

31.05.2023

Shehsawar A. Zafar

ESSAY - PMS (Punjab)

Ⓛ 2 HOURS  
(1530-1730)

📖 about 2,500 words

(cause)  
How Globalization and Climate Change are inter-related?  
(effect)

## Outline

### A. Introduction

Thesis Statement: While the world has resorted to globalization, its effects on the environment have largely been ignored. It has mainly affected the climate change in a ~~directly~~ and negative trend.

### B. How Globalization and Climate Change are interrelated

1. Festering relations among countries due to blame-game
2. Excessive deforestation to cater urban settlements
3. Usage of fossil fuel for urban transportation
4. Enhanced reliance on air-borne travel and sea-borne trade
5. Diminishing agricultural land and use of fertilizers



6. More inclination towards fossil fuel based power plants
7. Eliminating mountains ~~for~~ causing climate change due to volcanic eruptions

c. Mitigating Climate Change's <sup>Pace</sup> without Altering the Pace of Globalization (A Way Forward)

1. Acting upon existing framework in spirit
2. Mass Awareness by governments and public
3. Resorting to fuel efficient transportation modes.
4. Using and subsidizing non-conventional means for power generation
5. Ban on expanding cities to preserve agricultural land.

D. Conclusion



## ESSAY

The transformation of mode of production from feudal to capitalist was a precursor to many great changes in the world. Above all, it set the exponential tone of development towards globalization. By its virtue, the presence of raw material, production of the product and its consumption were not in the same region now. Hence, there was an ardent need to reduce the distances for which modern means of transportation and communication were developed. To speed up the manufacturing process, bulk electricity was also now being generated. But this all was not without any repercussion, rather at the cost of environment. After during this usage, earth's temperature started to rise and the effects started to be manifested. So, while the world resorted to globalization, its effects on the environment.



have largely been ignored. It has mainly affected the climate change in a direct and negative trend.

The worst political manifestation of climate change on the globalization is the festering of relationships between the countries on global arenas. Rather than resorting to solutions, it has started a blame game between the rival countries. For example during the massive floods in India (2010), India was allegedly held responsible for pushing its water into Pakistani rivers. This is reciprocated during winter smog season by ~~Pakistan~~ <sup>India</sup> and its ~~smog~~ is laid on Pakistani farmers from Punjab, blaming their residue of crops. Another manifestation is US-Sino rivalry when the then President of U.S. Donald Trump pulled off from the Paris Agreement in 2019. Hence, climate change has negatively affected globalization here.



Another cause of climate change negatively affected by globalization is the practice of deforestation to cater expanding urban settlements. This practice is carried on worldwide, where the habitat of numerous flora and fauna is destroyed to create human settlements. As per a criteria set by FAO, atleast 25% or one-fourth land of a country should be covered by the forests. In contemporary world, the pace of deforestation is devastatingly high. FAO (Food and Agriculture Organization) of UN has recorded that about 80 million hectares of forest land has been cleared ~~due~~ since 1990. Hence sprawling urban settlements built on forest land are a major cause of climate change, negatively caused by globalization.

The consumption of fossil fuel for transportation in urban areas is very high, which is another negative effect of globalization on climate change. Unlike rural areas



or countryside, the usual distance in urban areas for basic necessities are very large (schools, mosque, shopping centers, hospitals etc.). Hence, urban areas have a very high consumption of fossil fuels in form of CNG, gasoline (petrol) and diesel. Due to this, the concentration of carbon dioxide is rising in atmosphere. It is present around the globe and acts as blanket and acts as a Green house Gas. According to UN stats, the concentration of  $\text{CO}_2$  in atmosphere currently stands at 412 ppm (2022), at an increase of 50% from pre-Industrial era. Hence, the excessive consumption of fossil fuel for urban transportation is a negative effect of globalization on the climate change.

Another factor negatively affecting the climate change is the excessive reliance on air-borne travel and sea-borne trade. Air-based travel is the marvel of globalization, while sea-borne



Trade is the backbone of a globalized economy. They both are fueled by the fossil fuel, hence contribute immensely towards climate change. As per shared by World Trade Organization, nearly 70% of all the international trade is being done via sea-route. When zoomed in, we see that the 80% of sea-borne trade of China, a great economic power, is through Strait of Malacca alone. Likewise, almost 100% people resort to the long distance and across the border travelling, like to United States. Hence, sea-borne trade and air-borne travel due to globalization are negatively affecting the climate change.

Diminishing agricultural land and the use of fertilizer are also negatively affecting the climate change. Agricultural lands are converted into human settlements. So, the agricultural yield from the remaining land is being enhanced.



by the use of fertilizers. Many fertilizers contain Nitrogen ( $N_2$ ) which disturbs the ecosystem because it kills many insects, which are a food of birds, particularly migratory birds. moreover, the crops like rice evaporates methane ( $CH_4$ ), which is a 30 times more potent GHG than  $CO_2$ . By volume, methane is present in atmosphere by 1.5% of the total Green House Gases. Hence, the use of fertilizers and crops like rice and directly affecting the climate change in a negative way.

Another important aspect of globalization contributing towards climate change is the reliance on fossil fuel-based power generation. To automate the process in a bid for mass production, electrical appliances are used in industry in lieu of manual labor. Also, the modern concepts like Smart Industry requires



uninterrupted electricity supply. So, maximum reliance is made on fossil fuel because they are readily available and are relatively cheaper than nuclear, solar etc. As per US EIA, about 80% electricity generation in US for 2019 was through fossil fuel. The same figure for 2020 in Pakistan, a developing country, was 64% as per NTDC. Hence, electricity generation by non-conventional means is negatively affecting climate change.

Elimination of natural topography like mountains is also negatively affecting the climate change. Mountains etc. are cleared off to lay or to expand the infrastructure like motorways or rails. This can cause the land to escape from that "weak" point, hence causing volcanic eruption contributing to climate change. This is a natural cause, and has the least effect among all other causes. Hence, clearing off natural landscape to expand the infrastructure negatively.



contributes to climate change via volcanic eruptions.

The foremost step in containing climate change without altering the pace of globalization is to act upon the international conventions in spirit. All the theoretical work has already been accomplished, only the effort and commitment remains to be done. For example, the issue has been elaborately raised under United Nations Framework for Convention on climate Change (UNFCCC, 1992) and its subsequent Paris Agreement in 2015. The signatory nations should join hands to restrict the growing temperature to under  $1.5^{\circ}\text{C}$  of the pre-Industrial Revolution era, or max. by under its  $2^{\circ}\text{C}$  increase. Hence, by acting upon the conventions in spirit, we can control climate change from being festered by the globalization.

Mass awareness drives and campaigns are also useful in



educating the people about controlling climate change due to the globalization. It will compel the governments to make its policies environment friendly. This trend was started in 1970s, remembered as Green Politics. For example, Chipko Movement (1973) in India aimed at protecting forests in southern parts, started by the local villagers.

Another step to reduce climate change is to resort to fuel efficient modes of transportation. It will help in reducing carbon-emissions in the atmosphere, hence reducing climate change. For example, the use of electric vehicles, hybrid cars and car-pooling can greatly help in this regard. Hence, fuel-efficient practices will lead to reducing the pace of climate change despite globalization.



The pace of climate change can also be reduced by the use of non-conventional energy resources in wake of growing globalization. For example, governments can resort to renewable and non-conventional energy resources like solar parks, nuclear power plants etc. which do not cause climate change by liberating  $\text{CO}_2$  in the air. Pakistan's Quaid-e-Azam Solar Park installed in Bahawalpur is its best example. Public should also be given these systems at subsidized rates. Hence by resorting to non-conventional system, we can reduce the pace of climate change.

Another important factor to curb the harmful effects of climate change is to ban the expansion of cities beyond a certain point and the conversion of agricultural land for non-agricultural purposes, like establishing any housing



(4)

scheme. The best example is set in this regard by the KPK provincial government by putting a ban on such usage of land via an act by assembly. Hence by preserving the agricultural land for its destined purpose and exceeding the extra growth of a city, we can reduce the pace of climate change despite globalization.

Hence, we have seen that the globalization has negatively affected the climate change, or has exploited the planet. It comes in different manifestations, from worsening inter-state relations to the reducing energy gap by establishing fossil fuel based power plants. We need to address this via relevant forums, like in regional politics, to compel the govt governments for their implementation of UNFCCC, Paris Agreement, and carbon-credit mechanism. A chinese proverb says:

"The planet is not inherited from our fore-fathers but borrowed from our children."

(chinese proverb)

---