

Analysing local environmental footprints

The Hindu

Paper - III
(Environment)

While climate change is a global concern, issues such as water scarcity and air pollution are often localised or regionalised. Focusing on local environmental issues is crucial; and herein comes the importance of understanding household environmental footprints.

Distribution of household environmental footprints in India:

A recent study 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 (PM_{2.5}) 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.

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.

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.
- ❖ While transitioning from biomass to LPG reduces direct footprints, the lifestyle choices associated with affluence lead to a rise in PM_{2.5} 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.

Expected Question for Prelims

Que. Consider the following statements-

1. Eating out in restaurants has been highlighted as a significant contributor to increased environmental footprint.
2. The average per capita CO₂ footprint of the top 10% in India is 6.7 tonnes per capita per year.

Which of the statements given above is/are correct?

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

Answer : C

Mains Expected Question & Format

Que.: 'The solution to a serious and global issue like climate change lies in the analysis of local environmental footprints and their local solutions.' Discuss.

Answer's Approach:

- ❖ In the first part of the answer, briefly describe the seriousness of climate change.
- ❖ The second part discusses the available data and analyzes local environmental footprints as a response to climate change.
- ❖ Finally give a conclusion giving suggestions.

Note: - The question of the main examination given for practice is designed keeping in mind the upcoming UPSC mains examination. Therefore, to get an answer to this question, you can take the help of this source as well as other sources related to this topic.