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## **Climate Change Effects In Guyana**

Guyana is a country located in South America and is largely a home-based agricultural country. Many families work with each other to do labor to be able to feed themselves. A lot of families have their own farms with animals and plants. Over the years climate change has become a big part of why many farms are struggling to maintain the mass of food they once were able to produce. It's becoming a growing issue that's affecting the plants that grow on these farms. This issue makes it hard to keep biodiversity and Guyana is highly affected by climate change due to it being near the equator and with the globe rapidly warming up every day.

Guyana is one of the only countries in South America that speaks english. It is also home to dense tropical rainforests such as the Amazon making it a vital area to protect on a global level. Rainforests provide about 34% of global land surface photosynthesis. Majority of this country is rural with a population of 808,726 people. The country is full of various wildlife and has become a significant resource for oil extraction. Guyana has a parliamentary democracy which is elected every 5 years. About 70-75% of the country's economy is based on agriculture and mining. The vast majority have jobs in agriculture, mining,oil or gas.

In Guyana the typical family consists of 3 but typically they all live together with multiple generations in one household. Usually in these households women are responsible for the home and the men go out to work. Families typically live close to each other and usually exchange food products. Poverty is a major issue and most don't have access to common luxuries of a first world country.Guyana is primarily known as an agricultural country that exports sugar and rum. Foods that can't be grown or harvested are usually imported from other countries. This country has a lot of aerial land that isn't used due to the costs of farming land. According to the article Culture of Guyana,the rural ratio is 70/30 meaning that a vast majority of the country does live a farm lifestyle.

Climate change is an unsettling issue that plagues our entire globe. It being a global issue makes it imperative that we find solutions to. Climate change has affected Guyana's precipitation patterns, soil and pest outbreaks. Due to Guyana being a part of the amazon rainforest there are a multitude of crops affected by this change such as rice. It's also causing soil degradation because of the rising temperatures. With that being said many natural disasters happen due to Guyana being a low coastline country that in some areas is below sea level.

This current issue seems to be getting worse due to rising sea levels and the increase of floods according to the climate change knowledge portal. Things like carbon emissions,oil extraction,livestock and deforestation all play a vital role in adding to the climate change issue. Guyana also depends on hydroelectric power which does affect their water levels and neighboring ecosystems. This has had detrimental effects on people's livelihoods because it contributes to the poverty issue. With rising sea levels it leads to more weather events not allowing families to farm as normal and be forced to rely on

imported goods which are not readily available all the time. The change of weather can cause food insecurity for many and cause economic issues for more commercial farmers.

As for combatting this issue the main thing that needs to be done is to educate the public on what they can do to help. Education is available to the public but due to a lack of resources in many areas people still remain uneducated about necessary topics. The government has been making efforts to educate the public by implementing it into the school curriculum and trying to engage the public with the issue. Even with this progress it still fails to reach rural communities that education resources are lacking. More than half after secondary school don't go on to tertiary school resulting in most not seeking a higher education. With less than a million people living in this country it's become a prevalent issue to educate the public to a global standard.

Guyana has become Latin America's new oil producing country after its discovery of an oil reserve. Exports of oil have now tripled within the last year increasing Guyana's wealth. With the gap in oil in the eastern hemisphere it has become a more prominent oil producer. With this being said this urges the movement to take more action against climate change. This overall helps the economy but at a cost to the environment. It's imperative that there is some type of action taken to prevent further damage to the earth.

This introduces my solution of wide spread and meaningful education of these issues through the entire country. To do this it would need the government's support to help with spreading awareness. Talking about issues like this and making a connection with their daily lives. Those affected by the floods that happen,loss of farming land and those in poverty due to this issue. The best way to make this information available is to implement it more into schools and put policies in place so that the public knows the extent of these issues. This would be highly recommended for them to try to enforce because of the major poverty issues they have. It would be a way to help those people live a more comfortable life. With more education it would broaden the opportunities for natural renewable resources because the cost of electricity is very expensive for the country as a whole.

There is currently the Office of Climate Change (OCC) that has been working to educate the public on what they need to know about the effects of climate change. They made good progress so far in schools of all levels that conduct workshops that help people become more educated. Their approach is very unique to each part of the country making sure to consider that there are different issues for every region especially the coastline due to the rising sea levels. It makes sure that the up and coming youth do know about the things that they can do to help the environment and have a sustainable future for themselves. The use of media can also be very helpful because it has more outreach than anything else in the world at the moment. If more people knew the effects that it's having on their lives they would think twice about doing certain things and opt to choose a more sustainable choice.

Some policies that would need to be made for this to work is the need to make renewable energy a mandatory action to reduce costs of electricity and have a renewable resource. Green building codes could also be another corrective action to take because they help utilize renewable energy sources. The mandation of companies to be more environmentally friendly and share their information with the people that do use their products. This plan is only effective if everyone involved can participate and the government can monitor on a larger scale.

Another solution that can be mentioned is working on Guyana's infrastructure which could assist with the movement to prevent climate change. Energy wise Guyana is run on hydro based energy but can easily incorporate solar, wind and hydro energy. There is more than enough space to have these incorporated into

the infrastructure. On the flip side many communities might decline due to the impact on their community that it might have and the amount of space that it takes up. A project like this requires massive investment and Guyana might not have the resources to fully be able to rely on renewable energy. Overall the main issue would be the costs because of the levels of poverty that are currently shown Guyana and that with a redirection of resources it could lead to more food insecurity.

In conclusion climate change in Guyana is a major issue that needs to be addressed and dealt with as soon as possible. Due to it being an agricultural based country it's imperative that these recommendations are at least brought up to better the lives of those that live in Guyana. The use of education can make a positive impact for the rest of the world and Guyana. It would help educate people on why natural disasters happen more often or why the soil isn't as sustainable anymore. While providing the necessary solutions to major issues that families face everyday. Using these resources that could help with poverty and make sure that it's sustainable to the environment at the same time. Oil isn't the only way that they could help their economy and with the introduction of these policies it could help the nation as a whole become one of the most environmentally friendly places in the world.

## **Citations**

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