

- Q2. Climate change has emerged as a major non-traditional security threat to Pakistan. Analyze its socio-economic and political implications, and evaluate Pakistan's institutional response to climate change induced challenges.

Introduction:

Climate change has emerged as a serious non-traditional security threat, particularly for vulnerable countries like Pakistan. Due to its fragile economy, heavy reliance on natural resources and weak governance structures Pakistan is highly exposed to climate induced threats.

Pakistan has developed several policies and initiatives in response but implementation challenges persist due to weak institutional capacity and limited financial resources.

Socio-Economic Implications

Climate change in Pakistan is directly linked with its socio-economic structure.

1) Impact on Agriculture

Agriculture is the backbone of Pakistan's

economy and the primary source of income for large rural population. Climate change has introduced uncertainty into agricultural production through rising temperature that reduce crop yield. It also increased frequency of floods and droughts damaging standing crops. Pakistan has seen the most devastated floods in its history.

-) These challenges affect farmers incomes particularly small landholders.

2) Food Insecurity and rising Inflation

climate induced disruptions in agricultural output lead to shortages of essential food items. Reduced supply due to damaged transport networks result in rising food prices, increased dependence on food imports and worsening malnutrition especially among children and women. Agriculture contribute 24% to GDP and employ 42% of labor force.

- ## 3) Water Scarcity and Economic stress
- Pakistan's economy is heavily

dependent on water, energy and industry. Climate change affects water availability through glacier melting and reduced groundwater recharge. It reduces industrial output and threatens energy generation.

4) Public Health issues

Extreme temperature, floods and poor water quality contribute to heat-related illnesses and deaths. It also spread water-borne and vector-borne diseases.

5) Climate-Induced Displacement

Repeated climate disasters force people to abandon their homes. This leads to large-scale internal migration, rapid expansion of informal urban settlements and increasing pressure on housing, sanitation and employment in cities.

6) Infrastructure damage

Floods and storms frequently damage roads, bridges, school and homes. The economic consequence include

disruption of trade and connectivity
and increased reconstruction costs.

Political and Governance Implications

Climate change is increasingly shapes
political stability and governance capacity
in Pakistan.

i) Federal-provincial Tension and Resource
politics

climate change intensifies competition
over scarce resources particularly water.
This inter-provincial disputes results
in disagreements over dam construction
and irrigation and provinces accuse each
other of unequal water distribution.

ii) Strain on State Capacity and Governance
Frequent climate disasters require
continuous emergency response, relief
operations and reconstruction efforts.

When institutions fail to provide timely
and effective responses it result in
erosion of public trust in government and
weakening of state legitimacy especially

in disaster-prone regions.

iii) Internal displacement and political instability

Large-scale displacement caused by floods, droughts and land degradation has significant political consequences. Sudden population movements overwhelm local administrations, creates competition for jobs, housing and services. Displaced populations often remain politically marginalized and weakening democratic participation.

iv) National Security Threat

Climate ~~change~~ stress acts as a threat multiplier by intensifying existing security problems. Scarcity of resources and livelihood losses can increase crime and local conflicts and create fertile ground for extremist narratives.

Pakistan's Institutional Response to Climate Change

1) Policy and Legal Framework
Pakistan has introduced several policy to mainstream climate concerns into national planning. These frameworks aim to promote climate adaptation and mitigation, enhance resilience of vulnerable sectors such as water and agriculture and integrate environmental considerations into development strategies.

2) Climate Institutions
The establishment of specialized institutions has strengthened Pakistan's administrative capacity. Institutional arrangements include a federal ministry responsible for climate policy coordination, Advisory councils and technical bodies for climate planning and provincial environmental unit. These institutions provide a platform for policy formulation and engagement with international partners.

3) Disaster Risk Management Mechanisms
Pakistan's disaster management structure has evolved significantly in response

to repeated climate shocks. The development of national and provincial disaster authorities has improved early warning dissemination and enhance coordination during emergency response.

4) Climate Adaptation Initiatives

Institutional efforts have increasingly focused on adaptation measures, particularly in climate-sensitive sectors. These include promotion of climate-resilient agriculture practices and flood protection and water management.