

DAILY CURRENT AFFAIRS



S.NO.	TOPIC	
1.	CLIMATE CHANGE, A PASSING CLOUD IN INDIAN POLITICS	
2.	ANALYSING LOCAL ENVIRONMENTAL FOOTPRINTS	
3.	RBI'S PROPOSED FRAMEWORK TO ADMINISTER PROJECT FINANCING	
4.	WHY A WATERFALL APPEARS WHITE	

CLIMATE CHANGE, A PASSING CLOUD IN INDIAN POLITICS

Climate change, a passing cloud in Indian politics

he fifth phase of India's general election is over and the electoral rhetoric of both the major parties, i.e., the Bharatiya Janata Party (BJP) led by Prime Minister Narendra Modi and the Indian National Congress, have conspicuously side-lined one of the most critical issues of our times climate change. This omission is particularly stark against the backdrop of global environmental crises and the pressing demands for sustainable development.

Recent events, such as environmental activist Sonam Wangchuk's outcry over ecological degradation in Ladakh - underscoring the urgency of integrating robust climate action into national policy frameworks - shows us how critical climate mitigation and adaptation has become and its urgent need to become political, especially for electoral politics. Despite Mr. Wangchuk's calls for environmental security in the region, which resonated widely among the people of Ladakh, and then, subsequently, on social media, the response from the Modi government has been muted. This lack of response is symptomatic of a larger political reluctance to engage with environmental issues as central electoral themes.

A calculated omission

The reluctance of both the BJP and Congress to foreground climate change in their electoral platforms is not just a matter of oversight but a calculated omission. Integrating serious climate action into their political agendas would entail acknowledging and addressing the trade-offs between rapid industrial growth and environmental sustainability. Such acknowledgment could alienate powerful industrial constituencies and disrupt the economic status quo, which heavily relies on fossil fuels and high-emission industries.

This strategic avoidance plays out in the manifestos, where climate policies, if mentioned, are vague and lack commitment to specific, measurable actions. For instance, the Congress party's manifesto has a chapter, 'Environment Protection and Climate Change Authority' and proposes a 'Green New Deal Investment Programme' without clear directives or commitments to specific reductions in carbon emissions. Similarly, the BJP's manifesto praises past initiatives but fails to propose forward-looking strategies that align with the global scientific consensus, which calls for immediate and drastic action to mitigate climate

The absence of detailed climate action plans in



Oishik Dasgupta

is a Graduate Student of International Affairs and Global Governance at the Hertie School in Berlin, and Graduate Research Assistant at the Research Institute for Sustainability. Potsdam

these manifestos reflects a broader trend in Indian politics where short-term economic gains are often prioritised over long-term environmental sustainability. That said, we must remember India's vulnerability to climate impacts, including rising sea levels, extreme weather events, and severe air pollution, which pose significant threats to its population and economy. Moreover, the silence on climate change in electoral discussions sends a disheartening message to educated, middle-class voters, who are increasingly aware of and concerned about global environmental issues This demographic, capable of influencing policy through public opinion and voting power, I believe, seeks more than just token mentions of sustainability. They demand actionable plans that ensure that India not only meets its international commitments under agreements such as the Paris Agreement but also adopts a leadership role in global climate advocacy.

Why, then, is there such a glaring gap between the needs of the electorate and the political offerings? Part of the reason lies in the perceived political cost of ambitious climate policies. Comprehensive climate strategies may require tough decisions, such as phasing out coal, increasing taxes or prices on carbon emissions, and enforcing stringent environmental regulations - measures that could be unpopular in the short run despite their long-term benefits.

What we have now

Currently, the National Action Plan on Climate Change serves as the overarching guiding body for India's climate policy efforts that are spread across several policy documents, sector-specific strategies, and laws. In 2023, some very important policy documents and laws covering the energy sector emerged, which included the National Electricity Plan 2023, the National Green Hydrogen Mission and the Energy Conservation (Amendment) Act, 2022. These documents and laws play a crucial role in shaping the energy landscape. That said, one must note that the Indian leadership has shown no commitments in phasing out coal. These policies, however, are top-down in nature; these are being made by the top brass, based on international trends and immediate requirements. India, as a nation, is still lacking a considerable number of citizens who demand corrective policies to ensure climate policies and actions, as a bottom-up approach. and disrupt the Climate Action Tracker (developed by and disrupt the Climate Analytics, an independent global climate science and policy institute with an office in

Berlin) gives India an overall rating of "Highly

Insufficient" in its policies and actions tracking, based on 2030 projections. That said, there is more that the central and various other State governments can do. States or regions that are on the frontline of vulnerability need to develop plans that bring India's projection below 2-degree pre-industrial levels. A good example of comprehensive climate policymaking in India would be the Mumbai Climate Action plan developed by the Mumbai municipality, in collaboration with the C40 and the World Resources Institute.

In contrast to the complex web of climate bodies in India, we have a silver lining that should mark the beginning of climate jurisprudence in our country: M.K. Ranjitsinh and Others vs Union of India, where in March 2024, the Supreme Court of India ruled that the people of India have the right to be free from the adverse effects of climate change by drawing upon Article 21 and Article 14 of the Indian Constitution. This opens up many government sector bodies working on climate policies and action to much-needed legal scrutiny and makes them answerable to citizens.

The challenge

So, what now? The challenge for India, therefore, is to bridge this gap between electoral politics and climate policy. It requires a shift in political calculations, where long-term environmental and social gains are valued over immediate economic benefits. And, the media and civil society have pivotal roles in this transformation. By consistently highlighting the inadequacies in the current political discourse on climate change, they can drive a narrative that places environmental sustainability at the heart of India's development agenda.

The 2024 general election presents a critical opportunity for Indian voters, especially the informed and increasing middle class, to demand that their leaders take a more proactive and committed stance on climate change. This means not only voting with an eye towards policies that promise immediate benefits but also supporting those that promise sustainable growth and environmental security. The electorate must push for a paradigm shift in how climate policy is integrated into the broader national development strategies, ensuring that the progress made today does not come at the expense of tomorrow's security

As India stands at this electoral crossroads, the choices made will resonate far beyond the immediate political cycle, influencing the global fight against climate change and the future of sustainable development worldwide.

Integrating serious climate action into political agendas could alienate powerful industrial constituencies economic status quo



Points To Note Down from this News

- · context of the News
- · Top Down V& Bottom up Approach of Policies
- · Climate Action Tracker (climate Analytics)
- · Enample of Mumbai climate Action Plan
- · MK Rangitsinh case.

Practice Question:

"Climate Action Tracker" which monitors the emission reduction pledges of different countries is a:

This question was previously asked in

UPSC Civil Services Exam Official 2022 Prelims...

View all UPSC Civil Services Papers >

1. Database created by coalition of research organisations

2. Wing of "International Panel of Climate Change"

3. Committee under "United Nations Framework Convention on Climate Change"

4. Agency promoted and financed by United Nations Environment Programme and World Bank

More on Climate Action Tracker:

- ❖ The Climate Action Tracker is an independent scientific analysis that tracks government climate action and measures it against the globally agreed Paris Agreement aim of "holding warming well below 2°C and pursuing efforts to limit warming to 1.5°C."
- ❖ A collaboration of two organisations, Climate Analytics and NewClimate Institute, the CAT has been providing this independent analysis to policymakers since 2009.
- CAT quantifies and evaluates climate change mitigation targets, policies and action.



- It also aggregates country action to the global level, determining likely temperature increases during the 21st century using the MAGICC climate model.
- CAT further develops sectoral analysis to illustrate the required pathways for meeting the global temperature goals.
- ❖ CAT covers all the biggest emitters and a representative sample of smaller emitters covering about 85% of global emissions and approximately 70% of the global population. The aim of the Climate Action Tracker (CAT) project is to provide policymakers, civil society and the media that inform them with an up-to-date assessment of countries' individual reduction targets and with an overview of their combined effects at the global level.





ANALYSING LOCAL ENVIRONMENTAL FOOTPRINTS

Analysing local environmental footprints

What is the importance of evaluating household environmental footprints? Which are the three footprints analysed in this study? Do these footprints associated with luxury consumption show an increase as one analyses households that are richer and affluent? What should policymakers do?

EXPLAINER

Soumvaiit Bhar

Context

hile climate change is a global concern, issues such as water scarcity and air pollution are often localised or regionalised. For example excessive water use in one region may not directly affect water scarcity elsewhere Focusing on local environmental issues is crucial; and herein comes the importance of understanding household environmental footprints.

How are household environmental footprints distributed in India? A recent study titled 'Water, air pollution and carbon footprints of

conspicuous/luxury consumption in India', of which the author is one of the contributors, highlights the environmental impact of affluent individuals, particularly those who engage in consumption beyond basic needs. This study specifically examines the CO2, water, and particulate matter (PM2.5) footprints associated with luxury consumption choices among households in India across different economic classes The analysis contrasts these luxury consumption footprints with those associated with non-luxury consumption. The luxury consumption basket includes various categories such as dining out, vacations, furniture, social events etc.

How were environmental impacts assessed in this study?

Methodologically, the study employed an input/output analysis of the entire economy to map or link different components of household consumption to the resources or materials involved in their production. This approach enabled the capture and aggregation of the (indirect or embedded) environmental impacts associated with each stage of production. For example, the water footprint was utilised to quantify water



usage throughout various stages of production of different goods and services, as well as direct water usage by households. The PM2.5 footprint encompassed both embedded emissions and direct emissions from household activities such as the use of fuelwood. kerosene, and vehicular fuels. Similarly, the CO2 footprint was used to capture both embedded and direct CO2 emissions associated with household consumption.

What were the key findings? The study reveals that all three environmental footprints increase as households move from poorer to richer economic classes. Specifically, the footprints of the richest 10% of households are approximately double the overall average across the population. A notable surge in footprints is observed from the ninth to the 10th decile, with the air pollution footprint experiencing the

highest increase at 68% in the 10th decile compared to the ninth. Conversely, the rise in the water footprint is the lowest at 39%, while CO2 emissions stand at 55%. This suggests that Indian consumers, particularly those in the top decile, are still in the 'take-off' stage, with only the wealthiest segment exhibiting substantial increases in consumption-related environmental footprints. The heightened footprints in the 10th decile are primarily attributed to increased expenditure on luxury consumption items.

What are the key contributors?

The study identifies eating out/restaurants as a significant contributor to the rise in environmental footprints, particularly in the top decile households, across all three footprints. Additionally, the consumption of fruits and nuts is highlighted as a factor driving the increase in water footprint in the 10th decile. Luxury consumption

items such as personal goods, jewellery, and eating out contribute to the rise in CO2 and air pollution footprints. Notably, the presence of fuels like firewood in the consumption baskets of poorer households is emphasised, showcasing contrasting impacts of modern energy transitions. While transitioning from biomass to LPG reduces direct footprints. the lifestyle choices associated with affluence lead to a rise in PM2.5 footprints

(and subsequently, the CO2 footprint).
The average per capita CO2 footprint of the top decile in India, at 6.7 tonnes per capita per year, is noted to be higher than the global average of 4.7 tonnes in 2010 and the annual average of 1.9 tonnes CO2eq/cap required to achieve the Paris agreement target of 1.5°C. While still below the levels of the average citizen in the U.S. or U.K., this disparity underscores the need for urgent attention from policymakers. Given the influence of elite lifestyles on broader societal aspirations, policymakers should prioritise efforts to nudge consumption levels of affluent households downwards to align with sustainability goals.

The study emphasises that while sustainability efforts often focus on global climate change, global environmental footprints do not necessarily align with local and regional scale footprints However, local and regional environmental issues exacerbated by luxury consumption disproportionately affect marginalised communities. For instance, water scarcity and air pollution disproportionately impact marginalised groups, further marginalising them, while affluent sections can afford protective measures such as air-conditioned cars and air purifiers. This underscores th

What are the implications?

sustainability efforts. Soumyajit Bhar is Assistant Professor at the School of Liberal Studies of BML Munia University, Gurugram

importance of multi-footprint analysis in

addressing environmental justi

concerns and ensuring equitable

THE GIST

A recent study highlights the environmental impact of affluent individuals, particularly those who engage in consumption beyond basic

The study identifies eating out/restaurants as a significant contributor to the rise in environmental footprints. particularly in the top decile households, across all three footprints.

The study emphasises that while sustainability efforts often focus on global climate change, global environmental footprints do not necessarily align with local and regional scale footprints.

Conclugion

Points To Note Down from this News

- Name of study and itsfinding
- The three footprints
- contributors to higher footprints
- contrasting impacts of Modern Energy Transitions
- **Implications**
- way Forward

Mains Question:

What is the significance of evaluating household environmental footprints? Do these footprints show an increase as one analyses households that are richer and affluent? Analyse. (15 Marks, 250 Words).



RBI'S PROPOSED FRAMEWORK TO ADMINISTER PROJECT FINANCING

RBI's proposed framework to administer project financing

What are some of the more important provisions recommended by the Reserve Bank of India?

Saptaparno Ghosh

The story so far:

o strengthen the existing regulatory framework around long-gestation period financing for projects in infrastructure, non-infrastructure and commercial real estate sectors, the RBI issued draft regulations for consultation earlier this month. Comments on the draft direction are solicited until June 15.

What is purpose of the framework? Infrastructure projects usually have a long gestation period, with a higher probability of not being financially viable. provisioning, that is, setting aside some Depending on scale and technology, these projects may require a loan with a longer tenure. Such projects may also face multiple obstacles leading to delays or cost-overruns. The Ministry of Statistics and Programme Implementation's March review of 1,837 projects observed that 779 of them were delayed and 449 faced cost overruns. The review attributed the delay

to land acquisition, obtaining forest/environment clearances, changes in scope (and size) etc. These factors are dampeners for banks, which would have priced the risks associated with the project in a certain way on their books.

What are the key revisions?

The RBI's focus is on mitigating a 'credit event', that is, a default or a need to extend the original Date of Commencement of Commercial Operations (DCCO) or infuse additional debt, and/or diminution in the Net Present Value (NPV) of the project. One of the more important revisions concerns money ahead of time to compensate for a potential loss. The proposed framework recommends that, at the construction stage (that is, when the financial assessment is finalised and before DCCO), maintained on all existing and fresh a general provision of 5% is to be exposures. This is a revision from the erstwhile 0.4%. According to CareEdge

Ratings, this would "dampen the bidding appetite from infrastructure developers in the medium term"

This 5% provisioning would be implemented in a phased manner.

What about prudential conditions? The framework seeks that all mandatory pre-requisites must be in place before financial closure (that is, before the finalising of financial conditions). The indicative list must provide environmental, regulatory and legal clearances relevant to the project. The DCCO must be clearly spelt out. Financial disbursals would be made and the progress in equity infusion agreed to based on the stages of completion. The onus is on the bank to deploy an independent engineer or architect who would be responsible for certifying the project's progress.

RBI proposes to mandate that a positive NPV be a prerequisite to obtain project finance. It also seeks that lenders get the project NPV independently

re-evaluated every year. This is to help them avert the possibility of any build-up of stress and have an action plan in plac

Can repayment norms be revised?

Yes. However, the framework proposes that the original or revised repayment tenure, inclusive of the moratorium period, must not exceed 85% of the economic life of the project.

RBI's proposed framework also recommends certain criteria for evaluating a change in repayment schedule due to an increase in the project outlay if there's an increase in scope and size of the project. This revision will have to take place before the DCCO, after lenders offer a satisfactory re-assessment about the viability of the project, and if the risk in project cost, excluding any cost overrun, is 25% or more of the original outlay. Significantly, the framework also introduces guidelines to trigger a standby credit facility. This is to be sanctioned at the time of financial closure to fund overruns arising due to delays

What have initial observations been? Ratings agency ICRA observed in a report that higher provisioning requirement for projects under implementation would impact the near-term profitability of non-banking financial companies (and infrastructure financing companies). In their recent earnings call, the SBI, Union Bank of India and Bank of Baroda expressed confidence in the proposal not having any "significant" impact.

Points to Note Down from this News:

- Context RBI's framework
- The purpose of the feamework
- Findings of Minoof statishes and programme implement
- The Key Rensions Provisioning
- Prudential conditions

Context:

❖ To enhance the current regulatory framework governing long-gestation period financing for infrastructure, non-infrastructure, and commercial real estate projects, the RBI released draft regulations for public consultation earlier this month. Feedback on the draft regulations is invited until June 15.

What is the Purpose of the Framework?

- Infrastructure projects typically have extended gestation periods, increasing the likelihood of not being financially viable.
- These projects, depending on their scale and technology, often require long-term loans. They also face numerous challenges, such as delays and cost overruns.
- According to the Ministry of Statistics and Programme Implementation's review in March, out of 1,837 projects, 779 were delayed, and 449 experienced cost overruns.
- The delays were primarily due to issues like land acquisition, securing forest/environment clearances, and changes in project scope and size.



These factors deter banks, as they impact the risk assessment and pricing of such projects on their financial books.

What are the Key Revisions?

- The RBI aims to prevent credit events, such as defaults, extensions of the original Date of Commencement of Commercial Operations (DCCO), the need for additional debt, or a reduction in the project's Net Present Value (NPV).
- One significant revision involves 'provisioning,' which means setting aside funds in advance to cover potential losses.
- The new framework suggests that during the construction phase (before DCCO), a general provision of 5% should be maintained on all existing and new exposures, an increase from the previous 0.4%.
- ❖ According to CareEdge Ratings, this higher provisioning requirement could reduce the bidding interest from infrastructure developers in the medium term. This 5% provisioning will be implemented gradually.

What about Prudential Conditions?

- The framework requires all mandatory pre-requisites to be in place before financial closure (the finalization of financial conditions).
- This includes environmental, regulatory, and legal clearances relevant to the project. The DCCO must be clearly defined.
- Financial disbursements will be made, and progress in equity infusion agreed upon, based on stages of project completion.
- Banks must appoint an independent engineer or architect to certify the project's progress.

Conclusion:

Ratings agency ICRA noted that the higher provisioning requirements for projects under implementation could affect the near-term profitability of non-banking financial companies and infrastructure financing companies. However, in their recent earnings calls, the State Bank of India (SBI), Union Bank of India, and Bank of Baroda expressed confidence that the proposal would not have any significant impact on them.

Q. Consider the following

- 1. Under provisioning, banks have to set aside or provide funds to a prescribed percentage of their bad assets.
- 2. The percentage of bad asset that has to be 'provided for' is called provisioning coverage ratio.

Which of the above statements are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2



Solution

The correct option is (c) Both 1 and 2

Under provisioning, banks have to set aside or provide funds to a prescribed percentage of their bad assets. The percentage of bad asset that has to be 'provided for' is called provisioning coverage ratio. The provisioning coverage ratio is the percentage of bad assets that the bank has to provide for (keep money) from their own funds –most probably profit

Mains Question:

❖ Infrastructure projects typically have extended gestation periods, increasing the likelihood of not being financially viable. Discuss how does the RBI's proposed framework on project financing aims to address this effectively. (10 Marks, 150 Words).





WHY A WATERFALL APPEARS WHITE

QUESTION CORNER

Why a waterfall appears white



Q: Why does water appear white in a waterfall even though it is colourless?

A: When all colours are reflected from the surface of an object, it appears white. In a waterfall, water drops can be thought of as being suspended in air and as an inhomogeneous mixture of water and air.

We know that when light enters from a lighter medium (air) into a denser medium (water), some of it is reflected by the surface and the rest is refracted. In a waterfall, light suffers numerous such reflections and refractions.

The light refracted by a layer on top would also contribute to reflection at the next layer of drops. As a result, most of the light is reflected by the waterfall.

This leads to whiteness. Mist, paper, water vapour, colloidal solutions, clouds, talcum powder, snow, white paint, and sugar also appear white because of the same reason.

(There are no white pigments in white paint. White paint has transparent oxides of zinc, lead, and titanium suspended in a transparent solution.)



When all colours are reflected from the surface of an object, it appears white. SLNC/UNSPLASH

To see a waterfall white, light should not be directional, i.e. it should be coming from all directions. If it is directional, one would see colours as in a rainbow. (S. Mukund, Chennai)



For feedback and suggestions

for 'Science', please write to science@thehindu.co.in with the subject 'Daily page'

Points To Note:

- Colour of object and reflection
- Refraction
- Reflection



The important difference between reflection and refraction:

Parameters	Reflection	Refraction
Description	Reflection is the bouncing back of light when it strikes a smooth surface.	Refraction is the bending of light rays when it travels from one medium to another.
Nature Of Surface	Generally occurs on shinny surfaces that only allow rebounding of light without permitting penetration through it.	This occurs in transparent surfaces that allow bending of the ray to a different medium.
Types	There are two forms of reflection, they are, Regular reflection (Specular reflection) and Diffused reflection.	There is a single form of refraction.
Occurrence	Occurs in mirrors.	Occurs in lenses.
Behaviour Of Light	In this process, light bounces back and returns back in the same direction.	In this process, light changes path i.e travels from one medium to another.
Speed Of Light	When a light ray strikes the boundary of a shiny surface the speed of light ray does not vary.	The speed of light varies with the medium in which the ray undergoes bending.
Medium Of Light Propagation	The medium in which light propagates remains the same.	The medium of propagation gets changed.
The angle of Reflection And Angle of Incidence	The angle of reflection and angle of incidence is the same in the case of reflection.	In refraction, the angle of reflection and angle of incidence are not the same.

Colour of light reflected by an object will make it appear blue:

- ❖ The colour of an object is the colour of light reflected by the object.
- The reflected colour falls on the human eye and makes it appear colourful.
- So, if an object is blue in colour, then the colour of light reflected by that object is also blue.
- Other colours of light are absorbed by that object.