

[Click here for our in-depth coverage of Lok Sabha and Assembly elections #ElectionsWithTheHindu](#)

# Analysing local environmental footprints of luxury consumption | Explained

**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?**

Published - May 21, 2024 10:59 pm IST

SOUMYAJIT BHAR



For representative purposes. | Photo Credit: Getty Images

While 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 CO<sub>2</sub>, water, and particulate matter (PM<sub>2.5</sub>) 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 PM<sub>2.5</sub> footprint encompassed both embedded emissions and direct emissions from household activities such as the use of fuelwood, kerosene, and vehicular fuels. Similarly, the CO<sub>2</sub> footprint was used to capture both embedded and direct CO<sub>2</sub> 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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 PM<sub>2.5</sub> footprints (and subsequently, the CO<sub>2</sub> footprint).

The average per capita CO<sub>2</sub> 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 CO<sub>2</sub>eq/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.

## What are the implications?

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 the importance of multi-footprint

analysis in addressing environmental justice concerns and ensuring equitable sustainability efforts.

*Soumyajit Bhar is Assistant Professor at the School of Liberal Studies of BML Munjal University, Gurugram.*