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Madagascar, factor 6 Sustainable Agriculture

Poaching in Madagascar

Madagascar is located on the east coast of the African country Mozambique. Its current population is about 25 million; there are a variety of ecosystems in Madagascar such as coral reefs, tropical forests, dry forests, marshes, and swamps. Madagascar is a republic, their leader is the prime minister and they vote on a new prime minister every 5 years. Madagascar's standard of living has been dramatically declining over the past 25 years. The income has decreased by 40% while the population doubled. According to the National Institute of Statistics 68.7% of people live in poverty.

The life expectancy is barely over 55 years. It is said that 84 out of 1,000 children die before reaching the age of 5. In Madagascar there are a lot of infectious diseases people catch due to the lack of clean water, poor hygiene and chronic malnutrition. The poor families in Madagascar are most likely the farming families in rural areas. Despite its fertile land farmers are especially poor. According to the statistics there is no difference between men and women in terms of poverty. About 80% of the population lives in the countryside, where the standard of living is steadily declining in recent years, in terms of transportation, health, education, and market access.

Farmers have barely been producing enough food to feed their family. The average size of a family farm land is about 1.3 acres and the average size of a family household is 4-5 people most of which are commonly under the age of 15. The main crops that are grown in Madagascar are vanilla, rice, sweet potatoes, potatoes, oranges, bananas, sugarcane, and cassava. The people on average eat meat, chicken root vegetables, and rice. To create more room for farmland the slash and burn method is used, which involves cutting down and burning the existing vegetation. Most of the population, both men and women, work in agricultural jobs and few have jobs in sales and service. About 1 in 5 men and about 1 in 4 women have no education. Crime in Madagascar is high; even some of the government officials are involved in illegal activity. Organized crime, however, is not high due to the people in poverty.

Madagascar is known to contain a long list of diverse species of mammals, fish, reptiles, amphibians, and insects. According to Jha, Alok in "Madagascar's Record of Biodiversity: 600 Species Discovered in a Decade." Madagascar is known as a jewel in biodiversity terms because of its separation from major continents. Due to a coup in 2009, some of the rainforests have been cut down killing some of the diverse species within Madagascar along with destroying some National Parks.

Poaching is illegally hunting or catching game or fish on land that is not one's own, or in contravention of official protection. There are different reasons why people poach animals. They do it for their religion, for food or for money. For example, the radiated tortoise is actively poached and captured for illegal pet trade in Madagascar. Due to the amount of poverty in Madagascar, where about 81% of the population lives off of \$1.90 a day, people have a strong incentive to poach because it can help feed the family and they can make money off of the animal that they killed.

In Madagascar there is a variety of animals that are currently being hunted to extinction by poachers. For example, lemurs are hunted and killed for their meat and are sold to restaurants as a luxury item. The Crowned Lemur and the Golden Crowned Sifaka are red-listed endangered species, meaning they are critically endangered of going extinct, and are slowly losing their homes and territories due to poaching.

According to one of my sources (Platt, John. "Lemur Poaching on the Rise Due to Unrest in Madagascar." Scientific American Blog Network. N.p., n.d. Web. 11 June 2016.) the Crowned lemur has less than 20,000 square kilometers of territory left and the Golden Crowned Sifaka has less than 5,000 square kilometers of territory left, but that territory is still currently shrinking.

Due to a coup d'etat people stopped aid to Madagascar causing it to fend for itself until a new leader was found. The country was poor before that, however, after the coup ended Madagascar was in a worse state than it had been before the coup. This caused Madagascar to have a negative GDP for the past couple of years. There was also no support for the normally occurring cyclones and floods that destroyed the citizens' homes, schools, and farmlands. Deforestation sweeps the nation taking out a variety of animals' homes with it. The citizens suffer while the leaders of the nation mine for diamonds, gold and other valuable metals.

Poaching lemurs has been getting worse each year due to the political instability, and the lack of proper action and funding. Now you might be thinking, so the Lemur population is going down it is not like we will be impacted greatly right? According to Conservation International, the lemurs greatly affect the ecosystem they live in and help maintain the forest they live in. In this ecosystem the Lemurs are like a support beam if you take out a support beam from a building the building is likely to collapse. If the Lemurs go extinct then many other species would go extinct in Madagascar.

Environmental science journalist John Platt also claims that there are only 10 populations of the sifaka large enough for long term genetic breeding (Platt, 2016). Only 15 people have been arrested for selling poached lemur and were only charged 1,000 ariary or 0.31 cents per lemur. If a poacher sells them to the restaurants and markets in the region, according to Serge Rajaobelina, the poacher can make 8,000 ariary or \$2.46. Russ Mittermeier, Conservation International president, claims that there is little incentive for poachers to stop in Madagascar because "these types of criminals tend to get slaps on the wrist". He also talked to President Rajaonarimampianina about protecting and restoring the Lemurs along with the rosewood tree.

As mentioned earlier lemurs are being affected. There is a total of 100 known lemur species 7 are critically endangered, 19 are endangered and 41 are threatened to be endangered. If we keep this up then all lemurs in Madagascar may go extinct.

The Save Our Species Organization (SOS) is an organization that works to protect the extinction of both plants and animals. They are also working to help save the lemur population which has not only decreased because of poaching it is also decreasing due to deforestation. About 90% of the natural vegetation has been cut down driving many lemurs out of their homes. The SOS created safe reserves for the animals as well as creating jobs for the people in the community to keep them safe. They do a variety of things to help save endangered animals like destroying traps that poachers use to catch, surveillance and getting the community involved to help save the animals.

A handful of organizations in Kianjavato, Madagascar work together to help save the different species of lemurs that live in their area. They have gathered help from the community to help support the restoration of the Lemur population. There is a variety of jobs that the people do to help such as monitoring, tracking, researching, and educating about the different species of lemurs in the area. They also plant vegetation to help restore the habitats that the lemurs lived in.

I think that both of these projects work well because it helps both the animals and the people living in Madagascar. I still believe that the government should get involved and help stop poaching because it may not be the inhabitants of Madagascar doing the poaching it could be tourists. For example Walter Palmer killed Cecil the lion he however was never charged with killing him. I believe that if the

government has involvement with the issue of poaching they could truly make poaching nonexistent in their country.

I believe the simple solution to the problem of poaching would be to use dogs to sniff out the poached animals. However, before that happens, Madagascar will need to stabilize the economy and increase the amount of wealth distributed through the community and decrease the amount of poverty in the country by creating more jobs. I believe that some of the organizations that I mentioned would be able to help the income of the people in Madagascar by providing the various jobs that they need in order to watch the endangered animals. After that, they can start a training program for dogs such as the Coton de Tulear which is commonly found in Madagascar. I came up with this solution because I have recently learned that we use dogs in airports to search for agricultural hazards like invasive plants and, in some cases, animals.

According to my research, the Coton de Tulear are easy to train they have a high intelligence which would make them a good candidate for catching smugglers. Like all dogs, a Coton de Tulear has an excellent scent of smell that would help track the scents of certain animals. The Coton de Tulear would be able to handle Madagascar's hot and rainy season. Other dogs could be used to help, like the Wirehaired Vizsla and Vizsla breeds that have been bred for their sense of smell and their ability to retrieve and locate animals whether they live on the land or the sea. I believe that it would be more important to use a dog breed that is native to Madagascar so the Coton de Tulear would be a better option.

I also believe that the fine for poaching holding, or selling the animals should be increased to discourage people from poaching animals. As described before people in Madagascar who are caught poaching are given a fine of 1,000 Ariary, or 0.31 cents I believe it should be raised to 30,000 Ariary, or \$9.24) or if that is unavailable then I suggest the alternative of a minimum of 5 years in jail followed by a year of community service.

There should be different security checkpoints at certain hunting sights in Madagascar to make sure and prevent that poaching is not happening in those areas. Some restaurants should be closely monitored to make sure they are not using the animal as an ingredient in their cooking, which can be checked at random intervals, at least 2-3 times a month.

In conclusion, poaching is illegally hunting or catching game or fish on land that is not one's own, or in contravention of official protection, and there are many reasons why people do it such as for money, for food and for their religion. Madagascar has a high population of people who are in poverty meaning a lot of people have good reason to poach to provide food for their home whether by eating the animal to survive or selling off the carcass to make some money.

As I mentioned before, the land in Madagascar is very fertile so they grow various vegetation and raise some livestock. I believe that there should be a couple community gardens growing various fruits, and vegetables to help provide food to help feed the families. As mentioned before Madagascar uses the slash and burn technique when growing crops, that leads to deforestation as well as erosion so the nutrients in the ground can be blown away quite easily. A simple solution to this is to use a different and more effective technique like the crop rotation which after you have harvested the crop you replace it with another plant allowing continual planting, which enriches soil and reduces the amount of pests destroying your crops.

The Catholic Relief Services (CRS) is known to donate money to help Madagascar with emergency response and recovery in agriculture, agri-business, health and nutrition, climate change, good governance, and water and sanitation programs. They give about \$10 million per fiscal year. I believe

that the CRS will help fund their agriculture with the crop they grow and sell.

I also believe that the World Wildlife Organization (WWO) would not only support this cause but they would also fund it because they have been known to save and protect animals in ways ranging from pollution to poaching. The World Wildlife organization has aims to restore Madagascar's biodiversity. The WWO is known to work with the government, scientist, and the citizens of the community to solve the problem of poaching and deforestation in Madagascar.

I believe that Madagascar should use the simple solution of creating security checkpoints to catch the people who are poaching animals, which in turn will also create jobs, also since Madagascar is known to have a surplus amount of fertile soil creating more farms to grow rice, and sugarcane would help stabilize the economy. I believe that one of the sponsors would help pay the workers until Madagascar is able to pay them for their hard work. I also believe that they should slightly raise the prices when selling exports and ask for help from other countries to help raise money and pull the country out of poverty. I also think that some farmlands should be expanded to grow more rice since the country does not make enough rice to feed the country, in doing this the country may make enough rice to feed not only its people but have the ability to export it. The fine should also be increased from 1,000 Ariary or 31 cents to 30,000 Ariary, or \$9.24 or if paying is a problem then I believe that a minimum of 5 years in jail along with at least a year of community service would help slow poaching.

Assigning dogs to sniff out poached materials before they reach the market would help catch the people who avoided the security checkpoints by setting up at the spots where poachers would come through to make sure they were not carrying any illegal substances obtained from the animals who inhabit the area. I think the Coton de Tulear would be a great example of a dog to use to check the security in Madagascar, or the Wirehaired Vizsla or the Vizsla, which were bred for their sense of smell to help their owners retrieve both land and water game. They are all known to have a high intelligence which would allow them to catch poachers very, find well-hidden scores and alert their partner of whether or not you hunted caught or killed an animal that you were not allowed to catch or kill. I believe that doing this will knock out two problems at once. It will both get people to stop poaching and it would increase the number of jobs available to the residents of Madagascar.

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