Bringing a Community Garden to Haiti: Resolving World Hunger One Garden at a Time

An analysis of the problems associated with world hunger and a possible solution involving the construction of a series of community gardens in Haiti

Tag Words: Haiti and world hunger, essential vegetables, community gardens in Haiti

Authors: Allanda Williams, Gabriel Laverty & Christopher Krumm with Julie M. Fagan, Ph.D.

Summary (AW)

Haiti is the 146Th largest country with more than half of their population suffering from hunger. We chose Haiti as our target country because of the high percentage of the population suffering from undernourishment and also because it has been a year since the devastation in Haiti occurred. Haiti still needs as much aid and support as possible, we wanted to provide support but also to take it a step further. Organizations as well as countries offer monetary support, send food and supplies, but when that runs out what happens next. Our answer to this problem is our effort to help create community square foot gardens, small enough to be a personal garden but large enough to support a family and maybe a village. Allowing them to plant vegetable that would offer them the most nutritional value. We want to help create a sustainable Haiti, not only will they be able to have a nutritious meal in their diet but they will be able to produce it for their selves.

Video Link (GL)

World Hunger – Haiti Project: http://www.youtube.com/watch?v=p6ivlQK4rs8
The Issue: World Hunger

What is World Hunger (AL)
Hunger can be classified as pain because of the need for food, as well as need and want for food in a country. World Hunger refers to this want and need for food in a country. As a result of hunger, malnutrition can often occur. A person is characterized as being malnourished when there lacking nutritional elements which are needed for the basic human diet. Malnutrition can be classified as protein-energy malnutrition, and micro nutrient deficiency malnutrition. Protein-energy malnutrition is the type that is relevant to world hunger. Protein-energy is classified as a lack of protein in the diet and basic food groups needed to give a person energy, once a human consumes food, that food is converted into energy through biological processed. When there is a lack of protein in the diet that can be detrimental to a person health because protein is necessary for certain bodily functions. One of the more important one’s which is providing essential amino acids (this means that they cannot be produced naturally by the body and must be supplied in the diet) and developing and maintaining the body’s muscles.

http://www.worldhunger.org/articles/Learn/world%20hunger%20facts%202002.htm

What are the causes of World Hunger (AW)
One of the main causes of hunger continues to be poverty. The lack of resources and Mal-distribution of income throughout the world are all causes of poverty itself. Unequal distribution of income can be traced back to operation of the economic systems and political systems. Often those that are at the better end of the spectrum often gets resources and money while those that are poor receive little to nothing at all. Some other causes of hunger include: inefficient agricultural practices, war, famine, drought, overfishing, poor crop yield, lack of democracy and rights, use of land for non-productive use. Nature, drought is leading in the cause of food shortages. Drought leads to crop failure as well as loss in livestock. Disasters such as floods as storms also lead to loss in crop and live stock. War, often times in war it leads to millions having to flee their homes leading to them having unsecure food sources. Also in war food is used as a weapon to try and get an opponent to surrender. Poverty, those that are poor often cannot afford the supplies and tools which are needed to ensure food for their families. Infrastructure of agriculture, key infrastructure that is needed for agriculture is lacking, for example there aren't enough roads, warehouses and irrigation. Resulting in high transport costs, lack of storage facilities and unreliable water supplies for that country. Also poor farming practices, deforestation, over cropping and overgrazing are exhausting the resources leading to loss of farmland from erosion( weathering and transport of solids), salination( high levels of salt or the process of washing with salt) and desertification (transformation of habitable land into desert).

http://www.worldhunger.org/articles/Learn/world%20hunger%20facts%202002.htm
http://www.wfp.org/hunger/causes
http://www.globalissues.org/article/7/causes-of-hunger-are-related-to-poverty

Statistics about World Hunger (AW)
* “Over 9 million people die each yr worldwide because of hunger and malnutrition 5 million of those are children.
* 1.2 billion people suffer from protein energy malnutrition
* 2-3.5 billion people have micro nutrient deficiency
* About 38 billion US dollars worthy of food is thrown away every year.
* In the U.S. 40-50% of all food ready for harvest never gets eaten.
* In some parts of Africa a quarter of more of the crops go bad before they can be eaten. High losses in developing nations are due to a lack of technology and infrastructure as well as insect infestations, microbial growth, damage and high temperature and humidity.
* Medical cost of hunger and malnutrition is estimated at 30 billion each year
* Waste is just not hurting us financially but also environmentally. This leads to wasteful use of chemicals such as fertilizers and pesticides: more fuel that is used for transportation, more rotted food, leads to more methane (one of the most harmful greenhouse gases that contributes to climate change).

http://www.globalissues.org/article/7/causes-of-hunger-are-related-to-poverty

The Current State of Haiti (GL)
On January 12, 2010, the country of Haiti was hit by a 7.0 magnitude earthquake. The event killed nearly 230,000 people and left over 1.5 million people homeless. On the one year anniversary of the earthquake that devastated Haiti, very little had been accomplished towards relieving the terrible conditions that exist there. Nearly one million people are still homeless. Cholera outbreaks have been a major problem due to inadequate sources of clean water and resistant strains of the bacteria. The recovery process has been especially difficult due to the conditions that existed in Haiti prior to the earthquake. Haiti was and is the poorest nation in the Western hemisphere. 72% of the population lived on under $2 a day, and 80% of the population had no formal job. Eighty-six percent of the population lived in urban slums, and less than half of the urban population (and less than 20% of rural population) had access to proper sanitary facilities.

Many of Haiti’s problems were due to corruption in the Haitian government and the government’s inability to provide for its people. For many years between the cold war and the present, a large percentage of Haiti’s food supplies was provided by the United States and other countries. Unfortunately, foreign aid has some undesired effects on local economies. By 2008, Haiti was only producing 42% of its food consumption. The food aid from the United States was provided at reduced prices since it was subsidized, making it difficult for local farmers to compete in the local markets. In addition, foreign food aid is not always provided in adequate quantity or quality. According to a study performed by the Center of Human Rights and Global Justice (CHRGJ), foreign food aid lacks the nutritional diversity and the local familiarity that is necessary for the food recipients.

Many organizations, including Oxfam and the CHRGJ recommend reducing the amount of food aid provided to the country while assisting the local agricultural industry. Prior to and following the earthquake, USAID has worked with many Haitians to establish a secure agricultural system by educating the people on modern farming techniques and by providing financial, commodity, and institutional backing for the system. USAID is also working to protect Haiti’s water supplies and ensuring the security of agricultural land. While many efforts are being made towards Haiti’s recovery, the country still needs assistance with producing adequate amounts of food supplies.

http://allisongilchr.blogspot.com/
http://www.cfr.org/haiti/haitis-year-living-miserably/p23779
Haiti Climate (CK)
Haiti consists of a tropical climate with average rainfall around 54 inches a year. The country receives the vast majority of its water during the two rainy seasons that last from April to June and then from October to November. The dry seasons therefore last from December to March and then again from July to August. Being a tropical environment, temperatures rarely ever fall below 70 degrees Fahrenheit. Humidity is a major environmental factor that will affect the many different kinds of species of crops and fruits that thrive in Haiti. Many fruits and crops are able to adapt to this tropical and humid environment quite well. Bananas for example would grow very well in Haiti because of the humid and hot conditions that it is normally grown in. The eastern to central regions of the country receive larger quantities of rainfall than the other regions. The east and central regions of Haiti may therefore be the best regions to grow crops for consumption because of the large abundance of waterfall that is present there. Some regions of the country are also considered to be very arid throughout the entire year. Those areas should therefore be avoided in growing crops because of the lack of water available.

Land Use (CK)
The vast majority of Haiti consists of mainly rough and mountainous terrain. Extensive deforestation and soil erosion over the past few decades has eased the ability to grow crops. With several rivers such as the Riviere l’Artibonite and the Massif du Nord oriented in different regions of the island, attaining water for the crops would not be of a major concern. Haiti also lies in the middle of a hurricane belt during the months of June through October. Crops that require very specific and delicate climate and land conditions would therefore not fare well in this type of environment. Occasional flooding, earthquakes and even droughts can even occur. Several sources have shown that approximately 20.32% of the land is arable. 12.7% of Haiti is mainly used for growing permanent crops, while the remaining 66.98% is used for other purposes such as housing.

Potential Food Crops that can be Grown in Haiti (CK)
We have constructed a list of food crops that can and have been shown to grow in Haiti. Many of the food crops listed have been growing in the country for many years. The seeds, which must be bought to grow the crops are also relatively inexpensive. The environmental conditions in Haiti have also bee shown to be optimal for the growth of these food crops.

Broccoli (CK)
Two common subspecies of broccoli exist, which are known as “sprouting” and “cauliflower broccoli”. The sprouting broccoli is the traditional kind that is typically found in a supermarket with the green flowers on top and green stalk. The cauliflower broccoli contains a white curd, which closely resembles that of cauliflower, hence it’s name. Surprisingly, broccoli is a cool
weather vegetable, typically grown in the north and central regions of the United States from mid-August to mid-March. Broccoli is usually eaten steamed or cooked, but can also be eaten raw. Nutritionally, broccoli is very high in many essential vitamins and minerals that are required in the human diet, which include vitamin C, fiber, selenium, etc. Seedlings should be planted around 1 inch apart and about 2 or 3 feet apart in rows. Broccoli is also typically a fairly hardy vegetable, being able to grow in a wide array of environmental conditions. They typically grow best in environmental temperatures between 65 and 75 degrees Fahrenheit. Well drained, sandy soil are also the optimal soil conditions for growing this food crop. Broccoli also requires a large daily amount of water to sustain its nutritional requirements. Typically the soil must be flooded with at least 6 inches of water daily to satisfy it.

http://edis.ifas.ufl.edu/mv031
http://en.wikipedia.org/wiki/Broccoli
http://www.organicgardentips.com/how_to_grow_broccoli.html
http://www.gardeningknowhow.com/vegetable/how-to-grow-broccoli.htm

Beets (CK)
Several known subspecies of beets are available on the market for human consumption. The most popular subspecies consumed by humans is the purple-colored beetroot also known as the garden beet. People have utilized beets in many cooking recipes, which include boiling them, pickling them, or even adding them raw into a salad. With a wide growing range in the United States from the northeast, to the California coast to even Texas, beets can withstand a wide range of temperatures and growing conditions. They are typically a cold temperature food crop, not found to grow in tropical environments. Beets grow the most efficiently in loose, rich soil that has a slightly acidic pH (6 - 6.8). Beets are typically planted in late August / early September, which is around 1 - 2 months before the first frost of the year. Seedlings should be planted approximately 3 inches apart and 12 - 18 inches apart in each row to ensure there is ample growing space once they reach maturity. The beets should also be exposed to full or partial sunlight as well as adequate levels of water. An insufficiency in either sunlight or water will cause the beets to dry out or die of malnutrition.

http://en.wikipedia.org/wiki/Beets
http://plants.usda.gov/java/profile?symbol=BEVU2

Onions (CK)
Onions are a very diverse species, containing almost 500 different subspecies. Onions are very beneficial to consume in the human diet, because they contain adequate levels of carbohydrates, protein, sodium and calcium. Although onions can withstand a wide range of temperatures, they are typically grown in warmer conditions usually lasting from mid-March until late August/early September. When planting onions seeds, one should take into account its size once it reaches maturity. Farmers therefore usually recommend planting each onion seed about two and a half fully mature plants apart from each other. Onions have been found to be used in a wide variety of dishes within the cooking industry. A wide array of cooking techniques can be utilized to prepare and serve onions, which include eating them raw in salads, grilling them, pickling them, etc. When planting seedlings, they should be placed approximately 1 inch apart from each other to
ensure they have enough growing space once they reach maturity. Onions are typically a warmer level food crop that can be planted as early as mid March. Mid April is usually the optimal time period to begin growing these vegetables. Onions in general are not particularly picky about what kinds of soils they will grow in. Soils can range anywhere from sandy loams to heavy clay. Adequate levels of sunlight and water must also be provided to ensure the onions receive the nutrients they need to survive.

http://en.wikipedia.org/wiki/Onions
http://www.selfsufficientish.com/onion.htm
http://www.gardeningpatch.com/vegetable/growing-onions.aspx

Rice (CK)
Rice was a large food crop grown in mass quantities by peasants in the 1980s. It is even estimated that approximately 123,000 tons of rice was cultivated from 1980 to 1987. Rice is a very stable crop, able to grow quite efficiently in tropical environments. The traditional method to grow rice efficiently is to flood a field with large quantities of water after planting the seedlings. Flooding the field also prevents the growth of weeds and pest plants that could potentially compete with the rice for nutrients in the soil. With Haiti’s large abundance of waterfall in the rainy season, growing rice would be an ideal food crop to attempt to irrigate. Deep water rice may be the best type of rice to grow in Haiti because it typically grows near rivers and other large water sources. It is also able to withstand the rainy and dry seasons of Haiti. Since a large majority of Haiti has been deforested is considered to be arable land, paddy or irrigated rice may be another type of rice that could be grown.

http://worldinfozone.com/country.php?country=Haiti
http://www.edubook.com/how-to-grow-rice/5524/

Sweet Corn (CK)
Corn also known as maize is a very common food crop grown in Haiti. In the 1980’s corn was the most abundant food crop grown in Haiti. More than 220,000 hectares of land were used to grow corn in 1987. It is also intolerant to cold temperatures, which makes Haiti an ideal country for it to be grown year round. If attempted to be grown at colder temperatures, the cornstalks will not sprout. Sweet corn is the specific type of corn that is consumed by the vast majority of the population. In order to sustain this strain of corn, approximately 76 grams of water are required per 100 g. Other nutritional requirements such as protein, calcium, zinc, vitamins, iron, magnesium, etc. must be sustained in the soil in order to produce and maintain healthy ears of corn. Sweet corn requires soil temperatures of at least 60 degrees Fahrenheit to grow properly. Sufficient levels of water must be available for the corn to grow properly. Large quantities of nitrogen and moisture must also be present in the soil. Seeds should also be planted 12 to 15 inches apart from each other in order to prevent competition for nutrients in the soil. By planting the corn seeds in rows and columns, they will then be able to wind-pollinate each other.

http://worldinfozone.com/country.php?country=Haiti
http://www.coopext.colostate.edu/4dmg/VegFruit/corn.htm
Sweet Potatoes (CK)
Sweet potatoes are warm weather crops that will do very poorly if attempted to be grown in cold climates. Sweet potatoes can come in a variety of colors including the common orange, yellow and even purple. They prefer full sunlight but can also tolerate partial shade. They do not tend to grow very well in cold weather. Most commercial gardening websites suggest that the seedlings should be planted immediately after the last frost of the year has disappeared. They also tend to grow best when placed in rows so that it keeps the soil warmer and well rained. The soil where the sweet potatoes are grown should be kept fairly warm at around 65 to 70 degrees Fahrenheit. Sweet potatoes love long and warm growing seasons. They are therefore found growing in many farms in the southern United States such as North Carolina and Louisiana. To ensure that every sweet potatoes plant does not compete for nutrients within the soil, seedlings should be planted approximately 12 – 18 inches apart from each other and 3 – 4 feet between rows. Sweet potatoes also tend to not do well when competing against weeds for nutrients in the soil. It is therefore best to plant them in an area free of any other species of plants that could possibly compete with the sweet potatoes. The Beauregard is the most common and hardy of all the different varieties that are available. It contains the popular dark orange flesh skin that is traditionally exhibited. http://www.gardening.about.com/od/vegetables/p/Sweet-Potatoes.htm http://www.worldinfozone.com/country.php?country=Haiti http://www.hobbyfarms.com/crops-and-gardening/growing-sweet-potato-14925.aspx

Bananas (CK)
Bananas are a very common fruit found in Haiti that are mainly grown for human consumption. Banana growth is limited to tropical or near tropical regions of the world because of their inability to grow in cold environments. Temperatures must be stable and stay within a range of approximately 80 degrees F (26.67 C) in order for the fruit plant to grow optimally. Extended dry seasons more than three months are also not ideal for the growth patterns of this plant. They also tend to like environments that are very humid throughout the year. If temperatures were to fall rapidly, the banana fruit skins would turn grey and the leaves would turn yellow. Despite being very sensitive to temperature, bananas are able to grow in even the poorest of soil conditions. Specific nutritional requirements in the soil must be met in order to sustain them however. Adequate levels of nitrogen and potassium must be present in the soil. Minimal wind conditions would also be beneficial. Large and gusty winds may blow over the banana trees due to their large leaf stalks. By growing banana trees in large quantities, one can reduce unfavorable wind conditions as well as producing humidity. By growing several banana trees within close proximity to each other, one can also increase the amount of humidity in a particular area of land. Warm temperatures throughout the year are also required for this tropical plant because of their extremely slow growth rate of nine months. Bananas would therefore be able to thrive in Haiti’s mountainous and tough terrain. http://www.hort.purdue.edu/newcrop/morton/banana.html http://www.worldinfozone.com/country.php?country=Haiti http://www.tropicalpermaculture.com/growing-bananas.html

Tomatoes (CK)
Tomatoes are one of the most common vegetables found in the home garden. Tomatoes tend to thrive best in well-drained soils. They are another food crop that does not do well in colder
environments. They tend to grow best in temperatures at around 65 degrees Fahrenheit or higher. The plants may grow at temperatures slightly below this temperature, but they will not sprout fruits until the temperature rises. If tomatoes were planted in too cold of an environment, they would change color from red to purple. If not fed with large quantities of water, they will dry out and die. Leaf-end roll, non-blossoming and other unfavorable conditions will arise without adequate amounts of water supply. Due to Haiti’s tropical and humid environment, tomatoes grown there may require more watering than in colder environments. Water supply should not be a major problem however because of the large number of fresh water sources scattered throughout the country. Tomatoes also require copious amounts of sunlight (8 hours or more a day). The sunny and tropical climate year round makes Haiti a perfect environment to grow tomatoes.

http://worldinfozone.com/country.php?country=Haiti

The Service Project: The Farmer to Farmer Program

Community Service Project (CK)
Our service project involves associating with The Farmer to Farmer Program, who are involved in reestablishing food crop populations in Haiti. We initially came across this program after searching online for possible volunteer programs involving food crops in Haiti. After some research, we eventually came in contact with Meghan Olivier, who is the program director for the Farmer to Farmer program. She provided us with a great community service project to help build square foot community gardens in Haiti. Ms. Olivier eventually helped us get in contact with Dr. Albert Ayeni, who is the Rutgers Professor and International Programs Coordinator as well as a member of the NJ chapter of the Farmer to Farmer Program. We were able to meet with Dr. Ayeni and speak to him about our idea of helping to donate square foot community gardens in Haiti. Dr. Ayeni was very helpful in formulating and shaping our community service project. Through our discussion, we developed a set of objectives, goals and what types of vegetables that we would want to grow in these square foot community gardens. With Dr. Ayeni’s extensive knowledge in plant physiology and agriculture, he was able to give us a list of the top 11 types of vegetables that provide the most essential nutrients that are required in the human diet. The list of vegetables includes beets, broccoli, brussel sprouts, carrots, cabbage, cale, dandelions, onions, spinach, swiss char and water cress. We then decided from the list of vegetables to attain and donate beet, carrot and onion seeds. These three vegetables are very common ingredients in cooking. Dr. Ayeni also provided us with ideas on how to ship our donated seeds and garden equipment to Haiti as well as a means of ensuring that the gardens would be grown and maintained the way we wanted it to. We therefore devised a protocol on how to plant, grow and maintain the seeds. After speaking with Dr. Ayeni, we had received an email from Megan Olivier, stating that Makouti Agro Enterprise, the agribusiness that the Farmer to Farmer program is associated with in Haiti, would be providing several volunteers to build our community gardens as well as grow our donated seeds. Although not on the list of essential vegetables, we were also able to attain two bags of ramapo and moreton tomato seeds from the Rutgers New Jersey Agricultural and Environmental Society (NJAES). After explaining our community service project to Cindy Rovins, who is the Agricultural Communications Editor for NJAES, she as well as the rest of the society were more than happy to donate some of their seeds
to our square foot community gardens. Our group thought that the tomato seeds would be a great addition to the other vegetables that we would already be growing in our community gardens. We are also donating money to buy garden equipment so that the volunteers who will be building and growing our donated seeds in Haiti, will have tools to actually perform these duties.  

---

**Letter Sent to Farmer to Farmer Program**  
April 12, 2011

To Whom It May Concern:

The aim of our project was to create a sustainable and reliable food source for Haiti. We chose Haiti as our target country because of the high percentage of the population suffering from undernourishment and also because it has been a year since the devastation in Haiti occurred. Haiti still needs as much aid and support as possible, we wanted to provide support but also to take it a step further. Organizations as well as countries offer monetary support send food and supplies, but when that runs out what happens next. Allowing the citizens of Haiti to have a balanced nutritious meal in their diet as well as funds for the extra food that they produce is a step in the right direction in reference to our goals. On behalf of our group we would like to say Thank You for helping to shape our project and provide the tools necessary to make this project a success. Special Thank You to Meghan Olivier Program Officer, Partners of America, Makouti Agro Enterprise, Albert Ayeni Ph.D. Co-Director International Science and Education, Rutgers University, Tim and Professor Julia Fagan.

Sincerely,
Allanda Williams  
Christopher Krumm  
Gabriel Laverty

---

**Package Includes**

**Zip Lock Bags**

<table>
<thead>
<tr>
<th>Plant</th>
<th>Distance</th>
<th>Depth</th>
<th>Season</th>
<th>Harvest Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beets</td>
<td>1-3 inches apart</td>
<td>4”</td>
<td>Any Season</td>
<td>12-16 weeks</td>
</tr>
<tr>
<td>Okra</td>
<td>2 ft apart (24 in)</td>
<td>3/4&quot;</td>
<td>Summer</td>
<td>12 weeks</td>
</tr>
<tr>
<td>Item</td>
<td>Distance</td>
<td>Depth</td>
<td>Season</td>
<td>Maturation Time</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------</td>
<td>--------</td>
<td>-----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Turnips</td>
<td>10 inches apart</td>
<td>1/4&quot;</td>
<td>Any Season</td>
<td>8-12 weeks</td>
</tr>
<tr>
<td>Green and Purple Shiso</td>
<td>6 to 12 inches</td>
<td>1/2&quot;</td>
<td>Early Spring</td>
<td>When Mature</td>
</tr>
<tr>
<td>Wasabi Mustard</td>
<td>6 to 12 inches</td>
<td>1/2&quot;</td>
<td>Spring-Summer</td>
<td>When Mature</td>
</tr>
<tr>
<td>Purple Carrots</td>
<td>1 inch apart</td>
<td>1/2&quot;</td>
<td>Early Spring</td>
<td>Late Summer</td>
</tr>
<tr>
<td>Red Kale</td>
<td>18 inches apart</td>
<td>1/2&quot;</td>
<td>March-May</td>
<td>28-32 weeks</td>
</tr>
<tr>
<td>Oak leaf Lettuce</td>
<td>12 to 18 inches</td>
<td>1/8&quot;</td>
<td>Early Summer</td>
<td>4-5 weeks</td>
</tr>
<tr>
<td>Large Italian Parsley</td>
<td>8 to 12 Inches</td>
<td>1/2&quot;</td>
<td>Early Summer</td>
<td>10-12 weeks</td>
</tr>
<tr>
<td>Collards</td>
<td>18 to 24 inches</td>
<td>1/2&quot;</td>
<td>Any Season</td>
<td>10 weeks</td>
</tr>
<tr>
<td>Red Basil</td>
<td>10 inches apart</td>
<td>1/2&quot;</td>
<td>Spring/Summer</td>
<td>6 weeks</td>
</tr>
<tr>
<td>Lemon Basil</td>
<td>10 inches apart</td>
<td>1/2&quot;</td>
<td>Spring/Summer</td>
<td>6 weeks</td>
</tr>
<tr>
<td>Rye Cover Crop</td>
<td>2 oz per 100 sq ft.</td>
<td>Surface</td>
<td>Late Summer/Fall (After garden finished)</td>
<td>Cover Crop</td>
</tr>
<tr>
<td>19 varieties of Tomato</td>
<td>2 ft apart (24 in)</td>
<td>1/2&quot;</td>
<td>Any Season</td>
<td>12 weeks (when ripe)</td>
</tr>
<tr>
<td>Green Kale</td>
<td>18 inches apart</td>
<td>1/2&quot;</td>
<td>March-May</td>
<td>28-32 weeks</td>
</tr>
</tbody>
</table>

*(Gabriel Laverty)*

**Flowers:**
- Celosia
- Gomphrenia
- Zinnia Marigold

**Packets:**
- 1 Spinach
- 9 Marigold
- 1 Lettuce
- 1 Cabbage
- 1 Morning Glory
- 1 Poppywhite
- 1 Coral bells
- 2 Swiss Chard
In a recent statistical analysis, it was found that over 9 million people die each year from malnutrition causes. 5 million of those 9 million people are unfortunately children. Malnutrition is mainly due to an insufficiency in the major nutritional elements that are required in specific concentrations within the human diet. Carbohydrates, fats, protein, vitamins and minerals are all vital elements required in the human diet. A calcium deficiency can lead to bone growth deficiencies for example. Vitamin C deficiencies can also lead to diseases such as scurvy. The number of malnourished people in wealthier countries such as the United States is very low due to the adequate amount of resources that are available to supply these nutritional requirements. People living in these countries are able to attain the proper amounts of carbohydrates, fats, protein, that their bodies demand to function properly. Bread and beef are very large food products consumed in the United States, which contain abundant concentrations of carbohydrates and protein respectively.

Third world countries such as Haiti do not have the luxury of acquiring these resources as readily and easily as other wealthier countries do. With Haiti being located in a tropical environment, the country is prone to many environmental hazards such as earthquakes, tsunamis, hurricanes, etc. that could potentially destroy their agricultural systems. Unfortunately this agricultural system is their main source of food. In an unfortunate event, a 7.0 earthquake struck Haiti in 2010, destroying the already low number of resources that provided food to Haiti. Many of the agricultural fields and resources that were used to grow and provide crops to the country were destroyed.

In an attempt to help the people of Haiti, many organizations such as the USAID have worked to establish a new agricultural system to restore the old system that was lost. Many other organizations such as the Farmer to Farmer Program and Partners of the Americas have also sent volunteers and donated supplies and money to help the people of Haiti. All of these efforts are an attempt to help reduce world hunger and the number of people who are malnourished. With over 6 billion people inhabiting the planet, it may not be entirely possible to completely eradicate world hunger, but with the efforts of many individuals it is possible to significantly reduce these numbers.

Every Little Counts

Its been 14 months since the 7.0 earth quake devastated Haiti and sent shockwaves throughout the entire world. Even though there has been help that has been offered there is still more that needs to be done so that Haiti will be able to become better off then it was before this catastrophic event occurred. Just over 1 million families are still residing in settlements with no place to call their own. Requiring the basic necessities such as food, water, education, healthcare, sanitation, shelter and
protection. Despite how large scale the damage may be in Haiti every type of assistance counts ranging from minute to grand.

This same thinking has made 3 Rutgers University students: Allanda Williams, Chris Krumm and Gabriel Laverty led by their professor Julie Fagan to help create some sustainability in Haiti. The group has decided to create square foot gardens in rural Haiti communities by teaming up with Partners of American in their Farmer to Farmer program, geared towards promoting sustainable improvements in food security and agricultural processing, production and marketing. For Haiti, efforts like these are critical for it’s rebuilding. There needs to be better conditions so that the Haitians people can safely return to their homes, plans need to be put in place in case an event like this occurs again or a different type of catastrophic event and aid needs to continue to be received. There is no way that Haiti can be brought back in a year but with efforts from everyone it can build a stronger foundation then it ever has had.

______________________________________________________________________________

(Gabriel Laverty)

In the wake of the 9.0 magnitude earthquake that struck Japan on March 11th, it is easy to forget about another dramatic earthquake that struck Haiti just fourteen months ago. While the two countries received similar amounts of news coverage on their natural disasters, it is important to recognize the differences between the way the disasters were and are currently being handled. Japan can be considered a world economic superpower. Its government is stable and is not only able to provide disaster relief to its citizens, but is even working to maintain certain elements of its infrastructure throughout the ordeal. Japan will likely be able to recover in the next few months, and will have its industries pushing full steam again in a matter of weeks. Japan has the means to take care of itself.

Haiti’s disaster, however, has been pushed to the back burner, to my severe disappointment. This is a country in political unrest and extreme poverty. Haiti is the poorest nation in the Western hemisphere, and 72% of the country’s population lives on under $2 a day. Over 1.5 million people are still homeless, and cholera outbreaks have been a common occurrence. Large portions of Haiti’s population are malnourished and do not have access to clean water sources. This is a country that cannot take care of itself and will remain one of the poorest countries in the world for years to come.

While it is easy for us as Americans to throw money and food at disadvantaged countries, the foreign aid can only go so far. In fact, food aid from countries like the United States can cause negative effects on the country’s local economy and may cause harmful nutritional deficits for the people consuming the food. The only way Haiti can begin to thrive is by developing a sustainable economy. The best way we can support the people of Haiti is by donating knowledge, education, and technology so the people can rebuild their country. Efforts are already being made by organizations like USAID and the Farmer to Farmer program to educate local farmers on advanced farming techniques in order to maximize local food production and eliminate hunger and malnutrition in the region. USAID is also working to establish clean water sources and technologies for the Haitian people. These efforts should allow Haitian communities to establish strong local economies that will contribute to the stability and growth of the country. But we cannot stop there. Haiti still needs our help.
While it would be wrong to suggest that any disaster is any worse than another, it is important to put things in perspective. While some countries can get up and dust themselves off after a major disaster, other countries haven’t been able to stand on their own for years. While supporting and wishing the people of Japan a rapid recovery, we can’t forget the people of Haiti, who still have many years before even imagining the kind of success that wealthy nations achieve every day.