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Nauru, Factor 6: Sustainable Agriculture

The Pleasant Island

The island Nauru was known in its prime as the Pleasant Island because of its expansive mass of vegetation and welcoming residents ("Countries and Their Cultures." Culture of Nauru.). However, today it may still be overwhelmingly pleasant, but there is a lack of vegetation. Due to the depletion of sustainable agriculture, Nauru's health, economy, and food production have run dry. For decades, Nauru has given the world its supply of phosphates and now the prosperous lifestyle of the Nauruans is slowly fading. During the development of Nauru, the phosphates provided surplus revenue. Once lavish and plentiful, the now desolated mines have caused the economy to plummet. Nauru's other exports are fishing and other practices have been ruined from years of phosphate mining and the pollution that comes with it. With no food being produced Nauru is forced to import their food, which increases the price. In addition, the food is westernized; it is filled with saturated fats, high amounts of sodium, etc. so that makes the food significantly unhealthy. Since jobs are scarce, families have no choice but to buy the food that is cheaper and more than likely to be unhealthy. Because of this, Nauru has become the world's most obese country. The agriculture of Nauru has gradually declined to where it is now non-existent, but has not slipped away from the hands of opportunity Nauru is a unique island filled with opportunity if only aid and further agricultural education were given. If sustainable agriculture were to be reestablished, Nauru would see superlative effects on the health of the people of this petite island.

Nauru's history explains how the pollution and decline of their lifestyle occurred. Britannica's history states Nauru was discovered by an English vessel in 1798, but no European country kept tabs on Nauru until the 1830s when it became a port for ships in search of food and supplies. Thereafter, Germany began some intense assertions towards its desire of owning the land in 1888 but the dispute over Nauru was settled shortly after. In 1906 the British sought the Pacific Phosphate Company to come to Nauru. The British then negotiated with Germany to begin mining phosphate deposits within the same year. As the rise of WWI began, Austrian forces occupied Nauru and most German subjects had packed up and left. Nauru became a territory of the League of Nations and was left under the attention of Britain, New Zealand, and Australia, Australia being the most active in Nauru. However, during WWII Japanese forces involuntarily removed residents of Nauru and put them to toil in military installations. When Japanese forces had come over they brought with them tilapia which took over Nauru's waters and drove out the milk fish. Nauru was taken back from Japan in September 1945, and Nauru's Independence Day is on Jan. 31, 1946, for that is the day that the residents were finally returned to their homes. The United Nations initiated Nauru as a trust territory in November 1947, and in the 1960s Nauru started to unleash their own self-governance and political structures. Nauru was well aware that the phosphate mines were to deplete probably before the 21st century, however in 2005 they found additional deposits which subsided the issue momentarily. The country had already begun preparations by investing money from the export of phosphates into accounts, but the accounts lost their investments due to the riskiness and fraud of the program. With the country on the verge of bankruptcy, Nauru had to stop funding many public services. In 2001 Nauru agreed to accept 1,200 prisoners from Australia in exchange for 10 million dollars, then accepted 1,500 more prisoners for 14 million dollars, and in February of 2008 the last lot of prisoners had left the Pleasant Island. In 2012 a detention center was constructed in Nauru where prisoners from Australia were sent to and fro (Foster, Sophie. "Nauru (island Country, Pacific Ocean) Quick Facts."). In 2007, Forbes.com reported that, according to the World Health Organization's (WHO) latest estimate, Nauru has the highest percentage of overweight inhabitants among all countries. The

nation's residents having an average BMI (Body Mass Index) of 34 to 35 as a result of the country's import of westernized foods.

As we look into the regular life of Nauru we see how hunger and poverty affect the residents. Nauru is a western Pacific island located just 25 miles south of the Equator and is 21 sq. km, extending 5.6 km and 4 km ("Nauru." Worldmark Encyclopedia of Nations.). The current population as of May 30, 2014 at 2:51 is 10,367 people ("Nauru." Population of.), a very small country but with very high prospects. Nauru's weather is hot and very humid year-round. Average daily high temperature is near 90 degrees, and heavy rainfall is common throughout the year. The monsoon season is November through February ("Nauru Map and Information, Map of Nauru, Facts, Figures and Geography of Nauru -Worldatlas.com.). In Nauru the typical family household is about four people. The national diet is westernized because they must import more than half of their food. Because of the switch to westernized food, Nauru is the most obese country in the world. Now many Nauruans are likely to have a high incidence of diabetes, cancer and hypertension ("Nauru." Worldmark Encyclopedia of Nations.). The education in Nauru is free up to intermediate schools, and it is mandatory for children to go to school from the time they are five years old till the time they are sixteen years old. If a student wishes to pursue higher education he or she would go overseas. Fortunately there are numerous scholarships for students to go overseas for further education. Nauru, being a small country with limited space, has a limited amount of medical equipment. Nauru is a part of the World Health Organizations but they have a limited amount of doctors and equipment, so many procedures or intensive care must be done overseas. In Nauru all medical and dental treatment is free for all Nauruans and for government employees and their families.

Nauru is majority urban area and only uses 20% of its land for agricultural practices (about 4 km²) and the majority of this useable land is used for residential housing. Their main produce is coconuts and they don't particularly have animals that they raise, however, chickens and wild pigs roam the island uncontrollably ("Encyclopedia of the Nations." Nauru Overview). Farming milk fish used to be a very cultural experience in Nauru, however, when Japan brought over tilapia the fish started over populating the waters. Nauru has attempted several times, without success, to eradicate tilapia from Buada Lagoon, where it was a custom for farmers to farm milk fish. Nauru also exports a lot of their fish, such as tilapia, to the Philippines. Nauru is known for its extensive history in phosphate farming and phosphate is their only main export. Nauru has an unemployment rate close to 90%, as most of the work force were phosphate miners.

Nauruans have many different struggles in order to improve the lifestyle. It's difficult and almost unmanageable to produce any type of agriculture there. The phosphate mines have depleted the soil of nitrogen and potassium because of the long term mining, not to mention that better pest management should be implemented. As for fisheries in Nauru, milk fish is their main source which used to be raised successfully in Buada Lagoon. Now tilapia have overtaken the waters and are driving out all of the milk fish, so the tilapia break out would have to be gotten under control. When the phosphate mines were just starting out, life in Nauru was wholesome; the economy was booming so considerably that the islanders were not required to work for the reason that the government gave the islanders money. However, now that the mines are diminished, little to no money is being brought back to Nauru. With jobs being scarce and no set minimum wage Nauruan's only lucky break is that they have no taxes on income. If a family household has no incoming salary then it is difficult to purchase food that is way more expensive because it is being imported out of the country. The fact that Nauru has to import all their food results in a higher price and an unhealthy westernized diet. The westernized diet is clustered into a category of food that consists of saturated fats, carbohydrates, sugars, and sodium. These foods include the obvious junk food such as chips or soda pop, but also meats, refined carbohydrates, and dairy products. Frequently eating these foods are what can lead to the over consumption of these carbs, saturated fats, and etc. (Bittman, Mark. "What's Wrong with What We Eat.").

If sustainable agriculture were to be reintroduced and successfully employed in Nauru it would increase agricultural productivity, household income, and food availability. Farms are a great way to supply exports and even use as a sufficient source of healthy food for communities. If farms were started up there would be more opportunities for jobs and give the citizens healthier and more cost effective foods. Also since the citizens would be giving money to the farms or community base food suppliers, then money would also be brought back into the community instead of being given to another country for imports. The present status of the land is pretty poor, the phosphate mines have sucked the life out of the fields. As for the fisheries they have been neglected and are falling short of triumph. Nauru has been doing well to keep the country afloat up until now. They have taken in a detention center, have attempted offshore banking, tried to raise tourist flow, and has even begun to restore the fisheries. Without sustainable agriculture this country is balancing on a thin thread over a pit of fire. Agriculture is what will save Nauru from its teething troubles. Sustainable agriculture improves: healthy local economies, produces environmental solutions, provides local food security, enhances market stability, and organizes social capital and community amenities ("Community Farming Benefits."). Sustainable agriculture in Nauru is extremely difficult because of the pollution of the phosphate mines, but also because of water scarcity. Nauru uses rain water from harvesting facilities because there is no surface water and the ground water is polluted with fecal contamination which seriously limits its potential use. There is no wastewater treatment plant in Nauru and all the sewage and wastewater are either discharged to the sea or disposed at home. Also because of Nauru's climate harsh temperatures are frequent which produces many droughts on the land and less water resources ("Enhancing Water Security for Nauru through Better Water Management and Reduced Contamination of Groundwater").

In order for Nauru to restore their agriculture and improve food security Nauru would have to legalize GMOs (Genetically Modified Organism), get aid from countries to purify the land, implement a water source, and gain knowledge on how to properly maintain agriculture in their country. Nauru has already begun to enhance water sources by constructing water sanitation systems and has even started to reinstate the fisheries. However with New Zealand, Australia, and many other European countries banning GMOs, it will only destroy Nauru's chance of survival. GMOs would allow produce and other vegetation to withstand the harsh conditions, as well as the insects, so there would not be a need for insecticide. Without the need of pesticides there would be no river runoffs and that will bring less harm to the environment and most importantly the people. GMOs can help the environment by producing less carbon emissions and harmful soil tillage. The GMOs being able to withstand the climate of Nauru would increase productivity of agriculture in Nauru. Before planting the GMOs Nauru would need aid from countries such as Australia and/or New Zealand so Nauru could purify the land once again. Farmers could come from America and New Zealand as a community charity offer to help encourage and educate farmers about maintaining crops and also how to revive new fisheries. Nauru would be able to purify the land a little at a time by planting crops that put different nutrients into the earth. Also the water purifying systems will be done and the residents of Nauru could get safe and clean water while the rainwater systems could then be used to water the farms and crop to come. After the land is ready for farming many jobs will open up, which will help decrease the unemployment rate. With the communities working together to maintain the agriculture as well as helpful tips from countries aiding Nauru the public will begin to feel more united. When crops are ready and sold within Nauru it will bring the money back to its communities, and in return the communities will bring money back to the farms. Also to help keep the environment clean the public of Nauru should do its best to reduce the harmful products to the environment they use such as plastic bags or plastic bottles, reuse materials that are harmful to the environment, and recycle objects and substances that may be harmful to the environment. With these modest requests it can help preserve the environment and keep the country clean. With the country now having a healthier and cost effective choice on food the rates of obesity would start to decrease because the need to import unhealthy food and buy the cheaper brands of food would no longer be as necessary. With the country looking clean and trim the country of Nauru would have a much easier time getting tourists to discover the wonders of this "Pleasant Island". With the new found profits from tourism Nauru

would be able to settle itself more and keep building on repairing its environment and improving its contents.

Sustainable agriculture is the living breathing essence of every country's requirement to become a well running machine. Nauru is tiny oval shaped island surround by Pacific coastal line. In the golden ages of the prosperous island no one needed to work because the island was over flowing with phosphates within its plentiful barriers. However, when Nauru realized that this was not going to last forever they tried to prepare themselves, but were unable to shield their country from the inevitable. When the mines started running dry Nauru tried to find alternatives to the country's income such as banking, hosting a detention center, trying to expand tourism, etc. But found that the load was much too heavy and found themselves searching for key to open this locked door. The land was polluted and so was the water because of the phosphates and there was no water purification system. The country had no agricultural experience and had to import most of their food and needed surplus, and after they had switched their import of food to a more westernized product Nauru was in need of support. In 2007 they were named the world's most overweight country, and with this came a rise of diabetes, cancer, and hypertension. Nauru has done to the best of its abilities to restore their fisheries and also establish a water system. However these are important in order to begin the foundation of rebuild this palace of pleasantness, but the land is still polluted from the phosphate mining done over the years. If Nauru were to receive aid from another country and begin a land purifying project to help sustain agriculture. Then unban GMOs to help increase the crops resistance to the bugs and have a higher tolerance to the weather. In addition, also keep restoring the fisheries and finalize the water system. With these final gears grinding in their proper places the farms will produce crop and then be sold to the communities in Nauru, then the money will be brought to community and stop the dependency on imports. With farming more jobs will open up and also the communities will prosper more. And since healthy food is being grown and sold it will help keep Nauru well and kicking. To help keep Nauru clean reducing, reusing, and recycling trash or unwanted substances will help keep Nauru clean and a clean as well as gorgeous country whispers to tourists and lures them into a splendid passion of must see. If sustainable agriculture were to be implemented back in Nauru it would again truly be the Pleasant Island.

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