Kyoto Protocol Entered the Action Mode - [February 16, 2005] This Day in History

This article will elaborate upon the Kyoto Protocol and the impact it will have on the environment for the years to come. The Kyoto Protocol is an important topic in the Ecology and Environment segment of the IAS Syllabus.

What is the Kyoto Protocol?

The Kyoto Protocol came into effect on 16 February 2005. This international treaty seeks to implement the objectives of the United Nations Framework Convention on Climate Change (UNFCCC) to combat global warming by decreasing greenhouse gas concentrations in the atmosphere.

The major greenhouse gases that are addressed are :

- Carbon dioxide (CO2)
- Methane (CH4)
- Nitrous oxide (N2O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur hexafluoride (SF6)

In December 2012, after the first commitment period of the Protocol ended, participating countries in the Kyoto Protocol met in Doha, Qatar to adopt an amendment to the original Kyoto agreement. This was called the Doha Amendment which added new emission-reduction targets for the second commitment period, 2012–2020, for these countries. In 2015, at the sustainable development summit held in Paris, all UNFCCC participants signed yet another pact, the Paris Climate Agreement, which effectively replaced the Kyoto Protocol.

Kyoto Protocol - Salient Features

- The UNFCCC was an international agreement held in 1992 in which member countries agreed to reduce greenhouse gas concentrations in the earth's atmosphere in order to prevent devastating climate change. This was, however, not binding on the members, and no specific targets were set.
- By 1995, the countries, understanding the need for a stricter demand on greenhouse reduction, began negotiating on a protocol that was based on the UNFCCC but would be a standing agreement on its own.

- The Kyoto Protocol extends the UNFCCC and makes members commit to a specific reduction target. The text of the protocol was unanimously adopted 11 December 1997. It entered into force in February 2005. Currently, there are 192 parties to the protocol.
- The protocol gives specific target cuts in the emission levels of greenhouse gases of member countries and makes it binding. However, only developed countries have binding targets based on the (accurate) premise that they have had a historically larger share in the emission of pollutants due to the antecedence of industrialisation in those countries compared to developing economies. This is based on **common but differentiated responsibility**.
- These targets are between -8% and +10% of the countries' 1990 emission levels.
- In order to make the 'binding targets' more acceptable, the protocol provides flexibility in how countries meet the targets. Countries are allowed to partially compensate for the emissions by increasing what are called 'sinks', i.e., forests. This is because forests reduce carbon dioxide from the atmosphere.
- Most nations have ratified the treaty. The USA is a notable exception to this. It takes the stand that having binding targets only for developed countries and not polluting countries like China and India is potentially harmful for its own economy. Canada withdrew from the Kyoto Protocol in 2012.
- The targets are for the following greenhouse gases/gas groups: carbon dioxide, nitrous oxide, methane, sulphur hexafluoride, hydrofluorocarbons and perfluorocarbons.
- The first commitment period for the agreement was from 2008 to 2012.
- Apart from national measures, the agreement has three mechanisms that are means to achieve the Kyoto targets:
 - International Emissions Trading
 - Clean Development Mechanism
 - Joint Implementation
- India is a non-Annex I country. India is exempt from the treaty's framework. The Indian government ratified the treaty in August 2002. Since the per capita emission rates are much smaller for developing countries compared to the developed countries, India takes the stand that the major responsibility of reducing emissions lies with the latter.

Kyoto Protocol - Monitoring Emission

The emission monitoring process has to be carried out by various countries and a proper track record has to be maintained.

The emission monitoring is managed by the following process:

- 1. Registry systems These are meant to track the transactions carried out by the parties as per the Kyoto mechanisms.
- 2. Reporting- This is an important part of the process as the respective parties have to submit their information related to annual emission inventories as per the guidelines in the protocol.

- 3. Compliance system This ensures that the commitments are met by the parties and in case of issue relating to this.
- 4. Adaptation- This part of the process facilitates the development and deployment of technologies that can help increase resilience to the impacts of climate change. There is an adaptation fund to provide financial assistance to parties which take up adaptation projects and programmes.