

Climate Change and Pakistan's Survival Challenge

Outline:

I. Introduction

Climate change has emerged as an existential threat for the survival of Pakistani society which requires effective policy and societal response to counter its impacts.

II. Decoding the term Climate change

III. Climate change: A Challenge to Pakistan's Survival

1. Witnessing accelerated glacial melting face threat to water security

a. Over 3000 glacial lakes many at risk of outburst floods (GLOFs).

b. Pakistan Meteorological Department Report

2. Fluctuating Hydropower output due to irregular river flows.

a. Reduced water level at Tarbela and Mangla dams

b. International Energy Agency (IEA)

3. Confronting marginalization of vulnerable communities due to ecological instability.

Environmental degradation disproportionately marginalizes — UN Development Report

4. Facing severe weather-induced disasters due to erratic monsoon patterns.

National Disaster Management Annual Report 2022

5. Suffering crop failure due to extreme weather events.

Cotton production declined sharply after floods, affecting textile exports.

Pakistan Agricultural Research Council (PARC)

6. Facing natural disasters driven by global warming.

Over 1200 deaths in Karachi (2015) due to extreme temperature.

7. Deploying armed forces increasingly for disaster relief weakens Pakistan national security.

~ Military's role in flood relief

8. Witnessing displacement from environmental shock threatening social cohesion.

a. Over 33 million people displaced in 2022

b. Internal Displacement Monitoring Center (IDMC)

9. Experiencing decreasing per capita water resources due to hydrological stress.

Per capita water availability dropped below 1000 cubic meters — PCRWR (Pakistan Council of Research in Water Resources)

Low water levels in Tarbela and Mangla

IV. Way forward for a Survival-oriented Climate strategy:

1. Integrating climate resilience into national development planning.

Pakistan National Climate Change Policy

Climate smart agriculture programs in Punjab and Sindh to improve crops resilience.

2. Collaboration with international agencies

for technology transfer and climate modeling tools.

Participates in Green Climate Fund (GCF)

3. Building climate-resilient infrastructure to protect communities from extreme weather impacts.
Urban planning initiatives

4. Integration of renewable sources into national grid for consistent supply.

Projects like Qwaide Azam Solar Park and Thimpir Wind Farm

V. Conclusion