

# Environmental Science

## CSS 2016

(20 Marks)

Q: What are salient requirements of the United Nations Framework Convention on Climate Change? Why there was a need for supplementary Kyoto Protocol? Elaborate the controversies associated with the Protocol.

### Introduction :

The United Nations Framework Convention on Climate Change (UNFCCC), established in 1992, provides the foundational framework for international climate policy. Its main requirements include stabilizing greenhouse gas (GHG) concentrations to recognize common but differentiated responsibilities among nations and providing financial and technical support for developing countries.

Despite these efforts, the UNFCCC lacked specific binding emission reduction targets aimed leading to the Kyoto Protocol's creation in 1997 as a supplementary agreement. The Kyoto Protocol aimed to address these gaps by setting legally binding targets for developed countries and introducing market-based mechanisms. However, it faced controversies related to the US withdrawal, unequal target distribution between developed and developing countries.



## II Need for the Kyoto Protocol:

The Kyoto Protocol, adopted in 1997, was needed to address shortcomings of the UNFCCC.

### 1. Specific Target:

The UNFCCC established a general framework but lacked binding emission reduction targets. The Kyoto Protocol introduced legally binding targets for developed countries to reduce their GHG emissions.

The Kyoto Protocol was a major milestone in global climate agreements because it was the first time countries agreed to legally enforceable limits on greenhouse gas emissions. This was an important advancement in the global effort to combat climate change. - (Ban - Ki Moon)

### 2. Rising Emissions:

Global GHG emissions continued to increase despite the UNFCCC's objectives. The Protocol aimed to enforce concrete measures to curb this trend.

#### Kyoto Protocol Flexibility Mechanism

Clean Development Mechanism (CDM)

Joint Implementation

International Emission Trading



## Market Mechanisms:

The Protocol introduced market-based mechanism, such as emissions trading and the Clean Development Mechanisms (CDM), to provide flexible and cost-effective ways for countries to meet their targets.

## III. Principles of the United Nations Framework Conventions on Climate Change (UNFCCC):

### a. Common but Differentiated Responsibilities:

It Acknowledges that while all countries are responsible for addressing climate change, developed countries have a greater responsibility due to their historical emissions and greater financial capacity.

### b. Equity:

It ensures that needs and circumstances of developing countries are taken into account, recognizing their vulnerability to climate change impacts and their need for support.

"According to the UNFCCC, developing countries will need \$140 - \$300 billion annually by 2030 for adaptation to climate change impacts."



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c. Precautionary Approach:

It emphasizes taking prevention/preventive action in the face of uncertainty, advocating for measures to avoid significant environmental harm even when scientific evidence is not conclusive.

Prevention is better than cure  
(Proverb)

d. Sustainable Development:

Sustainable Development Promotes economic development that meets the needs of the present without compromising the ability of future generations to meet their own needs, integrating environmental protection and economic growth.

The environment in which we all meet; where we all have a mutual interest; it is the one thing all of us share

(Lady Bird Johnson)

UNFCCC

↓  
Conference of Parties

↙  
Technological Mechanism

↘  
Financial Mechanism



# IV Commitments of the United Nations Framework Convention on Climate Change (UNFCCC) :

## 1. National Communications :

National communication parties are required to regularly report on their greenhouse gas (GHG) emissions, climate policies and measures they are taking to address climate change. These reports help to track progress and transparency.

The initial round of National Communications was completed by 2000, with the first reports submitted by parties in 1994, the year the UNFCCC into force"

## 2. Financial Assistance :

Financial assistance developed countries must provide financial and technological support to developing countries to help them mitigate and adapt to climate change. This includes funding for projects that reduce emissions and enhance resilience.

Financial support is essential for equitable climate solutions"  
(Kofi Annan)



### 3. Conference of the Parties (COP)

The governing body that meets annually to review progress, negotiate new commitments and make decisions on climate action.

"The Conference of the Parties is a moment of global unity in the fight against climate change" (Ban Ki-Moon)

### V. Controversies Associated with the Kyoto Protocol:

#### i. US Withdrawal:

The United States, one of the largest greenhouse gas emitters, did not ratify the Kyoto Protocol, citing economic concerns and the lack of binding targets for developing countries. This decision significantly impacted the Protocol's effectiveness and credibility.

"At the time of Protocol's negotiation, the US was responsible for about 25% of global greenhouse gas emissions, making its participation crucial for the Protocol's effectiveness."



ii.

## Developed vs Developing Countries :

The protocol impose binding emission reduced target solely on developed countries while allowing developing countries, including major emerging economies like China and India, to increase their emission. Critics argued that this created an imbalance and was unfair to developed nations.

The Challenge is not just to reduce emissions but to ensure that the burden is shared fairly between developed and developing nations" (Ban Ki-Moon)

## iii. Economic Concerns :

Some countries expressed worries that the emission reduction targets could harm their economies, particularly those heavily dependent on fossil fuels. This led to resistance from certain nations and calls for renegotiation.

"The U.S government estimated that complying with the Kyoto Protocol could cost between \$100 billion and \$400 billion annually. This estimate was based on projected impacts on industries reliant on fossil fuels and potential economic disruptions."



iv. Equity and Effectiveness :

These were debates about whether the Protocol adequately addressed the needs of vulnerable countries and whether it provided sufficient support for developing nations.

The Protocol's approach to equity and effectiveness was often questioned by critics.

The Global Climate Risk Index 2023, ranks countries based on their vulnerability to climate change impacts. Nations such as Haiti, Mozambique and the Philippines consistently rank among the most vulnerable, emphasizing the needs for target equity-based support.

Conclusion:

In Conclusion, the United Nations Framework Convention on Climate Change (UNFCCC) established crucial guidelines for global climate action, focusing on emission stabilizing, differentiated responsibilities and support for developing nations. The Kyoto Protocol emerged as a necessary complement to address the UNFCCC's lack of binding emission targets and to introduced market-based mechanisms. Although it faced controversies such as the US withdrawal and issues of fairness and implementation, The Protocol marked a pivotal movement in climate diplomacy. Its legacy informs current climate agreements, underscoring a global commitment to defining and advancing international efforts and to achieve a sustainable future.

