Entire Responsibility of Humanity for Climate Change: Critical Analysis

Abstract

For several years we have not dealt with the problems of our planet. We have been carelessly trashing the environment as if it was something that we are able to replace any time. Recently, an expression that was supposed to be taken seriously 50 years ago has become the center of our attention: global climate change. This essay will focus on this phenomenon, and it will explore the background of this problem and attempt to find a solution that can be suitable for both developing and developed countries. The researchers are pointed where is the problem started. The root of the problem dates back to the 1800s and the industrial revolution. In the early days of that era no one thought that it could affect our planet's overall well-being so fast and so negatively if they burn fossil fuels and cut down trees in order to achieve rapid growth of the economy. Unfortunately, in only 200 years the Earth proved it otherwise. Our planet's temperature is continuously increasing, and we cannot make clear predictions about the events that can happen if we pass the critical +2-degree Celsius limit. For now, we are facing sea-level increase, the melting glaciers, and changing weather conditions.

Humanity is entirely responsible for climate change

Earth has a life cycle. Climate change has happened in the past and it is happening naturally from time to time. However this time the process is accelerated because of human activity so we can say we have a problem with climate change because of humans. The greatest motivator for humanity to not care about environmental friendliness is money. For businesses it is cheaper if they are not paying for garbage removal or if they do not follow other rules regulating their operation for a better environment. For instance logging is a great business as it is easy money. If businesses want to get more space they just cut down forests (e.g. in the Amazonas). By doing so they take an advantage from earth and pollute it to sustain their business and make more money. Another major issue is population growth, which poses an increasing demand to food production, …. Even though these issues need to be addressed by regulations in order to slow down the global climate change, the societal and industrial effects should not be disregarded in doing so.

Human activities damaging the environment

There are a number of business directions which primarily harm the environment and contribute to climate change, one of these is logging. Trees are covering 30% of Earth's land. These trees are not only producing oxygen and clear the air, which is essential for most living creatures on the Earth, but they also cool the environment which is crucial for the slowing down the global climate change. "If deforestation continues as it does today, we won't be able to keep the temperature increase under the estimated 2 degree Celsius". Most of the countries realized this threat, so at the 2015 United Nations Climate Change Conference which was held in Paris they had a debate on whether the deforestation has to be limited or not. They all agreed that this condition is unsustainable, but many ethical questions were raised by this issue. Without

limitation on tree logging we wouldn't be able to reach the impact that we hope for. This means that we would need to cut back on cutting trees in both small and big companies in the industry and in both rich and poor countries equally. Since this is a global problem, everyone has to participate to accomplish the desired effect. However, this solution may lead to different problems that have to be dealt with. For example, because of lack of resources we will have to increase the recycled materials which in turn will increase the prices of the products that contain wood too. As a result, the governments can lose their control over the industry, black market can gain power and illegal logging can ruin business of the law-abiding companies. Moreover, illegal logging may target national parks and protected lands, in the end causing more harm than good. The biggest wood production takes place in developing countries like Brazil, Indonesia and Columbia. "In Brazil in 2018 alone more than 1.3 million acres of forest was cut to the ground". A similar area was erased if we talk about Indonesia - nearly 500 thousand acres - or Columbia -approximately 300 acres). The economy of these countries was kick-started by timber extraction. Developed countries like the United States buy up most of the exploited wood, because it is way cheaper even with the cost of shipping, than buying from a developed partner like Canada. Demand creates supply. That is why it is not in any of the parties' interest to put a limitation on wood extraction. Study shows that developed countries are responsible for nearly 80 percent of historical carbon emission cumulatively. It means that during the 161 years since the beginning of industrial revolution these countries, among others the United States, Russia and a number of countries in the European Union reached huge economic growth with the help of fossil fuels and emitted more CO2 than nearly all of the developing countries all together, which relation is established without counting China's emission. Developing countries find it rather difficult to accept that they should stop or minimize their CO2 emission and deforestation, especially the ones with an economy relying primarily on wood extraction. They want to grow an economically and for them the cheapest way to do so is via fossil fuels.

On the other hand, the developed countries are mostly the ones that will feel the immediate effects of global warming and will bear most of the costs. Contrary to developing countries, they can afford to renew their energy sources, build windmills, use solar panels, and loose a bit of revenue in order to slow down climate change. Some of them are still not willing to do that despite the consequences. Unfortunately, the case is mostly similar in the poorer countries. Even if they were willing to reform their economy, most of their governments are barely able to maintain the essential economic growth to keep up the current standard of living in their country. We could say that developed countries could just pay for developing ones to aid them in building a more sustainable economy, plant more trees, which would benefit everyone in the long run, but due to corruption and lack of infrastructure in these states there is a chance that all the money could just end up in offshore bank accounts somewhere in the other parts of the world. There were some attempts to set regulations like the 30*30, which aims to keep the timber extraction under the limit that was set during the climate summit in Paris. It was a great initiation, but in the following 2 years the deforestation hasn't stopped, instead the numbers kept increasing.

The other problem is population growth. More than 7.7 billion people are living on Earth today, and as this number increases the pollution grows as well. This situation poses a growing demand for food production which is one of the factors behind desertification. That is due to people needing more clean water, energy and many other commodities for production, which also results in more pollution. For example, fertilizers have high nitrogen level which is why scientists say that they are the most polluting materials today.

Water pollution is not just affecting humans it affects animals too. Water pollution can happen in a number of ways. Firstly, the used products like plant treatment ones like insecticides and herbicides are polluting the underground water. “Pollution also enters the food chains and is toxic for humans as well”. Rainwater can be pollutant when exposed to toxic gases like nitrogen oxides, nitric oxide, nitrogen dioxide, and sulfur dioxide are released into the air. This rainwater is also entering the ground and pole the ground itself as well as underground water resources. Factories are the biggest water polluters. Usually they use water for cooling machines or the water used by the manufacturing process is not getting cleansed before it is released back to nature. Oil pollution also plays a significant role in the process. Petroleum and petroleum products enter the water. They usually do so from boats which somehow got damaged. The oil is not mixing with the water therefore it is covering its surface. As a result, the rays of the Sun cannot reach the water itself, so the plants and animals in masses of water do not get enough sunlight. This can cause damage since the water will accumulate algae. Another possible prerequisite for excessive algae growth is the use of marine fertilizer and untreated wastewater with high nitrate and phosphate content getting released back. Algae toxins can be dangerous to animals and humans. Human activity makes lots of different emissions which increase carbon monoxide in the atmosphere and later also enter the water masses of Earth. As the carbon monoxide level is growing oceans swallow more gases, which is only sustainable until a certain level. As soon the carbon monoxide level is getting too high the balance breaks up. The carbon monoxides are always in the water but their form can be different, which depends on temperatures and other chemical effects. For example if the carbon monoxide became carbonate-ion the lime frame animals like corals will incorporate into their frames. However if the carbon monoxide level is too high in the water, it will become acid which medley will break the lime frame and exterminate all lime animals in the water. “It may not seem like a big problem but given that corals give habitat for several animals like small fish and crabs”. Moreover, the other problem is that the planktonic animals also die and these planktons are the bottom of the food chain. One of the effects of this would bring the extinction of whales, which have mostly plankton in their diet. However the disruption of the food chain at the lowest level is not the only effect of high carbon monoxide levels. The temperature is also rising, and high temperature makes water masses uninhabitable for corals and the atolls will also disappear. These atolls are not just giving nests for animals, but they are also some of the few true wonders of Earth, as it is also indicated by most of their big constellations being under the protection of the UNESCO World Heritage. Furthermore, as in several places on Earth regions are sustained by tourism, the vanishing atolls will also cause unemployment as tourists will no longer visit these spectacles. A warning sign for vanishing atolls is the big coral reef, which got big damage in the past few years. We might just think this just affects the oceans but this is not true. If the coral reefs are destroyed, at the same time the coasts and surrounding areas will get destroyed as well. The corals are not just giving habitat for animals they are breaking the waves and prevent larger waves from reaching the shore, hence also preventing their destruction. The most common water pollution is coming from the factories and from households because these two users use the most amount of clear water. Householders are uses for washing, showering, cooking while factories for functioning. These two activities cause highly sensitive, sensitized water that does cause environmental damage. “A single residential city making 500,000 tons of polluted water per a year”. The nutrients enrichment can be affect water pollution. Another problem is air pollution which was started because of the industrialization when factories started to operate the pollution levels started to increase. Human activities are making so many gases like CO_2, N_20 and CH_4 which are dangerous for every living organism. These gases are coming from cars, timberland fires and other ways like burning fossil fuel for energy. “These gases are responsible for the greenhouse effect”. This effect is changing the balance of Earth,

making the temperature rise higher, and causing icebergs to melt. Human activities did not only cause elevated greenhouse effects, air pollution, and rising temperature which dangers Earth in general. Humans are getting unhealthy due to these dangerous gasses. Moreover, more asthma diseases, cancer and higher death levels on the older generations were recorded because of the changing temperature. Air pollution causes acid rain which is harms the trees, pollutes waters, and also damages our buildings and changes the soil composition.

The ozone shield is covering and protecting Earth from the effects of space. The Sun emits ultraviolet rays which are dangerous for all living organism, but human activity damaged the ozone shield by making holes or just making it thinner. “Ozone shield is growing thin or getting holes because of the high temperature and gas level”. In the last few years the problem is getting more severe because of the increased emission level, which doubled in the past few years. Lastly, humanity also produces pollution via war. In the past we had several wars which gave polluted Earth. For example, via the atom bombs which were dropped to Hiroshima and Nagasaki. This source of pollution nowadays is not too significant because compared to the 20th century we are living in peace, but the arms industries are still producing bigger and more powerful weapons. This process needs testing which contributes to pollution.

Conclusion and solution

[bookmark: _heading=h.30j0zll]Humans should understand that the situation is dire, and if we are not going to change something it will get worse. Governments and market leaders have the biggest responsibility to save our planet Earth. We should use social medias like Facebook and Instagram to make advertisements and draw people’s attention to this situation. Governments should invest more into renewable energy planning and build more wind turbines, solar panels and give more motivation for automotive companies to create more electric cars. All in all, since this is a global problem, we should all act together. Even though it is hard to accept that some of the countries will experience a slowed-down economic growth, but what will these countries do if their people have no land to live on, no water to drink and have to fear from the weather due to the stubbornness of past generations. We should act now, plant trees, cut back on overconsumption, turn off unused lights, buy products with sustainable packaging, recycle, and remember that we only have one planet to live on.

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