

**05/07/2024**

**(MODEL ANSWER)**

- Q. Discuss the strategies and initiatives taken by India to scale up climate action in the context of sustainable economic development. Highlight the challenges and opportunities these strategies present.

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**Answer Template:**

**Introduction:**

- Climate change is a pressing global issue requiring comprehensive strategies for mitigation and adaptation. India's approach to climate action is pivotal not only for its national sustainable development but also for its role as a leader in the Global South.
- The country has set significant goals, including a net-zero target by 2070 and ambitious **Nationally Determined Contributions (NDCs)**.
- According to the World Economic Forum, India is among the top ten nations with the highest renewable energy capacity. Furthermore, the **International Energy Agency (IEA)** has highlighted India's efforts to enhance its climate resilience through innovative policies and global collaborations.

**Body:**

- **Strategies And Initiatives:**
  - International Collaborations and Leadership
    - **International Solar Alliance (ISA):** Promotes solar energy use globally, aiming for \$1 trillion in solar investments by 2030.
    - **Coalition for Disaster Resilient Infrastructure (CDRI):** Enhances resilience in infrastructure against climate disasters.
    - **Global Biofuels Alliance:** Encourages the use of biofuels to reduce carbon emissions.
  - Emission Mitigation Targets
    - **2070 Net-Zero Target:** A landmark goal for reducing absolute emissions.
    - **Nationally Determined Contributions (NDCs):** Commitments to reduce emissions intensity by 33-35% from 2005 levels by 2030.
    - **Indian Emissions Carbon Trading Scheme:** A market-based mechanism for controlling carbon emissions.
  - Renewable Energy Development
    - **500 GW Renewable Energy Capacity:** A target to be achieved by 2030, emphasizing solar and wind energy.
    - **Green Development Pact:** Shaped under India's G-20 presidency to promote sustainable development.
  - Electric Mobility and Sustainable Transport

- **FAME Scheme:** Encourages the adoption of electric vehicles to reduce carbon footprint.
    - **Zero-Carbon Mobility Targets:** Promotes the use of zero-emission vehicles, particularly in urban areas.
  - Sustainable Agriculture
    - **Paramparagat Krishi Vikas Yojana:** Promotes organic farming to minimize environmental impact.
    - **National Mission for Sustainable Agriculture (NMSA):** Focuses on climate-resilient agricultural practices.
  - Sub-national Climate Action
    - **State-level Net-Zero Plans:** States like Tamil Nadu and Bihar are developing strategies for a net-zero future.
    - **Centre-State Coordination:** Proposals for coordination to synchronize state-level climate actions with national goals.
- **Challenges**
  - Financial Constraints
    - **Mobilizing Funds:** Difficulty in securing adequate climate finance, both domestically and internationally.
    - **Investment Gaps:** Large-scale projects require substantial upfront investments.
  - Technological Barriers
    - **Innovation and Development:** Need for advanced technologies to achieve emission reduction targets.
    - **Technology Transfer:** Challenges in acquiring and implementing global best practices.
  - Policy Implementation
    - **Diverse Regional Needs:** Ensuring effective implementation across varied geographic and economic contexts.
    - **Regulatory Hurdles:** Navigating bureaucratic processes and regulatory frameworks.
  - Societal Resistance
    - **Behavioural Change:** Encouraging sustainable practices among the population.
    - **Industry Resistance:** Overcoming opposition from traditional industries reliant on fossil fuels.
- **Opportunities**
  - Economic Growth
    - **Green Jobs:** Potential for significant employment generation in renewable energy and sustainability sectors.
    - **Sustainable Development:** Driving long-term economic growth through sustainable practices.
  - Global Leadership
    - **Diplomatic Influence:** Strengthening India's position in international climate negotiations and forums.
    - **Shared Goals:** Leading global climate initiatives can enhance India's diplomatic influence and collaboration.
  - Technological Advancements

- Innovation Hub: Positioning India as a leader in clean technology development and deployment.
- Research and Development: Investing in new technologies for renewable energy and emission reductions.
- Resilient Infrastructure
  - Disaster Resilience: Enhancing infrastructure to withstand climate impacts, thereby reducing economic losses.
  - Urban Planning: Integrating climate resilience into urban development strategies.
- Enhanced Climate Finance
  - Green Bonds and Investments: Mobilizing private sector investments through green financial instruments.
  - International Funding: Accessing global climate funds and partnerships.
- Community Engagement
  - Public Awareness: Raising awareness about climate change and encouraging sustainable lifestyles.
  - Inclusive Policies: Ensuring that climate action benefits all sections of society, including vulnerable communities.

### Conclusion

- India's commitment to scaling up climate action is evident through its ambitious targets, strategic policies, and global leadership initiatives.
- Moving forward, it is crucial to strengthen financial mechanisms, enhance technological capabilities, and ensure robust policy implementation.
- According to the United Nations Framework Convention on Climate Change (UNFCCC), India's proactive stance could significantly contribute to global climate goals. By leveraging its position in international forums and fostering sub-national climate resilience, India can pave the way for a sustainable and prosperous future.