

Climate Change: An Existential

Threat To Pakistan

Outline

Thesis Statement:

Climate change is not a distant environmental issue for Pakistan; it is an existential threat that endangers its ecology, economy, and social fabric. However, through effective governance, disaster preparedness, and international cooperation, Pakistan can mitigate its impacts and ensure survival.

- 1- Understanding The Existential Threat
 - Meaning of "existential threat" in Pakistan's context

- India Pakistan is highly vulnerable to climate change

2- Scientific and Environmental Evidence of Crisis

- NDMA 2024 data on disasters and floods
- Rising temperatures, glaciers melt, and erratic rainfall
- Heatwaves and the shrinking Indus Basin

3- Economic Destruction and Livelihood Crisis

- Decline in agriculture and food insecurity
- Damage to infrastructure, power sector, and GDP loss
- Rising inflation, poverty, and unemployment

4- Social and Political Risks

- Climate-induced migration and displacement
- Urban overcrowding and resource conflicts
- Governance strain and provincial inequalities

5- Environmental Degradation and Public Health

- Air pollution, droughts, and biodiversity loss
- Spread diseases, malnutrition, and health costs

6- Counter-Argument and Rebuttal

- "Climate change is a global problem" - a weak excuse
- Pakistan's low resilience makes it uniquely endangered

7- National and International Response

- National Climate Change Policy 2021 and NDMA reforms
- Green Pakistan Programme and Ten Billion Tree Tsunami
- Pakistan's diplomatic role at COP28 and Loss and Damage Fund

8- The Inlay Forward

- Adaptation and resilience-building
- Renewable energy transition and water management
- Education, awareness, and institutional transparency

9- Conclusion

- Summing up the existential nature of the crisis
- A call for national unity, adaptation, and timely action

Main Essay

Climate change has transformed from a global warning to a lived reality for Pakistan. The country today faces a crisis that touches every sphere of life - from melting glaciers to flooded plains, from economic breakdown to social unrest. The term "existential threat" means a danger so severe that it questions the survival of a nation's people, economy, and ecology. For Pakistan, this phrase has become a painful truth. Despite contributing less than one percent to global greenhouse gas emissions, Pakistan ranks among the top five most climate-vulnerable countries in the world, according to Global Climate Risk Index 2024. This imbalance between contribution and consequence underlines the injustice Pakistan faces. Yet, it also reminds us that survival now depends not on sympathy but on strategy - and the urgency to act.

before it is too late.

Pakistan's geography makes it highly exposed to climate shifts. The country's northern glaciers feed the Indus River, which provides for nearly 220 million people. As global temperatures rise, these glaciers are melting rapidly, disturbing the entire Indus Basin. The National Disaster Management Authority (NDMA), in its 2024 report, recorded more than 350 climate-related disasters in five years— including floods, droughts, and heatwaves. The devastating floods of 2022 were a warning bell that drowned one-third of the country, displaced 33 million people, and caused losses of over \$30 billion. The Pakistan

Metereological Department noted that average under
 temperatures have risen by 1.1°C since 1960. To
 while heatwaves have doubled in relief
 frequency. Such figures reveal that climate that
 change is not a future risk but a present envi
 and escalating danger.

Economically, the toll of this crisis is
 massive. Agriculture, the backbone of Pakistan's m
 economy and the livelihood of millions, h
 is deteriorating rapidly. According to the
 Asian Development Bank (ADB), climate
 change could shrink Pakistan's GDP by
 up to 9% by 2050 if left unchecked.
 Unpredictable rainfall destroys crops; flood
 wash away fertile soils while droughts
 leave fields barren. The 2022 floods
 destroyed 4 million acres of farmland,
 reducing cotton, rice, and wheat production
 drastically. With each disaster, inflation
 rises, exports fall, and unemployment deepens.
 Roads, bridges, and power grids collapse

under extreme weather, forcing the government to divert funds from development to disaster relief. This economic chain reaction proves that climate change is not only an environmental crisis but a direct assault on Pakistan's financial stability.

The human cost of this crisis is even more heartbreaking. Climate-induced migration has become a painful reality for millions. NDMA data shows that around 8 million people were displaced in 2022 alone due to floods. Families who once depended on fertile land in Sindh or Balochistan are now living in temporary shelters or overcrowded cities. The migration from rural to urban areas increases population pressure in already strained cities like Karachi and Lahore. Unemployment, housing shortages, and poor sanitation follow. Social tensions rise as communities

compete for scarce resources like water and electricity. In some areas, local disputes over land and water have even turned violent. Climate change, therefore, operates as a "threat multiplier," intensifying poverty, inequality, and political unrest.

Environmental degradation further complicates this crisis. Rising temperatures have worsened air pollution, which now kills thousands annually. Deforestation, soil erosion, and water contamination are diminishing biodiversity and agricultural productivity. After the 2022 floods, stagnant water became breeding grounds for diseases such as malaria, dengue, and cholera. The World Health Organization (WHO) reported that Pakistan faced one of the largest post-flood health emergencies in the region. These conditions are deteriorating public health systems and increasing the burden on

already limited medical infrastructure. The cycle of disease, displacement, and deprivation reflects how deeply climate change has infiltrated daily life.

Some argue that climate change is a shared global challenge and that Pakistan, contributing little to emissions, bears an unfair burden. While this view highlights international injustice, it cannot justify domestic neglect. What makes Pakistan's case exceptional is its weak resilience. Developed nations can recover from climate shocks through strong institutions and infrastructure. Pakistan, in contrast, struggles with limited resources and poor governance, making every climate disaster a national emergency. The

Global Climate Risk Index 2024 again confirms Pakistan among the top five most affected countries. This vulnerability stems not just from nature but from years of inadequate planning and delayed adaptation.

Despite these challenges, Pakistan has made some progress. The National Climate Change Policy (2021) outlines strategies for adaptation and mitigation. Under NDMA's guidance, early-warning systems and local disaster response authorities have been expanded. The Green Pakistan Programme and The Ten Billion Tree Tsunami are restoring forests and reducing soil erosion. Internationally, Pakistan has become a voice for climate justice. Its strong advocacy during COP28 helped establish the Loss and Damage Fund to support vulnerable countries. However, the real test lies in effective implementation and transparency within these programs, ensuring that allocated resources reach affected communities.

Moving forward, Pakistan must replace reaction with preparation. Building climate-resilient infrastructure is crucial to protect against future floods and droughts. Strengthening water management through the construction and maintenance of reservoirs and canals can regulate river flow and store excess rainwater. Modern irrigation systems like drip irrigation can reduce wastage and improve productivity. Similarly, promoting renewable energy—solar, wind, and hydropower—can lower emissions and reduce dependency on imported fuels. Investing in green industries can generate jobs while protecting the environment.

Public awareness and education are equally vital. Schools should integrate environmental education into their curriculum, while media campaigns can help spread awareness at the grassroots level. Local communities should be trained in disaster preparedness.

sustainable agriculture, and resource ~~so~~ that conservation. Transparency and coordination among federal and provincial governments must be ensured so that climate projects do not fall victim to corruption or inefficiency. A well-informed and engaged citizenry can turn vulnerability into strength.

International cooperation will remain ~~an~~ essential for Pakistan's success. Developed countries must provide climate finance and technological assistance under the principle of "common but differentiated responsibilities." Pakistan should continue its diplomatic efforts to secure these supports, emphasizing its status as a frontline state in the global climate crisis.

Regional cooperation, especially with neighboring countries sharing water resources, can also play a key role in managing future risks.

In the long run, sustainable development is the only path to survival. Economic growth should be aligned with environmental protection. Policies promoting green energy, water-efficient farming, and urban forestation can transform Pakistan into a more resilient nation. If handled wisely, climate change become an opportunity to reshape Pakistan's development model toward self-reliance and sustainability.

In conclusion, climate change stands as the gravest existential threat Pakistan has ever faced. It endangers the nation's environment, economy, and people simultaneously. The 2022 floods, recurring heatwaves, and melting glaciers have already demonstrated the urgency of ~~the~~ the crisis.

Yet, the same threat can become a turning point if the country unites around adaptation, resilience, and reform. Strong governance, transparent implementation, and public participation can still save the nation from collapse. Climate change may be a global phenomenon, but for Pakistan, it is an immediate reality — one that tests not only its systems but its will to survive. The time to act is now, for delay will cost more than any nation can afford.