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Bahamas, Factor 6: Sustainable Agriculture

Bahamas: Improve Local Farms Instead of Relying on Imports

The food source of the Bahamas relies mostly on imports from other countries, which is taking away from their economy and not helping the agricultural aspect of the country develop. The limited resources of the Bahamas cause the prices of the agricultural products that they do have to be quite a bit higher than those of other, more developed countries. The climate and soil of the Bahamas gives their farmers the ability to grow things that do not grow in many other parts of the world. Foods like hot peppers, pineapples, and coconuts can only be grown in places with year round warm climates, like the Bahamas. This could be a huge advantage to the farmers of the Bahamas because they can produce a lot of these foods and export a portion of them to other countries, bringing in more money to the economy and the agricultural industry in particular. They should use this money to improve their farms and increase the yields of their crops. Farmers could lower the prices of their crops because of the money they make from exports and then the citizens of the Bahamas would be able to get enough food for themselves and food security would improve sufficiently. The main industry of the Bahamas is tourism, but it would be very beneficial to them if they put more emphasis into agriculture. "The Bahamas is viewed as an industry leader in tourism and offshore financial services, but we are still in need of rural community development. The archipelagic nature of the Bahamas most persons concentrate on the more developed areas but majority of the Bahamas is still considered 'underdeveloped'." ("Our Rural Bahamas"). Supporting the local farmers and agricultural businesses will give them more money for farm improvements, giving them the ability to grow more foods so the people of the Bahamas can rely a lot more on their local farmers to supply the majority of their food.

The average family size in the Bahamas is four to five people, usually made up of two parents and two to three children. The average life expectancy is 71.4 years. The staple food for people from the Bahamas is seafood; including fish, crab, lobster, and shellfish. They also eat a lot of tropical fruit, rice, peas, potatoes, and pork. The seafood is pretty easy for them to get because the Bahamas are islands surrounded by water. Some popular things used for seasonings in the Bahamas are limes, chili peppers, tomatoes, garlic, onions, cinnamon, and coconut.

As far as education goes, children start primary school when they are five years old, go for six years, and then move on to secondary school for 5 more years. Their secondary education consists of three years of junior high and two years of senior high. Children from the Bahamas graduate from secondary school at age 16, and all public education is free because it is provided by the Ministry of Education and Culture. After their secondary education is complete, some of the Bahamian students go to colleges like the College of the Bahamas, the University of the West Indies, or any other place that has post secondary training available. The Bahamas has a literacy rate of 95.6%, ranking them 87th out of the 194 countries in the world.

Health standards and health care have been getting a lot better in the Bahamas in the last couple years. There have many new hospitals and health care facilities opening and they have a lot better care than those that were open in the past. More jobs in the medical field, such as doctors, nurses, and dentists, are being filled. This helps a lot with not only providing quality health care for the citizens of the Bahamas, but also gives more people jobs, which boosts the economy! There have been improved vaccinations against diseases like measles and diphtheria, a highly contagious bacterial disease that causes inflammation in the mucus membranes and makes it hard to breathe and swallow causing heart damage, that have made the death and infection rate among children a lot lower. One thing they do have a

problem with in the Bahamas is AIDS and HIV, which both have a pretty high infection rate. They have the highest rate of AIDS infections in the countries of the Caribbean, with 2.8% of citizens infected. The Bahamian government has tried to get the population to have a higher life expectancy by creating things like Healthy Lifestyle Initiatives. The purpose of these is to decrease the occurrence of illnesses, disabilities, and deaths that happen because of living an unhealthy lifestyle. Examples of these diseases are diabetes, heart diseases, and cancer. The government also encourages the adults to get vaccines and immunizations. The goal of this is to decrease the amount of diseases that are preventable by vaccines. The Ministry of Health gives out vaccinations for things like influenza, mumps, measles, yellow fever, and hepatitis B. Everyone who visits or lives in the Bahamas has equal access to medical care. Public and private medical centers both offer many facilities and services. The Bahamas has three public hospitals and two of them are in New Providence, the island that is home to most of the people and to the capital city. These two hospitals are called the Princess Margaret Hospital and the Sandilands Rehabilitation Center. There is also the Rand Memorial Hospital located in Freeport, Grand Bahama. There are community and satellite clinics for people who live on the Family Islands. There are two private hospitals called the Doctor's Hospital and Lyford Cay in the Bahamas. They offer general services plus individualized care to patients with certain diseases like heart disease. They also have health insurance that can be very helpful. "The Bahamas do not have a national health insurance scheme expats can contribute to. Although the National Insurance Board offers some medical benefits for job-related illnesses and injuries, you should make sure to get a private health insurance which covers all of your basic needs." ("Healthcare in the Bahamas")

In the Bahamas, they have three main types of farming: subsistence farming, backyard farming, and commercial farming. Subsistence farming, which is more commonly known as pothole farming, involves using the limestone rock in the soil to grow crops. Subsistence farmers grow as much food as they can eat and sell any extra crops that they may have. Backyard farming is pretty much the same as subsistence farming only on a smaller scale. Backyard farmers grow fruits, vegetables, and herbs for household use. Commercial farms are like many farms in the United States, they grow crops and raise livestock mainly for sale purposes. Most private farms are small, with an average farm size of only 11.55 acres, compared to the United States' average of 197.24 acres. The government actually owns 90% of the farm land in the Bahamas. This part of the government is known as the Ministry of Agriculture and Fisheries. They have a program where they try to increase the growth of the economy because of agriculture and depend less on money coming in from tourism. They own 36,148 acres of farmland known as crown land. There are about 1,700 farmers and 8,835 fishermen in the Bahamas. Citrus crops including lemons, limes, and oranges are a very popular thing to grow. Bananas, tomatoes, potatoes, peppers, mangos, coconuts, and cucumbers are also abundant crops. The livestock produced in the Bahamas includes mainly chickens, pigs, and sheep. A Swine Breeding Center was recently opened to try and make pig farming more profitable. "In 1994, a modern 24-sow unit piggery was constructed at GRAC, with assistance from the Republic of China. The piggery is stocked with high quality animals from the US which will be used to produce improved breeding stock for sale to small pig farmers and to demonstrate a new system of pig rearing." ("Agriculture in the Bahamas") In addition to crops and livestock, fishing is a huge industry in the Bahamas. There was another method of farming used in the past when the Bahamas was first being established. It is when farmers cut down and burn the leftover parts of crops. This process of farming is very bad for the land because it takes the nutrients from the soil and usually the land is not able to be used for crop production anymore, and instead it is used for wood production and raising livestock. This is one of the reasons that 80% of the Bahamian food source comes from imports, the land is becoming less and less suitable for growing crops.

Families in the Bahamas face many barriers involving improving agricultural productivity, employment, food markets, and getting adequate nutrition. They are encouraged to learn new skills like how to work the soil, improve their lifestyle, and make sure they know where their next meal is coming from. One problem they face is soil, water, and air depletion and pollution which makes it harder to farm. Another

problem is global warming. To improve agricultural productivity, people of the Bahamas need to preserve their resources and make sure the balance between people's needs and the islands' ecosystems stays even. Food markets can improve by becoming more self sufficient and growing more of their own food instead of relying so much on imported processed foods, which are expensive and unhealthy most of the time. This would help the Bahamians get adequate nutrition, too.

Improving sustainable agriculture would increase agricultural productivity, household income, and food availability in the Bahamas. Sustainable agriculture is developing and using practices that combat erosion, desertification, and soil depletion. They reduce the uses of pesticide and herbicide, and minimize environmental degrading that is comes along with some industrial agricultural practices. A reason that not enough food is produced in the Bahamas is because they are not using programs available that are working to help increase yields and decrease pollution. One group called the Institute for Cooperation in Agriculture, also known as the IICA, is working hard to improve the progress of Bahamian agriculture. They value expertise, networking, tailored planning, and entrepreneurship. The sustainable agriculture in the Bahamas is not as good as it is in many other countries because of their lack of some modern technology the fact that about 80% of their food source comes from imports. Crop production has been going up lately because there was a recession that made the costs of importing higher. Factors of this are improving because of the increase of production and the several projects that are trying to help improve the sustainable agriculture and crop production. The problems of food security are improving, which indicates that the situation is changing in a positive way.

Sustainable agriculture is a very important factor when it comes to increasing the amount and quality of food available to the Bahamian people. It develops more efficient farming methods that are good for the environment of all the islands of the Bahamas. "In the Bahamas, there are markets to be strengthened that could be potentially used as channels to achieve food security and economic revenue; additionally, there are policy adjustments and special programs that could give long lasting effect to food security progress in the Bahamas in the near future." ("Food Security in the Bahamas") These markets include the production of native foods like pineapples and peppers, backyard gardening, and aquaponics. They want to create more organized fisheries. Also part of the markets are financial, educational, and technical support to any size of farms. They try to make it easier to afford land for farming, offer grants and credits for agricultural purposes, and support of entrepreneurs. They try to create investment partnerships, too.

There are some other major issues that might effect sustainable agriculture in the Bahamas. Climate volatility would not be a huge problem because the Bahamas has a pretty constant temperature. Population growth could be an issue because more people living in the Bahamas means more people that they need to supply food for. Urbanization could be a problem because it would probably take some of the farmland and turn it into a city, which would lead to less food production. Pollution is an issue as well because it would lead to less food produced that is lower quality.

The government offers quite a few different programs to help improve crop production and sustainable agriculture in the Bahamas. "The goal of the government and other sustainable food production institutions (programs) should be to innovate in ways to balance the needs of the environment with the needs of the most vulnerable people so that The Bahamas can be more self-sufficient without damaging its amazingly beautiful resources." ("Food Security in the Bahamas"). Many of them, if scaled up successfully, could be very effective in helping the economy and agricultural security in the Bahamas. These programs include the Interamerican Institute for Cooperation in Agriculture (or IICA) which is committed to improving the progress of agriculture in the Bahamas. The Cape Eleuthera Institute is another organization working to improve food security. They want to find a way to balance the needs of the environment with the needs of the Bahamian people and make the Bahamas more self sufficient in the area of food production. They want to create food systems that provide healthy, replenishable, and local foods. If the programs are used at multiple scales, all of the large and small

Another thing that I think would offer huge agriculture security assistance and improvement in the Bahamas is the effective use of crop rotation. By using crop rotation, farmers in the Bahamas could grow different crops at different times of the year. Most of the small farms do not have crop rotation developed. It could help with stopping all of the nutrients in fields to be used up so quickly. It would be really helpful with getting completely rid of the farming method of slash and burn. The farmland would be much more efficient this way because the better soil with more nutrients. With the crop rotation method, nutrients replenish themselves when the crops of different seasons grow and use up different nutrients. For example, peppers, tomatoes, and potatoes should only be grown on a particular piece of land every two or more years. Sometimes it is better wait even as long as four years. But the land will not be wasted in these years, because other crops will be grown.

In my opinion, communities, the national government, corporations, and other organizations all play a very important role in improving local farms and increasing the food security in the Bahamas. If they all work together and make their native farms, along with the fishing industry, their main source of food. I believe that by bringing down the imports purchased by the Bahamas and increasing their self sufficiency, not only will the food security improve sufficiently, but the economy will prosper as well. There are challenging issues facing farmers such as the ground that is mostly made up of limestone and insect infestation, but there are some very good ways to combat them like using fertilizers for the insect problems, and methods like pothole farming, crop rotation, and planting things that grow in the partially limestone soil, farming in the Bahamas can become a huge success. By growing the select foods that can only grow in places with climates like the Bahamas, they can keep all they need to supply their citizens and export the rest to countries where resources to grow these foods are not available, therefore strengthening the economy even more. By keeping the tourism industry strong along with strengthening the agricultural industry, the economy of the Bahamas will prosper. With support of more business from the Bahamian people, farms in the Bahamas will make substantially more money. This will lead to them being able to afford more seeds and equipment that produce higher yields of crops and more livestock. This will eventually stop the prominent food insecurity that is now in effect in the Bahamas and turn it into an economically and agriculturally prospering society.

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