The Negative and Positive Story of Climate Change.

Every year, our planet suffers many natural disasters such as floods, wildfires, and hurricanes. They might seem like natural disasters, but the truth is that they are being influenced by human activities that contribute to the problematic phenomenon called climate change.

Climate change is a phenomenon in which the weather patterns related to an area in the world are changing to a point where the weather changes to nothing seen before. These changes can be noticed by studying changes for multiple years, which is known as long-term climate change, and it can also happen intermittently in shorter spans, which is known as short-term climate change.

This paper aims to explore what are some causes and effects of climate change, and how it is affecting the landscape, environment, and people worldwide. Lastly, it will examine what humans are doing to combat climate change.

From the beginning of time, human beings have been able to find ways to progress in the world. To accomplish progress, humans were forced to use all resources available, either underground or above ground. Things were not easy for the first humans, but somehow, they managed to survive, and for that reason, we are still here. Some resources past humans had to use were land, water, fire, metals, rocks, etc. Nowadays, humans have been able to develop even more sustainable resources that have helped mostly developed countries to become what they are now, such as electricity, many modern transportation machines, buildings, and more. To create many of these resources, other resources must be used. For example, coal is used to produce electricity, wood is used to build houses, gasoline is used to power up transportation, and more.

The way climate change is affecting the planet and everything in it can, in a way, be measured by studying changes in the world landscape in something called long-term climate change. It can also be measured by studying changes in the world where the changes are seen in smaller periods. Greenhouse gas emissions are leading to the warming of the planet. This happens when fossil fuels are burnt; when the gases are released, these gases keep heat inside our planet, thus making it warmer. Another leading cause of climate change is deforestation. Trees are there not only to be used for wood or decoration but also to absorb carbon dioxide (CO2). The population growth in the world is decreasing the size of our forests as well as the many wildfires produced by global warming. Additionally, deforestation also leads to weather pattern changes.

The more we produce greenhouse gas emissions, the more the world changes drastically and dangerously. Human activity is rising global temperatures which are impacting many weather-related events. For example, the warmer the temperature on the ocean, the stronger hurricanes and cyclones become, as well as droughts and wildfires become exponentially stronger. The rise in temperatures also is making the glaciers and ice sheets melt, and these are making the oceans raise their waters. The rise of the sea level is affecting many coastal areas because their land is lower, and this is affecting island nations. Eventually, some of these places could disappear, and their citizens would have to be displaced.

The way the world is advancing could lead to many worse events that would affect everybody, but not everything is written on a rock; there are things that we can do to minimize the effects of climate change. First, around the world, the countries that produce the most greenhouse gas emissions have created an international agreement called the Paris Agreement. In

this agreement, many countries are part of it and work together to find ways to minimize the production of greenhouse gas emissions.

Secondly, another noticeable change is the implementation of renewable energy. Many countries are focused on moving from producing energy by burning coal to creating ways to create as much energy as possible by using the wind, the sun, oceans/rivers, etc. These energies are produced from unlimited resources that eventually can completely replace the use of fossil fuels. We currently see many of these changes daily, in electric vehicles, solar panels installed on the roofs of houses, fields full of solar panels, and more.

Thirdly, education about climate change is a focused topic discussed not only in schools but also by many governments around the world. People must understand the reason why many changes are happening, and education is a must for them to understand. Many people see climate change and global warming as a conspiracy by the government, and they use many news outlets to spread misinformation. Educating people about climate change is an essential part not because everyone is going to change their mind but the more people who understand the topic the more support we will get to support the fight against it.

Developed countries are the countries that produce the most greenhouse gas emissions because they also use the most resources. Development goes hand in hand with the production of greenhouse gases and for this reason, these countries also spent the most money to combat climate change. China and the US are the leading producers of greenhouse gases but when it comes to funding the fight against climate change Japan, Germany, and France are some of the leading countries in the world. When it comes to comparing China and the US, the US is doing the most to reduce the production of greenhouse gases by creating more means to produce renewable energy and combating deforestation. The fight against climate change involves

developing ways to make places affected by climate change the most livable. The whole battle is not only to stop climate change but also to reverse it.

In conclusion, climate change is a complex topic that cannot be understood overnight but requires a lot of study. The consequences of ignoring it can be disastrous to the world and not only people currently alive are being affected but also future generations will be forced to suffer those consequences. Climate change affects societies, ecosystems, and economies and for these reasons, we need to work together to find ways to decrease its effects. It is the responsibility of all people to protect the planet and some people will have to work harder than others because of the amount of misinformation being spread around. Not everyone is on board making changes to decrease the effects of climate change and for this, I believe education is one of the most important tools that we have to educate people so they can make the best decisions for the benefit of all.

References

- Bostrom, A., Grander M. M., Fischhoff B. Read D. (1994, November 6). What Do People Know About Global Climate Change? https://www.cmu.edu/epp/files/ra-bostrom-et-al-climate-mental-models-i-19941.pdf
- Covert, T., Greenstone, M., Knittel, C. R. (2016). Will We Ever Stop Using Fossil Fuels? Journal of Economic Perspectives P. 117-138.

 https://pubs.aeaweb.org/doi/pdf/10.1257/jep.30.1.117?source=content_type%3Areact%7

 Cfirst_level_url%3Aarticle%7Csection%3Amain_content%7Cbutton%3Abody_link
- Dechezlepretre, A., Fabre, A., Kruse, T., Planterose, B., Chico, A. S., Stantcheva, S. (2022, April). FIGHTING CLIMATE CHANGE: INTERNATIONAL ATTITUDES TOWARD CLIMATE POLICIES. NBER.

 https://www.nber.org/system/files/working_papers/w30265/w30265.pdf
- Herring, D., Lindsey R. (2022, October 10). Can we slow or even reverse global warming?

 NOAA. https://www.climate.gov/news-features/climate-qa/can-we-slow-or-even-reverse-global-warming
- Owusu, P. A., Asumadu-Sarkodie, S. (2016, April 4). A review of renewable energy sources, sustainability issues and climate change mitigation. Taylor & Francis Online.

 https://www.tandfonline.com/doi/pdf/10.1080/23311916.2016.1167990

- Silva, M. H. (2022, May 24). Information and misinformation about climate change: lessons from Brazil. Inter-Research Science Publisher. https://www.int-res.com/articles/esep2022/22/e022p051.pdf
- Tilman, D., Lehman, C. (2001, May 8). Human-caused environmental change: Impacts on plant diversity and evolution. National Library of Medicine.

 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC33230/
- U.S. Agency for International Development. (2023). USAID's Climate Work: 2023 Review.
 USAID. https://storymaps.arcgis.com/stories/336fa1cc7ec143829096479a72cee39a