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UNIT IV - OBSERVED CHANGES AND ITS CAUSES

CDM

The Clean Development Mechanism

The Clean Development Mechanism (CDM), defined in Article 12 of the Protocol, allows a country with an emission-reduction or emission-limitation commitment under the Kyoto Protocol (Annex B Party) to implement an emission-reduction project in developing countries. Such projects can earn saleable certified emission reduction (CER) credits, each equivalent to one tonne of CO₂, which can be counted towards meeting Kyoto targets.

The mechanism is seen by many as a trailblazer. It is the first global, environmental investment and credit scheme of its kind, providing a standardized emissions offset instrument, CERs.

A CDM project activity might involve, for example, a rural electrification project using solar panels or the installation of more energy-efficient boilers.

The mechanism stimulates sustainable development and emission reductions, while giving industrialized countries some flexibility in how they meet their emission reduction or limitation targets.

Operating details of the CDM

A CDM project must provide emission reductions that are additional to what would otherwise have occurred. The projects must qualify through a rigorous and public registration and issuance process. Approval is given by the Designated National Authorities. Public funding for CDM project activities must not result in the diversion of official development assistance.

The mechanism is overseen by the CDM Executive Board, answerable ultimately to the countries that have ratified the Kyoto Protocol.

Operational since the beginning of 2006, the mechanism has already registered more than 1,650 projects and is anticipated to produce CERs amounting to more than 2.9 billion tonnes of CO₂ equivalent in the first commitment period of the Kyoto Protocol, 2008–2012.

The Clean Development Mechanism (CDM) is a program that aims to reduce greenhouse gas emissions and achieve sustainable development by preventing climate change. India has the second largest number of registered CDM projects in the world, with most of them in the energy sector.

Here are some details about the CDM in India:

- **Goals**

The CDM's goals are to help developing countries achieve sustainable development and to help developed countries comply with their Kyoto Protocol emission reduction targets.

- **Projects**

CDM projects must provide emission reductions that are additional to what would have otherwise occurred. Projects must go through a public registration and issuance process and be approved by the Designated National Authorities.

- **National Clean Development Mechanism (CDM) Authority**

The Central Government established the National CDM Authority to improve the quality of the environment in accordance with the Kyoto Protocol.

- **Carbon Bazaar**

The Carbon Bazaar is an annual international event that encourages European companies to use the CDM in India.

- **Sectoral emissions**

In India, the energy sector is the main emitter of CO₂, accounting for 87% of total emissions. Coal is the main source of energy in India and accounts for 62% of emissions.