

**N** SINCE  
1956  
NCAER | QUALITY. RELEVANCE. IMPACT

**IHDS**  
INDIA HUMAN DEVELOPMENT SURVEY



## DATA FOR DEVELOPMENT

**India Human Development Survey Forum | February 2024**

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

---

## Acquisition of disability after age 50 following extreme urban coastal flooding events in India

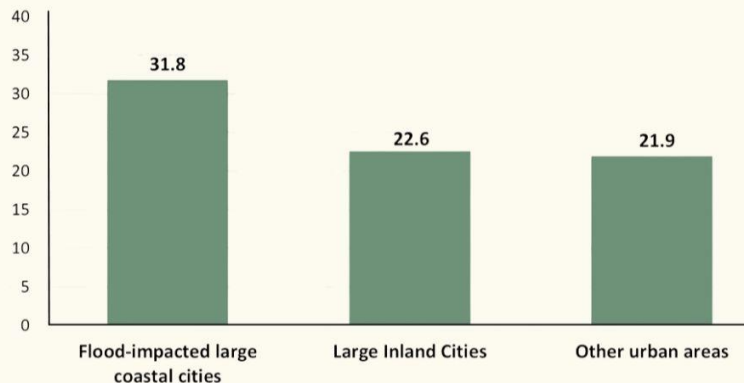
-Michael S. Rendall

Extreme climate events are infrequently considered for older individuals' health and wellbeing in low and middle income countries. The world's first and fourth largest urban populations exposed to extreme coastal flooding are in India (Mumbai and Kolkata). These and the next largest of India's coastal cities, Chennai and Surat, each experienced an extreme flood event in the years 2005-2007 that was either unprecedented in recorded meteorological history (Mumbai and Chennai) or whose magnitude



exceeded any in the last 30 and 40 years (Kolkata and Surat). Panel data collected before these events (2004-2005), and collected again approximately seven years later (2011-2012), are used for individuals aged 50 years and over. Acquisition of any disability condition between 2004-2005 and 2011-2012 in these four large coastal cities is compared to all India's urban areas, and to India's five inland cities (Delhi, Bengaluru, Hyderabad, Ahmedabad, and Pune) whose population sizes were between those of the four exposed coastal cities of the study.

**Figure: Percentage of adults aged 50+ who acquired disability in 2011-12 by city category**



Source: India Human Development Survey, individual panel file

Residing in a coastal city that experienced an extreme flood event was associated with 66% higher odds of acquiring disability (OR 1.66; 95% CI:1.21, 2.27) relative to residing in an equivalent-sized inland city. Being older, female, unmarried, in a single-generation household, and having a chronic morbidity condition had positive associations with disability acquisition, but only older age had a magnitude of association exceeding that for living in a coastal city which experienced an extreme flood event.

[Read More](#)

### About the Author



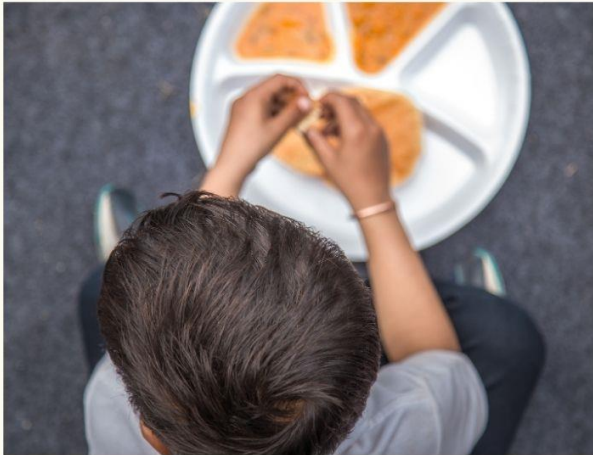
#### Michael S. Rendall

Michael S. Rendall is the Director of the Population Research Center at the University of Maryland. His research mainly focuses on evaluation of data quality in fertility, family structure, and international migration; elderly poverty measurement; new statistical methods for combining survey and population data; and new methods for the simulation of cohort lifetimes and population dynamics.



## The effect of the Mid-Day Meal programme on the longitudinal physical growth from childhood to adolescence in India

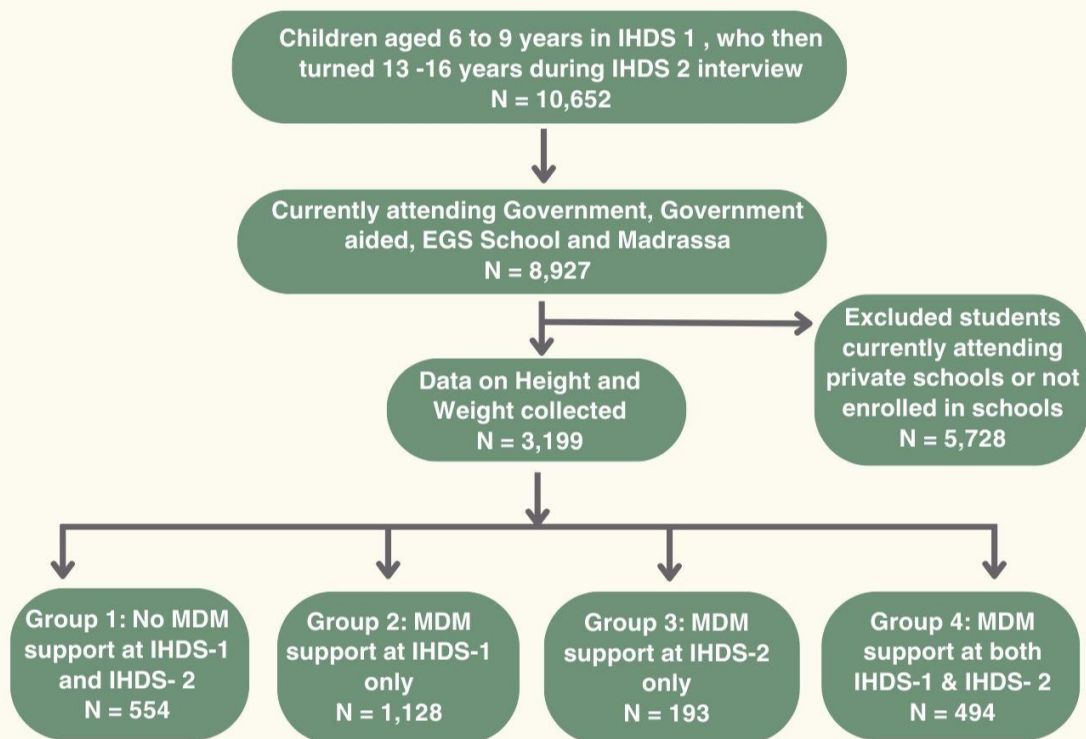
-Shivani Gharge, Dimitris Vlachopoulos, Annie M. Skinner, Craig A. Williams, Raquel Revuelta Iniesta, Sayeed Unisa



School feeding programmes have a critical role in the overall growth patterns among children and adolescents. The Mid Day Meal (MDM) scheme is the world's largest school feeding programme that provides one free cooked meal to primary and upper primary school- children in India. This study aims to examine the effect of MDM programme on the changes in the underweight prevalence among school-children in India. The authors utilised data from the Indian Human Development Survey (IHDS), Rounds 1 (2004–05) and 2 (2011–12).

The sample included individual-level information of children aged 6 to 9 years in IHDS-1, who then turned 13 to 16 years in IHDS-2. The sample was categorised into the following four groups based on their MDM consumption history: Group 1: no MDM support in IHDS-1 and IHDS-2, Group 2: MDM support in IHDS-1, Group 3: MDM support in IHDS-2, and Group 4: persistent MDM support in IHDS-1 and IHDS-2). The dependent variable was 'underweight status', as defined by the World Health Organisation Child Growth Standards Body Mass Index for age (BMI Z-score)  $< -2$  SD of the median. The authors examined the prevalence of underweight and established associations between 'underweight status' and socio-demographic characteristics. The authors also assessed the strength of the association of socio-demographic characteristics and MDM consumption patterns with underweight status across poor and non-poor asset groups.

The findings suggest that early and persistent MDM support among respondents reduced the likelihood of low BMI Z-scores as compared to those without MDM support. Respondents from the poor asset group who received MDM support in at least one of the two survey rounds had higher odds of being underweight in comparison with those who did not receive MDM support at all. Girls and adolescents residing in the Eastern region of India were less likely to be underweight. The study shows that the MDM programme was effective in reducing the incidence of being underweight among school- children. However, continuous programme upscaling with a special focus on children from poor households will significantly benefit India's school-aged children.



[Read More](#)

## About the Authors



### Shivani Gharge

Shivani Gharge is a PhD scholar at the International Institute for Population Sciences, Mumbai, working on the effect of the Mid Day Meal programme on food diversity, physical growth and learning outcomes in India. Her research interests include school feeding interventions, nutrition issues among women, children and adolescents.



### Dimitris Vlachopoulos

Dimitris Vlachopoulos is a Senior Lecturer in the Department of Sport and Health Sciences at the University of Exeter. He holds a PhD in Sport and Health Sciences from the University of Exeter. His research expertise includes the objective assessment of physical activity and musculoskeletal health.



### Craig Williams

Craig Williams is Professor of Paediatric Physiology and Health at the University of Exeter. He is also the Director of the Children's Health and Exercise Research Centre (CHERC) and the Editor-in-Chief of the Pediatric Exercise Science journal. He is internationally recognized for research in paediatric exercise physiology.



### Raquel Revuelta

Raquel Revuelta Iniesta is a Senior Lecturer in the Department of Sport and Health Sciences at the University of Exeter. She holds a PhD in Clinical Nutrition in Paediatric Oncology from Queen Margaret University. Her research interests focus on the nutritional issues of children, adolescents and paediatric cancer patients.





### Sayeed Unisa

Sayeed Unisa is an Adjunct Professor at the Tata Institute of Social Sciences, former Professor and Head of Biostatistics and Epidemiology, International Institute for Population Sciences and has over three decades of experience in teaching and research. Her research interests include mathematical demography, infertility, nutrition, epidemiology, gender and education.

## Field Perspectives

Insights and Observations corner

### Data Quality Monitoring in a Digital World: IHDS 3 Feedback Meeting

-Debasis Barik, Dinesh Kumar Tiwari

Digital data collection allows us to visualise the survey and associated process data almost in real time. Process data or paradata comprise real-time recording of the survey process, including the time taken to complete the interview, keystroke entry and data correction, skipping of specific sections, whether consent was taken for recording, whether GPS information was collected, and who responded to the interview, among other things. This has reduced the erstwhile reliance on physical monitoring in the field, where the supervisors used to check the filled-in hardcopy questionnaires and inform the interviewers about the mistakes they had made. With digital data collection, centralised monitoring has overtaken a major part of quality control.

In IHDS- 3, we are monitoring interviewers to check whether they are rushing through interviews, or asking questions appropriately, and also assessing the location in which questionnaire was filled. Then, a dedicated back-end team carefully listens to the audio recordings of interviews of those interviewers. This information is used in weekly/fortnightly Zoom meetings with interviewers to provide feedback/clarifications. We have also appointed a few field supervisors, who monitor the quality of interviews in the field itself and report the mistakes to our Delhi team. Interviewers, who make diligent efforts to collect high-quality data are provided cash prizes during these feedback meetings. This boosts the interviewers' morale and incentivises them to collect good-quality data in addition to clarifying any doubts in their minds.

## About the Authors



### Debasis Barik

Debasis Barik, Senior Fellow at the NCAER National Data Innovation Centre, is an esteemed demographer specialising in economic demography and the environmental adaptation of Indian households. His influential research, featured in prestigious journals like World Development, contributes to key large-scale surveys, including IHDS-3.



### Dinesh Kumar Tiwari

Dinesh Kumar Tiwari, Fellow at the NCAER National Data Innovation, is an accomplished anthropologist specialising in large-scale social surveys and experimental research. Currently coordinating IHDS 3, he excels in field management, monitoring, and ensuring data quality. With experience at the Indian Statistical Institute and the World Bank, his expertise encompasses migration studies, ethnographic research, public health, and experimental economics.



## Publications List

### Recent Publications using IHDS Data:

Bhatnagar, A. (2024). *Income mobility across castes in India: a longitudinal analysis*. *Indian Economic Review*, 1-21. [Link](#)

Gaur, D., Pandey, S. K., & Sharma, D. (2024). *Inequalities in Educational Achievement: Effect of Individuals' Capabilities & Social Identity*. *Journal of Policy Modeling*. [Link](#)

Gharge, S., Vlachopoulos, D., Skinner, A. M., Williams, C. A., Iniesta, R. R., & Unisa, S. (2024). *The effect of the Mid-Day Meal programme on the longitudinal physical growth from childhood to adolescence in India*. *PLOS Global Public Health*, 4(1), e0002742. [Link](#)

Kesar, S. (2023). *Economic transition, dualism and informality in India: Nature and patterns of household-level transitions*. *Review of Development Economics*, 27(4), 2438-2469. [Link](#)

Mondal, S. (2024). *Unpacking Caste and Intergenerational Occupational Mobility: A Novel Approach Through Occupational Prestige in West Bengal, India*. *Journal of Asian and African Studies*, 00219096231225954. [Link](#)

Sarkar, K., & Rizzi, E. L. (2024). *Self-Arranged Marriages in India: Change Amidst Sociocultural Underpinnings and Hanging Norms*. *Marriage & Family Review*, 1-30. [Link](#)

Sen, K. (2024). *Moving up the ladder: the spatial determinants of intergenerational occupational mobility in rural India*. *Journal of Social and Economic Development*, 1-22. [Link](#)

Talbert, R., & Rana, M. (2024). *Women's Empowerment, Region of Residence, and Contraception among Women in India*. *Population Review*, 63(1), 24-98. [Link](#)

## About IHDS

The India Human Development Survey (IHDS) is a nationally representative, multi topic survey of 41,554 households in 1503 villages and 971 urban neighborhoods across India. The first round of interviews were completed in 2004-05; Data is publicly available through ICPSR. A second round of re-interviewed most of these households in 2011-12 (N=42,152) and data for the same can be found via ICPSR. IHDS 3 is currently in progress with field work and data compilation.

IHDS 3 has been jointly organised by researchers from the University of Maryland, the National Council of Applied Economic Research, Indiana University and University of Michigan. Funding for the second round of of this survey is provided by the National Institutes of Health, grants R01HD041455 and R01HD061048. Additional funding is provided by the Ford Foundation, IDRC and DFID.

## IHDS Principal Investigators

### Sonalde Desai

Professor, UMD  
Professor, NCAER  
Director, NDIC

### Feinian Chen

Professor, JHU

### Amaresh Dubey

Professor, JNU  
Senior Consultant,  
NCAER

### Keera Allendorf

Associate Professor,  
IU

### Sharan Sharma

Assistant Research  
Professor, UMD

## Contact Us



Copyright © 2024, 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.

Want to change how you receive these emails?

You can [update your preferences](#) or [unsubscribe from this list](#).