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PMS Batch - 001

# Topic: Climate Change: Causes and Consequences

## Brainstorm

Human activities causing T to rise

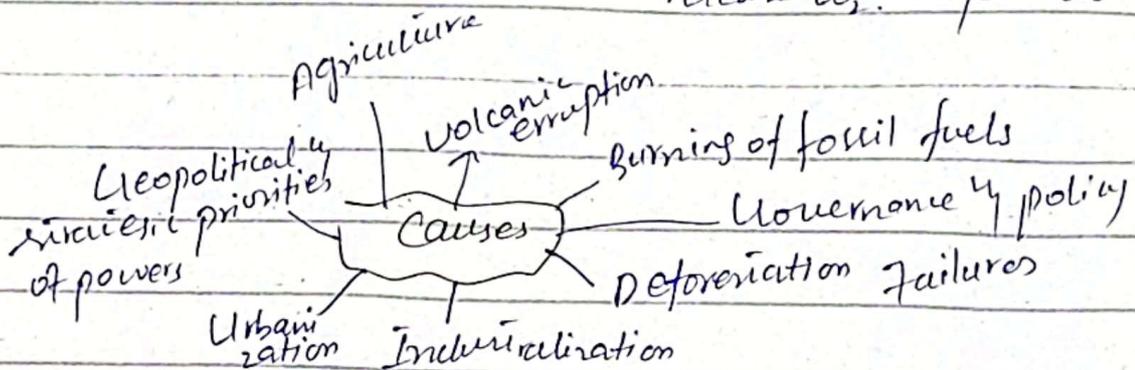
2024

↓ widespread use of fossil fuels

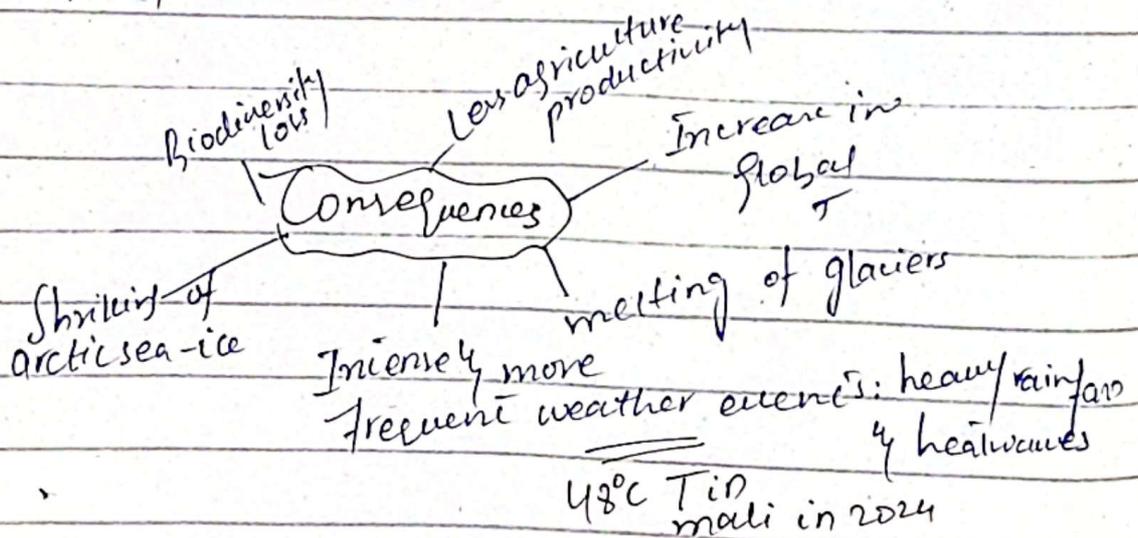
Earth's  
hottest

release CO<sub>2</sub>

year recorder



CO<sub>2</sub> levels are higher than any time in 800,000 years.



Parts of east africa suffered from worst droughts for 40 years (2022).

Loss arabian wild fires of 2015

## Outline

### I. Introduction

- a) Climate change in the eyes of Barack Obama
- b) Climate change as a man-made global emergency
- c) Thesis:

The main causes behind the climate change are fossil fuel dependency, deforestation, unsustainable industrial practices, agriculture and livestock, and geopolitical priorities of major powers. Consequences include rising global temperatures, rapid melting of glaciers and ice-sheets, extreme weather events, biodiversity loss and decline in agriculture productivity

### II. Causes of Climate Change

1. Fossil fuel dependency: The primary driver of global warming
  - a) Energy demand and transport sector pollution

b) Coal alone contributes 40% of global CO<sub>2</sub> emission

2. Deforestation: Destruction of natural carbon sinks

a) Urban expansion

b) 10 million hectares of forest lost annually (FAO)

Case in point: Amazon rain forest nearing a climate tipping point

3. Unsustainable industrial practices

a) Cement industry responsible for 8% of the world's total CO<sub>2</sub> emissions

b) Weak environmental regulations in developing countries

4. Agriculture and livestock: Methane and nitrous oxide emissions

a) Methane is 80 times more potent than carbon dioxide over 20 years

b) Excessive fertilizer use degrades soil and water system

5. Geopolitical priorities of major powers

a) Global powers prioritize energy security over climate concerns

b) Climate diplomacy often sacrificed for strategic alliances

### III. Consequences of Climate Change

#### 1. Rising global temperatures

a) Global temperatures exceed  $1.5^{\circ}\text{C}$  above pre-industrial levels

case in point: 2019 deadly heatwaves in Karachi claimed over 1200 lives

#### 2. Rapid melting of glaciers and ice-sheets

a) coastal cities and islands near existential threat

case in point: melting arctic and Himalayan glaciers

#### 3. Extreme weather events

case in point: 2022 flood affecting over 33 million people in Pakistan

#### 4. Biodiversity loss and ecosystem collapse

a) Disruption of food chains

case in point: 1 million species at risk of extinction (UN)

#### 5. Decline in agriculture productivity

a) Undermine global food security

### IV. Ways forward in Addressing

### Climate Change

1. Transition to renewable energy
2. Global cooperation and climate justice
3. Foreign planning
4. Green industrial policies

## V. Conclusion