Samya Hickman Vincent High School Milwaukee,Wisconsin Costa Rica, Climate Volatility

## **Costa Rica: Is Climate Change Impacting Costa Rica?**

Extremely nice weather for you but is it for the environment? Recent studies have shown that climate change has had and still has a huge impact on the environment. Costa Rica is a torrid and moist country because of its tropical climate. Costa Rica's juxtaposition towards the equator also has something to do with the climate change (Foley, 1997). Its dry season is from December to April but it is cooler towards the highlands and the rainy season is from May to November. The drastic changes in their seasons has a significant impact not only on their rainforests, but also on all of their food crops. The population in Costa Rica is 4.89 million people. With the climate change possibly affecting the land for agriculture which is mainly for crops', it could ignite the possibility of food production dropping drastically. The main crops in Costa Rica are corn, coffee, and sugar and out of those crops' coffee is the main one that is exported to other foreign places. The major exports are coffee, bananas, cocoa, and sugar. Among the climate changing without further notice it could cause the income from exports to drop significantly.

Costa Rica ranks thirty-seventh in exports to the United States ("Costa Rica Foreign Trade." Encyclopedia of the Nations, 2018, ). One of most major crops in Costa Rica is coffee. Coffee came to Costa Rica in 1808 from Jamaica. Those crops are still available and are a major export today. These coffee beans account for a huge amount of the worlds' contribution. Coffee has been a great and tensive part of the economy. The land for coffee was granted to producers and caused the sales and exports of coffee to increase and cause significant recognition for the producers of Costa Rica. Today's farmers have been trying to acquire the coffee to sell it to large exporters, and the large processing plants (Chalene,1965). The economy of Costa Rica's agriculture was established upon a network of producers. Exporting in Costa Rica is important not only to the United States but also their country based on the economic benefits that have come from it. So if climate changes to the point where they can't control it, it could destroy the

crops and the economy. If the crops are destroyed and not just the coffee, also for crops for other foods, that could cause malnutrition because we are going to need fibers, vitamins and other nutrients. Although they would still have meats and other alternatives to tend to, we still need those minerals. Costa Rica is among the 77 out 100 largest export economy in America. (https://atlas.media.mit.edu/en/profile/country/cri/)

Farming in Costa Rica is essential because 10% of the land is for agriculture. Agriculture is critical in Costa Rica whether it's in horticulture, animal, agribusiness or environmental. Every one of those pathways ties into Costa Rica because of its environment. The average size of a farm is 25 acres, approximately 12 football fields. Farming is important to their people. That's' where their food is derived from, and it feeds their families well. A typical family in Costa Rica is around 10 or more people. It's called an extended family which can consist of aunts, uncles, grandparents, and children. They typically together in a larger home or next to each other, if possible. You're probably wondering how they get food to benefit all of those people? Well, there are labor markets and farmers in their community depending on where they live. San Jose is the largest city and the capital of Costa Rica, this is where the farms are mainly at, due to its size and population density. The jobs they have in Costa Rica are typically similar to those in the United States. The whole purpose of farming is for a source of income and if that can no longer continue happening based on these uncontrollable modifications to their environment then they'd have to find jobs that will support them as much as farming has been able to.

Health is a critical standard of Costa Rica and in all of Central America. The Ministry of Health provides programs that assist with preventing malnutrition, fighting against diseases, and providing safe water to drink. The health care system to this day still isn't easily accessible to everyone, but has made progress. As to that the expected life length has risen for both males and females, but it is still below 100. Some of Costa Rica's health problems stem from the approximately 17% of Costa Ricans that are prone to struggle with alcohol abuse. Much of these problems are ignited by the culture of machismo, which is aggressive masculine pride. Those drinking problems lead to health issues including death, which causes a continued decrease in population. Malnutrition can also lead to a decrease in population if we don't resolve the issue, which is climate change. Climate change can lead to rapid issues in Central America.

Think about the possible flooding caused by increasing sea levels, and the crop yields will decrease. Causing a lower amount of land to be used to plant grain and other products that we may or may not eat that is imported from Costa Rica.

The representative for universal opportunities in Costa Rica was education. It was an example of the country's culture and their community's achievements. For over 30 years, about 30% of the government's budget was geared towards the education of their citizens. Education has always been a big priority. Colleges and Universities get most of the funds. Approximately 25% of the students in college pay no tuition. Education was made completely free and mandatory to the citizens of Costa Rica. The salaries for a teacher bi-monthly is around \$1,000 so working in other venues and businesses is totally acceptable and necessary. With the money those teachers receive , they can start a fundraiser to raise money for items that require less energy and won't use that much electricity, or for other things thing they think may help solve their problem. Since the government runs the state and covers the funds for everyone along with other people they can start things in the community as stated before. Why not be more involved in the community that is take care of by the provider which is the governor? Be considerate and generous to the point where your generosity solves issues. There is too much money is this world to be thrown around for unnecessary wants and building they think may boost the community's reputation. It isn't all about money though but it is how our world so far. It shouldn't be that way but that's how it has become.

As stated previously before, Costa Rica's food production is another priority and it is important. Climate change can increase the risk of hunger and can increase the sea-level in coastal areas rivers causing flooding, and the availability of clean drinking water. The flooding can wipe out crops and cause damage to the food that is being produced through planting. Certain plants require certain levels of water and a set temperature. As both of those factors rise drastically it can cause drastic outcomes. It can affect all parts of nutrition and food security, It can prevent food access, availability for food, and the stabilization of food. Malnutrition in children has decreased from 40 to 26 percent, which is a great thing but they can be put right back into malnutrition and hunger and poverty right after 200 million of them were just removed. Creating something that won't be destructed overtime and can be stabilized for a significant time can be

quite effective. Brainstorming something that is efficient can be more than necessary. Put your thoughts to the test and discover the possible outcomes. It doesn't need to be one person working on the project to distinguish the problems in so many areas.

Ways climate change can be prevented is by creating shelters full of food, being energy efficient, use powers that can be renewable - like solar and wind, buy and eat organic foods, start doing compost, minimize the transportation being used to reduce pollution and use alternatives for planes such as buses and trains. Compost is an easy form of recycling and it is effective. All composting is, is just recycling organic materials such as fruit peelings, newspapers, and coffee grounds. There are more organic materials that can be used to start a compost but in my opinion these are the most common things found in a person's home. Transportation can be easily altered by utilizing public transportation and even walking to shorter distances rather than driving around and wasting gas. These suggestions can be done by anyone in this Country whether it's people working in the government or schools, or other businesses. All of these things prevent climate change in so many ways and so many people can be a part of it. It can prevent so many possibilities of farming being corrupted and destroyed, same with jobs and the environment surrounding you, even if it's across the world. Try donating and supporting organizations that are based upon preventing climate change everywhere including Costa Rica. Climate can cause heat waves, floods, drought, fires (forest fires to be exact), food shortages, huge decline in crops, diseases, and mental illness. These effects can hurt the citizens of Costa Rica where we live. Take those solutions in consideration to prevent climate change. Make sure these solutions meet all the needs of the community they are intended for, they should help in huge ways. Us humans are a huge part of climate change due to our everyday activities. A substantial amount of studies show that 97% of climate volatility is tied to human actions not just in Costa Rica but everywhere (climate.nasa.gov/scientific-consensus). Neighboring countries can help also by traveling to other places to provide assistance for necessary changes.

Foreign aid can be a very useful form of empathy. Putting yourself in their shoes and offering to help out can show that foreign aid indeed is a priority. Even sending money to their country can support their economy. Although we have issues of our own doesn't mean we can't give and receive. You may say," well if they need help with their economy and other issues along with that, what can they possibly give us in return?" well, not all gifts and returns have to be materialistic wise. Why not lend a hand to others in need and show them that you are not selfish and you're generous? The golden rule/law states that, 'do unto others as you would have them do unto you". If we want help with our issues in our country since much hasn't really changed then be the person to utilize extra assistance to modify our problems and help modify theirs. It doesn't take a lot to affect one another whether or not it's by action or just words in general. Maybe the people that need help need some guidance and empathy to make them feel better and help resolve their issues and take a stand for the better of their community. Encouragement can help someone get through so much if you show it to someone you know that needs it.

In conclusion, Costa Rica has a lot of beautiful attractions, great education for minorities, and a good sense on how to produce food. Costa Rica is similar to the United States from different aspects. Assuming that Costa Rica continues to be affected by climate change so many things would change. Education, health, farming, and the exportation of Costa Rica's agriculture products would be totally tarnished, and it would affect the United States and other countries they export to. The effects of climate change is something no country or individual person wants to experience. As these conditions start it is difficult to reverse the issue. I advise anyone to read this and please take a stand towards preventing climate change by doing the smallest things even if you don't reside in that place. It may seem small, but it can make a great big difference. You tell me when you do it and see how it has affected more than one person you may or may not know. Everything happens for a reason but the things that do happen need to be mended and taken care of. Take small steps towards climate change, starting with going green and clean!

## Works Cited

Floey, Erin. Cultures of the World Costa Rica . Cavindish Square, 1997.

FAQ's, www.visitcostarica.com/en/costa-rica/FAQs. (Facts distributed throughout the article.)

Helmuth, Chalene. Culture and Customs of Costa Rica. Greenwood Press, 2000.

"Costa Rica Foreign Trade." Encyclopedia of the Nations, 2018, www.nationsencyclopedia.com/Americas/Costa-Rica-FOREIGN-TRADE.html.

Climate Change Article, climate.nasa.gov/scientific-consensus/

Vitamins and Minerals: How to Get What You Need https://familydoctor.org/vitamins-and-minerals-how-to-get-what-you-need/

Costa Rica's Export/Import Data https://atlas.media.mit.edu/en/profile/country/cri/