



## DATA FOR DEVELOPMENT

### India Human Development Survey Forum | January 2025

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

**Wishing All Our Readers a Happy New Year!**

May 2025 bring joy, health, and success to you and your loved ones. Thank you for being a cherished part of our IHDS community!

### Factors Contributing to Unwanted Birth in India: Evidence from Panel Study Design

*-Anjali Bansal, Laxmi Kant Dwivedi, Priyanka Dixit, & Amrita Gupta*



Globally, approximately 1 in 16 women experience an unwanted pregnancy each year. This study examined predictors of unwanted births using IHDS panel data (2004-05, 2011-12) through bivariate and multivariable logistic regression models. Among women who wanted to stop childbearing in 2004-05, 26% experienced unwanted births by 2011-12. Muslim women were more likely to experience unwanted childbearing than Hindu women (AOR-2.81, 95% CI: 1.73-4.59). Contraceptive users were 80% less likely to report unwanted

pregnancies (AOR-0.21, 95% CI: 0.18-0.24) than non-users. Husbands' preferences significantly influenced outcomes; women whose husbands desired more children had higher odds of unwanted births (AOR-5.80, 95% CI: 4.72-7.11). Additionally, women with at least one son were less likely to report unwanted pregnancies (AOR-0.52, 95% CI: 0.43-0.63).

To reduce unwanted pregnancies educating couples on the benefits of smaller families, reforming girl-child policies, and counselling husbands on contraception and gender equality are essential.

Table 1: Adjusted odds ratio along with 95% CI to examine the effect of different covariates on unwanted pregnancy, India, 2004-05 and 2011-12

Background Characteristics	AOR (95% CI)
<b>Age of women</b>	1
< 20	0.43***(0.28, 0.67)
20-24	0.23***(0.15, 0.36)
25-29	0.09***(0.06, 0.15)
30-39	0.02***(0.01, 0.03)
40+	
<b>Contraception status</b>	1
Not Using	0.21***(0.18, 0.24)
Using	1.14 (0.83, 1.57)
Missing	
<b>Husband's Desire</b>	1
Don't Want	5.80***(4.72, 7.11)
Want	0.73***(0.61, 0.88)
Missing	
<b>Number of Sons</b>	1
No Son	0.52***(0.43, 0.63)
1 Son	0.29***(0.23, 0.37)
2 Sons	0.40***(0.3, 0.53)
2+ Sons	0.48***(0.3, 0.78)
Missing	
<b>Ideal number of children in relation to actual living children</b>	1
Ideal = Actual	0.22***(0.16, 0.28)
Ideal < Actual	4.63***(3.94, 5.46)
Ideal > Actual	1.36 (0.9, 2.06)
Missing	

Source: Panel Survey IHDS-I (2004-2005) & IHDS-II (2011-12)

\*p<0.1; \*\*p<0.05; \*\*\*p<0.000

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## About the Authors



### Anjali Bansal

Anjali Bansal is a trained demographer and statistician with expertise in managing large-scale surveys. Holding a Ph.D. in Population Studies from IIPS, Mumbai, she has over eight years of experience in public health and social science research. Her work spans maternal health, nutrition, aging, and data quality, with extensive publications.



### Laxmi Kant Dwivedi

Laxmi Kant Dwivedi, Professor and Head of the Department of Survey Research & Data Analytics at the International Institute for Population Sciences, Mumbai, specializes in large-scale survey research, applied multivariate analysis, and population studies. He has published extensively, supervised multiple Ph.D. theses, and led significant national demographic projects.



### Priyanka Dixit

Priyanka Dixit is an Assistant Professor at the School of Health Systems Studies, Tata Institute of Social Sciences, Mumbai. With a PhD in Population Studies, her expertise spans biostatistics, public health, and reproductive health. She has published extensively and has received awards like the C. Chandrasekharan and K B Pathak Award for best paper and multiple fellowships.



### Amrita Gupta

Amrita Gupta, a Senior Research Analyst at TISS, is a trained demographer with a Ph.D. from IIPS, Mumbai. She specializes in maternal and child health, public health, gender studies, and social science research, with expertise in SPSS and STATA. Her work spans maternal health, food security, and occupational health, with extensive publications.

## Household Energy Choices under Fuel Stacking Scenarios: Evidence for Bundling Welfare Schemes for Facilitating Clean Fuel Use

*-M. Manjula*

Energy poverty related to the reliance on traditional biomass for cooking has a strong association with environmental degradation, gender inequity and human health. Reduction of energy poverty is a growing concern in public policy agenda globally, and in India, the last decade has seen concerted efforts to reach clean cooking fuel to the population. Despite this, wide regional disparities in energy poverty exists in India, indicating differential regional impacts of policies.



This paper using the IHDS-II (2011-12) data attempts to explain household cooking fuel choices under multiple fuel use (fuel stacking) scenarios in two states of India, differentiated by their socio-economic status and development trajectories. The paper employs multinomial logistic (MNL) regression model to identify factors determining fuel choice. The results indicate that urbanization, per capita income, the educational attainment of the household head and women in the household, having a separate kitchen for cooking and not living in one's own house were observed to be positively influencing a switch to clean cooking energy in both the states.

Table 2: Fuel use categories by per capita income in Odisha and Tamil Nadu.

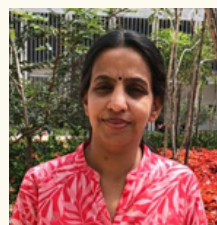
Fuel Use	Odisha		Tamil Nadu	
	Mean	CV* in %	Mean	CV* in %
Only LPG	68 608.68	115.3	48 399.97	114.72
LPG & kerosene	37 173.88	75.45	30 110.18	83.63
Solid fuel plus	22 907.75	119.58	28 191.68	129.82
Only solid fuel	11 881.17	97.94	23 010.91	91.78

Source: IHDS-II 2011-12

\*Coefficient of Variation

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## About the Authors



### M. Manjula

Manjula is a faculty at the Azim Premji University, Bengaluru, where she teaches courses in the broad domains of sustainability and livelihoods. Her research interests are on the ecological, social, and economic concerns of rural livelihoods, intersections of agriculture with gender, climate change, and sustainability. She also has long years of experience in the development sector.



## Publications List

### Recent Publications using IHDS Data

Chakraborty, M., & Mukherjee, S. (2025). Does parental migration affect children's health in rural India? A fresh look at retrospective data using LASSO Regression Method. *SN Social Sciences*, 5, Article no.1. [Link](#)

Chauhan, T. (2024). Accounting for Empowerment? Examining Women's Financial Inclusion in India. Working Paper. Center for Philosophy, Politics, and Economics, Brown University, 25, George St., Providence, 02906, Rhode Island, USA. [Link](#)

Chanu, N. P., & Elangbam, R. S. (2025). Understanding Chronic Health Conditions in India: Evidence from the India Human Development Survey. *Economic Sciences*, 21(1), 1-13. [Link](#)

Devare, D., & Kulkarni, S. (2024). Exigency to Redesign Policy Initiatives Improving Female Labor Supply in Urban India. *Arthshastra Indian Journal of Economics & Research*, 13(4), 47-61. [Link](#)

Rathee, N., & Nargunam, R. (2024). Is Health Insurance Actuarially Fair? Quantifying Discrepancies in the Indian Health Insurance Sector. Working Papers 2024-271. Madras School of Economics, Chennai, India. [Link](#)

Sharma, S. (2024). Short-Term Parental Migration and Intergenerational Educational Persistence. *Asia-Pacific Social Science Review*, 24(4), Article 6. [Link](#)

Sharma, K., & Rahman, N. (2024). Deprivation of safe drinking water and clean cooking fuel in India: longitudinal drivers of change. *International Journal of Energy and Water Resources*. [Link](#)

Tabassum, S., & Lalji, C. (2024). The Great Indian Budget: Does Migration Influence Household's Consumption Proportions? *IIM Kozhikode Society & Management Review*, 22779752241301838. [Link](#)

Yan, H. X., & Chen, F. (2025). Adolescent gender beliefs in India: Does mothers' empowerment matter? *Social Science Research*, 127, 103132, Article 103132. [Link](#)

## IHDS in Book chapter

Halder, P., & Mukhopadhyay, I. (2024). Intergenerational Transfer of Education Among Social Groups in India. In Alakshendra, A., Datta, A., Reddy, B. (eds) *Development, Inclusion and Sustainability. Sustainable Development Goals Series*. Springer, Singapore. [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 neighborhoods across India. The first round of interviews were completed in 2004-05; 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 is available via ICPSR. Fieldwork for IHDS 3 was undertaken in 2022-24 and data is currently being cleaned and processed.

IHDS 3 has been jointly conducted by researchers from the University of Maryland, the National Council of Applied Economic Research, Indiana University and University of Michigan.

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