

Q:3 Climate Change is no longer a distant threat; it is knocking on our doorsteps.

Outline

1. Introduction

Thesis statement: Climate change is knocking at the door of humanity because of human activities. Increasing sea levels, temperature increases, and decreasing average lifespan are the consequences of climate change. A collective reaction is required to forestall this threat.

2. What is climate change and how has it become threat?

3. How climate change is no longer a distant threat?

- a. Massive deforestation brings the effects of climate change closer to home.
- b. Lack of multilateral cooperation on climate change
- c. The extensive reliance on fossil fuels amplifies the climate crisis.
- d. Budgets that lack resilience to climate impact
- e. Ramping up weapons of mass destruction production intensifies the threat.
- f. Limited public awareness escalates the climate crisis's proximity.

4. How climate change is knocking on our doorsteps?

- a. Continuously increasing water level threat to coastal life.
- b. Climate change is causing various health issues globally.
- c. Increasing temperature is resulting in the escalation of wildfires.
- d. Extensive glaciers melting - losing fresh water reserves.
- e. Urban flooding because of unprecedented rain.
- f. Dents to the macroeconomic and development sectors.
- g. Decreasing the average lifespan of humans on Earth.

5. How to stop climate change from knocking on our doorsteps?

- a. Transitioning from fossil fuels to renewable energy sources
- b. Implementing innovative agricultural solutions and minimizing food wastage.
- c. Natural based solutions; halts deforestation and restore ecosystem
- d. Promotion of electric vehicles in the transport sector.
- e. Strong implication on CO₂ objectives

6. Conclusion

In an Indian village, there lived a family. The family's financial conditions were dire, and it was difficult to put twice as much bread on the table. The roof of the room was continuously leaking during the rainy season and also did not protect the members in other seasons. But, the family did not focus on roof maintenance. One day, the family was sitting beneath the sky when a storm with a lot of rain and a strong wind knocked off the roof. It was the result of family lethargy. Similarly, the world did not focus on climate change and now, its consequences are knocking at the door of humanity. Humans are responsible to bring it on its door because of massive deforestation, extensive reliance on fossil fuels burning, making more and more weapons of mass destruction, and lack of public awareness regarding climate safety. Similarly, lack of multilateral cooperation on climate change and budgets that paucity resilience to climate impacts are also responsible in bringing the climate change on humanity door. This brings a lot of consequences like continuously increasing water level in the sea and causes various health issues globally. Moreover, the surface temperature of the earth is increasing which escalate the wildfires and also responsible of extensive glaciers melting; resultant, humanity ^{is} losing fresh water reserves. The climate change is also responsible for the unprecedented rain that leads to urban flooding. On the other hand, climate change is responsible for decreasing the average lifespan of humans on Earth. Humans can stop this with collective

actions like transition from fossil fuels to renewable energy sources, innovative agricultural solutions, halts deforestation, and restore ecosystem. Moreover, promotion of electric vehicles in the transport sector and strong implication on COPs objectives are helpful in fighting against climate crisis. Climate change is knocking at the door of humanity because of human unusual activities. Increasing sea levels, temperature increases, and decreasing average lifespan are the consequences of climate change. A collective reaction is required to forestall this threat.

The natural setup of Nitrogen, Hydrogen and other gases in the atmosphere is disturb because of addition of other gases through burning of fossil fuel. This disturbance is known as climate change. On the other hand, green house gases are mainly responsible in climate change. In greenhouse effect, the sun radiation is not fully absorbed in the Earth's stratosphere region and resultant in disturb the bucket of gases composition. The consequences of greenhouse effect is that, ozone hole is creating in stratosphere layer of Earth. Ozone is a shield that purify the sun light before reaching on the Earth. After hole, many consequences are facing by the humanity. Similarly, the addition of gases in atmosphere are the causes of temperature increasing and many more. Now, discussing the causes that brings the threat of climate change closer to humanity.

The climate change is no longer a distant threat because of massive deforestation. Forests are

consider as carbon sink and control the temperature of the land. That's why, every country needs to fulfil the international requirement of having forests on 25 percent of country land. But humans are cutting the trees instead of planting of trees. According to Forest Watch Dog, more than 10 million hectares of land have been deforested over past four years from 2018 to 2022. The result of massive deforestation is that the level of carbon dioxide is continuously increasing in the atmosphere and CO_2 is contributes largely in climate change. Massive deforestation brings the climate change ~~at~~ humanity door.

Climate change is the result of lack of multilateral cooperation. During 1960s to 2010, massive industrialization was taking place, but work on climate safety was negligible. USA, UK, and China play an important role in industrialization, but contributes less in climate safety. The failure of the Montreal Protocol is the testimony to a lack of multilateral cooperation. The United States of America did not ratify the Montreal Protocol because of economic development, and other countries followed the same path. When largest producer of CO_2 did not ratify; then, the climate threat must reach ~~at~~ the humanity door. Climate change is no longer a distant threat because of multilateral cooperation.

The extensive reliance on fossil fuel for energy purpose amplifies the climate change. The requirement of energy is essential in all industry and house. But,

the production of energy through fossil fuels burning give dent to the gases composition in the atmosphere. The burning of oil, gas, and coal produce nitrogen dioxide, sulfur dioxide, CO_2 , and many other gases. When these gases are released in the atmosphere, the gases composition is disturb and resultant in climate change. From 1800s to 2024, billions of barrel of oil is burned and billions of tons of coal is burned resultant millions of tons of gases added in the atmosphere. According to IPCC, " CO_2 is contributing 64 percent towards climate change and N_2O is contributing 4 percent towards climate change." The main source of these gases are the fossil fuel burning. The climate change is no longer a distant threat because of extensive burning of fossil fuels for energy production.

Climate change is no longer a distant threat and humans are responsible for that. A budget lacking resilience to climate impacts can exacerbate the socio-economic consequences of climate change and hinder efforts to adapt to its effects. It underscores the importance of integrating climate risk assessments. Many underdeveloping countries are now thinking about climate resilience budget making. Pakistan is facing climate crisis at high level, but does not make budget for climate resilience. All these negligence show that governments are not taking climate change on urgent level. But, the disasters are increasing day by day because of climate imbalance. Climate change is no longer a distant because of budgets that lack resilience.

Ramping up weapons of mass destruction production intensifies the climate threat. The world is busy in weapons manufacturing race, but neglect the consequences of weapons production. There are eight countries in the world along with Pakistan who has weapon of mass destruction. Instead of spending funds on climate, these countries spend more funds on manufacturing of weapons. When these weapons blast, a lot of heat is produced which contribute in climate changing. Moreover, the radiation which is released after blast responsible in temperature increasing. The radiation from the Chernobyl nuclear power plant, atomic attack on the Hiroshima, and on the Nagasaki is still present in the atmosphere and is contributing extensively to climate change. But humans are still busy manufacturing more deadly weapons. The production of weapons from humans end bring climate change at humanity's door.

Lack of public awareness escalates the climate's proximity. The climate change is knocking at the door, but many people still declared it a myth. No control on fossil fuel burning releases of Chlorofluorocarbons in the atmosphere, and many other reasons show the humanity irresponsible behaviour towards the climate change. Some people and country do not put focus on it because of economic interests. On the other hand, some people deny the severity of climate change due to ideological beliefs, distrust in scientific consensus or misinformation. Similarly, lack of public awareness is the result of insufficient media

coverage which potentially downplaying its significance. The climate change is no longer a distant threat because of lack of public awareness. Now, discussing the consequences that give evidence that climate change is knocking on our doorsteps.

Continuously increasing sea level threat to coastal life is the evidence that climate change is knocking on human's doorsteps. About two third population is living on the coastal areas. The population of Australia, New Zealand, Maldives, Sri Lanka, Mumbai, Karachi, and many other cities population is facing existential threat because of rising sea level. According to IPCC "An average of 8 inch global sea level has been increasing due to climate changes." On the other hand, Pakistan is also facing this threat because of many coastal area. Many coastal villages, like Soomar, are losing land because the sea level is growing up. Facing coastal threat, Maldives shifts its capital because old capital is sinking day by day. The level of water in ^{the} ocean gives a clear message that climate change is on humanity's doorsteps.

The widespread of water-borne and vector-borne diseases around the world is testimony that climate change is at corner of humanity's house. Vector-borne diseases like dengue and malaria are surging with warmer temperatures. On the other hand, water-borne illnesses such as cholera are making a comeback due to climate change induced storms and floodings. The World Health Organization estimates approximately 250,000

additional deaths per year from under-nutrition, malaria, and heat stress due to climate changes between 2030 and 2050. Pakistan is also facing this threat at very large level. The extensive heat waves and flood around the state are the reasons of increase in diseases. The WHO predicts that about 46 million people in Pakistan will be at risk of contracting malaria by 2070. The state ^{of Pakistan} is facing economical as well as diseases threat because of climate change. Climate change is causing various health issues globally.

The world temperature is increasing which gives a sign that climate change is on humanity's doorstep. Earth temperature is increasing day by day because of fossil fuel burning and disturbing the gases composition in earth's stratosphere layer. According to IPCC, about 1.2°C temperature has been increased from 1850 to 2022 and it has potential to increase upto 1.4°C to 5.8°C in 2100. The continuously increases in temperature is resulting in the escalation of wildfires. Amazon wildfire in 2018 and 2019, Canadian wildfires in 2023, and Greece wildfire in 2023 are the evidence that temperature is increasing gradually.

The melting of glaciers around the world is the result of climate change. The 97% of water on the earth is salty and only three percent is suitable for drinking and other purpose. This part of water is reserved in the form of ice which is known as glacier. But, extensive fossil fuel burning lead to increasing the Earth's temperature and disturb the natural

seasonal cycle. The result of temperature increasing is that, the glaciers around the world are melting fastly. According to NASA, Himalaya Glacier is fastest melting in the world and on second the European Glaciers. The more fastly melting the glaciers, more scarcity of water faced by humanity. Extensive glaciers melting, resulting in losing fresh water reserves because of climate change gives clearly sign of crisis on doorstep.

The urban flooding and unprecedented rain are the sign that climate change is knocking on humanity's doorstep. Urban flooding is the result of unprecedented rain pattern in the world. Urban flooding is popular in many countries because of changing weather pattern. Pakistan is extensively facing this issue. Urban flood in Lahore, Karachi and Rawalpindi in 2022 are the reasons of climate change. According to National Disaster Management Authority of Pakistan, 45 deaths were happened in 2022 urban flooding in Karachi. Not only Pakistan but also India, Sri Lanka and Bangladesh face this crisis. Urban flooding because of unprecedented rain is the signal that climate change is reached on men's doorstep.

The economic and industrial sector of the world is facing severe challenges because of climate changes. The economy of the world is facing huge dents because of weather and climate cycle changing. Extensive floods, earthquakes, hurricanes and tsunami are the results of climate changes. All these disasters

give material and financial dents to the world economy. The flood in Pakistan during 2023 destroyed everything and gives a dent of 30 billion dollars to Pakistan economy. The United Nations Secretary General Antonio Guterres estimates ^{that} about more than 100 billions dollars economic loss because of climate change. As per Asian Development Bank, the economic toll of climate change on Pakistan could reach 18-26% of its GDP by 2050. Moreover, many other countries face this conditions. Climate change gives dent to economic and development sector of the world and show its presence on door of humanity.

Climate change is gradually decreasing the average lifespan of humans on the Earth. Environmental pollution is one of the reason of climate change. The quality index of air is bad day by day and resultant decreasing the lifespan of humans on the earth. As per Air Quality Index, Lahore is ^{the} most polluted city in the world and then Mumbai. The result of this is that the average lifespan of people of Pakistan is decreasing. According to United Nations Environmental Program, in Pakistan, life expectancy has been reduced by four years due to air pollution which contributes in climate change. The climate changes gives existential threat to the humanity on the earth and also gives signal that it reached on humanity's doorstep. Now, discussing the solutions in according with United Nation Environment Program.

The first solution to counter the

climate change is transition from fossil fuels to renewable energy sources. The burning of fossil fuels are main source of hazardous gases and it can be counter by replacing with environmental friendly energy sources like solar energy, wind energy, geothermal energy etc. According to UNEP, humans can cut 12.5 gigatonnes greenhouse gases emissions annually shifting to renewable energy. This transition is useful in saving climate as well as countries foreign reserves because almost all countries import fossil fuels from other countries. To counter the climate change, transitioning from fossil fuels to renewable energy sources play a significant role.

The second solution to counter the climate crisis is to implement the innovative agricultural solutions and minimizing food wastage. The water pollution, land pollution and air pollution are main components of climate crisis. To counter these, advanced agricultural equipments, new seed and irrigation system are helpful in saving land, air and water pollution. According to UNEP, new food production solutions can reduce emissions by 6.7 gigatonnes a year. Similarly, minimizing food wastage is helpful because waste food contributes in land pollution which is main source of climate change. Implementing innovative agricultural solutions and minimizing food wastage are useful in mitigating the sources of climate change.

The third solution is based on natural ecosystem restoration by halts deforestation. Forests are

CO₂ sinker and protect land from degradation. Moreover, the temperature of the earth can also be reduced by more plantation. According to UNEP, the world can reduce emissions by 5.9 Gt annually if it halts deforestation, ecosystem degradation and restores ecosystem. The need is that people must plantating at area where trees deforestation occur and also plantating more on new lands. Every country ^{must} ensure that 25 percent of its territory ~~must~~ ^{is} be filled with plantation. Natural based solutions such as halts deforestation and restore ecosystem are helpful in countering the climate change.

The forth solution is the promotion of electric vehicles in the transport sector to counter the climate changes. Transport releases hazardous gases because of combustion of fossil fuel in the engine. Replace fossil fuel based transport with electric vehicles will save the world. According to UNEP, the world can reduce emissions by 6.9 Gt by using electric vehicles in private and public transport. Many advanced countries are shifting towards electric vehicles, but underdeveloping countries still facing hurdles both financial and technological. The developed countries must shift the technology in the underdeveloping countries. To counter the climate change, the mode of transportation must be changed from oil burning to electricity mode.

The fifth solution is strong implications on COPs objectives. Conference of the Parties under United Nation Environmental programs set some objectives to counter

climate change at international level. Every country must fulfil the requirements whether policy making or climate budget for the objectives completions. The Government of Pakistan must ensure that next budget is in according with climate based as direction given by International Monetary Fund. Similarly, the Government of Pakistan must fulfil its Vision 2030 Energy programs on time because these projects are according to COPs objectives. Strict implications on COPs objectives to counter climate crisis is essential.

In conclusion, although the humans activities disturb the gases composition in atmosphere which lead to climate change, still it is in humans control to stop the catastrophic conditions. Promotion of electric vehicles reduce emission and also stoping deforestation is helpful in temperature controlling. The humanity faces a lot of viral diseases like malaria, cholera etc because of climate changes, but all these can be control by shifting the energy mode from fossil fuel to renewable energy source because these diseases can easily control when larges producer of hazardous gases mode is shift to environmental friendly energy sources. Although, the climate change is on the human's doorstep; it does not cross the door if all governments and individuals aim to stop it. To stop climate change, just doing practical work on given suggestions.