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Haiti, Factor 7: Animal Agriculture

Haiti and Animal Agriculture

Haiti is a small country in the West Indies with a population of 10.17 million people (People 1). The West Indies is made of hundreds of islands that reach from the coast of Florida to the northeast coast of South America. Most of Haiti is covered with rugged mountains, with heights that rise to almost 9,000 feet. In an Indian translation, Haiti stands for “high ground.” Only 33% of the country is able to be used for farming, and just over 10% of the land is used for permanent crops. The remainder of Haiti is comprised of non-arable land, approximately 54% of the country. This non-arable land can be used for raising livestock (People 1). Haiti’s climate is tropical and semi-arid where the mountains are located.

Being the fourth most food insecure nation in the world, Haiti is small and densely populated. The country is about the size of the state Maryland. Maryland has a population of about 5.8 million people, nearly half of Haiti’s population. Haiti is one of the poorest countries in the Western Hemisphere (People 1). The poverty level in Haiti is heartbreaking: 90% of the 5.6 million people who live in rural areas in Haiti are under the poverty line and make less than two dollars per day, two-thirds of those people live on less than one dollar per day (Key 1). For comparison, an average American’s income is \$137.13 per day. In Haiti, the French speaking minority (1%), control nearly half of the wealth, while the native speaking majority lives an impoverished life (Key 1).

A typical Haitian farm is a tiny patch of land, about two and one-half acres in size (Haiti-Agriculture 1). Very few farms in Haiti are over 30 acres. Haitian farmers grow beans, corn, yams, and if they are lucky they may have a few chickens, or other small livestock. A diet of the Haitian farmers consists of what the farmers grow, and other products that they may trade for (Haiti-Agriculture 1). Haitian farmers are typically subsistence in nature, growing only products to feed their families, and rarely, if ever, do they produce enough to sell. Although many Haitians make their living through subsistence farming it accounts for about one-quarter of Haiti’s annual gross domestic product and employs about 60 percent of the labor force (Haiti-Agriculture 1). Even though that Haitian need the agriculture and farmers to feed them, they are not as mechanized as their American counterparts as they don’t use tractors, planters, and combines. Haitians use simple hand tools to help them cultivate their land, and hardly ever will you see the use of a plow or an animal (Haiti-Agriculture 1).

A typical farm household in Haiti is 4.2 people, with only two or three beds (Central 1). The United States average household size is 2.5 people. In Haitian homes, it is usually just the parents and the children; however, some elders in the family might live in the household as well (Central 1). Homes for natives of this country are small, one-roomed houses with either a thatched roof made of sticks and dried mud, or tin (Central 1). Houses are not stable enough to sustain hurricanes and earthquakes that frequently hit the country. Very few homes, if any, in the rural areas have heat or air-conditioning. Only 10% of homes in rural areas have electricity (Central 1).

The Haitian government requires children to attend school from age six until age twelve. However, this country has schools and other buildings that lack the amount of people to run them for these children. Only a small portion of the children actually attend school, and if they do, it is to a private or a church-administered school (Hope 1). If children wish to receive higher education they will have to attend school in Port-au-Prince, the capital of Haiti, and surrounding areas (Hope 1). Very few kids get to attend higher education because of the financial aspects attending these institutions. Most kids are needed at home for livestock and farm care. In Haiti only about three-fifths of the adult population can read (Hope 1). This is because education costs money, and the Haitian government only spends 1.4% of their gross domestic product on education (Hope 1).

On January 12, 2010, a 7.0 magnitude earthquake struck Haiti. It took 230,000 lives and left over 1.5 million people homeless (Earthquake 1). The major point of destruction was in Port-au-Prince, the capital of Haiti, with a population of around 898,000 people (Earthquake 1). Aftershocks of the earthquake were just as destructive. These aftershocks ranged from a magnitude of 4.2 to 5.9 on the Richter scale. During this earthquake 23 percent of schools were destroyed along with hospitals and other government buildings (Earthquake 1). To make the situation worse, a cholera outbreak happened in October of 2010 (Earthquake 1). It spread across the country and killed thousands. These disasters left the people of Haiti devastated and looking for answers. Families were left broken, the water supply unsafe to drink, healthy food was scarce, and homes were no longer safe to live in. In this country's time of need, support groups like the American Red Cross and other relief groups rushed to Haiti to lend a helping hand. Some of the aid that these groups gave to the annihilated country was hygiene items, cooking sets, medical supplies, set up of hospitals and service commands, and distribution of food. (Earthquake 1).

Prior to the catastrophic earthquake, 46% of Haitians had little or no accessibility to healthcare, because it was either too expensive or just too far away (Culture 1). In the aftermath of the earthquake, healthcare has been brought to the forefront and Haitians are receiving more care and to a higher degree than ever before (Culture 1). The people of Haiti are now caring for themselves with better services and more well-trained people than they have ever had in their history (Key 1)! However, this has not solved all of their healthcare needs and problems. HIV and AIDS has become a huge problem in the last 10 to 15 years. Over 150,000, over 6% Haiti's population, have contracted this disease from 1981 to 2012 (Culture 1).

Malnutrition stunts one in four children in this country and over half of the women are anemic (Culture 1). This problem can be fixed by animal agriculture. Meats from these animals can provide needed protein, iron, and many other vital nutrients that the people of Haiti need in their diets (Haiti-Livestock 1). Nutrition needs to be improved in Haiti to increase the productivity (Snowbarger 1). If more meats were added to a Haitian's diet that them many more nutrients to the children, adults, and the elderly of Haiti. Increasing animal agriculture in this country could be one of the turning points into making Haiti a better nutritioned nation.

Agriculture in Haiti has taken many hits over the years. Several things stand in the way of making this country agriculturally sustainable (Key 1). First of all, disastrous weather has taken it's toll. Between the earthquakes, hurricanes, and droughts, it is very difficult to get this country into a stable weather pattern (Key 1). Land ownership is another problem Haiti has. The government and landowners make the farmers pay high rents on the land that they live off of. Farmers in Haiti haven't had the education as the United

States farmers have. Erosion and soil exhaustion has been a big problem. Only 4% of the forests within Haiti remain (Snowbarger 1). From 1991 to 2002 the food production fell 30% because of soil exhaustion (Key 1).

Farm families in Haiti are at a huge disadvantage compared to agricultural land in other countries. In this country land where crops can be grown and where livestock can be raised is not of the quality to sustain a herd of any type of livestock to feed a family (Haiti-Livestock 1). Crops struggle compared to other countries of similar latitudes. As stated earlier in this essay, most Haitian farm families are lucky if they raise chickens, or other small livestock such as a pig or a goat. The problem is animals who don't have supplemental feed cannot survive. If these animals cannot survive they can't feed the family (Haiti-Livestock 1). The major problem with adding supplemental feed to a diet of an animal is the lack of productive land in Haiti. Not only is the land shortage an issue. Densely populated nation makes food insecurity an even bigger issue (Haiti-Livestock 1). With families only being able to provide for themselves, rarely do they have any produce to sell to other consumers. Since they have nothing to sell, they are left with little money to spend on healthcare, clothes, education, and other things that Haitians could use to make their lives better. Families who only eat the foods that they grow are limited themselves to that and what they can trade for. In turn, this leads to families having less than adequate nutrition (Haiti-Livestock 1). Haiti needs a sustainable animal agriculture program to improve the quality of protein in their diets to feed themselves and fight malnourishment.

Animal agriculture in Haiti is a growing problem. This harsh land is not easy for animals to survive, much less, thrive on. Not many families have the ability to raise more than a few animals at a time because they don't have enough money to pay for the extra feed that it costs to raise them (Key 1). Another problem with animal agriculture and farming as a whole in Haiti is that many people are giving up on farming and moving to urban areas. In these urban areas they can find work and generally make twice as much money compared to what they were getting working and tending the land (Key 1).

Haiti is trying to improve the animal agriculture industry within their country. Haitians are working on getting the agriculture related services and production away from the major cities like Port-au-Prince (Key 1). By doing this they are trying to stimulate animal agriculture as well as crop production in the smaller communities. Another way that they are trying to help an agriculturally driven economy is by creating more jobs for the Haitians in the field of agriculture. The unemployment rate in Haiti, 41%, is one of the highest when compared to all countries in the Americas, such as the Dominican Republic, 13%, and the United States, at less than 7% (Key 1). Getting farmers to stay in the industry of farming or getting new Haitians into farming related businesses in these smaller areas can be difficult. Some are hesitant to get into farming, because of the long-term commitments that are needed to farm (Key 1). However, by creating more jobs and stimulating agriculture in rural areas, they are trying to rely less on the foreign food imports so that Haiti will be able to stand on their own someday.

The people of Haiti have been knocked down numerous times over the last fifteen years by natural disasters. These natural disasters have left the Haitians devastated and rebuilding their lives. Trying to rebuild agricultural sector was not a priority to the nation's farmers after recent natural disasters due to the added labor and loss of income (Haiti-Livestock 1). Many turned to a paying job in the city and gave up on the rural lifestyle. With the earthquake in Haiti's past, Haitians are looking toward a brighter future

with agriculture driving it. Animals in Haiti mean food for families. In Haiti, the number of livestock has been increasing in recent years (Haiti-Livestock 1). Several struggles still remain in raising animals. The land is not ideal to farm and raising animals can be difficult, because the nutrient-rich soil has been stripped away by the deforestation and recent natural disasters (Haiti-Livestock 1). Along with the struggles to farming, animal health in Haiti is also a problem. Animals die from diseases that Haitians don't know how to treat (Haiti-Livestock 1). Animal agricultural education with livestock is getting better and the life of a rural farm family is improving.

Improving animal agriculture in Haiti will not only help farm families, but will help the country's economy and improve the quality of the diet of Haitians. As most farm families only have a few animals for their own personal consumption, that doesn't leave much produce or meat for them to sell. Which, in turn, leads to the problem of these farm families not having money to spend. They need this money to spend on other things like education and healthcare. If farm sizes were to increase by even just three more animals, the results would be more products for the farmer to sell and make a profit off of. This could have a positive impact on these farmer's lives and their family. Enhancing animal agriculture in this country could also improve the environment. Manure from these animals makes essential fertilizer that the over-worked ground needs (Key 1). All of these things can create a better economy for the Haitian's. Also, by adding more livestock and increasing farm sizes, jobs would increase in the poor rural communities. Being able to boost the economy, especially in these rural areas, could prompt a major impact that makes Haitian lives better. If Haitians are being able to produce more meat in Haiti rather than having to import so much, that would mean cheaper buying for the consumers, more money for the farmers, more jobs created, and more opportunities for the people of this country (Key 1).

A problem that the country of Haiti faces is trying to get farmers to stay farming or to start. Through numerous natural disasters and growing soil, water, and deforestation problems, farming does not seem to be an ideal form making a life. Haitian farmers also have problems with animal health issues, less money to feed animals, and weather-related pressures (Haiti-Livestock 1). Drought has taken it's toll on the soil for the past fifteen years. Clean water is very hard to find for the Haitians, and the natural disasters won't seem to let up (Key 1). People can't control the weather, no matter how hard we all try, so weather-related issues will always be a headache. Livestock, whether it be a chicken, goat, pig, or a cow all need water. Post-earthquake many wells and water systems were damaged or ruined. The Water Project has been funding the repairing and replacing of wells and water systems, as well as adding new forms of getting clean water for human consumption and for animals (Give 1). This project could really help bring clean water to rural parts of Haiti, where livestock is. By giving the clean water to the Haitians and the animals, farmers would have more incentive to go into raising livestock. This way they would not have to worry about giving clean water to their families and the animals (Give 1). Agriculture can be at the forefront for creating a better Haiti. When farm families have that extra dollar in their pockets, they can then spend a little more on education and healthcare, which should help support a stronger economy.

Solutions to the animal agriculture problem in Haiti can be difficult to find. Goats are the most plentiful animal on a Haitian farm (Haiti-Livestock 1). These animals are known for their ability to digest poor quality forage, and turn it into milk or meat (Haitian Goat 1). Animals like these are cheap to raise and buy compared to other animals. They would provide the farm families with food and income. Raising just three goats can offer so many more opportunities for the rural families. Some things need to be put into

place, however, for goats to thrive on the land at which they will live. Education needs to be brought to rural farm families teaching them how to use the goats to their own advantage. Educating the farmers of Haiti of the benefits of raising goats would be key into making this work (U.S. 1). Teaching the farmers to properly feed, daily care, vaccinations to make the goats as productive as possible. A way that education could be brought into Haiti to help learn the animal husbandry practices would be taking high school/college level students that are into animal agriculture studies or farmers that excel in animal husbandry practices on their own farm to Haiti and working with the Haitian farmers to show them ways to get more production out of their animals. These high school/college level students or farmers could be from universities much like Iowa State University and farmers from the Midwest in the United States.

Supplemental feeds would need to be available for Haitian farmers, especially if the families would like to breed the goats (Haitian Goat 1). Goats in the last trimester of pregnancy need more nutrition. Unlike in America, in this country there isn't field upon field of grain and hay or forage that could be used to feed animals like goats. A supplemental feed that would be a great addition to making the goats in Haiti a success would be introducing a grass called Teff. This grass has been proven to be a high-yielding, fast growing, and high competitive in forage quality (Teff 1). It is found to succeed in many different soil types, one of the soil types being Haiti's. Teff grass can flourish in drought prone areas and in warmer climates (Teff 1). Another advantage of the Teff grass is that no known insects or diseases that affect it. This grass is very leafy and palatable for livestock to eat and can be harvested by means of dry hay, silage or it can be grazed (Teff 1).

A practice that could be used to better the herds of goats in Haiti would be to breed them to other goats that are known for either their milking qualities, or meat production qualities (Haitian Goat 1). Breeds that would be key to use in Haiti are goats that are heat and insect repellent (Haitian Goat 1). Goats that would be great for this country would be Boer goats for meat production and Saanen goats for milk production. Breeding goats to select for higher quality traits could benefit the Haitian farmers and the lives that they have. The ability of goats to convert low quality forage into meat/milk on land that cannot sustain traditional crop production strategies should increase the net return on investment for the Haitian farmers (Haitian Goat 1). This should lead to an increase in salary and benefit to all of Haitians rural producers (Haitian Goat 1). Since land is in short supply, multiple families could join together and share pastures, breeding stock, costs on raising the goats, and division of the labor. Having multiple families helping to raise the goats together could bring more cooperation because all of the work doesn't fall directly onto just one farmer and family. Families with younger children could be able to send their kids to school since more families could be coming together for one goal, raising food for themselves and selling what they don't need to market (Haitian Goat 1).

Heifer International is a program that has taken upon themselves to try and reduce unemployment and manage the resources within Haiti (Heifer 1). They provide many resources for Haitians as well as other countries in need. Heifer International is a program that a group or individuals can buy an animal and they will send it to a country that needs that animal to survive. In addition, they also provide things like employment kits, small-business start-up kits, family farm care packages (Heifer 1). Heifer International should be scaled up immensely in Haiti, this project would place the focus of adding goats to every farm family in Haiti. In addition, to this making the price for one of these animals could be lowered so that more can be bought and more people could afford to buy one for a Haitian family. In this program it only

costs \$120 to give a goat to a family who really needs it (Heifer 1). Many church groups and school groups in the United States raise money and send it to the Heifer International. A person or group can pick out an animal to send to a country and the group will send it. This program has reached Haiti when food insecurity became an issue by sending animals to farm families who really need them (Heifer 1).

Another organization that is helping farm families become self-sufficient is World Vision. They also are donating animals to families who need them to eat, much like the Heifer International (World 1). World Vision's mission is to provide emergency assistance to children and families affected by natural disasters and civil conflict, work with communities to develop long-term solutions to alleviate poverty, and advocate for justice on behalf of the poor (World 1). Along with donating animals to families, World Vision also helps connect children to other families and people to be sponsored (World 1). With the donations that families and groups give, a child can receive clean water, nutritious food, education, and healthcare (World 1).

Teaming up with these two organizations to bring goats to Haiti would be instrumental in making animal agriculture thrive in this country. With the help of Heifer International and World Vision, goats could be added to all farms in Haiti, giving farmers the opportunity to become subsistent. Other organizations have been helping Haitian farmers stand on their own. Some of those organizations include Smallholders Farmers Alliance and Reiser Relief. The Smallholders Farmers Alliance improves the tree cover in Haiti and is working to educate the farmers about better farming methods (Haiti-Livestock 1). The Reiser Relief helps to improve the malnutrition by providing food and clean water to women, children, and elderly living in impoverished nation (Haiti-Livestock 1).

Adding just a few animals such as goats to a farm family in Haiti might not seem like a huge problem solver. The effects of just those few animals would have a lasting impact on Haitian families. Selling more animals at the market leads to more income for the families. More income would lead to better education for the people of the country. When people are educated, jobs are created. Adding more jobs would then improve the economy and improve the lives of Haitians. By giving the Haitians the education, tools, and resources they need to become subsistent farmers we are allowing them to stand on their own. Improving agriculture within Haiti could improve the lives of the Haitians, and by increasing the participation of Heifer International, World Vision, and other projects that already exist, Haiti can turn into a thriving country.

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