

Q.10.10

Climate Change can Result in Economic Downfall

Outline

1) Introduction:

Thesis Statement:

Climate Change poses significant risks to global economies, potentially leading to economic downfall mainly due to extreme weather events. Although, this alarming situation could be handled through green measures at state and global level.

ii) Defining Climate change and its major causes

iii) Manifestations that Climate Change can Result in Economic Downfall:

A) Severe floods and glaciers retreat damaging critical infrastructures

Case in point: Pakistan loses \$35bn due to floods in 2022

B) Agriculture's yield sensitive to severe temperature and drought leads to inflation and food insecurity

For example: Syrian civil war too agri-resources

C) Increase in energy cost due

to transition to renewables

- Pakistan requires \$340 bn in transition to renewables

D) Rise in sea level may affecting coastal tourism and employment

Case Study: Maldives is vulnerable to sea level rise

E) Heat waves and seasons changing seasonal patterns influencing mountaineering and Ski Resorts

- Decline in Alps Ski Resorts in France

F) Climate change exacerbates competition among nations for scarce resources

Case in Point: Indian ambitions to ~~block~~ stop flow of water to Pakistan

G) Climate change is threatening global supply chains

- Panama canal is facing a rainfall deficit leading to disruption of supply chains

H) Extreme weather events lead to decline in the availability of fresh water impacting industrial sectors

Case in point: UN 2018 report about water crisis in Pakistan

I) Climate Change risks pushing insurance costs higher

- For example: Year 2011, was most expensive year to cover costs in Europe

IV Climate Change business opportunities in green economy in 21st century

V The way forward to mitigate impacts of Climate Change on Economies:

A) Ending reliance on fossil fuels

B) Promoting sustainable transportation

C) Providing climate damage fund to affected countries

D) Implementing European Union Carbon Border Adjustment Mechanism (CBAM) for curbing CO2 emissions

E) Encouraging investment in renewable energy

F) Incentivising forestation and afforestation across the globe

VI Conclusion

The Industrial Revolution advanced societies in a number of ways and resulted in a rapid economic growth. By shifting from an agrarian economy to manufacturing economy, the Industrial Revolution made huge advancements in terms of increased production and efficiencies. However, these developments came with severe consequences. The Industrial Revolution's environmental impact is profound, marking the start of intensive use of fossil fuels. These fuels are the major driving force behind climate change. The consequences of this environmental impact still felt today. The carbon emission from industries and vehicles causes global warming which result in devastating floods and heat-waves. These floods and heat waves affecting critical infrastructures and food security. Besides food insecurity, tourism sectors also face economic challenges owing to rise in sea level and melting of glaciers. Further, extreme weather events lead to decline in availability

of water, which have negative impacts on the development of industrial and agricultural sectors. In addition, global supply chains are also in ^{risk} ~~threatening~~ due to rainfall deficiency in last several years, ^{and} exacerbating competition among nations ^{over} ~~for~~ scarce resources. These results from climate change may slow down economic development around the world. However, these far-reaching repercussions could be controlled by ending reliance on fossil fuels and promoting sustainable and environmental friendly transportation. Likewise, there is a need of increasing investment in renewable energy and providing the pledged climate damage fund to developing countries. Therefore, climate change causes significant risk to global economies notably due to changing seasonal patterns. However, this major source of discomfort could be controlled through ^{global} practical approaches.

Climate change is the long term increase in the global average temperature. This increase in the temperature of the earth is due to emissions of greenhouse gases into air from the burning of fossil fuels. Climate change is majorly caused due to anthropogenic activities such as combustion of fossil fuels, deforestation, and explosion of weapons particularly nuclear weapons. Besides anthropogenic activities, global warming natural causes like ~~such~~ volcanic eruptions, which release large amount of ash and gas, also lead to global warming.

The factors due to which climate change causes economic downfall are severe floods and glacier retreat. It happens because of extreme weather patterns and weather, and damage critical infrastructures like schools, roads, railway tracks,

and homes. According to data released by Ministry of Planning and Development, Pakistan, 1100 schools damaged in Khyber Pakhtoon Khawa (KPK) and overall damages cost more than \$35bn in 2022 floods. This shows that it results in economic downfall of states. Thus these damages divert funds from other development projects and lead to slow economic growth.

Agriculture sector is very sensitive to severe temperature and drought. Agriculturists yield especially staple requires water frequently and a moderate temperature for ^{their} growth. Higher temperature and unpredictable weather patterns reduce crop productivity and food insecurity. It ^{sometimes} leads political and economic instability. For example, in Syria, droughts exacerbated by climate change contributed to Syrian civil war.

by fueling tensions over water and agriculture resources. It also leads to inflation which world is witnessing currently due to decline in production of agri-yields. Pakistan also faces inflation ~~due~~ because of decline ~~of~~ agricultural production, impacting its economic growth.

Further, the cost of transition to renewable energy is increasing due to high demands. States require huge capital to adopt on new ongoing trends in energy transition to reduce emission of green-house gases. Dr. Shamshad Akhtar, ex caretaker finance minister, said that Pakistan requires \$340bn investment to address climate and development challenges. It is a clear manifestation of the fact that how a costly transition it is especially for developing countries. Therefore, poor countries needed funds to shift environmental friendly technology from traditional

Power generating sources.

Likewise, rise in sea level affects coastal tourism and employment. The rise in sea level causes submerge of islands which are best spots of tourism in the contemporary era. The rise in sea-level threatens beach tourism and leads to unemployment. For instance, experts say, there are about 1200 islands in Maldives, and around 80 percent of Maldives will be under water by 2050 due to rising sea-level. A great number of countries are dependant on coastal tourism. This erosion and storm surges pose risks to economies of nations. States with ~~with~~ ^{spending} ~~its~~ budget to relocate population which create hurdles for economic development due to climate related activities.

The global supply chains are also not immune to climate change risks. The increasing

landslides and floods affecting the flow of goods across the globe. In sea, the shipping cooperation faces challenges in their operations. It can be seen in the case of Panama canal, which is an artificial canal in the world, and is fed from Gatun lake. In 2023, the canal ~~received~~ ^{received} less rainfall, as compared to ~~last years~~ ^{last years}, due to change in seasonal patterns. This less rainfall, which is major source of water for canal forced to restrict the number of vessels passing through it and diverted to Suez and other sea routes. Thus result high cost for supplying goods which eventually leads to slow economic downfall.

The above mentioned manifestation of the climate change which can lead to economic downfall could be mitigated by reducing excessive human reliance on fossil fuels. It is the most single

important that people can do to combat climate change is to drastically reduce ~~comp~~ consumption of fossil fuels. The burning of oil, coal, and natural gas in buildings, industrial process, and transportation is responsible for the vast majority of emissions that are warming the planet. Fossil fuels causes global warming more than 75 percent, according to the United Nations. Therefore, there is need of time to replace oil, gas, and coal with renewable and efficient energy sources.

In conclusion, climate change is a burning issue of twenty-first century, which has negative impacts on ^{human} health and ecological life. It also leads to economic meltdown due to its long lasting and slowly rottenness of the environment. ~~It is~~ In this alarming situation, it can be controlled through collective efforts of the public and governments at large. It is need of the hour to adopt climate friendly practices. The governments should also increase their spendings on climate resilient projects to save the planet.

It is recently reported in a leading newspaper, The Guardian, that a 1 per cent increase in global temperature leads to a 12 per cent decline in World Gross Domestic Product (GDP). In a scenario like this, it will impact every single citizen across the globe. The silver lining is still vital for people and world powers to take climate action and save the world from disaster.

