

# Climate Change

## Causes and Consequences

### Outlines

#### 1) Introduction :-

Hook :-

Background :-

Thesis :- climate change is primarily driven by human activities such as deforestation, fossil fuel combustion, greenhouse gases emission, transportation and livestock agriculture, resulting in severe environmental consequences such as intense droughts, severe water scarcity, rising sea levels, flooding and catastrophic storm.

#### 2) Human Activities Driving Climate Change

##### A) Deforestation :-

i) Loss of carbon sinks

ii) Rapid urbanization and land-use change

iii) Biodiversity loss

##### b) Fossil Fuel Combustion :-

i) Coal, oil and natural gas dependency

ii) Industrial and energy sector emissions

iii) Accumulation of  $\text{CO}_2$  in atmosphere

## C) Greenhouse Gas Emissions:

i: Carbon dioxide, methane and nitrous oxide

ii: Industrial processes and waste management

iii: Intensification of greenhouse effect

## D. Transportation:

i: Heavy reliance on petrol and diesel powered vehicles

ii: Expansion of transport networks

iii: Lack of energy efficient transportation

## E) Livestock Agriculture

i: Methane emissions from ruminants

ii: Fertilizer use and nitrous oxide release

iii: Unsustainable farming practices.

## 3) Environmental Consequences of Climate Change

### a. Intense Droughts

i: Extended dry spell

ii: Decline in agriculture productivity

### b. Water Scarcity

i: Depletion of fresh water resources

ii: Pressure on human and agriculture (combustion) consumption

### C. Rising Sea Levels

i: Melting glaciers and polar ice caps

ii: Threats to coastal regions and settlements

## d. Flooding

i: Intense precipitation

ii: Overflow of rivers and drainage systems.

## e. Catastrophic Storms

i: Intensified hurricanes and cyclones

ii: Economic losses and humanitarian crises

## 1) Way Forward:-

a) Transition to renewable and low carbon energy systems

b) Implementation of reforestation and afforestation programs

c) Effective implementation of Paris climate agreement

d) Strengthening climate governance, finance and international cooperation.

## 2) Conclusion

## Introductory Paragraph:-

Once Barack Obama warned, "There is one issue that will define the contours of this century more dramatically than any other, and that is the urgent threat of a changing climate." This statement echoes a reality that climate change is not just an environmental concern, it is a defining challenge of our era. Climate change is the gradual alteration of earth's climate caused largely by human activities. Its effects are more severe in developing countries, where limited resources make coping with floods, droughts and food security becomes difficult. Pakistan is increasingly vulnerable to climate change unless taking the importance of immediate environmental measures. Climate change is primarily driven by human activities such as deforestation, fossil fuel combustion, greenhouse gases, transportation and livestock agriculture, resulting in severe environmental consequences such as intense droughts, water scarcity, rising sea levels, flooding and catastrophic storms.