

The EPI may rankle but India can recast policies

(GS Paper 3, Environment)

Why in news?

- Recently, the latest Environmental Performance Index (EPI) placing India last among all 180 assessed countries was dejected by India.
- The assessment, carried out by Yale and Columbia Universities with an **emphasis on climate change mitigation**, has become controversial for **prioritising the flow of greenhouse gases from countries** while reducing the emphasis on the stock of carbon dioxide from industrialised countries that is warming the globe.
- Evidently, if countries were assigned a penalty for the stock of CO₂ in the atmosphere, rather than measure their mitigation actions over a decade, India would fare much better.
- Less controversially, the EPI dwells on performance on air quality, waste management and ecological conservation measures.

Government's response:

- The EPI ranking and scores have been rejected by the Union Government as based on “unfounded assumptions”, “surmises” and “unscientific methods.”
- The national rank of **165 on Climate Policy and score of 21.7 in this category** which overall has a 38% weightage in the calculations along with 42% for Ecosystem Vitality and 20% for Environmental Health has particular significance.
- India is under pressure to raise its ambition and commitment towards the more ambitious 1.5° Centigrade goal for temperature rise under the Paris Agreement, going beyond the less rigorous target of well below 2°C.



Projected greenhouse gas (GHG) emissions:

- Within the overall climate score, **India does better in sub-metrics such as growth rates for black carbon, methane and fluorinated gases, and greenhouse gas emissions** based on their intensity and per capita volumes.

- The Index rates the country low on projected green house gas (GHG) emissions for mid-century, a target for Net Zero emissions.
- The **EPI report estimates that China, India, the United States, and Russia are expected to account for over 50% of global residual greenhouse gas emissions** by 2050.
- This projection has met with strong protest from India, which has faulted the EPI for introducing a new metric on climate with increased weight in the calculation compared to the 2020 assessment.
- It stands accused of ignoring the important tenet of equity in global climate policy within the United Nations framework: that **India has low per capita GHG emissions, reduced intensity of GHG emissions in its economy**, made big strides **achieving 40% renewable power generation**, supported electric vehicles, launched a major carbon sink initiative, and done a lot for wetland conservation.

Claims and low Protected Areas Representativeness Index (PARI) :

- The country has protested that the new India State of Forest Report (ISFR) 2021 was not factored in as part of the biodiversity metric.
- On the face of it, India scores abysmally low on some of the Ecosystem Vitality variables, such as Marine Protected Areas (0.3 of a possible 100) and Protected Areas Representativeness Index, or PARI (0.5), Terrestrial Biome Protection (TBM) – National (1.2) and TBM – Global (2.1).
- **Wetland loss prevention is among the best scores for India**, at 62. Given the many biomes that exist in the country, the low PARI score puts pressure on the Government to defend its claim that the EPI scores for biodiversity health are faulty due to weaknesses in collecting species and habitat data.
- The ISFR, on which the Union government relies, ran into trouble for making spectacular claims, because of perceived methodological weaknesses.
- It is faulted for relying on a relaxed definition of forest and claiming expansion of forests when satellite imagery of the same areas showed a decline.
- The **palm trees in private plantations in Tamil Nadu, tea estates in several States and even urban tree agglomerations were found added as forest**.

Biome protection, air quality:

- The EPI-assigned rating for India in protecting biomes has led to sharp differences too.
- The Index assigns a **'laggard' rank on tropical and subtropical dry broadleaf and coniferous forests**, montane grasslands and shrublands and the worst performance on deserts and xeric shrublands.
- The Government's defence is that national and legal boundaries for protected areas may not match geographical boundaries of biomes, and international classifications may not be optimal to measure conservation.

Air quality:

- A second sensitive area in which India brings up the rear in the EPI is air quality. With a score of 7.8 and a rank of 179, the familiar dispute over data and reliability of several parameters has reopened.
- The Government faults the dataset on pollutant concentration data covering mainly Particulate Matter (PM2.5), Oxides of Nitrogen, Sulphur Dioxide and Volatile Organic Compounds, because of "higher uncertainty in regions with less extensive monitoring networks and emissions inventories".
- Although the scores and rank could be contested, there is little doubt that **India's air is widely seen as among the foulest**. Data for 2019, when economic activity was unfettered by COVID-19, attribute 1.67 million deaths during the year from air pollution.

Green goals:

- The national case would be stronger **if policies on luxury urban emissions are aimed at helping poorer Indians**. On transport (about 13% of emissions), prevailing high fuel and vehicular taxes could exclusively drive change and raise a green commons such as clean public transport, cycling and pedestrianisation.
- The national policy of **achieving Net Zero emissions by 2070** provides a longer timeline for a coal phase out, but other areas can benefit from policies that prevent a carbon lock-in effect.
- Emissions from buildings, including embedded carbon in construction materials such as cement and steel, provide scope for reduction.
- India has also **not expanded disaggregated rooftop solar power across residential deployments** and commercial structures.

- There cannot also be excessive reliance on carbon sinks in the short term, since tree cover of the right kind takes time to store carbon. Stronger protection for biomes (protected areas represent about 5% of the land) can generate wide-ranging benefits and biodiversity can recover.

Way Forward:

- What India needs to adopt is a rigorous dashboard approach to indicators, assigning high weight to the environment, modelled on the proposal made by Amartya Sen, Joseph Stiglitz and Jean-Paul Fitoussi in their exploration of development beyond GDP.
- This can generate good data, identify the real beneficiaries of policies, avoid serious environmental deficits and ensure inter-generational equity in the use of natural resources. It can also curb pollution. Distorted rankings from external assessments would matter little.