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## ESSAY

# Climate change of Pakistan: Causes & Consequences

## Outline

- 1) Introduction
- 2) Climate change of Pakistan
  - a. Pakistan contributes little to green house gas emissions.
  - b. Impacted majorly due to its geographic location
- 3) Causes of Climate Change in Pakistan
  - a. Deforestation
    - (i) logging and wood fuel in rural areas
    - (ii) Urban expansion have led to clearing of forests.
  - b. Greenhouse gas emissions
    - (i) fossil fuel combustion
    - (ii) Production of methane via cattles and use of synthetic fertilizers contributes to  $\text{NO}_x$  emissions.

(iii) Industrial work releases gases

#### d) Industrialization

- (i) Increased energy consumption
- (ii) High pollution levels.

#### e. Melting glaciers

(i) Pakistan has more than 7000 glaciers due to the global warming.

(ii) Also led to glacial lake outbursts floods (GLOFs)

#### f. Energy Production

(i) Reliance on heavy fossil fuels for electricity production.

(ii) Contributes to global warming due to gas emissions.

#### g. Pollution and waste management

(i) Open waste burning

(ii) Harmful pollutants released

(iii) Untreated industrial emissions

#### 4) Consequences of Climate Change in Pakistan.

##### a. Rising temperatures

(i) Causes heatwaves

(ii) glacial melting

(iii) floods

(iv) droughts

(v) storms

b. Rise in sea levels.

(i) Higher temperature causing polar ice to melt.

(ii) Coastal flooding.

c. Disruption of ecosystem.

(i) Changing habitats of animals and plants -

(ii) Struggle for survival.

d. Erratic rainfall patterns

(i) intense and unpredictable rainfall

(ii) extreme weather events caused like floods and droughts.

(iii) October 2022 flood in Pakistan — 2000 people killed and 15 billion dollars of economic loss.

e. Agricultural impacts

(i) Decreased crop yields due to alleviated water availability.

(ii) Food insecurity due to the changing climate patterns.

f. Migration And Displacement

(i) Disasters pushing people from rural / coastal areas to urban.

(ii) Increased strain on the urban infrastructure.

g. Water scarcity.

(i) Caused due to climate change impacts on Indus River.

(ii) Due to high population growth.

(iii) Changes in monsoon patterns.

5) Conclusion.

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