

**Research questions**

- What demographic groups have the highest or lowest monthly expenditures?
- How big are caste-based expenditure gaps?
- How do gender and higher education status mediate these gaps between caste groups?

**Overview of variables**

Variable Name	Description
HHID	The household's ID
date	The date the interview was taken
state	The state the household belongs in
relationship	Relationship to the head of the household, encoded numerically. For instance, '1' stands for 'Self', '2' stands for 'Spouse', '3' for Mother and so forth.
age	Age of the respondent
gender *	Gender of the respondent, with two categories: male or female.
education	Education level of the respondent, ranging from 'no education' to 'graduate or above.'
caste	Caste of the respondent, with 4 categories: Scheduled Caste, Scheduled Tribe and Other Backward Class
incsource	The household's primary mode of income. This has several options, ranging from 'Agriculture (own land)' and 'Own business' to 'Daily laborer'
month_exp	The estimated monthly expenditure of the household

*\* This approach aligns with the traditional gender binary, which unfortunately does not capture the full spectrum of gender identities. While we use this dataset for instructional purposes, it's important to be mindful of its limitations and to consider how future data collection efforts might better represent gender diversity.*

**Policy context**

The caste system, though legally abolished in 1950, continues to shape the social fabric of India, defining individuals' social and economic positions based on the family they are born into. Originally rooted in Hinduism, caste now influences nearly all Indians, regardless of religion, as conversion often does not erase caste identity. This system largely dictates marriage prospects and occupational choices.

Castes in India are broadly classified into four categories: Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Classes (OBC), and the General or Forward category. The SC, ST, and OBC groups often face discrimination, being relegated to menial jobs and labeled 'untouchable.' To address this, the Indian government offers reservations, akin to affirmative action in the U.S., to help these groups achieve upward mobility. The exact share of ST, SC and OBC castes (jointly thought of as the 'Reserved' category of caste) in India's population is contested. According to the 2011 government census in India, these 'Reserved' castes only make up around 29.5% of the population.<sup>1</sup> Meanwhile, an independent survey conducted by the Pew Research Centre in 2021 shows that around 68% of India's population belong to the Reserved category.<sup>2</sup>

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<sup>1</sup> <https://scroll.in/article/746204/before-releasing-caste-numbers-the-government-needs-to-account-for-discrepancies-in-data>

<sup>2</sup> <https://www.pewresearch.org/decoded/2021/06/29/measuring-caste-in-india/>

Poverty and land ownership disparities are stark between castes. According to the UNDP and Oxford Poverty and Human Development Initiative, half of those in Reserved categories are considered poor, compared to just 15% of higher castes.<sup>3</sup> This economic disparity is also evident in household expenditures, where General category households typically have higher spending, while Reserved category households have lower expenditures.<sup>4</sup> Land ownership, a key source of wealth in rural areas, is also skewed, with Reserved category individuals often landless or possessing less fertile land.<sup>5</sup>

Our exercise focuses on Uttar Pradesh (UP), India's most populous state, home to 16% of the country's population and with a significant rural demographic (over 77% as of the 2011 census, compared to 69% nationwide).<sup>6,7</sup> UP also has the highest proportion of OBCs, comprising over 50% of its population, and nearly 70% of the state falls under the Reserved categories.<sup>8</sup> Despite these numbers, a 2022 study by the Centre for the Study of Regional Development reveals that land ownership among these groups in UP is disproportionately low compared to their population share.<sup>9</sup>

## Data

The Access to Clean Cooking Energy and Electricity – Survey of States (ACCESS) is recognized as India's most comprehensive survey on energy access, featuring the largest panel data on this subject within the country<sup>10</sup>. This survey was carried out across six states where energy access is notably lacking—Bihar, Jharkhand, Madhya Pradesh, Odisha, Uttar Pradesh, and West Bengal.

In 2018, the Council on Energy, Environment and Water (CEEW) conducted this study with support from the Shakti Sustainable Energy Foundation (SSEF) and the Lee Kuan Yew School of Public Policy at the National University of Singapore. The survey carried out random sampling of over 9,000 households from 756 villages in 54 districts, resulting in the collection of approximately 2.5 million data points. Data collection involved interviewing the head of each household, or in their absence, the next most senior family member. While the primary aim of the survey was to gather information on energy access across these six states, we will leverage the demographic data collected to analyze land ownership and expenditure patterns among different groups

## Methods

We can use the ACCESS 2018 data to conduct a basic cross-sectional exploratory analysis to examine expenditure differences between caste and other groups of households. We'll focus on estimating the difference-in-means between Reserved and General caste categories, while also comparing male vs. female expenditures and the role of a high school degree or more.

## Why should we care?

- The persistence of caste-based spending gaps highlights deep-rooted social and economic inequalities that continue to limit opportunities for historically marginalized communities in India. Understanding the nature of these spending gaps can help us identify effective policy solutions to promote economic equity and social mobility:
  - If spending gaps are driven by disparities in education and employment opportunities based on caste, this underscores the need for more targeted policies to improve access to quality education and better employment prospects for Reserved category individuals.
  - If the gaps are related to systemic discrimination in land ownership and resource distribution, there is a clear role for land reform policies and social protection measures that address these historical injustices.
- A more comprehensive understanding of caste-based economic disparities also requires attention to how these factors intersect with gender and education. For instance, women in Reserved categories may face compounded disadvantages by limited access to education, suggesting the need for policies that are both gender-sensitive and caste-aware in addressing economic inequalities.

<sup>3</sup> <https://www.cnn.com/2020/04/15/asia/india-coronavirus-lower-castes-hnk-intl/index.html>

<sup>4</sup> <https://thegroundtruthproject.org/what-does-the-caste-wealth-gap-look-like-in-india/>

<sup>5</sup> <https://thewire.in/caste/how-caste-continues-to-determine-asset-and-landholding-structure-in-rural-india>

<sup>6</sup> [https://censusindia.gov.in/nada/index.php/catalog/1191/download/3778/DH\\_2011\\_0918\\_PART\\_B\\_DCHB\\_BUDAUN.pdf](https://censusindia.gov.in/nada/index.php/catalog/1191/download/3778/DH_2011_0918_PART_B_DCHB_BUDAUN.pdf)

<sup>7</sup>

[https://censusindia.gov.in/nada/index.php/catalog/42617/download/46288/Census%20of%20India%202011-Rural%20Urban%20Distribution%20of%20Population.p](https://censusindia.gov.in/nada/index.php/catalog/42617/download/46288/Census%20of%20India%202011-Rural%20Urban%20Distribution%20of%20Population.pdf)

<sup>8</sup> <https://www.hindustantimes.com/cities/lucknow-news/uttar-pradesh-s-obc-population-estimated-at-over-50-101696332268523-amp.html>

<sup>9</sup> <https://thegroundtruthproject.org/what-does-the-caste-wealth-gap-look-like-in-india/>

<sup>10</sup> <https://www.ceew.in/publications/access-clean-cooking-energy-and-electricity>