Bradi Bohlke Kingsley- Pierson CSD Kingsley, IA Madagascar, Factor 7: Animal Agriculture

Madagascar: Animal Agriculture Problems

Madagascar is known as "big red island", "the rainbow island", or "the eighth continent". Madagascar is a large South African Island in the Indian Ocean. It is the fourth largest island in the world. Madagascar was once said to be in one big group with Madagascar, Antarctica, India, and Africa. All the landmasses were connected as one. Madagascar comes in with an area of 587,041 km squared; almost about the same size as the United States' State of Texas. Madagascar has a population of about 22 million animals and people combined. The capital city, Antananarivo, has a population of 1,404,000 alone. Antananarivo has a unique connection like the United States, Antananarivo is spelled out in large, white letters, just like the Hollywood sign in California ("Antananarivo, Capital City of Madagascar.", n.d.).

Madagascar has many parts that make up this great country, such as it's government, climate, and the people. Madagascar's government is a republic, and was fortunate enough to get it's independence June 26, 1960 from France. Madagascar's climate varies in different parts of the island. On the coast, you will find a tropical climate, but inland, you can expect temperate climate. Madagascar has about 3,000 miles of coast. In the south portion of the island, you can come across an arid climate. The area will receive less than ten inches of rainfall in a year. Madagascar is also home to many people, 22 million to be exact, who are referred to as the Malagasy. Madagascar consists of eighteen separate tribal and ethnic groups. Such as Malayo-Indonesian, mixed African and Malayo-Indonesian, Arab ancestry, French, Indian, Creole, and Cormoran. Religions are a variety, just like everything else. Madagascar contains religions of 52% Indigenous beliefs, 41% Christian, and 7% Muslim. Another way to describe the people of Madagascar is through their languages, Malagasy, French, and English. Madagascar has a literacy rate of 70%.

Madagascar contains many resources, such as graphite, chromite, coal, bauxite, salt, quartz, tar sands, semiprecious stones, mica, fish, and hydropower. There are many other profitable parts of Madagascar. Some industries in Madagascar are processing, soap, breweries, tanneries, sugar, textiles, glassware, cement, automobile assembly, plants, paper, petroleum, and tourism. Madagascar has many agriculture products, such coffee, vanilla, sugarcane, cloves, cocoa, rice, cassava, beans, bananas, peanuts, and livestock products.

Since most families have farmers or fisherman to support them, lifestyles can be a little challenging. Some challenges they come across are that Madagascar has quite a few droughts which can severely affect a farmer's products and the fish population. A typical subsistence farm family in Madagascar has an average size of 1.3 hectares. But here is a shocker, even though families usually contain about six children each, families this size usually stay in a home with about only two rooms!

Diets for the people of Madagascar are typically rice-based ("Food & Daily Life," n.d.). You could say Madagascar would not have very many food options if it was not for rice to serve as a multipurpose grain.

Rice can be found in products such as rice flour, to make bread. It can be found in sweets or puddings, such as koba. Koba is a sweet treat made from ground rice, bananas, and peanuts all wrapped up in a leaf. Rice is also usually served with vegetables, meat, beans, or stew. If you are on the coast of Madagascar, then you will probably be served fish, such as shellfish for dinner.

Poverty is spread throughout Madagascar. About two thirds live in poverty. They survive on about less than a dollar a day. So how does access to health care come into play here in Madagascar? There are many state hospitals located throughout Madagascar, and basic care is free. The only expenses you have to pay at hospitals is that you have to pay for your bedsheets, dressings, and food. Hospitals are constantly running out of supplies to keep the hospitals going. There are about 3,150 doctors in Madagascar, and hospitals have challenges with staffing their hospitals. According to "Poverty & Healthcare." (n.d.), this equals out to about 1.6 doctors per 10,000 patients.

Animal agriculture is a plan for families to maintain constant practices for raising livestock and poultry. Animal agriculture in Madagascar is major. Bara, Sakalava, and many other groups are your typical livestock producers. These groups usually obtain zebu cattle. Zebu cattle are one of the oldest species of cattle known. Zebu cattle have seventy five different breeds. These breeds can range in color, size, and where they live, also known as their habitat. Zebu cattle originally came from South Asia. They are the perfect fit for Africa, or Madagascar, because they can adapt very easily in dry, hot climates. Farmers who raise these cattle, allow them to graze freely. The farmers have learned to burn off the dry grass to encourage new, green vegetation come. But like everything else, there are some downfalls. Cattle stealing sometimes happens between farmers, so farmers take certain precautions. However, zebu cattle are not produced for food necessarily. Zebu cattle are usually only slaughtered for ceremonial events, but on occasion they are sometimes consumed. Another form of animal agriculture is fish farming. Farmers gather fish supplies from local freshwater lakes, rivers, or ponds. Including fish products, shellfish really are the only animal agricultural product that Madagascar produces and exports.

Madagascar is low on animal agriculture, because it has a range of biodiversity according to "Madagascar." *Worldmark Encyclopedia of Nations* (n.d.), also they stated that "approximately 95 percent of Madagascar's reptiles, 89 percent of its plant life, and 92 percent of its mammals exist nowhere else on Earth". Many types of plants and animals exist only here and nowhere else such as the Ring-tailed Lemur. These animal species are not for animal agriculture product purposes. Madagascar is known for its exotic animal species, but not so much of its animal agriculture products such as beef or poultry. This is why I feel like animal agriculture in Madagascar is a problem.

To solve the animal agriculture problems in Madagascar first, I would suggest that you live somewhat close to a river and somewhat close to a village or community. I would suggest living in the middle of these to places, because it will allow you to fish and be close to town for other necessary items. The Government of Madagascar could create a policy stating that families must live a certain distance from a local natural water source. Creating a policy will give a helpful push towards bettering your resources. Be useful of your resources, and take advantage of them.

Second, if it was my family in Madagascar, I would think about investing in a small herd of zebu cattle. Zebu cattle will be less expensive because they will graze on grass and drink from a natural water

source. You need to have at least one bull to keep your herd going. After some time, you can maybe even buy more zebu cattle. If it is not financially possible to buy more cattle, a bull will help to keep your number of zebu cattle in your herd to increase. If you live close to a river or some water source, this will allow a place for them to drink. Also think about how you could invest in some other kind of animals you could get food from. Poultry would give you eggs and meat. Poultry do not need fancy housing, and uses little resources. But the best part of poultry would be the nutrition you gain from it. There is a lot of Vitamin A and Omega 3 the eggs could give you. Vitamin A helps with your eyesight, and Omega 3 gives you good heart health. You could also use the feathers for many things, like plastic and in pillows. Fish would be a great asset to bring to the table. Fish is high in protein, and give you the "good" fats and Omega 3. The human body doesn't make large amounts of these nutrients, which a good for our health.

Third, think of some different ways you could make your resources last longer. Do not waste! You could always use it at some point. Making your resources last longer will help you to produce even more resources if you use it correctly. Do not let Madagascar disappear. Keep the forests around. Please, try not to let Madagascar become another country to lose its natural beauty. Again, set in a policy that states what you can and cannot throw out. Or create a business to allow all your garbage to be recycled and sort out what should not go to waste.

Also, think about some other animals you could introduce. Chickens or other poultry should be used more. They have many attributes that could bring a positive effect on Madagascar. Chickens or other poultry require less space compared to larger means of food. With that they also require less feed, water, and other supplies needed to raise a healthy product.

Government impact could help this situation as well. If the Madagascar would come together to help small farmers with grants to help continue their farms and even help them produce for the country. Harvey et. al (2014) tells us that smallholder farms are at a very vulnerable state. They say that Malagasy farmers take the biggest hit. Small farm holders are more affected by disease, pest, weather outbreaks, and in some cases isolation. If the government would back these and even larger farms that need it, they could help protect the farmers product. Helping farmers bring in disease and pest control would also be very helpful. All in all, Madagascar needs to come together. Everyone could do their part to make a large impact, and change the future of Madagascar.

Those are some ways to help just your family, but now how could you fix Madagascar as a whole? I would set some policies in place. The government could have polices to have certain areas of farms to really focus on one product. This could allow for the country to come up with more quantites and different products and maybe even knew ones. Since Madagascar is fairly remote, I do not think technology will really help right away. After some time, Madagascar could maybe introduced to it. They could introduce more high tech farming tools and animal facilities. It is just a matter of time before Madagascar takes off in an endless amount of animal agricultural products and agricultural products to help families.

I truly believe that Madagascar's animal agriculture can be turned for the better using time and patience. Madagascar seems like an amazing place from what I found while doing my research. I honestly hope that one day I get to visit the beautiful paradise known as Madagascar. We have learned a lot about

Madagascar and know that the demand and reliance on animal agriculture in Madagascar continues. It is important to keep a balance of soil, water, plants, and animals. We need to remember that with bad soil and no water, Madagascar will not be able to grow plants or to allow animals to grow. In order for this to work, everyone will need to take part in conserving the land and doing their part to raise livestock, grow plants, and to try their best. Madagascar needs to continue to push forward, and things will get better. Madagascar can and will come to increase their animal agriculture problems, that I truly believe is important.

Bibliography

"Food & Daily Life." *Our Africa*. N.p., n.d. Retrieved from http://www.our-africa.org/madagascar/food-daily-life

Harvey, C. A., Rakotobe, Z. L., Rao, N. S., Dave, R., Razafimahatratra, H., Rabarijohn, R. H., MacKinnon, J. L. (2014). Extreme vulnerability of smallholder farmers to agricultural risks and climate change in Madagascar. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 369(1639), 20130089. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3928894/>

Jose. "Antananarivo, Capital City of Madagascar." *Visit Capital City*. N.p., n.d. Retrieved from http://www.visitcapitalcity.com/africa/antananarivo-madagascar>

"Madagascar." *Worldmark Encyclopedia of Nations*. Encyclopedia.com, n.d. Retrieved from http://www.nationsencyclopedia.com/Africa/Madagascar-ECONOMY.html

"Poverty & Healthcare." *Our Africa*. N.p., n.d. Retrieved from <a href="http://www.our-africa.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/poverty-healthcare.org/madagascar/povert

"Zebu Facts." *Math.* N.p., n.d. Retrieved from http://www.softschools.com/facts/animals/zebu-facts/441/