



# DATA FOR DEVELOPMENT

## India Human Development Survey Forum | December 2025

A monthly update of socio-economic developments in India by the IHDS research community

### Credit Accessibility and Labour Allocation Decisions of Workers in Rural India

Gunjan Kumari, Neha Gupta, K. Narayanan

#### Access to Formal Credit on Labour Allocation in Rural India

Evidence from an endogenous switching regression



Increase in total labour supply

Shift from low-productive non-agricultural wage employment to farm cultivation

#### Who benefits the most?

- Credit -constrained workers
- Larger effects for men and land owning households

#### Policy implication

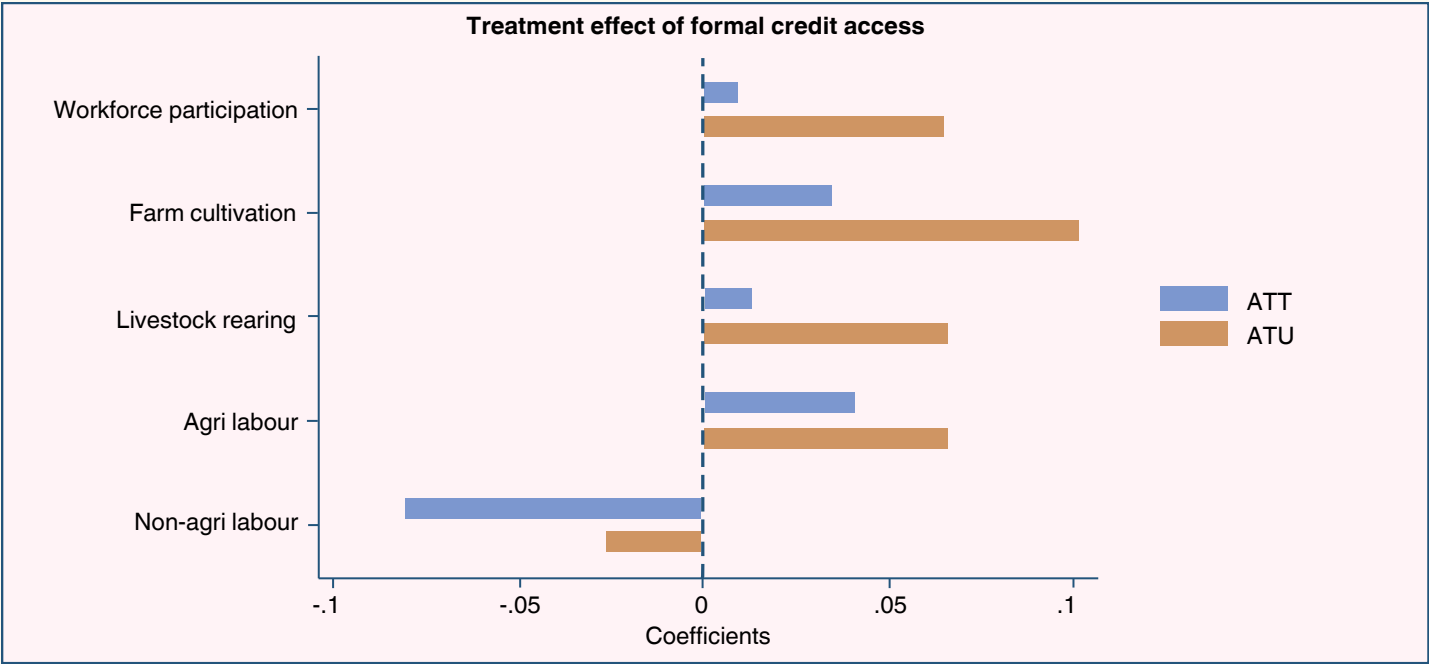
More equitable access to formal credit towards credit-constrained rural households can improve labour allocation.

Source: Kumari, G., Gupta, N., & Narayanan, K. (2025). Credit accessibility and labour allocation decisions of workers in rural India. *Agricultural Finance Review*, 85(3), 416-444.

The paper investigates the causal effect of formal credit access on labour allocation decisions in rural India, both at the extensive (workforce participation) and intensive (total working days) margins. It further examines heterogeneity between credit-constrained and unconstrained workers, along with variations by gender and land ownership. To address unobserved heterogeneity and selection bias arising from the non-random credit distribution and household self-selection, the authors employ an endogenous switching regression model using data from rural households in the India Human Development Survey (IHDS) Round II (2011-12).

The findings reveal that access to formal credit increases aggregate labour supply and enables reallocation of labour from low-productive non-agricultural wage employment to farm cultivation, where expected returns are higher. Credit-constrained workers would have gained the most had they been able to access formal credit. The results suggest that the current pattern of credit distribution has distorted labour market outcomes by confining workers to low-productivity casual employment. The study recommends a more equitable distribution of formal credit, with a particular focus on credit-constrained households.

**Figure 1:** Impact of formal credit access on participation in overall workforce and various activities



Source: Kumari, G., Gupta, N., & Narayanan, K. (2025). Credit accessibility and labour allocation decisions of workers in rural India. *Agricultural Finance Review*, 85(3), 416-444.

Notes: This figure presents the average treatment effect of credit access separately for treated (ATT) and untreated (ATU) units across different employment types. Estimates are derived from the endogenous switching regression model.

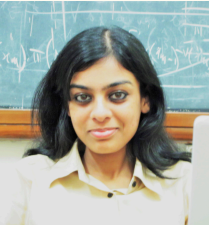
[Read More](#)

## About the Authors



### Gunjan Kumari

Gunjan Kumari is an Assistant Professor at the School of Business, UPES Dehradun. She holds a Ph.D. in Economics from IIT Bombay. Her research focuses on the dynamics of the Indian labour market, particularly labour allocation patterns and worker welfare.



### Neha Gupta

Neha Gupta is an Assistant Professor in the Department of Economics at IIT Bombay. She holds a B.A. (Hons) in Economics from St. Stephen's College and M.A., M.Phil., and Ph.D. in Economics from the Delhi School of Economics. Her research interests span applied microeconomics, behavioural and experimental economics, and labour economics.



### K. Narayanan

K. Narayanan is a Professor and Head in the Department of Economics at IIT Bombay. He obtained his Ph.D. from the Delhi School of Economics and completed his postdoctoral research at the Institute of Advanced Studies, United Nations University, Tokyo. His research spans industrial economics, international business, climate change, and development economics. His latest book, *Regional Economic Diversity: Lessons from an Emergent India*, co-authored with Poornima Dore, is published by Oxford University Press.



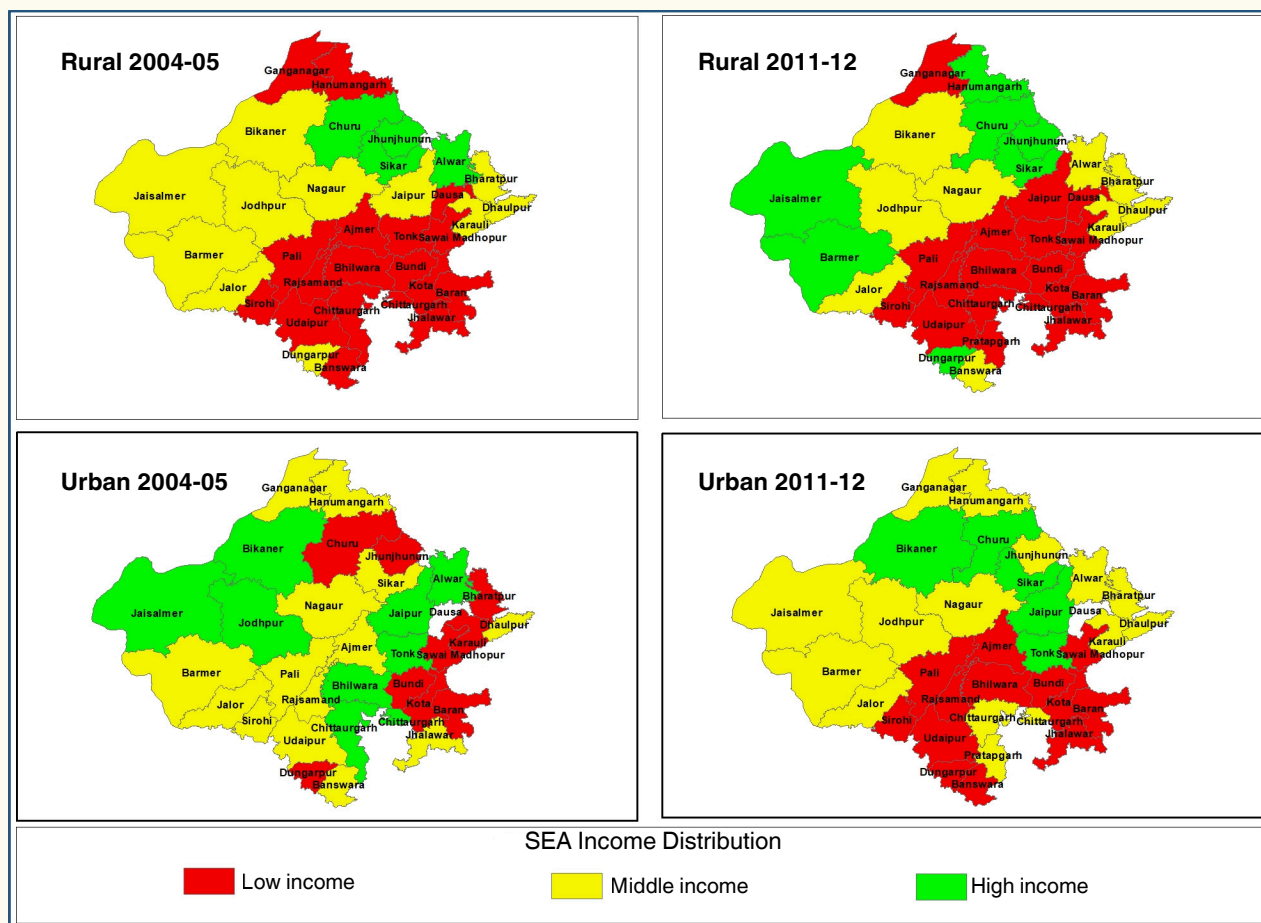
# Spatial Income Inequality in Rajasthan Using Small Area Estimation Model

Preeti, Bharat Diwakar

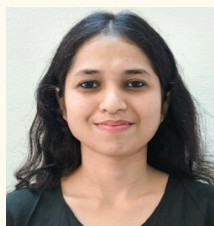
The paper examines district-level income distribution in Rajasthan by addressing the limitations of small sample sizes in conventional surveys, which restrict policymakers from obtaining reliable micro-level estimates. To overcome this challenge, the authors apply small area estimation (SAE), a method that improves precision by integrating survey data with external administrative sources. Using SAE, the analysis combines the India Human Development Survey (IHDS) of 2004 and 2011 with the Population Census of 2001 and 2011 to generate detailed income estimates for both rural and urban areas.



Diagnostic tests confirm that the SAE estimates are more reliable than direct survey estimates. The findings show rising income levels across districts between 2004 and 2011, along with marked spatial disparities—low-income districts are concentrated in the southern and some northern regions. Rural areas exhibit higher inequality than urban areas, with within-district disparities contributing the most to overall inequality. These micro-level insights can support policymakers in designing targeted, area-specific development strategies.

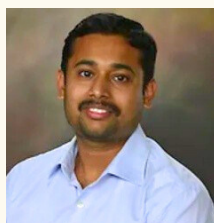


## About the Authors



### Preeti

Preeti is a research scholar in the Department of Humanities and Social Sciences at IIT Roorkee. She holds an Integrated M.Sc. in Economics from the Central University of Rajasthan. Her research focuses on income and wealth inequality, with a particular emphasis on analysing granular datasets using statistical techniques.



### Bharat Diwakar

Bharat Diwakar is an Assistant Professor in the Department of Humanities and Social Sciences at IIT Roorkee. He holds Ph.D. in Economics from Auburn University, Alabama (USA). His research interests include macroeconomics, R&D-based growth, human capital and population growth. His work has been published in journals such as Macroeconomic Dynamics, Review of Income and Wealth, Economic Change and Restructuring, and The B.E. Journal of Macroeconomics, among others.

---

## Publications List

### Recent Publications Using IHDS Data

Ahsan, M. N., Emran, M. S., Mohammed, A. R. S., Murphy, O. A., & Shilpi, F. (2025). When Ranks Fail: New Evidence on Intergenerational Educational Mobility. ResearchGate (Preprint). [Link](#).

Barik, D. (2025). Risk of Developing NCDs in Later Life among the Overweight and Obese Women in India: Insights from a Nationally Representative Longitudinal Study. Margin: The Journal of Applied Economic Research, OnlineFirst version. [Link](#).

Biswas, S., & Bhattacharya, K. (2025). Gender heterogeneity in secondary school dropout due to financial shocks: Evidence from India. International Journal of Educational Development, 119, 103452. [Link](#).

Das, M. (2025). The association between parents' height and sons' height: findings from India Human Development Survey (IHDS), 2011–12. Journal of Health, Population and Nutrition, 44, 419. [Link](#).

Das, M., & Kumar, M. (2025). Poverty due to Noncommunicable Diseases among Indian States using Human Development Survey Data. Research Square (Preprint). [Link](#).

Deshmukh, N. (2025). Weathering the Drought: Risks and Resilience Patterns in Functional Health of Older Adults Across Rural India. Research Square (Preprint). [Link](#).

Jahan, N. (2025). Three essays on environmental economics. [Thesis, University of Manitoba, FGPS - Electronic Theses and Practica]. [Link](#).

Kaur, S., & Sharma, N. (2025). Insights into economic inequality and economic mobility: a longitudinal analysis of agricultural and non-agricultural household income in Punjab, India. *Indian Growth and Development Review*, 1-16. [Link](#).

Pandoh, A., & Singh, A. (2025). The Inequality Within: Why Women's Wages Reveal India's Next Growth Test. *The Policy Edge: Opinion*. [Link](#).

Rafi, M., Prasad, S., & Naseef, M. (2026). Socioeconomic Impacts of India's Rural Job Guarantee Program: Evidence From MGNREGA. *Journal of Public Affairs*, 26(1): e70100. [Link](#).

Sedai, A. K., Yasar, M., Crowder, W., & Bhukta, R. (2025). Banks and Inequality: Evidence from a Nationwide Branch Expansion Policy. *Journal of Money, Credit and Banking*. [Link](#).

Sabet, S., & Gathen, J. (2025). The Unproductive Wealth of Nations. The Case of Gold in India. Working Paper, London School of Economics. [Link](#).

## About IHDS

The India Human Development Survey (IHDS) began as a nationally representative, multi-topic survey of 41,554 households in 1,503 villages and 971 urban neighbourhoods across India. The first round of interviews were completed in 2004-05; the Data is publicly available via ICPSR. The second round re-interviewed most of these households in 2011-12 (N = 42,152), and data for the same are available via ICPSR. Fieldwork for IHDS-III was undertaken in 2022-24, and data is currently being cleaned and processed.

The IHDS-III has been jointly conducted by researchers from the University of Maryland, the National Council of Applied Economic Research, Indiana University and the University of Michigan.

## IHDS Principal Investigators

### Sonalde Desai

Distinguished  
University Professor  
Emerita, UMD

Director, NCAER-NDIC

### Feinian Chen

Professor, JHU

### Amaresh Dubey

Senior Consultant,  
NCAER

### Keera Allendorf

Associate Professor,  
IU

### Sharan Sharma

Assistant Research  
Professor, UMD

## Contact Us



*Copyright © 2025, India Human Development Survey. All rights reserved.*

### Our mailing address is:

3104 Parren J. Mitchell Art Sociology Bldg.  
University of Maryland, College Park, MD 20738  
[ihdsinfo@gmail.com](mailto:ihdsinfo@gmail.com)

**Thank you for your support.**