



UPSC & STATE PCS CURRENT AFFAIRS · UJIYARI.COM

EDITORIAL ANALYSIS

The Climate Action Gap — Why Green Growth Is Still Slipping

DOWN TO EARTH

20 March 2026

SUBJECTS COVERED**ENVIRONMENT****IR****GS PAPERS****GS3****GS1****CURATED & WRITTEN BY****Bharat Choudhary**

UPSC Educator & Content Creator •

[linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)

Free UPSC & State PCS Resources

ujjyari.com

The Climate Action Gap — Why Green Growth Is Still Slipping


 Down to Earth

20 March 2026

GS3

GS1


 Down to Earth

MAINS RELEVANCE:

GS Paper 3

GS Paper 1



INTERVIEW ANGLE

"Six of nine planetary boundaries have been breached. The concept of 'green growth' — growing the economy while reducing environmental impact — is being questioned. Should India reconsider its development model? What is the difference between green growth and degrowth, and which is more realistic?"

WHY IN NEWS

Down to Earth's 2026 analysis reveals that **six of nine planetary boundaries** have been breached, placing humanity in the "danger zone." Global emissions are not falling fast enough for climate targets, and the concept of **green growth** — decoupling economic expansion from environmental degradation — is proving increasingly illusory in practice.

THE PLANETARY BOUNDARIES FRAMEWORK

Planetary Boundaries is a scientific framework developed by **Johan Rockström** (Stockholm Resilience Centre) and colleagues in 2009, identifying **nine Earth-system processes** that define a "safe operating space" for humanity.

The nine planetary boundaries:

Boundary	Status (2026)
Climate change	✗ BREACHED — ~1.3°C above pre-industrial
Biosphere integrity (biodiversity)	✗ BREACHED — mass extinction underway
Land system change (deforestation)	✗ BREACHED — forest cover loss accelerating
Freshwater depletion	✗ BREACHED — groundwater and river flows declining
Biogeochemical flows (N, P cycles)	✗ BREACHED — nitrogen/phosphorus overload in ecosystems
Novel entities (chemical pollution)	✗ BREACHED — microplastics, pesticides, pharmaceuticals
Stratospheric ozone	✓ Recovering (Montreal Protocol success)
Ocean acidification	⚠ Approaching boundary
Atmospheric aerosol loading	⚠ Regional concern (South Asia)

Six of nine are now in breach — a 2023 update by the same research group (published in *Science Advances*) was the first to formally declare the chemical pollution boundary as breached.

Significance: The boundaries are **interdependent** — breaching one (e.g., biodiversity loss) accelerates others (e.g., carbon storage collapse as forests die). This creates tipping cascades.

THE GREEN GROWTH ILLUSION

Green growth is the dominant policy paradigm — the idea that economies can grow GDP while simultaneously reducing their environmental footprint through:

- Renewable energy replacing fossil fuels
- Circular economy replacing linear production
- Energy efficiency improvements per unit of GDP
- Natural capital accounting

Down to Earth's critique:

THE DECOUPLING PROBLEM

Absolute decoupling (total emissions falling as GDP rises) remains rare:

Relative decoupling (emissions per unit of GDP declining) is common — but if GDP grows faster than the efficiency gain, absolute emissions still rise

The **rebound effect**: Efficiency gains make energy cheaper, encouraging more consumption — partially or fully negating the gain (Jevons Paradox)

Embodied carbon in trade: High-income countries appear to have decoupled because they've outsourced manufacturing (and its emissions) to China, Vietnam, India — the emissions count in the producing country's data, not the consumer country

Global emissions data (2025):

CO₂ from energy: ~37 billion tonnes/year (record high in 2024; still rising)

Paris Agreement trajectory: Must reach net-zero by **2050** for 1.5°C; currently tracking toward **2.8–3.2°C** warming by 2100

Emissions gap: Difference between pledged NDCs (Nationally Determined Contributions) and 1.5°C-compatible trajectory = ~**20 billion tonnes CO₂eq/year**

BIODIVERSITY LOSS — INDIA'S SPECIFIC EXPOSURE

Approximately **8,000 vertebrate species** (amphibians, birds, mammals, reptiles) face extinction risk due to combined climate change and habitat loss — per the Down to Earth analysis citing IUCN Red List data.

India's biodiversity context:

India is one of the **17 megadiverse countries** (hosting 7–8% of all recorded species)

Biodiversity hotspots in India: 4 out of 36 global hotspots — Himalaya, Indo-Burma, Western Ghats + Sri Lanka, Sundaland (Nicobar Islands)

India has approximately **91,000 animal species** and **45,500 plant species** described

Threatened species in India (IUCN): 1,212 animal species; 306 plant species

National Biodiversity Authority (NBA): Statutory body under Biological Diversity Act, 2002

Key drivers of Indian biodiversity loss:

Habitat destruction: Infrastructure projects (roads, dams) fragmenting forest corridors

Human-wildlife conflict: Tiger/elephant vs. human settlements at forest edges

Invasive species: Lantana camara, water hyacinth choking native ecosystems

Overexploitation: Illegal wildlife trade, over-fishing in coastal waters

Climate-driven range shifts: Alpine species losing habitat as snowlines recede

INDIA'S CLIMATE COMMITMENTS VS. REALITY

India's NDC (Nationally Determined Contribution) under Paris Agreement (2022 update):

Reduce emissions intensity of GDP by **45%** by 2030 (from 2005 levels)

Achieve **50% non-fossil fuel** power generation capacity by 2030

Create additional **carbon sink** of 2.5–3 billion tonnes CO₂eq through forest/tree cover by 2030

Net zero target: 2070 (stated at COP26, Glasgow)

Progress as of 2025-26:

Renewable energy capacity: ~250 GW (target: 500 GW by 2030)

Solar: ~100 GW; Wind: ~47 GW; Hydro: ~47 GW; Others: ~56 GW

Non-fossil share: ~45% of installed capacity (thermal still dominates generation)

Forest cover: 24% of India's land area (below 33% constitutional target)

The gap: India is on track for **relative decoupling** (emissions intensity falling) but absolute emissions continue to rise as the economy grows — India is now the **3rd largest emitter** globally after China and USA.

THE EDITORIAL'S CORE ARGUMENT

Down to Earth makes three structural arguments:

1. GREEN GROWTH IS NECESSARY BUT INSUFFICIENT

Renewables deployment, EVs, and efficiency improvements are essential — but they cannot substitute for reducing absolute consumption. The editorial calls for **degrowth-aligned policies** in high-consumption sectors (aviation, fast fashion, red meat) even if the word “degrowth” is politically toxic.

2. CLIMATE AND BIODIVERSITY MUST BE TREATED AS ONE CRISIS

The **Kunming-Montreal Global Biodiversity Framework (GBF, COP15, 2022)** set the **30×30 target** — protect 30% of land and ocean by 2030. India signed it. But biodiversity protection and climate mitigation are being pursued in separate bureaucratic silos — while the science shows they are inseparable (forests both protect biodiversity and sequester carbon).

3. ECO-ANXIETY IS A POLICY SIGNAL, NOT A MENTAL HEALTH PROBLEM

Youth climate protests and eco-anxiety — fear and despair about environmental futures — are growing globally and in India. The editorial argues this is not a mental health crisis to be medicalised but a **rational response to inadequate policy action** — and that policymakers should read it as a legitimacy signal.

KEY INTERNATIONAL FRAMEWORKS

Framework	Year	Key Target
Paris Agreement	2015	Limit warming to 1.5°C; net-zero by mid-century
Kunming-Montreal GBF	2022 (COP15)	30×30 (protect 30% land + ocean by 2030)
SDG 13	2015	Climate action by 2030
SDG 15	2015	Life on land — halt biodiversity loss
Convention on Biological Diversity (CBD)	1992	Conservation + sustainable use of biodiversity
IPBES	2012	Biodiversity equivalent of IPCC (science-policy interface)

UPSC RELEVANCE

Planetary Boundaries framework (Stockholm Resilience Centre, Johan Rockström, 2009), 9 boundaries and which are breached (6 of 9), Kunming-Montreal GBF (30×30, COP15, 2022), India's NDC targets (45% intensity, 50% non-fossil capacity, net zero 2070), India's renewable capacity (~250 GW, target 500 GW by 2030), India's 4 biodiversity hotspots, National Biodiversity Authority (NBA), Biological Diversity Act 2002, India global emitter rank (3rd).

Mains GS3: *Climate change — Paris Agreement, NDCs, emissions gap, green growth vs. degrowth, biodiversity frameworks (CBD, IPBES, GBF), India's climate commitments and progress, planetary boundaries concept, forest carbon sinks. GS1:* *Human geography — climate change impacts on settlements, resource use; youth and eco-anxiety as social phenomenon.*

★ FACTS CORNER — KNOWLEDGEPEDIA

PLANETARY BOUNDARIES FRAMEWORK:

Concept by: Johan Rockström, Stockholm Resilience Centre (2009)

Total boundaries: 9

Breached (as of 2026): 6 — climate change, biosphere integrity, land system change, freshwater depletion, biogeochemical flows (N/P), novel entities (chemical pollution)

Safe: Stratospheric ozone (recovering); ocean acidification (approaching); aerosol loading (regional)

Key update: 2023 paper in *Science Advances* — first time all 6 declared formally breached

GLOBAL CLIMATE DATA (2025-26):

Annual CO₂ emissions: ~37 billion tonnes (record high trend)

Current warming: ~1.3°C above pre-industrial

Paris target: 1.5°C (with 2°C upper limit)

2100 trajectory (current NDCs): 2.8–3.2°C warming

Emissions gap to 1.5°C: ~20 billion tonnes CO₂eq/year

INDIA'S CLIMATE COMMITMENTS (UPDATED NDC, 2022):

Emissions intensity reduction: 45% by 2030 (vs 2005)

Non-fossil capacity: 50% by 2030

Carbon sink: 2.5–3 billion tonnes CO₂eq additional (forests/trees)

Net zero target: 2070

India global emitter rank: 3rd (after China, USA)

INDIA RENEWABLE ENERGY (2025-26):

Total installed capacity: ~250 GW

Target (2030): 500 GW non-fossil

Solar: ~100 GW; Wind: ~47 GW; Hydro: ~47 GW

Non-fossil share of capacity: ~45%

INDIA'S BIODIVERSITY:

Megadiverse country: Yes (one of 17 globally)

Biodiversity hotspots: 4 (Himalaya, Indo-Burma, Western Ghats + Sri Lanka, Sundaland/Nicobar)

Animal species: ~91,000; Plant species: ~45,500

Threatened species (IUCN): 1,212 animal + 306 plant

Governing law: Biological Diversity Act, 2002

Regulatory body: National Biodiversity Authority (NBA), Chennai

KEY FRAMEWORKS:

CBD: Convention on Biological Diversity — 1992, Rio Earth Summit

Kunming-Montreal GBF: 2022 (COP15, Kunming-Montreal) — 30×30 target

IPBES: Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (est. 2012) — equivalent of IPCC for biodiversity

Paris Agreement: 2015 (COP21, Paris); entered into force 2016

OTHER RELEVANT FACTS:

Jevons Paradox: Efficiency gains reduce cost → increase consumption → may negate efficiency gains (William Stanley Jevons, 1865)

Degrowth: Economic theory advocating planned reduction of production/consumption in wealthy countries

33% forest cover target: India's National Forest Policy 1988 — goal to bring 33% of land under forest/tree cover (currently ~24%)

Eco-anxiety: Psychological distress from climate/environmental concerns — American Psychological Association recognised term (2017)

UNFCCC: UN Framework Convention on Climate Change (1992) — parent treaty of Paris Agreement

Sources: Down to Earth, Stockholm Resilience Centre, IPBES

CURATED & WRITTEN BY

Bharat Choudhary

UPSC Educator & Content Creator

 [linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)

Published on ujjari.com · Free UPSC & State PCS Current Affairs