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EXPLORING CASE-BASED LEARNING



How urban is India?

Arindam Jana



Case Brief

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Case No 1-0002

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Reframing Urban Inclusion

The opening set of cases produced by IIHS represents a focus central to our institutional mission, its teaching and its practice: urban inclusion. Through an on-going collaborative, multi-year research project titled 'Reframing Urban Inclusion', the 30 cases available on the website, www.cases.iihs.co.in include original teaching and learning cases commissioned and produced at IIHS through support from the Ford Foundation.

The cases were curated to address a particular set of challenges. The first is pedagogical. IIHS' stated aim is to be part of a global moment to re-think urban theory and practice from India, South Asia and the Global South. These cases are a key curricular and pedagogical intervention within that effort. Distributed through open access modes to encourage widespread, public and diverse forms of use, the cases seek to give scholars and educators in the Global South a new canon to teach with, that begins from and is responsive to place.

The second is more outward facing. India is at a critical moment in its urbanisation. The urban agenda has begun to emerge strongly on the national political register, and questions of how to shape policy agendas from housing to employment, planning to service delivery, are more pressing than ever before. It is our hope that these cases will therefore equally be used by and inform an evidence-based, empirically rich, conceptually grounded and reflexive practice and interface with policy.

Since 2013, the project has brought together leading academics and practitioners from different disciplines to identify and contextualise social and economic realities of Indian cities through the case method. We hope that they will provide new evidence of the possible opportunities and mechanisms for urban integration as well as build a conceptual and empirical foundation for politically, socially, and economically inclusive cities.

The project has three thematic foci:

1. Conceptualising Pro-Poor Planning

Urban planning processes determine access to basic resources such as land, shelter and housing, livelihoods, mobility, and security. Inclusive urban planning is aimed at serving all the citizens of the city, reducing vulnerability and addressing exclusion from access to these basic resources.

Cases in this theme (1) untangle the current state of urban planning and its effects on vulnerability and exclusion, (2) explore how meaningful participation can be more effective in pro-poor planning, and (3) highlight opportunities for, and instances of successful integration across agencies and organisations involved in urban planning.

2. Re-visiting Settlement Upgrading

This theme seeks to expand and re-articulate debates on slums in India. The 'slum' is a form of an urban settlement that is situated at the intersection of land markets, new urban political economies, the efficacy of the state as a provider of housing to the poor, differentiated state-citizen relations, splintered urban infrastructure, questions of law, legality and planning, as well as conceptions of urban citizenship.

Cases in this theme (1) explore the processes of settlement and resettlement, paying attention to the market and political forces that shape the outcomes, (2) broaden the scope of settlement transformation from spatial upgradation to impacts on other sites of transformation such as livelihoods and employment, and (3) explore alternative imaginations of 'property rights' and tenure regimes.

3. Re-drawing the Picture: Metrics of Urban Inclusion

The dynamics of urban poverty and vulnerability are poorly understood. We know that the security of tenure, spatial coherence of urban infrastructure and service delivery, transit distances between livelihoods and living spaces, socio- cultural identities and social networks play important roles in inclusive cities. However, we have limited statistical data and information on the locational and distribution patterns of urban India.

Cases in this theme (1) examine the use of data in urban decision making and identify potential sites for intervention, (2) provide a more contextual and holistic analysis of urban dynamics, moving beyond sector-wise administrative data collection methods, and (3) emphasise improvements in information and learning from experience for local decision making.

IIHS Case Method

The IIHS case is a work-in-progress that represents experiments in different forms of creating interdisciplinary and inter-sectoral cases, as well as a diversity of pedagogical environments to learn and teach with these cases. The opening set of cases is, thus, also in a sense, an experiment in form and teaching modes. Given this, we do not claim a singular 'IIHS Case Method' or any one form or definition of a case. Indeed, one of the explicit aims of case development at IIHS is to challenge conventional ideas of what case-based learning is.

How then does a user know how to use cases? Pedagogical transactions will differ from case to case and indeed multiple options will be open within each case. Therefore, in order to aid users, all IIHS cases come with a set of consistent elements that help users navigate through the diversity of form and content. These are:

- **Preface:** Every case begins with an introduction by the case writer that describes their own approach to the case. How did the case writer frame the case? Why did they choose to structure it as they have? What were their intentions in writing the case?
- **Teaching Note:** The second shared case element is the Teaching Note. Here, the case writer lays out their imagination of how they would teach with the case in its current form. They suggest learning outcomes, pedagogical modes, learning environments and assessment frames. True to the diversity of the cases, each of these is particular to the case.
- **The Main Case:** This is the main body of the case—its core empirics, arguments, discourse and data. Across the cases, these come in different forms: PowerPoint presentations, audio-visual material, web interfaces, written text, and data visualisations.
- **Pedagogical Possibilities:** The next element lays out the case writer's suggestions on other ways in which the case could be taught, including in other disciplines or learning environments. These are not as detailed as the Teaching Note but offer a set of possibilities to the user to imagine other uses of the case than those laid out.
- **Case Archive:** The final element of the case is a library of documents—reports to interview transcripts, unedited footage to visual photo libraries—that act as an archive for the case. This repository allows users to also access a host of background and additional information necessary to navigate the larger contexts in which the case is situated.

Each IIHS case—regardless of the diversity of its form—comes structured with these elements. It is our hope that this recognisable framework will enable users to navigate easily across cases with very diverse elements and forms.

Case Note

This case discusses how 'urban' should be viewed in India with the underlying analyses attempting to illustrate the sensitivity of the statistical picture of urban India to the definition of 'urban' that has been chosen. In doing so, it begins to characterise the extent and location of urban India that the official definition overlooks.

The first section discusses India's definition of urban in a historical and comparative perspective. The second and third sections examine the sensitivity of the official figures on urban population to the definitions and process used to count urban population. The concluding section places the results discussed in the note in the context of urban research in India.

Much public discussion presents India as an essentially rural nation, albeit with a growing urban population, an important urban economy, and a significant urban infrastructure deficit. According to the Census of India, the country is about one third urban: the official percentage of urban population in India was 28% in 2001 and 31% in 2011. The Census also states that in the decade 2001-2011, there were more people added to the urban population than the rural population; and their projections indicate that urban population is going to constitute more than half the total population by 2041.

These figures, however, do not capture the extent of the population living in the dense, highly populated conditions with significant non-agricultural earning opportunities commonly associated with "urban" contexts. If the entire population living within striking distance of cities and their employment opportunities were counted as "urban", for example, as much as 52% of India would have been considered "urban" in 2001 (Uchida and Nelson 2010).

Chandrasekhar analysed National Sample Survey data from 2009-10 and estimated that roughly 8 million workers residing in officially rural areas travel to work in urban areas, and they constitute about 9% of the total urban nonagricultural workforce (Chandrasekhar 2011). If one looked at physical context alone, India also looks more urban than official figures indicate. Others have argued that all settlements that have a population greater than 10,000 and appear to have contiguous built-up area should be counted as "urban", thereby estimating that 37% of India was urbanised in Census 2001. If one considers settlements with population greater than 5,000 "urban," then nearly half (approximately 47%) of India lives in urban-like conditions today (Denis and Marius-Gnanou 2011). There are some contrarian views of the extent of urbanisation as well, stating that Census figures are consistent over-estimates: Kundu has maintained that the level of economic development does not correlate with the official levels of urbanisation (Kundu 2011).

India's official definition of "urban" is two-fold, taking into account demographic as well as economic characteristics of the settlement. Any settlement that has a recognised urban local area government automatically qualifies as "urban". These are classified as statutory towns: in 2001, there were 3,799 statutory towns accounting for 25% of the total population, and in 2011, there were 4,041, accounting for 26% of the total population. Second, any settlement that satisfies the following three conditions is also, in principle, classified as "urban": (a) population greater than 5,000 persons; (b) density of more than 400 persons per square kilometre; and, (c) 75% or more of the male main workers involved in non-agricultural pursuits. These settlements are called census towns: in 2001, there were 1,362 census towns accounting for 2% of the total population, and in 2011, there were 3,894, accounting for 5% of the total population.

This case begins to pull apart the official definitions used by the Census and develop a more accurate picture of urban India. It does so by taking population, density and the labour condition apart and assessing various combinations of each as different notions of measuring the "urban."

All analyses accompanying this teaching note are based primarily on data released by the Census of India for the years 2001 and 2011. Due to the unavailability of settlement area information from the 2011 data, we have not been able to estimate population densities for 2011. As part of the analyses, we have also constructed a point location database for all settlements of south India based on Census 2001 and Census 2011. Creation of the point location database is an ongoing process – it involves geocoding of settlements based on their Census location identifiers, by querying Open Street Maps and the India Place Finder at the University of Tokyo. A final level of error correction for this database is done manually using various online map resources (Bhuvan, Google Maps, Google Earth and Here Maps). As this database grows to account for the entire country, the analyses and the accompanying visuals will be updated appropriately.

Components and Materials

The primary component of this case study is data—tables and visual representations in the form of maps and graphs. Using data from Census 2001 and 2011, visualisations such as those in Exhibits 1 through 3 have been created contrasting official rate of urbanisation in India as well as population, population density, and labour participation in India. These have helped pull apart official definitions of ‘urban’ used by the Census to something that is more representative of urban India, which have important implications for policy and funding allocations.

The case also contains the raw data that these maps have been generated from. This is to encourage anyone to replicate analyses, adapt them, or use the data for further analysis. It is also intended to enable the case to be used to teach scholars and practitioners how to use data to make assessments of the urban.

Exhibits

Exhibit 1: Distribution of Official Urban Settlements in 2001

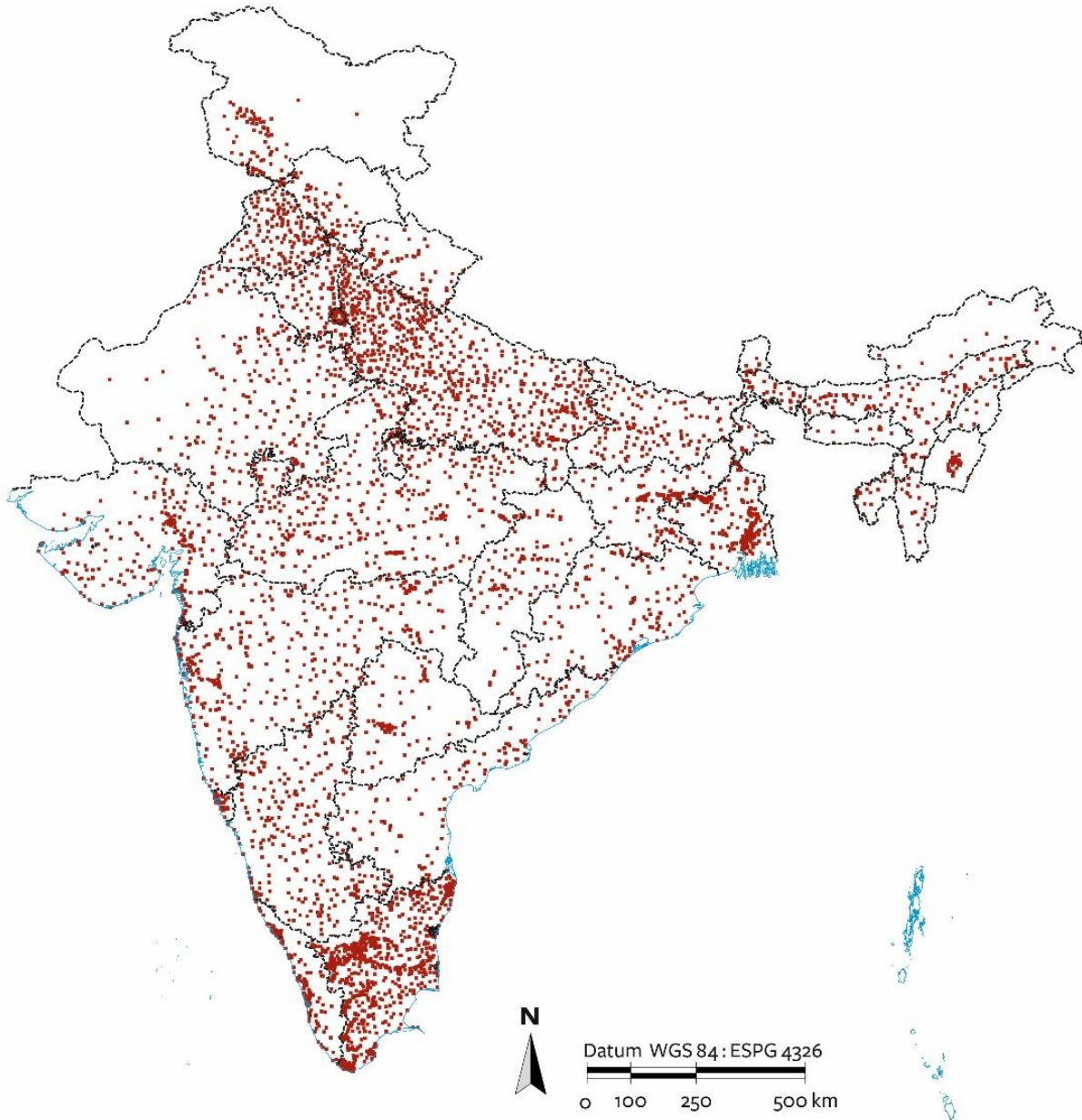


Exhibit 2: Distribution of Official Urban Settlements in 2011

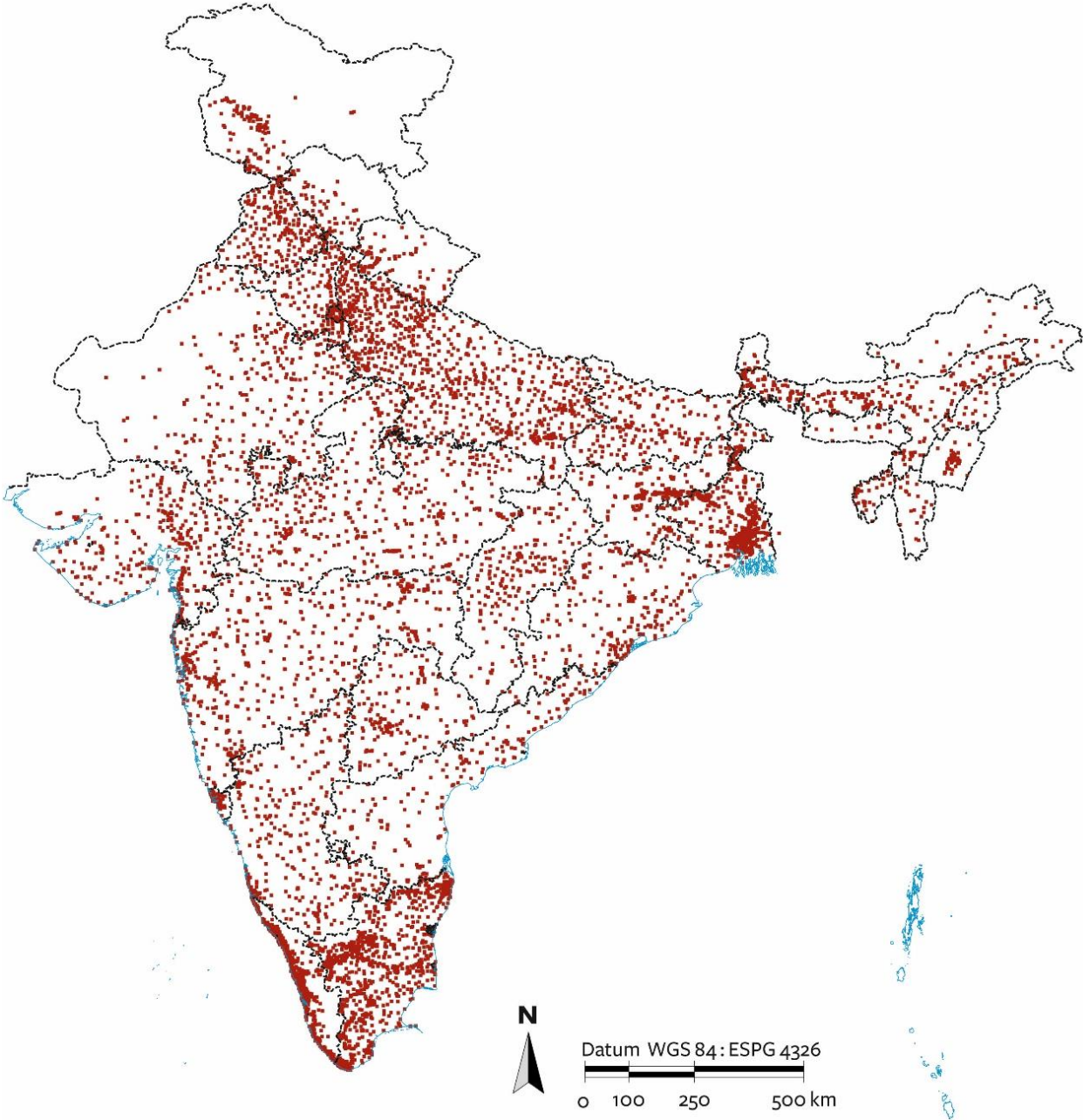
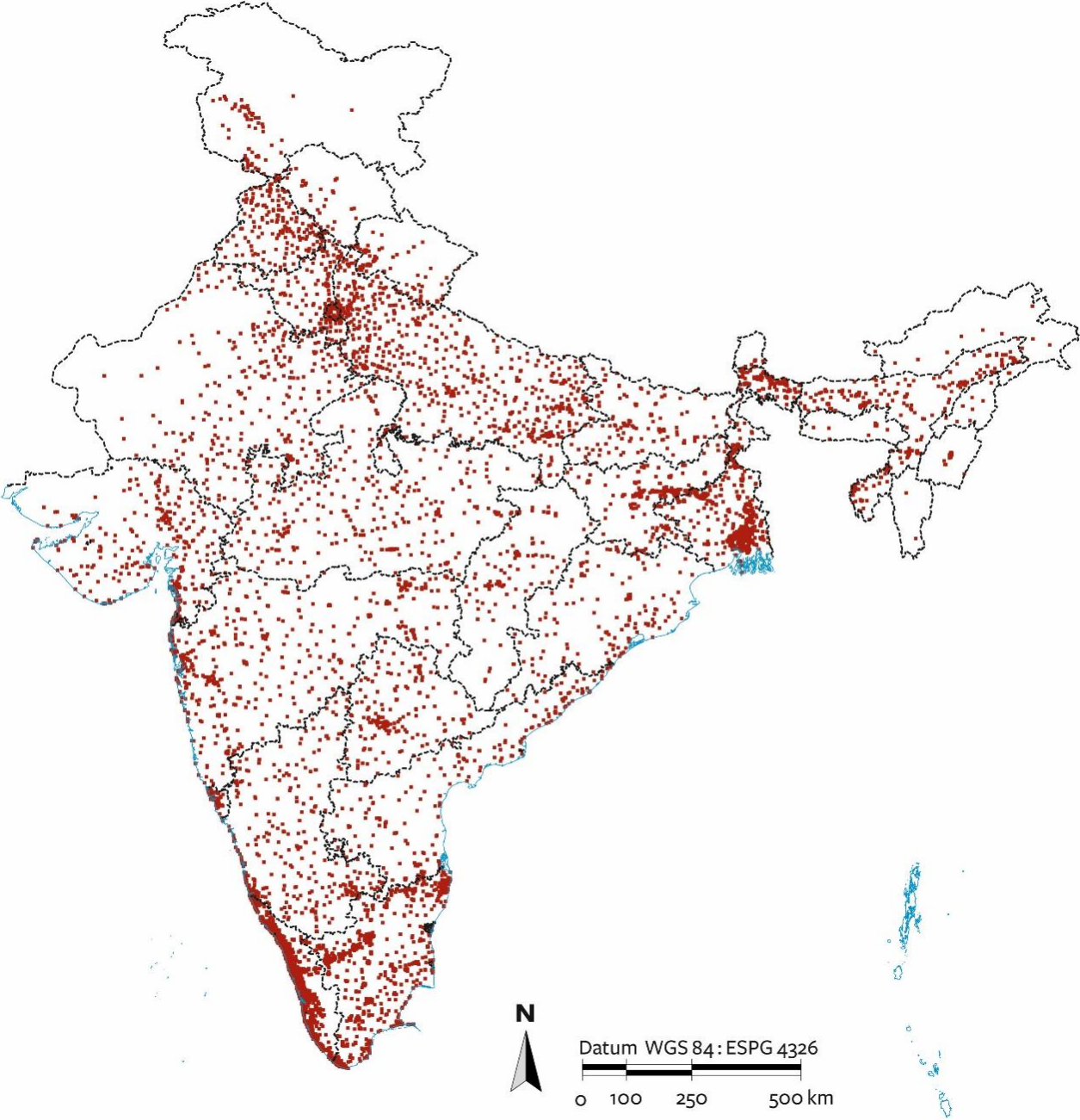


Exhibit 3: Distribution of Settlements Satisfying Population, Density and Labour Conditions, 2001



Teaching Note

This case is visualised as a learning tool to understand the concepts behind the identification and measurement of 'urban' and 'rural'. In my opinion, this case can be incorporated into the teaching curriculum in three distinct pathways:

1. As a *standalone module*, where learners are provided the teaching note, supplementary data tables, and maps, to wade through the concepts involved in the identification of 'urban' in India, and the potential pitfalls in the mechanisms of estimation. In this pathway, the teaching note would act as a background narrative to explain the concepts involved. In addition, the teaching note also raises critical what-if questions, which would provide the learners a particular lens with which to understand the questions of 'grey' areas within the strict dichotomous nature of rural-urban definition – what if only population size is a criteria for measurement, or, what if the labour condition were dropped, etc.

As a standalone module, this case would fit in at the very beginning of the course, when the basic concepts and tenets of urbanisation are being laid out for the learners. This module could either be taught as a lecture – whereby the instructor would walk through the core content of the teaching note, and introduce the learners to issues in the measurement of urban – or, as background reading material that could be referred to during active lectures in the foreground.

2. As a *quantitative methods workshop*, where learners would be provided with the supplementary data to work through problems of identifying settlements that could be classified as 'urban' given a set of rules. This workshop could be used to introduce learners to statistical and visualisation tools (e.g., Excel, QGIS, Stata, etc.). At the end of this workshop, the learners would not only be able to manipulate large datasets and create visualisations, but also, by providing the teaching note as background reading, be introduced to problems faced with the methods used for identification of 'urban' by other agencies and real world problems associated with the measurement of urban.
3. As *supplementary material*, to other modules in the course, whereby the teaching note and visuals associated with this case, could be used by instructors in other modules to allow learners to work through scenarios with alternate quantitative and spatial distributions of 'urban'. For example, in a module on urban service delivery, use the spatial distributions of different scenarios of what could be considered 'urban' to showcase potential issues in resource allocation and planning.

Accessing the Full Case

The full content of this case is open-access and downloadable at www.cases.iihs.co.in.

The full content of this case includes the following documents:

Folder A: Introduction to the Case

Terms of Use and Agreement

Reframing Urban Inclusion

IIHS Case Method

Preface Note

Teaching Note

Folder B: Main Case

Framing Note

Understanding the Indian Definition of Urban

Visual Files

Distribution of Official Urban Settlements in 2001 and 2011

Distribution of Settlements Satisfying Population Condition in 2001 and 2011

Distribution of Settlements Satisfying Density Condition in 2001 and 2011

Distribution of Settlements Satisfying Labour Condition in 2001 and 2011

Distribution of Settlements Satisfying Population and Density Conditions in 2001 and 2011

Distribution of Settlements Satisfying Population and Labour Conditions in 2001 and 2011

Distribution of Settlements Satisfying Density and Labour Conditions in 2001 and 2011

Distribution of Settlements Satisfying Population, Density and Labour Conditions in 2001 and 2011

Folder C: Supplementary Material

Data Files

Stata Data File of 2001 and 2011 Rural Districts PCA

Stata Data File of 2001 and 2011 Urban Districts PCA

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About the Author

Arindam Jana primarily works on demographics and information systems. His other areas of interest lie in information design, urban economics and transportation systems.

He has worked with the Indian Institute for Human Settlements, Bangalore, and the Institute for Financial Management and Research, Chennai. In the former, he co-anchored the Urban Informatics Lab, and worked on research on urbanization, spatial analysis and housing. At IFMR, he worked on designing development finance products and credit scoring models. He has previously also worked Nathan Associates (India), where he worked on areas like litigation economics and designing tools to assist in sports strategies. He holds a Master Degree from the Madras School of Economics.

About IIHS

The Indian Institute for Human Settlements (IIHS) is a national education institution committed to the equitable, sustainable and efficient transformation of Indian settlements. IIHS aims to establish an independent funded and managed National University for Research and Innovation focused on the multi-sectoral and multi-dimensional challenges and opportunities of urbanization. The University is intended to be a globally ranked institution. The IIHS is a proposed network of mother and daughter institutions across South Asia, leveraging on the local and regional knowledge and innovation and linking them to global best practices. Its mother campus, based in Bengaluru, will include academic, research and social infrastructure, student and faculty housing. This campus is expected to set international standards for efficient, economic and sustainable design, operations and maintenance.



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