



DAILY EDITORIAL ANALYSIS

TOPIC

**SAFEGUARDING FOR INDIA'S CARBON
MARKET FOR SUSTAINABLE FUTURE**

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SAFEGUARDING FOR INDIA'S CARBON MARKET FOR SUSTAINABLE FUTURE

Context

- The **growth-driven model of development**, rooted in the Industrial Revolution, has already pushed **planetary boundaries beyond safe limits**.
- There is a need **to decouple economic growth from environmental harm**, and nations need to expand their economies while reducing ecological footprints.

About Carbon Market

- A carbon market allows entities to **buy and sell carbon credits**—each representing a ton of carbon dioxide reduced or removed from the atmosphere.
 - ♦ It creates financial incentives for industries to reduce emissions and invest in cleaner technologies.
- It signifies a certified reduction or removal of greenhouse gases, measured in **CO₂-equivalents**, generated through activities like **renewable energy projects, reforestation, agroforestry, or biochar production**.
 - ♦ These credits can be **bought by firms** to offset emissions as they transition toward cleaner operations.
- Globally, around **175–180 million credits** are retired annually, mostly from **renewable and nature-based projects**.

India and Carbon Market

- India's carbon market is being developed under the **Carbon Credit Trading Scheme (CCTS)**, enabled by the **Energy Conservation (Amendment) Act, 2022**.
- It includes **both compliance and voluntary mechanisms**, aligning with global standards **under Article 6 of the Paris Agreement**.

Institutional Framework

- **National Designated Authority (MoEF&CC)**: It is a **21-member body**, which aims to oversee the market's governance. It ensures transparency, accountability, and alignment with international climate commitments.
- **Bureau of Energy Efficiency (BEE)**: It plays a key role in operationalizing the market, setting emission intensity targets and monitoring compliance.
- **India's Carbon Credit Trading Scheme (CCTS)**: It aims to set **emission-intensity benchmarks** for energy-intensive sectors while enabling **voluntary offsets**.
 - ♦ A **national registry and trading platform** aim to oversee transactions, supported by draft methodologies for **biomass, compressed biogas, and low-emission rice cultivation**.

Key Features of India's Carbon Market

- **Emission Intensity Targets**: Legally binding targets have been set for most of the industrial units across sectors like aluminium, cement, pulp and paper, and chlor-alkali.
- **Sectoral Coverage**: The market initially covers **eight carbon-intensive sectors**, including **iron and steel, petrochemicals, and textiles**.
- **Trading Mechanism**: Entities that exceed their emission reduction targets can sell surplus credits to those falling short, promoting cost-effective decarbonization.
- **Global Alignment**: India's updated NDCs aim **to reduce emission intensity by 45% by 2030 from 2005 levels**.
 - ♦ The carbon market is a cornerstone of this strategy, helping India meet its climate goals while supporting economic growth.

Challenges and Safeguards

- **Land Rights and Consent**: Many carbon offset projects rely on land use changes, such as afforestation or soil carbon sequestration.
 - ♦ These projects risk dispossession and exploitation, without securing land rights and informed consent from local communities

- ♦ The **CCTS framework** has limited attention to **land rights** and **revenue equity**.
- **Benefit Sharing:** Carbon revenues need to be equitably distributed. Marginalized groups, especially smallholder farmers and tribal communities, should not be left out of the financial gains.
- **Transparency and Accountability:** Past global experiences show that opaque carbon markets can lead to greenwashing, where companies claim environmental benefits without real impact.
- **Risk of Exploitation:** Carbon projects risk exploitation when **information asymmetry and power imbalance** prevail. In India, **farmers and tribal groups** often lack awareness or bargaining power, leading to **opaque contracts and unfair benefit-sharing**.
- **Environmental Integrity:** Projects need to genuinely reduce emissions, not just shift them elsewhere. This requires rigorous monitoring, verification, and enforcement.

Case Study

- The **Kenyan experience** of the **carbon project** serves as a critical warning: if **land rights, consent, and equitable distribution** are ignored, India's carbon market could **reproduce extractive patterns** under a **green veneer**.
- Projects involving **afforestation, reforestation, or agricultural offsets** often intersect with **customary land use**.
 - ♦ These initiatives may **disrupt grazing, fuelwood access, and livelihoods**, particularly for **tribal and marginalized communities** without robust consent and benefit-sharing.

Toward Fair and Transparent Carbon Markets

- Overregulation may stifle innovation, but **weak regulation invites exploitation**. The solution lies in a **balanced, transparent, and adaptive regulatory architecture** that:
 - ♦ Guarantees **transparency and accountability**;
 - ♦ **Formalises benefit-sharing** mechanisms;
 - ♦ Embeds **free, prior, and informed consent (FPIC)** and **land rights protection**;
 - ♦ Encourages **stakeholder consultation** and **community oversight**.
 - ♦ **Monitoring, reporting, and verification (MRV) systems** need to be robust to prevent greenwashing and false claims.
- Such reforms would not only build **trust and integrity** in carbon markets but also ensure that **climate action advances justice**, not inequality.

Conclusion

- Sustainability cannot be built on exclusion. The **next phase of climate action** needs to go beyond emissions accounting to include **social safeguards and community empowerment**.
- For countries like India, the **challenge and opportunity** lies in designing **carbon markets that uplift the vulnerable people while protecting the planet**.

Source:

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Daily Mains Practice Question

[Q] Discuss the importance of implementing ethical safeguards in India's carbon market. How can these safeguards contribute to a more inclusive and sustainable future for marginalized communities and the environment?

