

Outline: The Environment has gone beyond the tipping point now?

① Introduction

There is no doubt in the proposition that human excesses have been damaging the environment for centuries now and if timely emergency measures are not adopted, climate change has the potential to engulf the very existence of life on this planet.

② Conclude Paragraph.

③ What are the causes of environment deterioration?

A - Increasing reliance on hydrocarbons - Carbon emissions

B - Increasing industrialization

C - Non-serious attitude of major emitters.

(violation of Paris Agreement)

D - Increasing reliance on fertilizers for food supply.

E - De-forestation.

④ What are the implications on the life on earth?

A - Increased global temperature (1.43°C)

B - Floods and droughts threatening life & economy.

C - Climate - Conflict News

⑤ What can be done to fight the climate change?

A - Increase in forestation.

B - Shifting to clean energy.

C - Ensure finances for the developing nations.

⑥ Conclusion -

→ The Environment has gone beyond the tipping point now.

With every passing minute, our environment is deteriorating. This climatic emergency, which the world is facing, could not have ^{been} better explained than the words of Former US President Barack Obama, who remarked that, "we are the first generation to feel the impact of climate change and the last generation that can do something about it". This piece shall start by discussing in detail, the causes of environmental deterioration such as excessive reliance on hydro carbons for energy and ever increasing industrialization. It will then explore the implications of damaging environment upon life on this planet. In the end, it will suggest some measure that can be adopted to curb the damages already suffered and curtail further exploitation of climate. There is no doubt in the proposition that human excesses have been damaging the environment for centuries now and if timely emergency measures are not adopted, climate change has the potential to engulf the very existence of life on this planet.

It is imperative to note here that it has been recorded that world temperature has risen by 1.43°C since the pre-industrial era. This should certainly ring the alarm bells. Moreover, according to World Bank, by 2050, climate change would have internally displaced 216 million people, mostly in Africa and Asia. Though it is often subjected to debate that which parts of the globe have been more responsible for this atmospheric catastrophe, the brunt of climate change is suffered by the whole world. World Economic Forum's risk report for 2024 found that the impact of climate change could

in the loss of \$ 12.5 Trillion to the world economy and lead to an additional 14.5 million deaths by 2050. (Tamil Ahmad, Building Trust, Jan 2024)

There have been a number of factors at play, which have contributed in the destruction of our environment, however foremost of them is the increasing reliance on hydrocarbons as a source of energy. Countries in Global North as well as those in Global South, both have their shares in the global carbon emissions. According to a research; China is the world's largest carbon emitter with 35% share in the global emissions, USA is the second largest emitter with 15% emissions, while India and Europe stand on third and fourth position respectively. According to UNFCCC, 65% of the carbon emissions are done by the developed nations. Therefore, carbon emissions have had devastating effects on our environment.

Moreover, the increased industrialization has also contributed alot in damaging the environment. In the global perspective, China is trying to compete with USA in an economic warfare. China has constantly indulged in industrial race to challenge the hegemony of USA in the global market. While in the context of South Asia, India is trying to compete China in this region and as a result, India has undergone rampant industrialization to overtake United Kingdom to become world's fourth largest economy. Thus, this ever increasing competition in global markets and resulting industrialization lead

to more and more carbon emissions, polluting our environment.

Another factor is the laxity of all the major carbon emitter countries. In Paris Climate Agreement, the divide between the Global North and Global South was acknowledged and accordingly it was agreed that the developed nations including USA, Europe, UK and Canada, will cut their emissions by 45% till 2030, whereas, developing nations will cut their emissions by 20% till 2030 and 50% by 2050. However, after 5 years in COP 26 Glasgow, it transpired that not a single country has chalked out a carbon-cut-off plan. China and USA topped the list of countries who failed to achieve their targets of decarbonisation. Therefore, this non-seriousness of the major emitters has remained one of the main reasons of environment deterioration.

As far as the sea life is concerned, it is greatly threatened by the increasing use of fertilizers in agriculture. With rapidly growing population, the demand for food remains on the rise. To meet the increasing demand, more and more land is utilized for agriculture across the world. To increase the supply, farmers heavily rely on fertilizers to increase the yield. These used fertilizers contain high amounts of nitrogen, which threaten the sea life due to its toxicity, when it is flushed with the rain into rivers. Moreover, some farmers also burn the agricultural waste to turn it into fertilizer known as "mulch". This burning of agricultural waste also damages the environment. (Rishi Shah, Sustainable Farming, 2020) - Therefore, in pursuit of meeting the demands of food, environment is compromised.

The rampant population across the world means that more and more land is required for housing and construction. This translates into deforestation. Forests perform a very important function of absorbing carbon from our environment, thus minimizing the after effects of carbon emissions to some extent. Wildfires have also damaged the major forests e.g. Amazon, Arizona, forests in Australia and Indonesia etc. Therefore, increasing deforestation is also a major contributor to the damaging of environment.

All the causes discussed above have damaged the environment and have inflicted irreparable loss on climate. Global temperature has risen by 1.43°C as compared with that of pre-industrial era. This rise in global temperature has far reaching effects on the ecosystem and all the life that is present on the planet earth.

Pakistan is among those countries, which have borne the severest brunt of climate change. The most recent example is that of 2022 floods, which caused unprecedented losses to Pakistan. 2022 floods damaged more than 30% of the crops in Pakistan, more than 12000 kms of roads got damaged, more than 1 million houses were destroyed and more than 36 million people got displaced. (NDMA Report on 2022 floods). The total loss endured by Pakistan's economy was estimated at \$ 30 billion. These losses caused by the floods are just the tip of the iceberg as compared with the overall climate damages endured

by the world -

The destruction of environment also leads to droughts and irregular rain patterns. Prolonged dry spells in countries such as Pakistan and India, damage the crops exacerbating the food shortages, which are already present. Crops such as wheat and rice, which form the staple diet of people living in Indian Subcontinent, heavily rely on regular rains. Lesser yields not only have the potential to create food shortages but national incomes of agrarian countries are also seen plummeting. Therefore, climate change is frog marching the world into severe food shortages.

Climate change also has the potential to exacerbate the other problems existing in the societies. It must be recognised that climatic problems themselves do not cause conflicts however, they do provide fuel for prevailing environmental, economic and social factors to turn into conflicts. e.g. in Pakistan, Uppar Hunza has become a hotspot for glacier sub-bursts. Gilgit hosts the victim communities of the Altabad, where a landslide created an artificial lake in 2010. As a result, Gilgit city, where several neighborhoods are already prone to sectarian violence between Sunni and Shia sects, now also has displaced Ismaili communities. (Ali Tajeer Sheikh, Climate-Conflict News, 2024). Therefore, climate disasters amplify other conflicts and exacerbate fragility.

Given the devastating implications that the climate change is having upon the lives of people across the globe, it is imperative for the world to take emergency measures to mitigate, if not avert, the fatal consequences. One of the foremost step in this regard is to promote forestation - The world must unitedly undertake to plant as many forests as possible across the globe - Pakistan has performed well on this front - Despite limited funds available, One billion trees were planted from 2014 to 2018 - 1.5 billion more trees were planted till 2022, with an 86% success ratio - (World Economic Forum) - Therefore, more and more plantation will help us curtail the negative impacts of carbon emissions -

Moreover, the world must work towards decreasing its reliance upon hydrocarbons and shifting on clean energy - Pakistan is taking all the possible measures to shift on clean energy - There are 15000 Megawatts hydro-electric power projects under construction in Pakistan - Apart from this, 3000 MWs of Solar projects and 5000 MWs of electricity from civil nuclear reactors would be produced by 2030 - It is worth noting here that in order to encourage public to use solar panels, government of Pakistan is offering subsidy, which can greatly reduce Pakistan's reliance on hydrocarbons for electricity production - Globally, Europe and UK also appears to be very providing as far as their objective to achieve net carbon zero by 2050 is concerned -

Finances are also very important as far as the fight with climate change is concerned. Though a significant step in this regard was taken in the recently held Conference of Parties (COP28) in Dubai, when Loss and Damage Fund was created and \$725 billions were pledged for developing countries to fund their war with climate. Developing countries such as Pakistan, which are already handling trade deficits and budget deficits, need the fiscal support of developed world. This support can also be in the form of soft loans and investments in clean energy projects. Therefore, finances are as much important here as they are in any other war.

In the light of the above discussion, it can safely be concluded that as a result of industrialization and economic wars, the world has inflicted irreparable loss upon our climate. Though it will be like living in a feds' paradise to aim for restoring our climate to the pre-industrial era, but we can still get together to put an end to any further deterioration of our environment and also attempt to recover or compensate from the damages already suffered. However, it is feared that if this got any delayed than this, our future generations might not even have an option to live.