

CLIMATE CHANGE IN PAKISTAN: CAUSES & CONSEQUENCES

OUTLINE:

1. Introduction

2. Causes of climate change in Pakistan

2.1. Geography: Between Glaciers and Monsoons.

- Himalayan glaciers → melting and GLOFs in GB.
- Erratic monsoons worsen floods and droughts.
- Geography creates exposure, but policy failure makes it disaster.

2.2. Vanishing Forests, Rising Floods

- Forest cover only ~5%.
- Deforestation fuels soil erosion with flashfloods.
- Weak protection of forests accelerates climate vulnerability.

2.3. Fossil fuel Addiction

- 54% electricity from fossil fuels.
- Adds emissions and drains foreign exchange.
- An energy crisis becomes a climate crisis.

2.4. Agriculture designed for the Past

- Rice and sugarcane consume excessive water
- Flood irrigation wastes resources.
- Outdated farming collides with modern climate stress.

2.5. Unplanned cities, Unlivable spaces

- Karachi floods due to blocked drains.
- Lahore smog from unchecked industry + transport.
- Poor Urban planning magnifies climate impacts.

2.6. Governance & Institutional Weakness

- Climate change treated as emergency, not long term planning.
- Weak enforcement of laws, poor coordination.
- Weak governance fuels strong disasters.

3. CONSEQUENCES OF CLIMATE CHANGE

3.1. Human Survival at risk

- 2025 Buner flood : 328+ dead in single day.
- Heatwaves since 1980 killed 2700+.
- Climate change in Pakistan eroding human security

3.2. Economic Losses & Fiscal Stress

- 2022 flood : US \$ 30+ Billion damage; GDP shrank
- Agriculture, exports, and industry hit.

- Every disaster pushes Pakistan back years.

3.3. Food and Water Insecurity

- PES: water stress rising, millions at risk.
- Erratic rainfall results in crop failure.
- Climate risk today = hunger tomorrow.

3.4. Public Health Crisis

- Smog causes respiratory illness.
- Heatwaves and floods spread vector-borne diseases.
- Climate crisis is also a silent health emergency.

3.5. Social and Political Strain

- Displacement → "climate refugees" in cities.
- Rising inequality → social unrest.
- Climate change threatens not just survival but stability.

3.6. Environmental Degradation

- Soil erosion, loss of biodiversity.
- Mangroves and wetland destroyed.
- Damaged ecosystems means weaker natural defenses.

Conclusion

Climate change in Pakistan is more than a scientific issue; but it is the test of national

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Survival, Stability and Sustainability.

3.3. Food and Water Insecurity

- 66% water stress rising, million at risk.
- Extreme rainfall events in crop failure.
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- Long term respiratory illness.
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- Climate crisis is also a health crisis emergency.

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- Displacement - "Climate refugees" in cities.
- Rising inequality - social unrest.
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Climate Change in Pakistan : Causes and Consequences

INTRODUCTION:

In August 2025, the people of Khyber Pakhtunkhwa woke up to the deadliest cloudburst in the recent memory. In Buner district, flashfloods and landslides swept the lives of 300 people destroying roads, bridges and houses leaving the community stranded. The Helicopter sent for rescue operation crashed due to rough terrain. At the same time, in Gilgit - Baltistan unusual heat triggered Glacial Lake Outburst Floods which destroyed the villages downstream. These events were not isolated natural disasters; but they were clear signs of how badly the climate change is affecting the landscape threatening the life of people of Pakistan.

According to Pakistan Economic Survey 2024-2025, this year was one of the warmest in last six decades, the national average temperature averaging to 23.52°C almost a full degree above normal. Rainfall was 31.1% higher than average, worsening floods and landslides. The Germanwatch Climate Risk Index also places Pakistan among the world's most climate-vulnerable states, even though the country contributes less than 1 percent of GHG emissions. This contradiction highlights that Pakistan Challenge is not only green global warming but also weak planning, poor governance and fragile infrastructure. Unless strong reforms are adopted, climate change will remain a direct threat to national survival and stability.