

TOPIC:

CLIMATE CHANGE: An Existential Threat To Pakistan

Introduction:

Climate change today represents the single biggest threat to Pakistan's stability and survival. The phrase "existential threat" means a danger so serious that it challenges the very existence of the state, its people, and its resources. For Pakistan, this is not a theoretical risk but an unfolding reality. The floods of 2022, which affected 33 million people and caused losses

exceeding \$30 billion, revealed how deeply vulnerable the country has become. Glaciers are melting, temperatures are rising, and water resources are shrinking. Pakistan contributes less than 1% to global greenhouse gas emissions, yet it ranks among the top five most climate-vulnerable nations according to the Global Climate Risk Index 2024. This imbalance between contribution and consequence shows that climate change threatens not only Pakistan's environment but its very existence. However, with strong governance, early adaptation, and cooperation at national and international levels, this existential danger can still be controlled.

Outline:

Thesis:

Climate change poses an existential threat to Pakistan by endangering its environment,

economy, and national security. It is already destroying livelihoods, displacing populations, and sustaining resources. Yet through resilience, policy reform, and climate diplomacy, this threat can be reduced.

1. Meaning and nature of existential threat in Pakistan's context
2. Scientific and environmental evidence of crises - NDMA 2024 data, floods 2022, heatwaves, glacial melt
3. Economic destruction caused by climate change - agriculture loss, GDP decline, infrastructure damage
4. Social and political risks - displacement, poverty, provincial tensions, resource stress
5. Environmental degradation and health hazards - air pollution, water scarcity, diseases
6. Rebuttal of counter-argument - global problem but Pakistan's weak resilience makes it exceptional

- 7- National and international response - climate Change Policy 2021, NDMA initiatives, Green Pakistan Program
- 8- Way forward - adaptation, disaster management, water reforms, renewable energy, public awareness
- 9- Conclusion

ESSAY:

Climate change is no longer a distant threat for Pakistan; it is a crisis that has already arrived. Pakistan's geography, economy, and demography make it one of the world's most exposed countries to climate disasters. The northern glaciers feed the Indus River, which supports the livelihood of nearly 220 million people. As these glaciers melt faster each year, Pakistan faces both floods and future water scarcity. The country's dependence on agriculture and its low capacity for adaptation amplify every disaster.

Hence, the threat is existential because it directly endangers the conditions of national survival - food, water, health, and stability.

Scientific evidence confirms the scale of this crisis. The National Disaster Management Authority (NDMA) in its 2024 report recorded over 350 climate-related disasters in the previous five years. The 2022 floods submerged one-third of Pakistan, destroyed 2 million homes, and displaced 33 million people. According to the World Bank, total damages exceeded \$30 billion. Similarly, the Pakistan Meteorological Department (PMD) found that average national temperature has risen by 1.1°C since 1960, while the frequency of heatwaves has doubled. In 2024, Jacobabad reached 52°C , making it one of the hottest

places on Earth. These facts prove that the danger is not theoretical; it is measurable, visible, and escalating.

Economically, the impact is devastating. The Asian Development Bank (ADB) estimates that climate change could reduce Pakistan's GDP by 8-9% by 2050 if no action is taken. Agriculture - which provides 40% of employment - is highly sensitive to temperature and rainfall. Unpredictable monsoons damage crops, reduce exports, and increase food prices. In Sindh and Balochistan, droughts have destroyed farmland and forced thousands to migrate. Each flood or heatwave damages power grids, roads, and irrigation channels, further increasing the financial burden. Inflation rises, unemployment spreads, and poverty deepens. This economic breakdown shows that climate change is not only an environmental challenge but a direct threat

To the survival of Pakistan's economy.

The social consequences are equally alarming. Millions of people have been displaced by floods and droughts, creating internal climate migrants. According to the NDMA, more than 8 million Pakistanis were displaced in 2022 alone. Rural-to-urban migration is increasing population pressure on major cities like Karachi, Lahore, and Islamabad. This rapid migration leads to overcrowding, unemployment, and tension over limited resources such as water and electricity. In provinces like Sindh and Balochistan, competition for water and land is already causing local disputes. Climate change, therefore, acts as a "Threat multiplier," worsening poverty, inequality, and political instability.

The environmental and health dimensions make the crises even deeper. Rising

Temperatures increase the spread of vector borne diseases such as malaria and dengue. Water scarcity and pollution reduce clean-water access, especially in rural areas. Urban air pollution, partly linked to heat and dust, causes respiratory diseases. Forest loss and desertification are reducing biodiversity. These environmental damages are irreversible in some areas and further weaken food and health security.

Some argue that climate change is a global issue, affecting all nations equally, and therefore Pakistan is not alone. It is true that floods, wildfires, and storms also affect developed countries. However, this view ignores the difference in resilience. Countries with strong economies and advanced infrastructure can recover quickly. Pakistan lacks such capacity. Weak governance,

poor planning, and limited financial resources mean that each climate shock becomes a national crisis. The Global Climate Risk Index 2024 ranks Pakistan among the top five most affected countries, proving that vulnerability, not exposure alone, defines the scale of threat. Hence, Pakistan's climate crisis is exceptional because its survival capacity is low.

To manage this existential threat, Pakistan has begun taking action. The National Climate Change Policy (2021) provides a framework for adaptation and mitigation. The Ten Billion Tree Tsunami Project aims to restore forests and control soil erosion. The Green

Pakistan Programme promotes renewable energy, particularly solar and wind, to reduce dependence on fossil fuels. The NDMA has started developing local disaster management authorities and early-warning systems, though progress is slow. Internationally, Pakistan played a key role in establishing the Loss and Damage Fund at COP28, seeking global support for climate-affected developing nations. These steps, though limited, show that Pakistan is trying to turn awareness into action.

Going forward, Pakistan needs to shift from reaction to preparation. Building climate-resilient infrastructure should be a national priority. Dams and water reservoirs must be maintained and expanded to manage both floods and droughts. Early-warning systems should reach every district, especially in

rural areas. Farmers need access to heat-resistant seeds, drip irrigation, and crop-insurance schemes. Education and awareness campaigns should teach communities how to respond during disasters. On the policy front, transparency in fund allocation and coordination among federal and provincial governments are essential. Internationally, Pakistan should continue to lobby for climate finance and technology transfer from developed countries.

Moreover, renewable energy investment is crucial. Pakistan's energy sector relies heavily on imported oil and gas, which are both costly and polluting. Expanding solar, wind, and hydropower can reduce emissions and improve energy security. Urban planning must integrate green spaces and efficient drainage to prevent urban flooding. At the local level, community-

based disaster management can save lives and reduce damage. Every citizen must understand that climate change is not only a government issue but a shared responsibility.

In the long run, sustainable development is the only path to survival. Economic growth must go hand in hand with environmental protection. Water-efficient farming, waste management, reforestation, and green industries can create jobs while reducing carbon footprints. Climate change offers an opportunity to redesign Pakistan's development model around resilience and sustainability.

Conclusion

Climate change today stands as the greatest existential threat to

Pakistan - It is destroying lives, livelihoods, and ecosystems while undermining national unity and economic growth. The 2022 floods, rising heatwaves, and melting glaciers have already proved how fragile the country's systems are. Yet the same crisis can become a turning point. With strong policies, transparent governance, and public participation, Pakistan can adapt and recover. The task is urgent but achievable. The future of more than 220 million Pakistanis depends on how quickly and wisely the nation acts. Climate change may be global, but for Pakistan, it is a matter of survival.