

"Globalization and climate change are interrelated."

1) Introduction :-

Thesis Statement :

Globalization and climate change are connected, as the globalized world's economic activities have accelerated environmental degradation and contributed to climate change. Globalization also provides an opportunity to make efforts at international level to cope up with the crisis. Various measures at international to individual levels would save the planet from further degradation.

2) An overview of the climate of the globalized world

3) Negative Impacts of Globalization on Climate change :-

- a) Global temperature is rapidly increasing since industrial revolution.
- b) Capitalism is the original sin (consumer driven market)
- c) Global trade is impacting climate of the world.
- d) Multinational Corporations (MNCs) exploit the resources and contribute to climate change.
- e) Urbanization resulted in deforestation.
- f) Loss of Habitat is directly linked with globalization.
- g) Less developed Countries (LDCs) are more vulnerable to climate change.

4) Positive Impacts of climate change

- a) Intergovernmental cooperation to deal with climate change.
- b) Financial aid to developing countries by developed countries to cope up with climate crisis.
- c) Shift towards sustainable practices - Blue economy.
- d) Transfer of technology to deal with climate crisis.
- e) Enhanced global disaster response coordination.
- f) Awareness campaigns regarding climate change at global level.

5) What needs to be done to save the planet - A way forward

- a) Sustainable degrowth to reduce carbon emissions.
- b) Effective implementation of Nationally determined contributions (NDCs).
- c) Bridging gap between resilience and mitigation.
(A case study of Norway)
- d) Reduce carbon footprint through sustainable choices.

6) Conclusion :-

In May 2024, Mohinjo Daro experienced a record breaking temperature of 52.2°C according to Meteorological Department of Pakistan. Other than this, the whole world is experiencing extreme weather conditions which were considered to happen in ~~hurry~~ future given the condition of ~~ex~~ rapid increase in carbon emissions. This is climate change which is directly linked with globalization. The interconnectedness due to globalization resulted in increased human activities leading to exponential increase in carbon ~~foot~~ footprint. Globalization has negatively impacted the climate of world as global temperature is rapidly increasing since industrial revolution. Capitalist economy which works on the principle of demand and supply, global trade, and Multinational corporations are impacting negatively the climate of the world. Apart from this, due to globalization the phenomenon of urbanization emerged, ~~habitat loss~~ which again has negative consequences for climate. Habitat loss and vulnerability of LDCs is yet another consequence of interconnectedness of globalization and climate change. Since, the phenomenon of globalization is so deep rooted it has some positive potentials for climate ~~climate~~ as well. Intergovernment cooperation, financial aid to developing countries, shifted focus of world towards renewable energy, enhanced disaster response coordination and global awareness campaigns are the hot topic ~~of~~ world leaders ~~among~~ of globalized world now. Global cooperation is too a reality ~~now~~ amidst the climate crisis. Therefore, globalization and climate change are connected, as the globalized world's economic activities

have accelerated environmental degradation and contributed to climate change. Globalization also provides an opportunity to make efforts at international level to cope up with climate crisis. Various measures at international to individual level can save the planet from further degradation.

Earth's temperature is already above 1°C pre-industrial times. ^{From} Melting glaciers of Arctic to droughts in Africa; the fingerprints of climate are visible across the world continents. In 2023, nearly 1600 people in Europe died because of climate change. Droughts, floods, storms, rising sea levels, prolonged rains are more frequent now. Scientists associate these changing patterns with human activities which grew rapidly with the globalization phenomenon.

Global temperature is increasingly rising since industrial revolution. Because of industrial revolution advancements were made in transportation system, communication, and human economy transition towards efficient manufacturing process. This increased the emission of CO_2 as the industries mostly use oil and coal for running. According to the International Intergovernmental Panel of Climate Change's (IPCC) sixth assessment report (2023) 95% of the climate change and global warming is the outcome of human activities such as transportation, industries, population expansion and economic activities etc. So, it is very clear from the various reports that human activities and interconnectedness of people is behind climate crisis.

Capitalist economy is based on the principle of demand and supply. With the globalization, consumer driven economy in order to meet the demands of people excessively burned fossil fuels. When the industrial sector burn fossil fuels CO_2 and N_2O is carbondioxide and Nitrous Oxides are released in air which traps heat in atmosphere causing global warming. According to IMF, fossil fuel subsidies increased by 2 trillion dollar by 2020-2022. This shows how ~~har~~ much the capitalist economic system is dependent on fossil fuel, thus contributing to global climate crisis.

Global trade is impacting the climate of world. As the ~~dependence of world~~ integration of world increased with globalization, the economies of world are heavily reliant on one another. The phenomenon of import and export emerged to fulfill the demand and supply needs. ~~The trade~~ This trade. 95% of world's trade occur through sea routes. Suez canal was made by the French and Britishers to reduce the time of ~~trade~~. ~~These measures that were previously taken to reduce the~~ the cargo ships. These cargo ship use fossil fuels and contribute to carbon emission. Not only these ships contribute to carbon emissions, but also are polluting the water. EU's Red Sea Naval Mission released a statement in June 2024 that a Greek-flagged oil tanker carrying 150,000 tonnes of crude oil was evacuated by its crew after being attacked in Red Sea, ^{now} poses an environmental hazard. There are many other such examples also which show that how global trade impacts climate change.

Furthermore, Multinational Corporations exploit the resources ~~as~~ and contribute to climate change. The multinational corporations (MNCs), have their branches or sweatshops in various countries. These MNCs extract the raw material from the less developed countries (LDCs) which are rich in resources and then assemble the products in their parent country. This activity of MNCs for wealth generation put the LDCs at greater stake. These countries ~~are~~ are usually poorer and lack enough finances to ~~remain~~ ~~climate~~ prepared. For example, palm oil plantations in South Asia, driven by global demands, have led to large-scale deforestation, contributing to loss of biodiversity and increased carbon emissions.

Urbanization, spurred by globalization, has also led to the rapid clearing of forests to make way for cities and infrastructure. As more people move to urban centers, the demand for land increases, leading to deforestation. Almost 10 million hectares of forests are lost ~~annually~~ annually throughout the world. (WHO). Deforestation reduces the planet's ability to absorb carbon dioxide, further accelerating global warming. Urbanization continues to be a major contributor to environmental degradation in globalized world.

Globalization has accelerated the loss of natural habitats due to industrial expansion, deforestation, and urbanization. As global economic activities grew natural ecosystems were destroyed to accommodate

industries. Pakistan has lost 60-65% ecological species due to the effects of climate change. Blind dolphins were previously in a large quantity in Indus River but because of their habitat loss 60% of blind dolphins are disappeared. (World wide fund for Nature).

In addition to this, less developed countries (LDCs) are disproportionately affected by climate change due to their limited resources and infrastructure to cope with climate disasters. These countries contribute less to global emissions but face severe impacts such as floods, droughts, and rising sea levels. Pakistan contributes only 0.9% to global greenhouse gas (GHG) emissions, but for past few years Pakistan is facing extreme consequences of climate change. LDCs often lack the financial means to implement mitigation and adaptation strategies, making them more vulnerable to the effects of climate change driven by globalization.

Even though globalization has resulted in climate change crisis in many but globalization provides the opportunity to take collective action as well to reduce the impacts.

Globalization is the reason for intergovernmental cooperation as well. Intergovernmental cooperation has resulted in bringing countries together through agreements

like Paris Accord. Nations can work collaboratively to set emission reduction target and implement climate policies. For example, the Paris Agreement unites countries worldwide to commit to reduce greenhouse gas emissions. Countries have even designed their nationally determined contributions (NDCs) to reduce greenhouse gases under the Paris agreement. This cooperation is essential in tackling climate change on global scale, as no single country can address the issue alone. Globalization has made it easier for governments to collaborate on environmental solutions.

Through globalization, developed countries provide financial aid to developing countries to help them cope with the impacts of climate change. This practice is known as climate justice. It aims to address the inequality in contributions to climate change. For example, the Green Climate Fund, established under the United Nations Framework Convention on Climate Change (UNFCCC), provides financial assistance to vulnerable nations for climate adaptation and mitigation projects. This support helps Less Developed Countries (LDCs) build resilience to climate-related disasters. By facilitating resource transfer, globalization helps to ensure that even the most vulnerable countries can participate in global climate efforts.

Globalization has encouraged world leaders to shift their focus towards sustainable practices, including the adoption of the blue economy concept, which promotes sustainable use of ocean resources. As the focus of world leaders grew towards exploration of eco-friendly economic models. For instance, countries like Norway are investing in renewable energy sources like offshore wind farms as part of their blue economy initiatives. These sustainable practices help reduce carbon emissions while promoting economic growth. Spread of these innovative ideas encourage countries to adopt environmentally friendly policies to combat climate change.

Furthermore, globalization facilitates the transfer of clean technology to developing nations, enabling them to combat climate change more effectively. Technologies like solar power, wind energy, and carbon capture are crucial in reducing greenhouse gas emissions. For example, India has been benefited from technology transfers that helped it build one of the world's largest solar farms. This exchange of technology allows countries to adopt greener practices without the need to develop solution from scratch. Globalization accelerates this process, helping to spread climate-friendly technologies across borders.

Globalization has also improved global coordination in responding to natural disasters caused by climate change. International organizations and governments can

quickly mobilize resources and expertise to help affected countries. For example, after Typhoon Haiyan hit the Philippines in 2013, the global community provided swift aid, including funds and medical supplies. The international response was facilitated by the interconnectedness brought about by globalization. Such coordination helps countries recover from climate-related disasters more efficiently, saving lives and rebuilding communities.

Globalization has also spurred awareness campaigns regarding climate change at global level. Social media platforms, international conferences, and global networks allow the rapid dissemination of information. For instance, movements like Fridays for Future, initiated by youth activists like Greta Thunberg, have gained international attention and mobilized millions to demand climate action. These campaigns highlight the urgent need to address climate change and have helped create a sense of global responsibility. Globalization has made it possible for these messages to reach a wide audience.

Sustainable degrowth is a strategy aimed at reducing economic growth to lower carbon emissions and environmental harm. SDG 13 (Climate Action) by 2030 would require sustainable degrowth to reduce carbon emission with conceptual alteration in social, environmental, and economic policies. For example, promoting the use of public transportation instead of private cars can reduce fuel consumption and emissions. Implementing degrowth strategies on a global scale would require major economic reforms and shifts in consumer behavior. This approach offers a viable solution for reducing the environmental impact of globalization while maintaining a sustainable economy.

Effective implementation of Nationally Determined Contributions (NDCs) would allow countries to meet their climate targets set by international agreements like the Paris Accord. NDCs outline country's commitments to reduce greenhouse gas emissions and adapt to climate change.

Out of 60 policies related to climate change only (the National Energy Efficiency & Conservation Policy 2023) at its action plan 2023-30 is aligned with NDCs of Pakistan. Proper implementation of NDCs is crucial to ensuring that global efforts to combat climate change are successful.

Bridging the gap between resilience and mitigation is also ~~Norway~~ crucial. Norway serves as a case study for successfully bridging the gap between resilience and mitigation in its climate strategies. The country has invested heavily in renewable energy, particularly hydropower, while also developing strategies to adapt to the effects of climate change. For example, Norway's flood and coastal management systems are designed to protect against rising sea levels. The ~~foo~~ playgrounds in the Copenhagen also serve as water reservoirs during rainy season. The roofs of the carparkings are made up of waste material and serve as an open gym for public. There are separate wide lanes for cyclists to encourage people to use cycles. These all measures are part of ~~mitigation~~ ^{resilience} strategies while energy policies which reduce reliance on fossil fuels are part of re-building mitigation strategies. The harmony between the two strategies is crucial for climate adaptation.

Individuals too play the most important role in tackling climate crisis by reducing their carbon footprint. They can reduce their carbon footprint by making sustainable choices in areas like energy use, transportation, and consumption. Simple actions like opting for renewable energy or using energy-efficient appliances can significantly lower carbon emissions. Globalization allows these practices to spread more easily, fostering a culture of sustainability across borders and encouraging collective responsibility.

In conclusion, globalization and climate change are deeply interconnected, with economic activities driving environmental degradation and global warming. However, globalization also offers opportunities for international cooperation, technological advancements, and awareness campaigns to combat climate crisis. A way forward involves implementing sustainable development, adhering to international commitments, and fostering individual responsibility for reducing ~~carbon~~ carbon footprint. Only collective action can save planet earth.