STATE OF THE CITIES

INDIA

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FOREWORD

Om Mathur is, beyond doubt, the foremost urban scholar in India and has been for some time. He has worked on Indian urban issues on a continuous basis for almost half a century, a record that is unlikely to be surpassed in the near future. His long career has spanned various institutions including an early stint in the Planning Commission in its multilevel planning unit, in the United Nations Centre for Regional Development, as Director of the National Institute of Urban Affairs, at the National Institute of Public Finance and Policy, and now with the Institute of Social Sciences. For decades, he has been the go to person for advice on urban policy for the government of India, successive Indian Finance Commissions, the Planning Commission, state governments, international institutions like the World Bank, the Asian Development Bank and others. His advice is always given with the backup of well researched papers drawing on his extensive empirical and historical knowledge

Through this volume on the ***State of the Cities:*** **India,** he, along with his young colleagues, has now done a signal service to both researchers and policymakers alike by bringing together the state of knowledge on urban issues in India. A perusal of the volume's bibliography illustrates the dearth of studies on urban issues at both the micro and macro levels over the last decade. This is a bit of a puzzle, given the size of the country, the number of research institutions, universities and NGOs that are spread all across India. Many of the issues and features of recent urbanization highlighted in this volume pose many unanswered questions as to the ongoing changes in the process of urbanization unfolding in India in recent decades. There is also the overall issue of how large cities are continuing to grow and are being managed at very low income levels in India, when the historical experience has been that very large cities generally emerge as income levels increase along with overall development. That enables adequate investment in the infrastructure needed to sustain the growing populations in these cities.

In compiling this volume, the key handicap that Professor Mathur has faced is the lack of recent data. As is evident throughout the study the key source of data on various aspects of urbanization in India is the decennial population census. With the next census being slated to be held in 2021, Om Mathur's work program for the next two years is already cut out: issuance of a new updated volume as soon as the 2021 census data become available!

Coming to the substance of this report, it provides a comprehensive view of the evolution of Indian urbanization over the last 50 years or so. A new controversy has arisen in recent years regarding the definition of urbanization in India. Whereas, the definition used in Indian censuses suggests that the level of urbanization in 2011 was still only around 31 percent in 2011, various other definitions provide estimates ranging from 40 to 60 percent. Chapter 2 documents the basis of these definitions, but does not offer a definitive view on the relative reliability of these different estimates. My own view is that

the census definitions are rational and consistent over time and therefore still continue to provide the best guidance on the pattern of change of the urbanization process in India. It is also consistent, on a cross-country basis, with the level of India's per capita income. There is no doubt that the composition and characteristics of change have been different over the decades. One constant, however, is the relatively low contribution of net rural urban migration to urban population growth in India at just around 20 percent over the last few decades: this must be an outlier among fast-growing emerging and developing economies. Among the significant new features in the 2000-2011 decade were the very large increase in urban to urban migration and a huge decline in rural population growth at just 1.16 percent per year. These new trends in Indian demography need much greater research and understanding of the phenomena behind these changes. Assuming that the rural population growth rate between 2011 and 2021 will continue to exhibit a further decline, one can speculate that the next decade of 2021 to 2031 may even experience an unprecedented actual fall in total rural population in India. These issues will be of great relevance to the policy stance towards both rural and urban development in the years to come. I hope that the data marshalled in this volume will generate enough curiosity among both researchers and policymakers to initiate work to understand this change so that we can cope with it better in the future.

Another feature that has been brought to our notice is the extreme diversity between different regions of the country. States such as Tamil Nadu, Kerala and Maharashtra exhibit urbanization levels in excess of 45 percent, similar to the or high middle-income countries, whereas, at the other end, Bihar's level of urbanization was as low as 11.7 percent, similar to the least developed countries in the world. Odisha at 16.7 percent and Rajasthan at 24 percent are in a similar category. This suggests that the approach to urban development within the country must be very different across states. There is very little evidence of much thought being given to this unique feature of the pattern of Indian urbanization across the country.

Among the startling recent developments brought out in chapter 3 on "Economic Foundations of Urbanisation" is the stagnating urban share in GDP over the last couple of decades at around 52 percent. With the increasing share of urban population this stagnation implies *falling urban productivity* over the last couple of decades. Even more startling is the precipitous decline in the share of urban areas in manufacturing GDP from around 70 percent in the early 1990s to around 50 percent in 2011-12. The urban share of manufacturing workforce has been falling correspondingly. I have not seen references to these remarkable counterintuitive developments anywhere else and am constrained to observe that this constitutes shocking neglect by macroeconomic and economic researchers alike. It would be interesting to find out whether such an urban decline has taken place anywhere else in the world at this stage of development. Overall growth in manufacturing on a decadal level was the highest during the 2000s; it has certainly fallen since. One feature of Indian manufacturing which is consistent with both the

remarkably slow growth of Indian urbanization, and the falling urban share in manufacturing employment, is that it has not been either employment intensive or export oriented like East and South East Asian countries. These are issues of great importance for overall and urban economic policy in the coming years and decades. It would seem that we are not taking advantage of agglomeration economies that cities typically provide: it is no wonder then that Indian industry finds it difficult to compete with its peers in the rest of Asia.

Government policy with regard to urban development is typically focused on the provision of infrastructure. Chapter 4 on "Infrastructure, Environment and Urban Change" documents the various government programmes that have been designed over the last few decades. Presumably, because of the lack of data and of studies, there is no information on the actual allocations, implementation, and outcomes of these different programmes. It is therefore not possible to evaluate the efficacy of these programmes and of this size in addition to the needs of the country. The availability of information on essential public services like electricity, water, sanitation, etc. to urban residents is still dependent on the data provided by the 2011 census and is hence very outdated. This suggests that both the government at different levels and research institutions need to put in place programmes that monitor the spread of services over time on a regular basis between censuses. Overall, the availability of essential public services to the Indian urban citizen, such as only 54 percent having access to tap water in their homes in 2011, was of a very low order. Given the low level of the quantity and quality of essential public services, availability of affordable housing, and generation of quality jobs, the low rate of rural urban migration and slow urbanization in India is perhaps not surprising!

State of the Cities, India is a welcome digest on Indian urbanization bringing together in one place information that is usually not easy to access and absorb. I hope that it is read widely and that it induces much more research on the Indian urban condition, which is sorely needed.

March 2021

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President and Distinguished Fellow
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PREFACE

Urbanisation occupies an important place in India's public policy frameworks. Parallel to the global trends in urbanisation and the fact that the world has already sailed through the demographic threshold of 50 percent with no evidence of any country having succeeded in arresting it, urbanisation in India is beginning to be seen as given, evident, and to an extent even irreversible. It has become an object of examination in its own right and, as Neil Brenner puts it, is a seemingly ubiquitous frame for coming to grips with space-economic relations.[1] Not only is a discourse on urbanisation out of the shadow of the maxim that 'India lives in villages', but it has also outgrown, to a significant extent, the kinds of questions that urban observers would often ask: 'why has India's urbanisation been so slow' and offer an answer at the same time, 'the answer, I suggest, is the relative slowness of economic development'.[2] It is a fact that India's urbanisation has not leap-frogged, but it stands dominated by multiple narratives to describe India's urban transition, and in several ways endorse what Becker, Mills and Williamson wrote and I quote 'India's experience with city growth is complex, and it raises a host of related questions. What explains the timing and the extent of the transition from a traditional rural to a modern society? Why does city growth typically speed up in early stages and slowdown in later stages?'[3]

Recent advances in the sphere of urbanisation relate to several core issues of which four are of vital importance. The first issue relates to the measurement of urbanisation, stemming from the increasing use of an index of agglomeration and application of satellite imaging and night-light data for assessing the intensity and connectivity of urban economic growth. The Asian Development Bank (ADB) considers cities measured this way as 'natural cities', distinguishing them from cities that are assessed on administrative parameters.[4] The questions are: What do these new measures point to?; Have the traditional criteria – administrative considerations, density, non-agricultural occupations, and infrastructure and other socioeconomic indicators – lost their relevance?; Or, is the use of these criteria in various combinations just a statistical artifact?; Or, is it keeping up with the times?

The second issue is of the form and structure of urbanisation, exhibiting trends towards urbanisation beyond the typical historical patterns, for example, in the relentless growth of large cities extending into peripheries and blurring

[1] Neil Brenner. 2017. Critique of Urbanization: Selected Essays. Birkhauser Verlag Gmbh. Basel. Switzerland.

[2] Kingsley Davis. 1962. 'Urbanization in India: Past and Future'. In Roy Turner (ed.), India's Urban Future. University of California Press, Berkeley. California. USA.

[3] Charles Becker, et.al. 1992. Indian Urbanization and Economic Growth since 1960's. The Johns Hopkins University Press, Baltimore.

[4] Asian Development Bank. 2019. Fostering Growth and Inclusion in Asia's cities. Theme Chapter of the Asian Development Outlook 2019 Update. Manila, The Philippines.

of the city boundaries. These have led many to suggest that politico-economic spaces are no longer to be treated as if they were composed of discrete, distinct, and bounded settlements. As a result, new questions have arisen--- How should such a phenomenon that transgresses the statutory boundaries be described?; How best to characterise a process that is led, on the one hand, by the growth of large cities, and, on the other hand, by the growth of peripheries, suburbs, and settlements, which, as the Census of India claims, have acquired urban characteristics, and are called in its vocabulary, census towns; What is the best way to put together and explain the duality that marks the process of urbanisation – coexistence of areas with levels of urbanisation matching those of the emerging economies and those that are still to cross the 1951 level of urbanisation in a common frame?

The third issue concerns the link between urbanisation and economic growth and other developmental parameters such as poverty reduction. At one level of generalisation, as this study will demonstrate, the links between urbanisation and growth are viewed as given, with supporting data on regression values drawn from a sample of 153 developing and developed countries and likewise, the Indian states. Yet, establishing the causation between urbanisation and growth has proved to be elusive. Urban scholars such as Gilles Duranton, for example, asks and I quote, 'Arguably urbanization and growth interact but in what proportions? How much of that extra 5 percent of GDP is a consequence of this extra percentage point in the rate of urbanization? 0.1 percent? 1 percent? 2.5 percent? 5 percent? Is there a third variable out there that explains both the GDP growth and urbanization? Although a lot is at stake here, we have almost no idea.[5]' India's data on urbanisation and growth are complex, showing trends that would seem to be positive on the one hand, and disconcerting on the other, evidenced in the slowing down of the rate of growth of the urban share of GDP. What could explain this phenomenon at such a low level of urbanisation? How best to read the growing disconnect between the urban share of GDP and the non-primary sector GDP?

The fourth issue is about the approach to urbanisation: how should cities be planned, developed, governed, financed, and sustained? Questions have been raised about the relevance of traditional, master planning approaches and the continuing use of the floor area ratio (FAR) for determining the physical expansion of cities in the context of globalisation that requires cities to be competitive and flexible enough to adjust to the changing economic realities. Questions have been raised about the impact of the principle of subsidiarity and the new benchmarks such as the Sustainable Development Goals (SDG), the Paris Agreement on Climate Change and the New Urban Agenda on the role of cities in city governance and city financing, adding though that cities lack the sovereignty that is typically available to nation states in meeting such challenges.

The purpose of this study – ***State of the Cities: India (SOCR)*** is to bring up such

[5] Gilles Duranton. 2014. 'The Urbanization and Development Puzzle.' In Shahid Yusuf (Ed.). The Buzz in Cities: New Economic Thinking. The Growth Dialogue. Washington, DC.

issues and gain understanding of how the phenomenon of urbanisation has unfolded itself in India and what challenges and opportunities have surfaced in the process. This report focuses on the issues of the measurement of urbanisation, of its form and structure, and its links with growth, inclusion, and environmental security. ***The SOCR recognises in this connection the absence of post-2011 data on most constituents of urbanisation.***

The field of urban studies is today confronted with significant conceptual and methodological challenges. As David Madden and David Wachsmuth point out, urbanisation today 'astonishes us by its scale; its complexity surpasses the tools of our understanding and the instruments of practical capacity', and add, 'Fortunately, however, there is considerable intellectual adventurousness on display, as urbanists across the social sciences and humanities, as well as in the cognate fields of planning, architecture and design, grapple creatively with the tasks of deciphering the rapidly transforming worldwide landscapes of urbanization'.[6]

Prepared in this larger context, this report establishes an analytical framework and database to be periodically upgraded and reinforced for a better grip on the processes of urbanisation. If this report can help initiate an informed debate on India's urbanisation and lead to an examination of the other facets of urbanisation – how are cities planned, governed, and financed – we would consider it a high return on the efforts that we (myself and the urban research team at the Institute of Social Sciences) have put in its preparation. It is a work-in-progress.

March 2021

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[6] David J. Madden and David Wachsmuth. 2017. 'Assemblage, Actor- Networks and the Challenges of Critical Urban Theory'. in Neil Brenner. Critique of Urbanization: Selected Essays, Biskhauser Verlog Gmbh. Basel. Switzerland.

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The Urban Research Team at the ISS comprising Om Prakash Mathur, Abbas Haider Naqvi, Akanksha Laroiya, Varikoti Sai Samyukta, and Himani Verma places its special thanks to Dr D. Subrahmanyam, Senior Executive Director, HSMI and his colleagues Akshaya Sen, Dr Manika Negi and Dr Sukanya Ghosh for organising an expert group meeting to discuss a draft of this report in 2019 and approving it for finalisation. Suggestions made by experts have been incorporated in this report. Much as the Urban Research Team desired the report to be enriched with updated data on such aspects as the urban share of gross domestic product and urban consumption and employment pattern, which were due in August/September, 2019, it had to finalise the report as the above-stated data were not released for technical reasons. The Institute recognises the limitations of data in the finalisation of the report, but expects it to be reinforced as such data are placed in public domain.

A very special thanks to Jana Urban Foundation, a not-for-profit company based in Bangalore, for providing support for publication of the *State of the Cities: India* report. The support has enabled the ISS to place this research report in public domain for a close review and examination.

At the Institute, Dr George Mathew, Chairman, and Dr Ash Narain Roy, Director, are especially acknowledged for their quiet but critical support extended to the team. The team also places its appreciation to Mr Joshy Jose, Administrator, and Mr Lalit Arya, Assistant Librarian, for their support. Ms Jaya Prajeeth is especially acknowledged for her tireless commitment to the arduous task of providing several drafts of the report.

For all the deficiencies in the report, the Team Leader (HUDCO Chair) alone is responsible.

ABBREVIATIONS

AEGR	Average Exponential Growth Rate
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
ASI	Annual Survey of Industries
CAGR	Compound average growth rate
CPCB	Central Pollution Control Board
CSO	Central Statistics Organisation
CT	Census town
EIUS	Environmental Improvement of Urban Slums
FAR	Floor area ratio
GDP	Gross Domestic Product
HDI	Human Development Index
HPEC	High Powered Expert Committee
HRIDAY	National Heritage City Development and Augmentation Yojana
HSMI	Human Settlement Management Institute
HUDCO	Housing and Urban Development Corporation Ltd
IDSMT	Integrated Development of Small and Medium Towns
ILO	International Labour Organization
IMR	Infant Mortality Rate
ISS	Institute of Social Sciences
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
MPCE	Monthly per capita Consumption Expenditure
NAS	National Accounts Statistics
NCT	National Capital Territory
NCU	National Commission on Urbanisation
NDP	Net Domestic Product
NITI	National Institution for Transforming India
NLT	Night Light Data
NSDP	Net State Domestic Product
NSSO	National Sample Survey Organisation
NVA	Net Value Added
OG	Out growth
PPP	Purchasing Power Parity
RAY	Rajiv Awas Yojna
RBI	Reserve Bank of India
SDG	Sustainable Development Goals
SOCR	State of the Cities Report

UA	Urban Agglomeration
UBSP	Urban Basic Services for Poor
ULCRA	Urban Land Ceiling and Regulation Act
UN	United Nations
URGD	Urban-rural growth differential
UT	Union Territories
WPR	Worker-population ratio

URBAN RESEARCH TEAM

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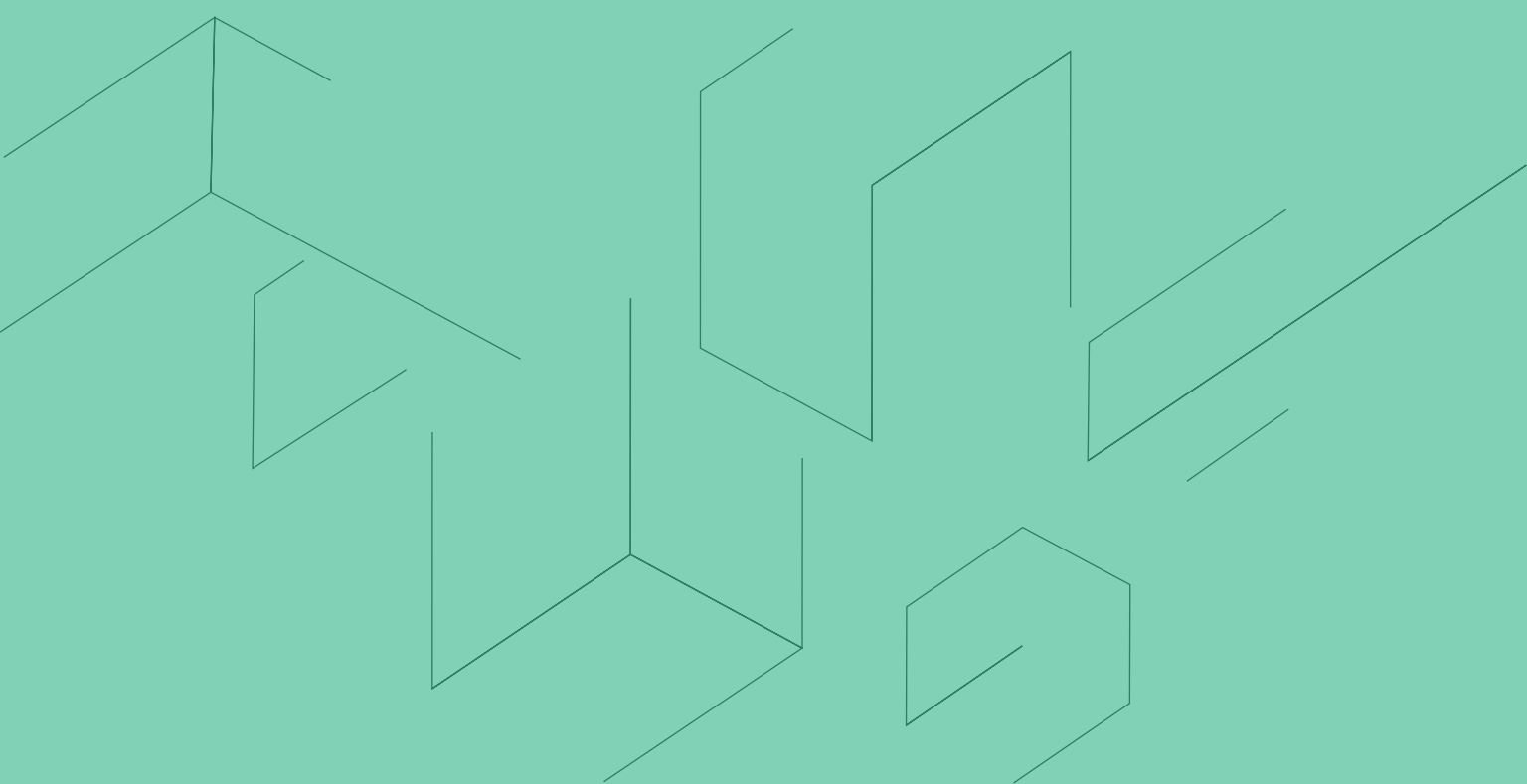
Abbas Haider Naqvi is Urban Economist at the Institute of Social Sciences, New Delhi. Over the past year, he has worked on the preparation of a study on the *State of the Cities: India* and been engaged on the preparation of another study on *Cities and the Sustainable Development Goal 11*. He holds a PhD in Economics from Aligarh Muslim University. Prior to joining the Institute of Social Sciences, he was associated with the Institute of Economic Growth, New Delhi. He has presented and published several research papers in national and international Journals. His areas of interest include fiscal federalism, urban economy, and municipal finance.

Akanksha Laroiya is Regional Planner and associated with the Institute of Social Sciences for over two years. Her key responsibilities included conducting background research on 'sustainable development' and its different aspects; collecting multi-level, multi-temporal data pertaining to India's demography, urban economy, soft/hard infrastructure, energy and transport systems, governance framework, financial structures and urban policies; performing statistical and spatial analysis of the data collected; and preparing drafts reports. Prior to joining the Institute of Social Sciences, she was involved in the preparation of Integrated Cluster Action Plan (ICAP) for five clusters in Rajasthan, identified in the first phase of Shyama Prasad Mukherji Rurban Mission. She has done her Master's in Planning (with specialisation in Regional Planning) with a Gold Medal and a Bachelor's in Physical Planning with General Proficiency Prize, from the School of Planning and Architecture, New Delhi.

Varikoti Sai Samyukta is Urban Planner at the Institute of Social Sciences, New Delhi. She has a Master's in Urban Planning from the School of Planning and Architecture, New Delhi. She is a part of the team working on the *State of the Cities: India Report*, which aims at an in-depth exploration of India's urbanisation. She has dealt with themes such as urban infrastructure, health, housing, transport and energy, and governance framework. She has also worked on a study, *Cities and the Sustainable Development Goal 11* report. Earlier, she was an intern at the Directorate of Town and Country Planning, Hyderabad, and worked on Kurnool Master Plan and Telangana Statistical Abstract Report. She has also worked on the Revision of City Development Plan of Vijayawada, during her internship period at Feedback Infrastructures Pvt. Ltd.

Himani Verma is Urban Researcher at the Institute of Social Sciences, New Delhi. She has a Master's in Economics from the University of Rajasthan, Jaipur. She started her career as a Research Analyst at the Institute of Economic Growth, Delhi. Later, she joined the Department of Economic Affairs, Ministry of Finance, as a Research Associate and subsequently the 15th Finance Commission as a Young Professional to the Chairman. She has been a part of the team who have worked on the *State of the Cities Report (SOCR)*.

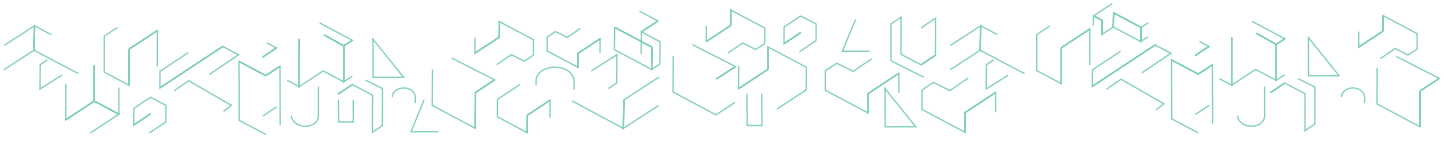
1



Overview

It may indeed be both the best of times and the worst of times to be studying cities, for while there is so much that is new and challenging to respond to, there is much less agreement than ever before as to how best to make sense, practically and theoretically, of the new urban worlds being created.

Edward Soja. 2000. Postmetropolis:
Critical Studies of Cities and Regions.
Cambridge. MA. Blackwell.



With 55 percent of the world's population living in settlements designated as urban, urbanisation is one of the most notable developments the world has witnessed in recent decades. The United Nations project this percentage to increase to about 68 percent by the middle of the century, with indications that there will still be a scope for it to rise further.

With 55 percent of the world's population living in settlements designated as urban, urbanisation is one of the most notable developments the world has witnessed in recent decades. The United Nations (UN) projects this percentage to increase to about 68 percent by the middle of the century, with indications that there will still be a scope for it to rise further. India is an integral part of this process, having registered, in parallel, a slow but steady increase in the level of urbanisation. Although the current level of India's urbanisation (31.1 percent: 2011) is substantially below the global average and the averages of several developing regions, the 'urban' importance of the country rests in the scale of growth in urban population and in the changes that have taken place in its composition and distribution across spaces and cities of different sizes, and the impact it has had on the country's economy, the labour market, and the social structures. This study report, titled as ***State of the Cities: India (SOCR)*** examines India's urbanisation and its multiple facets and dimensions. It delves into the demographic, economic, and infrastructural aspects of urbanisation and lays a foundation for further work on how Indian cities are planned, governed, financed, and sustained.

Urbanisation in India has in recent years unfolded itself in ways that are markedly different from the processes and trends observed earlier, especially in the pre-1990 period.

Urbanisation in India has, in recent years, unfolded itself in ways that are markedly different from the processes and trends observed earlier, especially in the pre-1990 period, when it was urbanisation with low economic growth, propelling a series of questions on whether a liberalised or quasi-liberalised macroeconomic framework that marked the post -1991 period, produces a different order and pattern of urbanisation, or leads to a change in the structure of gross domestic product (GDP) and employment or spawns a different format of intergovernmental relations and governance and financial systems. As connections between urbanisation and macroeconomic parameters deepen with the advancement of the economy, questions on the role of cities and consequently on how they need to be planned, governed, and financed begin to surface with increasing frequency, demanding a careful examination of the existing state of cities and how these have grown and developed together with the underlying philosophy, principles and postulates, and their preparedness to be able to address the emerging challenges.

THERE EXISTS TODAY MULTIPLE NARRATIVES OF URBANISATION – IT IS SAID TO BE RAPID, MODERATE, SLOW, MESSY, AND HIDDEN, ALL AT THE SAME TIME.

Of the many facets of urbanisation, the one that has attracted attention not just in India but internationally too, is the definition of what constitutes an urban settlement. The *Economic Survey 2016-17* (Government of India) states that 'as India rapidly urbanises, these traditional measures (for measuring urbanisation) are inadequate to capture the complex phenomenon, especially when we study this at the state or local level.'[7] The *Economic Survey* puts

BOX 1 MULTIPLE MEASURES OF URBANISATION: INDIA

	Level of urbanisation	
1. Census of India		
Urban areas		
(a) Statutory towns, 2011	26.66%	Administrative units defined by states as urban like municipal corporation, municipality, and nagar palika etc.
(b) Census towns, 2011	4.48%	Administrative units satisfying the following three criteria simultaneously – i. Minimum population of 5,000 persons. ii. 75% and above of the male working population being engaged in non-agricultural pursuits. iii. A density of population of at least 400 persons per sq.km.
(c) All settlements	31.16%	
2. World Bank		
(a) Agglomeration index, 2008/09	42.90% to 51.90%	An index based on the threshold values of three criteria, namely, population density, population of a large city (50,000 and 1,00,000), and travel time to the nearest largest city.
(b) Remote sensing, night light data (NLT)	63%	Twice as large as the official urbanisation rate for India.
(c) Identifying urban areas combining data from the ground and from the outer space	31.4%	Population size and population density from the 'ground', and built-up area and lit-up area from the 'outer space'.
3. United Nations estimates		
(a) 2010	30.9%	
(b) 2020	39.9%	

Sources:

1. *Registrar General & Census Commissioner, Census of India, 2011.ibid.*
2. *Mark Roberts. 2018. Urban Growth in South Asia. A view from outer space. In P. Arestis (ed). Alternative Approaches in Macro Economics.*
3. *Virgilo Galdo, Ye Lie and Martin Rama. 2018. Identifying Urban Areas by identifying Data from the ground and from outer space. World Bank Policy Research Working Paper No: 8628. The World Bank, Washington D.C.*
4. *United Nations. 2018. World Urbanization Prospects. The 2018 Revision. The Online Edition, New York.*

[7] Government of India. 2017. Economic Survey, 2016-17. Volume II, pp 221-224

out a few numbers to demonstrate that India will be 47 percent urban if all settlements with over 5,000 population were deemed to be urban and 65 percent if it adopts a population threshold of 2500+, a threshold used in such countries as Mexico and Venezuela. The *Economic Survey* brings in measures such as an 'agglomeration index', initially put out by Uchida and Nelson and incorporated in the World Development Report 2009,[8] to measure urbanisation – an index averaging between 42.9 and 51.9 (2008/09), and satellite imaging data sets to indicate that India was far more urban – about 63 percent – than estimated by the 2011 Census of India.

The most fundamental source of potential confusion in the study of urbanisation and city growth is the measurement of urban itself. What defines an urban area? Unfortunately, there is no unique answer. Despite the fact that the world is becoming more and more urban in nature, the definition of urban itself remain fleeting, changing over time and space.

Reference in the *Economic Survey* and recent articles on what constitutes a settlement as urban is neither unique to India nor new nor even surprising. Barney Cohen in his seminal paper on 'Urban Growth in Developing Countries' observed, 'the most fundamental source of potential confusion in the study of urbanisation and city growth is the measurement of urban itself. What defines an urban area? Unfortunately, there is no unique answer. Despite the fact that the world is becoming more and more urban in nature, the definition of urban itself remains fleeting, changing over time and space'.[9] Other scholars such as Frey and Zimmer have likewise considered the concept, stressing the point that definitions of urban are not static, and change in response to shifting macroeconomic and other developmental parameters.[10] The UN is one source that records in its bi-annual publication, *World Urbanization Prospects*, the range of criteria that its member countries use for defining what they consider to be urban including the changes that they introduce therein over time. China, for instance, has brought about changes in the definition of urban three times between 1982 and 2010, which currently consists of 'all urban residents meeting the criterion laid down by the National Bureau of Statistics of China and residents living in villages or towns that are directly connected to municipal infrastructure and that receive public services from municipalities'.[11] In India while the definition of urban has stayed unchanged since 1961, this issue has historically been debated centering around the (i) primacy of the administrative set-up in deciding whether or not the place is urban, (ii) discretion of the state governments in designating a settlement as urban even when it may satisfy the Census criteria, and (iii) line of distinction between a small town and a village. Pointing to the difficulty in distinguishing a large village from a small town, the Census Commissioner (1931) noted: 'many of the non-industrial towns differ but little in their conditions from large villages, except in the provision of an **infrequent lamp post'**.[12]

[8] Hirotsugu Uchida and Andrew Nelson. 2008. 'Agglomeration Index: Towards a New Measure of Urban Concentration', a background paper for the World Development Report 2009, The World Bank, Washington, D.C.

[9] Barney Cohen. 2004. 'Urban growth in Developing Countries: A Review of Current Trends and a caution regarding Existing Forecasts', in World Development, Elsevier Ltd. London Volume 32, No. 1, pp. 23-51.

[10] W. H. Frey and Z. Zimmer. 2001. 'Defining the City', in R. Paddison (ed.), Handbook of Urban Studies. Sage Publications. London.

[11] United Nations. 2018. World Urbanization Prospects, New York. The UN database on 'Urban' population has often been criticised on the ground that urban population estimates therein are based on criteria that are used by national census bureaus, which are hardly comparable.

[12] Government of India, 1931. Census of India, pp 45-46.

BOX 2 DEFINITION OF URBAN AREAS

Brazil
Administrative centres of *municipios* and districts, including suburban zones.

China
For up to 1982, total population of cities and towns. Cities had to have a population of at least 100,000 inhabitants or command special administrative, strategic, or economic importance to qualify as cities. Towns were either settlements with 3000 inhabitants or more, of whom more than 70 percent were registered as nonagricultural or settlements with a population ranging from 2500 to 3000 inhabitants of whom more than 85 percent were registered as non-agricultural.
For the 1990 census, the urban population included: (1) all residents of urban districts in provincial and prefectural-level cities; (2) resident population of 'streets' (*jiedao*) in county-level cities; (3) population of all residents' committees in towns. For the 2000 census, the urban population was composed of population in City Districts with an average population density of at least 1500 persons per square kilometre, other population in suburban-district units and township-level units meeting criteria such as contiguous built-up area, being the location of the local government, or being a Street or having a Resident Committee. For the 2010 census, urban population included all urban residents meeting the criterion defined by the National Bureau of Statistics of China in 2008, i.e., the criterion used in the 2000 census plus residents living in villages or towns in outer urban and suburban areas that are directly connected to municipal infrastructure, and that receive public services from urban municipalities.

India
All places with a Municipality, Corporation, Cantonment Board or Notified Town Area Committee, etc.
A place satisfying the following three criteria simultaneously:

i. a minimum population of 5000;
ii. at least 75 percent of male main working population engaged in non-agricultural pursuits; and
iii. a density of population of at least 400 per sq. km. (1000 per sq. mile).

Russian Federation
Cities and urban-type localities, officially designated as such, usually according to criteria based on the number of inhabitants and the predominance of non-agricultural workers and their families.

South Africa
A classification based on dominant settlement type and land use. Cities, towns, townships, suburbs, etc., are typical urban settlements. Enumeration areas comprising informal settlements, hostels, institutions, industrial and recreational areas, and smallholdings within or adjacent to any formal urban settlement are classified as urban. The 1996 estimate was adjusted to comply with the 2001 census definition. Estimates from 1980, 1985, and 1991 were adjusted to take into account the populations of Transkei, Bophuthatswana, Venda, and Ciskei.

Source: World Urbanization Prospects: The 2014 revision, United Nations, Department of Economic and Social Affairs/ Population Division.

Defining Urban

1. *In over half of the countries, definition of 'urban' is based on administrative considerations equating urban settlements with certain types of local governments, capital cities etc.*
2. *In about one-fourth of the countries, population size and density are the principal criteria; population sizes vary between 200 and 50,000.*
3. *Several countries (single party system) include socioeconomic criteria, e.g., percent of labour force employed in non-agricultural occupation and availability of urban facilities.*
4. *There are a few countries who do not lay down any criteria. (adapted from United Nations, World Urbanization Prospects. 2014)*

Such towns, as this report will indicate, now play an important role in the process of India's urbanisation.

A DUALITY IN THE DEFINITION OF WHAT IS URBAN HAS LED TO AN ANOMALY WHEREIN WHAT IS URBAN IS NOT NECESSARILY MUNICIPAL, AND WHAT IS MUNICIPAL IS NOT URBAN.

Application of the criteria laid out by the Census of India together with the use of satellite imaging and agglomeration index (and more recently, a combination of the two sets of data, namely, population size and population density from the ground and built-up area and lit-up area from remote sensing exercises, or outer space) has opened up the subject of urbanisation to a deeper analysis of not just the thresholds of population or of density or occupational attributes of settlements but a range of characteristics that involve, for example, the scale, pace, and composition of urban population growth, rate of urbanisation, structure of urban employment and gross domestic product (GDP), the nature and quality of infrastructure equipment, in order to be able to address the question: how urban is India ? ***SOCR*** attempts such an analysis.

"Our knowledge of how best to deal with the whole issue of urbanization remains primitive".

Robert McNamara

This study has several triggers, one of them being the extraordinarily important shift that has been observed in the world's vision and perspective of the phenomenon of urbanisation. In 1969, Robert McNamara, then President of the World Bank in his address to the UN Economic and Social Council noted, 'I have mentioned the steady drift from the countryside to the cities. That is a phenomenon the world over, but its effects in the underdeveloped countries are even more serious than in the developed nations. We simply do not understand the dynamics of urbanization in sufficient depth so as to be fully certain of the most efficient solutions. Should the developing nations use their limited resources in an effort to motivate villages through intensive rural development to remain in the countryside? Or, should the funds be invested in urban infrastructure?'.[13] In yet another address to the IBRD Board of Governors, McNamara said: '**our knowledge of how best to deal with the whole issue of urbanization remains primitive'**.[14] Lester Pearson's report on Partners in Development (1969) perceived the growth of cities in terms of unemployment and an increase in social tensions, suggesting that 'the planning strategy in developing countries must emphasize the growth of small and intermediate centres'.[15] The world community has since come a long way in recognising the potential gains and transformative and disruptive attributes of cities and urbanisation,

[13] Robert McNamara. 1969. Address to the UN Economic and Social Council, New York.

[14] Robert McNamara. 1969. Address to the Board of Governors. The World Bank. Washington D.C.

[15] Lester Pearson. 1969. Partners in Development. Report of the Commission on International Development, New York. Praeger.

with India being an integral part of this process. From a stage where much of the formal thinking on urbanisation in India focused on how to control and regulate urbanisation and develop small and intermediate towns (India's Fourth and Fifth Five Year Plans), India now considers urbanisation an 'engine of economic growth' (Planning Commission), 'integral part of economic development' (NITI Aayog), and one that will define the 'trajectory of India's future development' *(Economic Survey)*.[16] For India, it has been a long journey, far from smooth, often ambivalent, but simply the changes over the decades are phenomenally instructive, shedding light on the dynamics of urbanisation and how it has translated into public policy responses from time to time. Environmental Improvement of Urban Slums (EIUS), Integrated Development of Small and Medium-sized Towns (IDSMT), Urban Basic Services for the Poor (UBSP), Mega Cities, National Slum Development Programme (NSDP), Jawaharlal Nehru National Urban Renewal Mission (JNNURM), Rajiv Awas Yojna (RAY), Smart Cities, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Swachh Bharat Mission, National Urban Livelihood Mission (NULM), and Housing for All are examples of publicly-led initiatives to address the challenges of urbanisation and tap its potential and economies. This study takes note of these developments, together with the precepts and the thought processes underlying them. Chart 1 attempts to capture India's urban story.

As urbanisation has advanced and spread out to countries, large and small, developed and developing, concerns over its challenges and how these might possibly be approached and responded to have become an important theme globally. In its first policy paper on urbanisation (1991), the World Bank discerned a close link between urbanisation and macroeconomic parameters and called upon countries to 'alleviate the constraints on the productivity of cities'. Noting the serious gaps in the understanding of urban issues, the World Bank produced in the follow-up paper (2000), a matrix of strategic vision for supporting cities, arguing that they were important for their liveability, bankability, and competitiveness.[17] Based on its ongoing urban work in the intervening years and noting the very significant contribution of cities to the global GDP, the World Bank's 2010 urban strategy paper underlined the importance of a 'system of cities' in making cities 'more equitable, efficient, sustainable, and environmentally friendly'. According to the 2010 paper, density, agglomeration, and proximity were fundamental to human advancement, economic productivity, and social equity.[18] The UN-Habitat, a specialised agency of the UN dealing with human settlements, on the other hand, put to the global community that over 1 billion people, or 32 percent of the world's urban population, were living in

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[16] Planning Commission, Eleventh Five Year Plan, 2007-12. New Delhi; NITI Aayog. 2017. The 3-year Action Plan. New Delhi; and Economic Survey. ibid.

[17] The World Bank. 1991. Urban Policy and Economic Development: An Agenda for the 1990s; and Cities in Transition. 2000. International Bank of Reconstruction and Development. Washington D.C.

[18] The World Bank. 2010. System of Cities: Harnessing Urbanization for Growth and Poverty Alleviation. Washington D.C.

slums and that poverty was shifting its locus towards cities, a process that it recognised as ***"urbanisation of poverty" (2003).*** As a result, ***Cities without Slums*** emerged as a lead benchmark for the developing world to act upon.[19]

Benchmarks such as liveability, bankability, competitiveness, equitable, efficiency, and sustainability, and cities without slums have often served as guide points for countries to shape their approaches to urbanisation. Several of these have now been re-cast and stand absorbed, albeit in varying forms and degrees, in the Sustainable Development Goal 11, the New Urban Agenda, and in the Paris Agreement on Climate Change. Although segments of these goals and agendas have been emphasized from time to time, these are still in the process of being understood. Scholars have been quick to point out that the theoretical approaches to the study of cities in global climate politics are relatively new, reflecting the speed and scale at which cities have expanded and changed over the last two decades. Others have drawn attention to the challenges of theorising the power of cities, stating that cities that ought to be the driving force for the new global benchmarks 'lack the sovereignty that is typically afforded to nation-states'.[20] Yet others have suggested that 'we need cities and human settlements that are inclusive, safe, resilient, and sustainable. We are failing in how we plan, build and manage our cities'.[21] Mention may be made here of the Government of India's recent thinking on how urbanisation in India should be taken forward. Contained in a draft National Urban Policy 2018, it is presented in the form of ten ***sutras*** or philosophical principles whose prime message is to replace a view of cities as 'machines for living' with one that sees them as 'evolving ecosystems'.[22] This study attempts to weave several of the global considerations to understand the state of the Indian cities.

We need cities and human settlements that are inclusive, safe, resilient, and sustainable. We are failing in how we plan, build and manage our cities.

This study recognises the complexity in capturing the dynamic and transformative attributes of urbanisation. It acknowledges the dramatic shifts that have taken place in this sphere since the time when Ildefons Cerda,

CITIES THAT OUGHT TO BE THE DRIVING FORCE FOR THE NEW GLOBAL BENCHMARKS, SUCH AS THE SUSTAINABLE DEVELOPMENT GOALS, LACK THE SOVEREIGNTY THAT IS TYPICALLY AFFORDED TO NATION-STATES.

[19] UN-Habitat.2003. The Challenge of Slums. Global Report on Human Settlements. Earthscan Publications Ltd. London and Sterling. VA.

[20] Craig A Johnson. 2018. The Power of Cities in Global Climate Politics. Palgrave Macmillan. Canada.

[21] Joan Clos. 2016. Towards a new urban agenda. LSE CITIES.

[22] Government of India, Ministry of Housing and Urban affairs. 2018, Draft National Urban Policy, New Delhi (mimeo).

BOX 3 THE FIVE BASES OF THE GENERAL THEORY OF URBANISATION

At no time has anyone, anywhere, treated the subject of the ***urb*** from so many viewpoints; no one else has ever even tried. Cerda was concerned with the 'hygiene, the health order; the moral order, the economic order, the political order; the legal order', and of course, with social, financial, and aesthetic aspects, logic, rationality, feelings, justice, liberty, equality, and internal consistency. No other thinker, no other treatise writer had even attempted to tackle head-on the full complexity of these human artifacts to which we have given the name ***cities***.
In FOREWARD to CERDA: *The Five Bases of the General Theory of Urbanization*, pp. 13, edited by Arturo Sorie Y Puig. 1999.

a Spanish engineer, invented the term ***"urbanizacion"*** in 1860/61, and wrote a classic under the title, *Teoria general de la urbanizacion* (The Five Bases of the General Theory of Urbanization),[23] and Kingsley Davis (1955), who put out a definition of urbanisation as the 'expansion of city-based population relative to the total national population' ($U = P_0/P_t$ with U = urbanisation; P_0 = population of cities; and P_t = total national population).[24]

Subsequent work, however, considers Davis' description of urbanisation a 'narrow, ahistorical and population-centric', unable to grasp the scale and diversity of agglomeration processes that are associated with the contemporary form of urban around the world.[25] The form of urbanisation, as scholars note, has been radically reconfigured, a process that has seriously called into question the assumptions, underpinned in urban theory and research. Along with the dramatic spatial and demographic expansion of major mega-city regions, recent decades have also witnessed far-reaching implosions and explosions of the urban at all spatial levels, continuing in many ways the seminal work of Jane Jacobs on the rise and fall of cities. Writing in the widely-quoted book, *The Death and Life of Great American Cities*, Jacobs alleged: 'cities happen to be problems in organized complexity, like the life sciences. They present situations in which a half-dozen or even several dozen quantities are all varying simultaneously and in subtly interconnected ways. Cities, again like the life sciences, do not exhibit one problem in organized complexity which, if understood, explains all'. For Jacobs, 'master planning', 'order', and 'zoning regulations' in city building and rebuilding were 'sterile, regimented, empty'; she argued that 'intricate intermingling of different uses in cities are not a form of chaos. On the contrary, they represent a complex and highly developed form of order. Everything in this book has been directed towards showing how this complex order of mingled uses works'.[26]

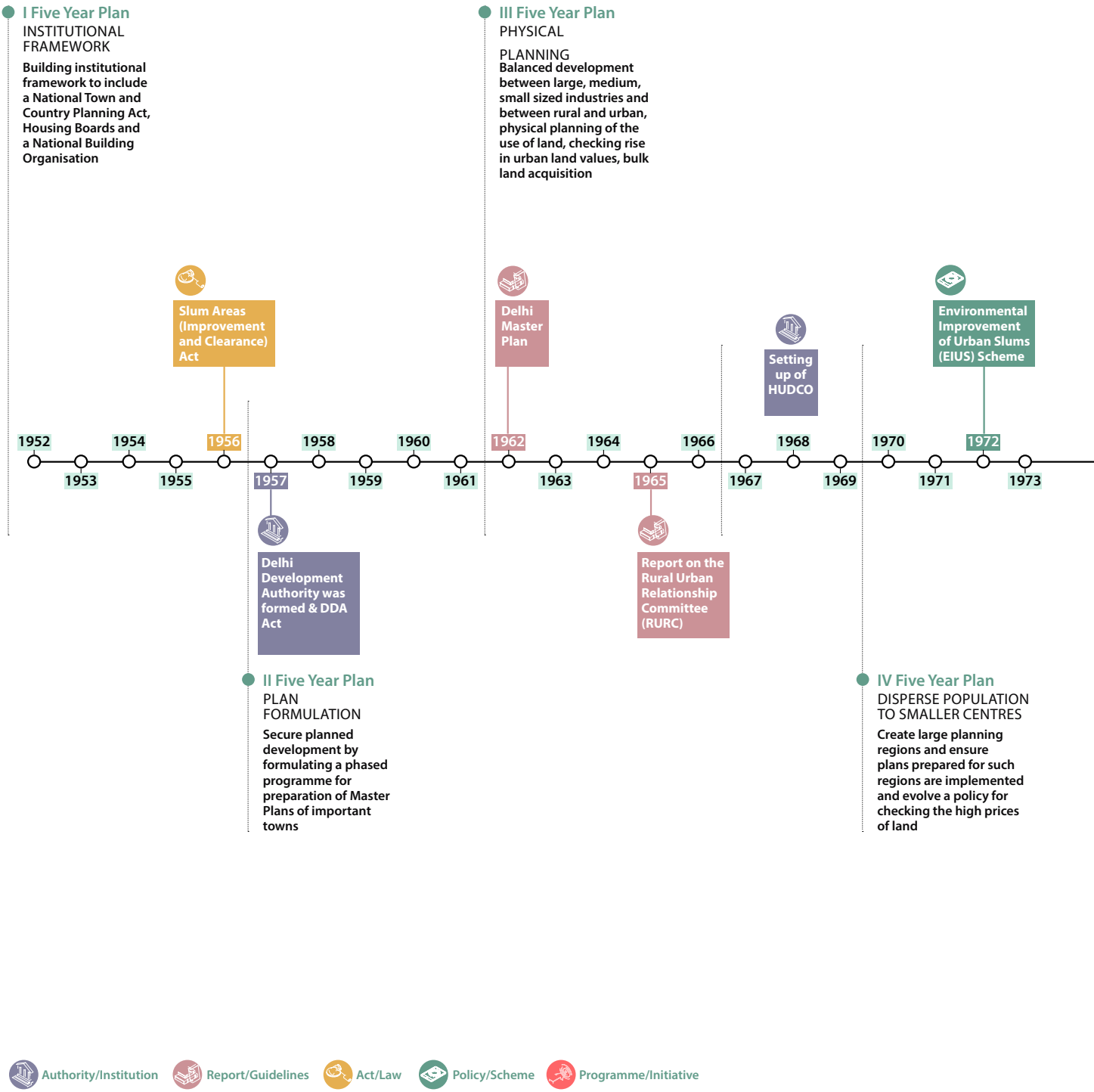
Cities happen to be problems in organised complexity, like the life sciences.

[23] Arturo Soria y Puig. 1988. The Five Bases of the General Theory of Urbanization. Fundacio Catalana per a Recerca. Barcelona.

[24] Kingsley Davis. 1955. 'The origin and growth of urbanization'. American Journal of Sociology. 60.5 (pp. 429-37).

[25] Neil Brenner (ed.). 2014. Implosions/Explosions: Towards a Study of Planetary Urbanization. Imprint by Jovis Verlag GmbH. Berlin.

TIMELINE OF URBAN DEVELOPMENT IN INDIA



V Five Year Plan

DECONGESTION OF LARGE CITIES

Restrict growth in large urban conglomerates. Ban on new industries within certain limits of large cities. Encouraging growth of household and cotton industries under Rural Industrialisation Programme

1974 Minimum Needs Programme

1976 Urban Land Ceiling and Regulation Act (ULCRA)

1977 Report of the Task Force on Small and Medium Towns

1978 Integrated Development of Small and Medium Towns (IDSMT)

1980 Rolling Plan

VI Five Year Plan

URBAN DEVELOPMENT TO BE SEEN AS A COMPLIMENTARY TO RURAL DEVELOPMENT

Greater emphasis to the provision of adequate infrastructural and other facilities in the small, medium & intermediate towns.

1981 Planning Commission's Task Forces on Housing and Urban Development

1983 Model Regional and Town Planning Development Law

1985 NCRPB was formed

VII Five Year Plan

ECONOMIC DEVELOPMENT

Interaction between physical and investment planning; Preparation of regional and sub-regional urban development plans.

1986 Urban Basic Services (UBS)

1988 National Housing Policy

1988 National Commission on Urbanisation (NCU)

1989 Nehru Rozgar Yojana & Report by NCU

1990 Urban Basic Services for Poor (UBSP)

1992 74th CAA & Draft National Urban Policy

1994 Expert group on commercialisation of infrastructure projects

1996 Swarna Jayanti Shahri Rozgar Yojana

1996 The India Infrastructure Report and UDPFI Guidelines

VIII Five Year Plan

FOCUS ON RURAL-URBAN LINKAGE

Urbanisation is seen as a natural consequence of economic changes. Urban policies to directly support goals of poverty reduction and removal of unemployment and under-employment

1993 Mega City Scheme

1995 PM's Integrated Urban Poverty Eradication Programme

IX Five Year Plan

ECONOMICALLY EFFICIENT, SOCIALLY EQUITABLE AND ENVIRONMENTALLY SUSTAINABLE URBAN GROWTH

Commercial and market approach to infrastructure planning, development and management. Capacity building inputs, convergence of all urban schemes to attain goals of state macro urban development model

1998 National Housing and Habitat Policy

1999 Repeal of ULCRA, Two Million Housing Programme

2001 Valmiki Ambedkar Awas Yojana

2002 100% FDI in Integrated townships

2003 Model Municipal Law

X Five Year Plan

STRENGTHENING OF DEMOCRATIC STRUCTURE WITH THE ASSISTANCE OF STATE GOVERNMENT AGENCIES

Capacity building in public services, broad based urban sector reform measures to be commenced, strengthen the functional and financial autonomy of the ULBs. PPPs to be brought on to the urban agenda.

2005 Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

2007 Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

2009 North Eastern Region Urban Development Programme

2010 McKinsey Global Institute: India's Urban Awakening

2011 Rajiv Awas Yojana

2011 Report on Indian Urban Infrastructure and Services

XI Five Year Plan

LIVEABLE, INCLUSIVE, BANKABLE, AND COMPETITIVE CITIES

- Strengthening ULBs
- Increasing efficiency and productivity of cities by deregulation and development of land
- Condusive environment for private sector to invest in urban infrastructure
- Establishing Autonomous regulatory framework to oversee functioning of public and private sectors
- Reducing incidence of poverty
- Using technology and innovation

2013 Right to Fair Compensation & Transparency in LARR Act

2013 World Bank: Urbanisation Beyond Municipal Boundaries

2014 Swachh Bharat Abhiyan

2015 Smart Cities

2015 AMRUT

2015 Housing for All HRIDAY

2015 Rurban Mission

2016 India Habitat III National Report

2016 The RERA Act

2017 Three year Action Agenda 2017-2018 to 2019-2020

Urbanisation, integral to economic development

2018 Strategy for New India @75

2019 Cities and the Sustainable Development Goal 11 Report

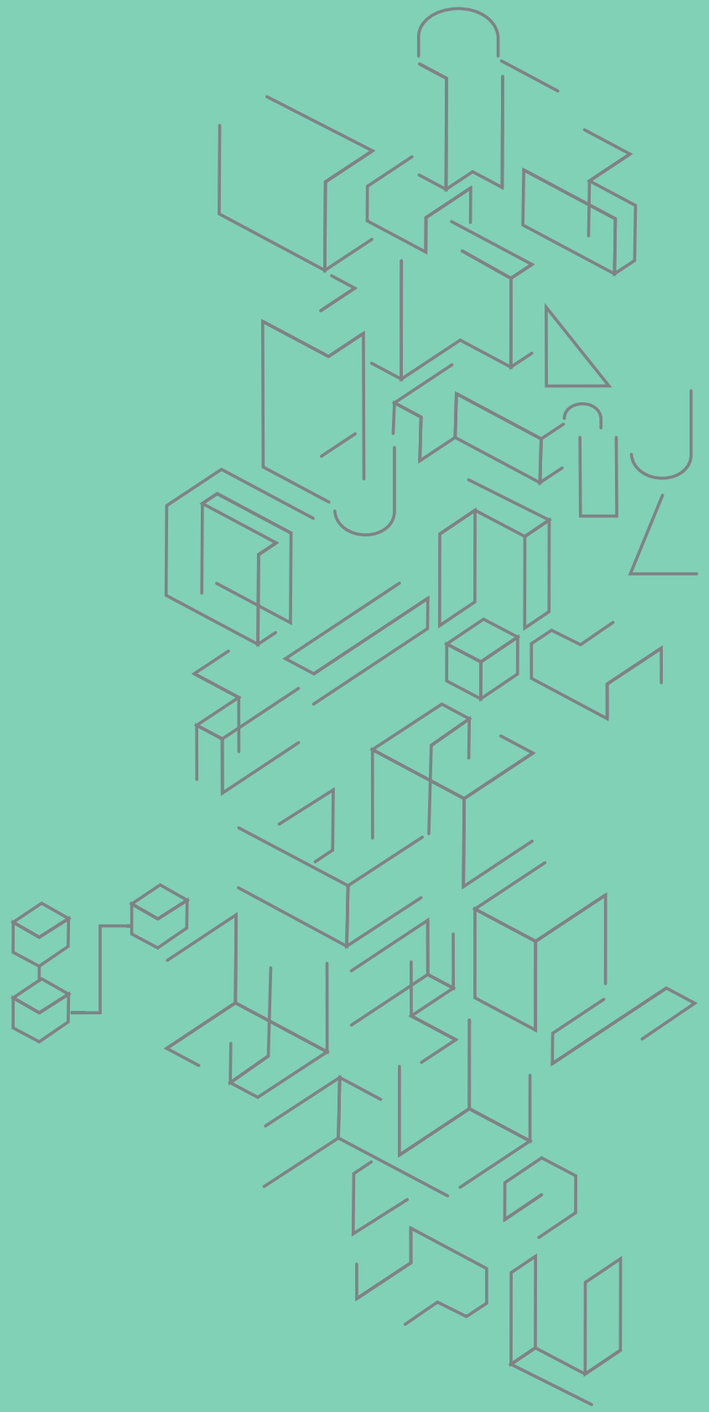
XII Five Year Plan

ECONOMIC GROWTH - INCREASE AVENUES FOR ENTREPRENEURSHIP AND EMPLOYMENT

Strengthening five enablers

- Governance
- Planning
- Financing
- Capacity Building
- Innovation

Institute of Social Sciences



The theories that explain the phenomenon of urbanisation, rural-urban migration, (Harris-Todaro model), economies of urban concentration, growth poles, the Zipf law, inter-firm clustering, and global flows and borderline connectivity are adjusting to the changing circumstances and priorities.

Mention may be made here of Global Urban Research Initiative (GURI) that set in at the University of Toronto a research platform for the developing countries to share and deliberate on the 'overviews of urban research' and lay ground for a scientific examination of the emerging urban issues. Spearheaded by the Ford Foundation and the World Bank to help build a knowledge base, GURI's Initiative (1993-1999) focused on documenting the state of urban research as it was getting reshaped by globalisation, structural adjustment, and reduction in the role of the public sector. GURI contributed to the production of several volumes of comparative urban research, spanning over forty countries of Africa, Asia, and Latin America. The India's state of urban research forms a part of Richard Stren's edited book on Urban Research for Asia.[27] More recently, a New Science of Cities has emerged. Michael Batty, author of the book with the same title advocates application of tools and methods for defining spatial flows and interactions. According to Batty, cities are complex systems that grow from the bottom, their size and shape follow well-defined scaling laws that result from competition for space. Recent advances in digitisation, big data, artificial intelligence and cloud computing are producing new forms of communications, creating opportunities for city growth analysis and modelling that are dramatically different from those available thus far.[28] It is significant that in many ways, even the theories that explain the phenomenon of urbanisation, rural–urban migration, (Harris-Todaro model), economies of urban concentration, growth poles, rank size rule, the Zipf law, central place theory, inter-firm clustering, and global flows and borderline connectivity are adjusting to the changing circumstances and priorities. The SOCR keeps this context in view.

The ***State of the Cities Report (SOCR)*** focuses on the demographic, economic and infrastructural characteristics of Indian cities aggregated at state levels, with a view to address a core question: how urban is India? It is designed to enhance our understanding of the urban phenomenon, how it has unfolded itself in India and what directions it is setting for its future. There exist today multiple narratives of urbanisationy —it is said to be rapid, moderate, slow, messy, hidden, all at the same time. What underpins these narratives? An attempt is made here to study the process and the phenomenon of urbanisation at different spatial levels with the use and application of the various tools and methods, and probe such questions as: Is India's urbanisation spatially more balanced today than in the past?; Is it more productive?; Is it better equipped with infrastructural services? Is it moving closer to the goals of inclusion and environmental security? – in an attempt to develop and advance our understanding of the key question, ***how urban is India?***

Urbanisation in India as in several other countries is a complex phenomenon; moreover, it is taking place under conditions of low per capita income and

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[26] Jane Jacobs. 1961. The Death and Life of Great American Cities. Vintage Books, New York.

[27] Richard Stren. 1994. Urban Research in the Developing World: Asia. Centre for Urban and Community Studies. University of Toronto Press Incorporated.

[28] Carlo Ratti and Matthew Claudel. 2016. The City of Tomorrow. Sensors, Networks, Hackers, and the Future of Urban Life. Yale University Press. New Haven. USA

BOX 4 URBAN THEORY AND CITIES

What is the current state of urban theory? Is contemporary urban theory capable of capturing the complexity of contemporary cities around the world? How is the contemporary city being studied? Using what methods? What constitutes the CITY?

Historically, urban theorists differentiated the city from towns or villages according to population size or density, built form, or economic, political or religious power. It was the concentration of people, living and working together, the agglomeration of buildings and infrastructure, institutions and organizations that defined urban spaces and places as cities. Most recently, urban theorists have argued that distinctions between the rural and urban have become irrelevant, or at least less relevant, and that the spread of urban life has led to the bleeding together of numerous cities, small towns, suburbs and so on to such a degree that it is more relevant to talk of city-regions, or globalised urban systems than discrete urban spaces. Such insights highlight how cities are not discrete boundaries or individual settlements but, instead, that flows and juxtapositions, porosity and relational connectivity define urban life. As such, cities are now understood as existing in an era of increasingly geographic extended spatial flows, where relations stretch out across space. Cities now are considered as discontinuous, internally diverse, open and relational.

Mark Jayne and Kevin Ward. 2017. Urban Theory: New Critical Perspectives. Routledge. London and New York.

substantial governance and infrastructure and service deficits. This study attempts to capture its complexity via an urbanisation index using a set of 25 indicators. It presents a body of evidence and data as brought out from time to time by the Census of India, National Sample Survey Organisation (NSSO), Annual Survey of Industries (ASI), Economic Survey, Central Pollution Control Board (CPCB), the Ministry of Road Transport and Highways, and the National Family Health Survey, 2015-16. It also uses the bi-annual publications of the United Nations, *World Urbanization Prospects*, and the World Bank's *World Development Indicators*. For a wider usage of this report, it brings in at appropriate places, the theoretical propositions and underpinnings in the expectation of triggering an informed debate about India's urban profile and trajectory and its relationship with macroeconomic parameters. Recognising the SOCR to be a build-up on several recent reports, namely, McKinsey Global Institute's India's urban awakening: Building inclusive cities, sustaining economic growth, (2010); Ministry of Urban Development's, India: Urban Infrastructure and Services (2011); World Bank's Urbanisation beyond Municipal Boundaries (2013); World Bank's Leveraging Urbanisation in South Asia (2016); Government of India's India Habitat III National Report (2016); and Institute of Social Sciences's Cities and the Sustainable Development Goal 11 (2019), the SOCR divides up the study into five chapters, namely, (1) Overview, (2) India's Urban Transition: The Demographics, (3) Economic Foundations of Urbanisation, (4) Infrastructure, Environment, and Urban Change, and concludes it in Chapter (5) with a ranking of Indian states under the title, ***How Urban is India?***[29] . A compendium of state urban infographics which forms the basis for the construction of ranking of states has been included in a separate section.

Urbanization in India as in several other countries is a complex phenomenon; Moreover, it is taking place under conditions of low per capita income and substantial governance and infrastructure and service deficits and is, therefore, far more complex.

[29] The SOCR makes use of the official statistics that are in public domain.

As this report gets ready to be put in the public domain, the Covid-19 pandemic continues to be a major concern in India as in several other countries. As Antonio Guterres, Secretary-General, United Nations, puts it in the UN-Habitat's 2020 report on THE VALUE OF SUSTAINABLE URBANIZATION, Covid-19 'has disrupted lives and economies around the world. Cities have borne the brunt of the pandemic.... The Covid-19 pandemic has exposed deep inequalities and demonstrated that tackling the virus is more challenging in urban areas, where access to quality healthcare is uneven, housing inadequate, water and sanitation lacking, transport infrastructure patchy, and jobs precarious'. In the same report, Maimunah Mohd Sharif, Executive Director, UN Habitat, states that Covid-19 will not reverse urbanization. 'The primal drive to congregate in cities and towns in pursuit of aspirations and a better life will continue. We have a chance to make this agglomeration process more inclusive, with a clear focus on our collective wellbeing. To harness the transformative powers of urbanization towards sustainable development, we need effective planning, management and governance'.[30] It is in this spirit that the SOCR has been prepared.

[30] Antonio Guterres. 2020 'Foreword' in UN-HABITAT.2020. World Cities Report 2020: The Value of Sustainable Urbanization, and Maimunah Mohd Sharif. 2020. Introduction in UN-HABITAT. 2020. World Cities Report 2020. United Nations Human Settlement Programme. Nairobi, Kenya.

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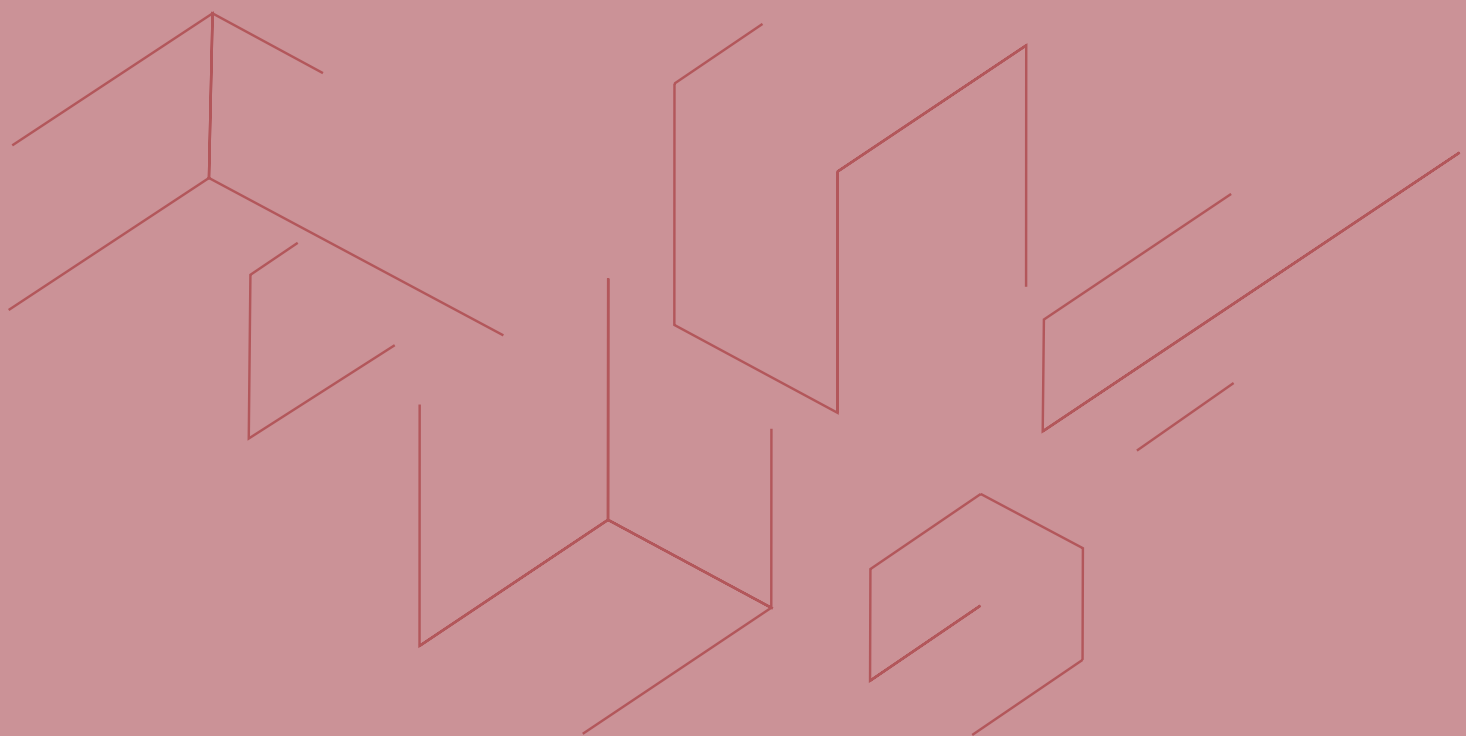


India's Urban Transition: The Demographics

The world continues to experience an increase in its urban population even as the rate of urbanisation in many regions has slowed from pervious decades. Nevertheless, urban areas are expected to absorb virtually all the future growth of the world's population. At the time of adoption of the 2030 Agenda for Sustainable Development in 2015, 54 percent (4 billion) of the world's population lived in urban areas; by the end of the 20-year period covering the New Urban Agenda in 2036, 62 percent (5.4 billion) of the global population is expected to reside in urban areas. Ninety-six percent of urban growth will occur in the less developed regions of East Asia, South Asia and Africa with three countries - India, China and Nigeria - accounting for 35 percent of the total increase in global urban population from 2018 to 2050.

UN HABITAT
FOR A BETTER URBAN FUTURE

World Cities Report 2020

INTRODUCTION

Urbanisation is one of the important emerging realities of recent decades in India. Consisting of 7933 urban settlements of different population sizes and a population of 377 million, India has the second largest urban system in the world.

Urbanisation – commonly understood in terms of a proportion of people living in settlements designated as urban – is one of the important ***emerging*** *realities of recent decades in India.* Consisting of 7,933 urban settlements of different population sizes and a population of 377.1 million (2011), India has the second largest urban system in the world. In the 2001-11 census decade, the urban system registered an unprecedented expansion, fuelled in the main by an increase in the numbers and population of census towns and in part by an impressive growth in the population of large cities. The overall urban population growth rate which had registered a steep fall in the decades of 1981-91 and 1991-2001 has posted a recovery, albeit a marginal one. Inter-state gaps in the levels of urbanisation have displayed trends towards convergence. Eighty one out of 640 districts now claim to have over 50 percent of their populations living in cities and towns. At the international level, India's share in the world's urban population has risen to 11.03 percent and is projected to rise to 14 percent by 2050. On the other hand, population growth rates of statutory cities and towns are at a historic low, 2.03% during the 2001-2011 decade. The role of rural-urban migration in the process of urbanisation continues to be subdued, staying within a narrow range of 20.0-22.8 percent. 268 districts are grossly under-urbanised, with the level of urbanisation in these districts being less than 17.3 percent, the 1951 level of India's urbanisation. Internationally too, the level of India's urbanisation has thus far been consistently lower compared with the average for the less developed countries. Nor has India demonstrated any initiative that will bring its urbanisation parameters close to what scholars such as Neil Brenner and Henri Lefebvre call, 'planetary' or 'generalised' urbanisation, a process associated with economic globalisation and integration and information revolution.[31]

It is in this context that this chapter examines the trends in India's urbanisation, covering the scale, pace, rate, composition, and its spread and distribution across city-sizes and spaces at various levels. Given that India's urbanisation has been described in multiple ways- ***rapid, moderate, slow, hidden, and messy,*** an attempt is made here to make use of the established frameworks

BOX 5. WHAT IS DEMOGRAPHY?

Demography is the scientific study of population. It is concerned with the 'numbering of the people' and with the 'understanding of population dynamics' – how populations change in response to the interplay between fertility, mortality, and migration. This understanding is a pre-requisite for making forecasts about future population size and structure, which are required for planning and development. Demography is largely concerned with addressing questions about how populations change and with the measurement of population and the components of population change.

(International Union for the Scientific Study of Population)

[31] Neil Brenner (ed). 2014. Implosion/Explosion: Towards a study of planetary urbanisation. Jovis Verlog Gmbh. Berlin

BOX 6. INDIA AND THE WORLD'S URBAN POPULATION

'Globally, more people live in urban areas than in rural areas, with 55 percent of the world's population residing in urban areas in 2018. In 1950, 30 percent of the world's population was urban, and in 2050, 68 percent of the world's population is projected to be urban. Growth in the urban population is driven by overall population increase and by the upward shift in the percentage living in urban areas. Together, these two factors are projected to add 2.5 billion to the world's urban population by 2050, with almost 90 percent of this growth happening in Asia and Africa.' (United Nations. 2018. World Urbanization Prospects: The 2018 Revision. New York).

India has been an important part of the process of world's urbanisation. Although the rate of India's urbanisation has been lower in comparison with the average for the less developed countries, its share in the world's urban population has risen consistently over the decades.
In 1950, India's urban population was 8.5 percent of the world's urban population; in 2020, it is estimated at 11.03 percent. Over the decades (2020–2050), India will play a larger role in the world's urbanisation process than any other country, with its share in the increment to world's urban population rising up to 13.1 percent. China's share over the same period will begin to decline, ending with 16.3 percent in 2050.

Figure 1 Transitioning to an urban world

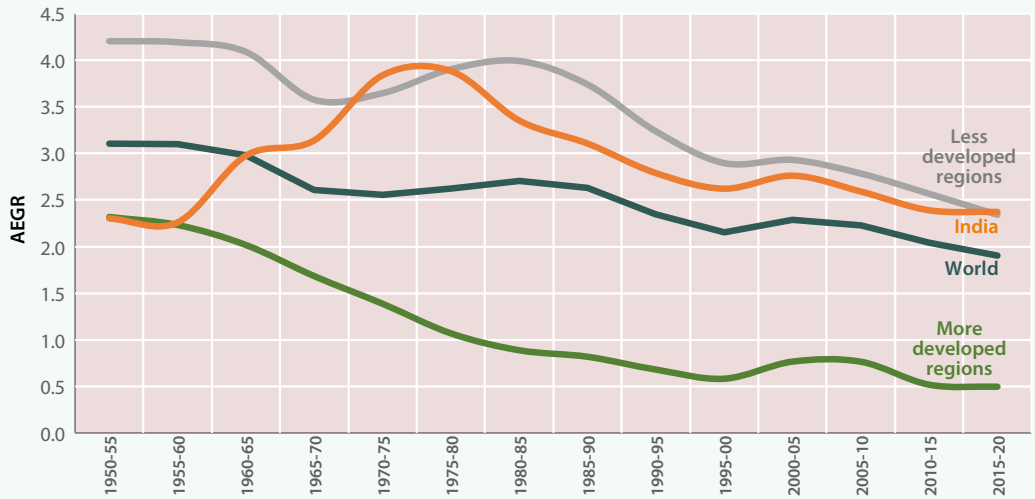


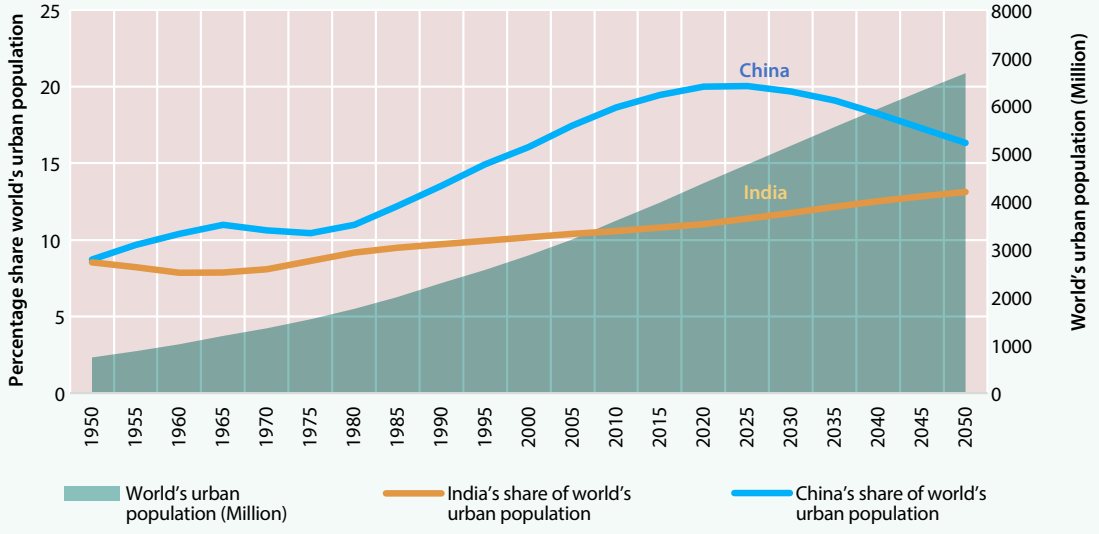
Table 1. Growth of urban population: India and the World

Year	Urban population: AEGR (Annual exponential growth rate)		
	India	World	Less developed countries
1960–1990	3.38	2.68	3.82
1990–2010	2.75	2.25	2.96
2010–2020	2.40	1.98	2.46
1960–2010	3.13	2.51	3.48
1960–2020	3.00	2.42	3.31

Source: *United Nations. 2018. World Urbanization Prospects. The 2018 Revision. New York.*

Box 6 *Contd.*

Figure 2 Share in world's urban population



Source: *United Nations. 2018. World Urbanization Prospects. The 2018 Revision. New York.*

That urbanisation is not neutral to macro-economic factors and developments is one of the premises that guides the analysis of the trends in urbanisation.

for discerning its principal characteristics. ***That urbanisation is not neutral to macro factors and developments is one of the premises that under-runs the analysis; it attempts to respond to the question: what is different about India's urbanisation of the post-1991 period?*** This chapter also refers to a few propositions that have dominated urban thinking, for example, the process of urbanisation being an attenuated 'S', 'logistic curve', exhibiting a pattern in which the rate of change is slow at first, then rises steeply as the early stages of industrialisation are reached, and tapers off gradually when the proportion urban begins to reach a saturation point; or that the rate of population growth is independent of the size of the city. The SOCR attempts to test out a few such propositions[32].

[32] Scholars look at the theory of urbanisation as an underdeveloped area in the field of urban and regional economics. It is partly a consequence of the great diversity of urbanisation experience which does not easily lend itself to generalisation. It also reflects the complex character of the urban growth process which cannot solely be explained in economic terms. See Harry Richardson. 1969. Regional Economics. Weidenfald and Nicholson. London.

INDIA'S URBAN TRANSITION

BOX 7. MEASURING URBAN TRANSITION

Measuring urban transition:-

- Absolute increase in urban population
- Percent growth rate of urban population
- Level of urbanisation (percentage of population that lives in settlements designated as urban)
- Percentage growth rate of the urban share of population

Michael Cohen *et al.*, notes that there is often a confusion between overall urban population growth and the growth rate of the share of urban population. Urban growth is the rate of change in the urban population; the rate of change in the proportion of population that is urban, measures how fast a country is transitioning from rural to urban.

Source: Michael Cohen *et al.*, (eds). 1996. Preparing for the Urban Future: Global Pressures and Local Forces. The Woodrow Wilson Center Press. Washington D. C.; Also see. The World Bank. 2019. Realising Indonesia's Urban Potential. Time to Act. Washington, D.C.

Table 2. Trends in rural–urban transition

Census Years	Population (in million)			Level of urbanisation (%))	Number of cities and towns[33]
	Urban	Rural	Total		
1901	25.9	212.5	238.4	10.8	1915
1911	25.9	226.1	252.1	10.3	1864
1921	28.1	223.2	251.3	11.2	2018
1931	33.5	245.5	279.0	12.0	2188
1941	44.2	274.5	318.7	13.9	2392
1951	62.4	298.6	361.1	17.3	3035
1961	78.9	360.3	439.2	18.0	2657
1971	109.1	439.0	548.2	19.9	3081
1981	159.5*	523.9	683.3	23.3	3891
1991	217.6*	628.9	846.4	25.7	4651
2001	286.1	742.6	1028.7	27.8	5161
2011	377.1	833.7	1210.9	31.1	7933

Source: *Census of India, various issues.*

**These figures include the estimated population of Jammu and Kashmir and Assam.*

[33] Source: Census of India, 2011, Table A-1. Number of villages, towns, households and population. Note should be made of the fact that Table A-4 of the census registers UAs and towns whose number in 2011 was 6171. This report makes use of these two sets of figures in line with the relevance of the figure.

From a modest total of 25.9 million (1901), the number of urban dwellers has risen to 377.1 million (2011), signalling a phenomenal 14-fold increase in urban population over the period 1901

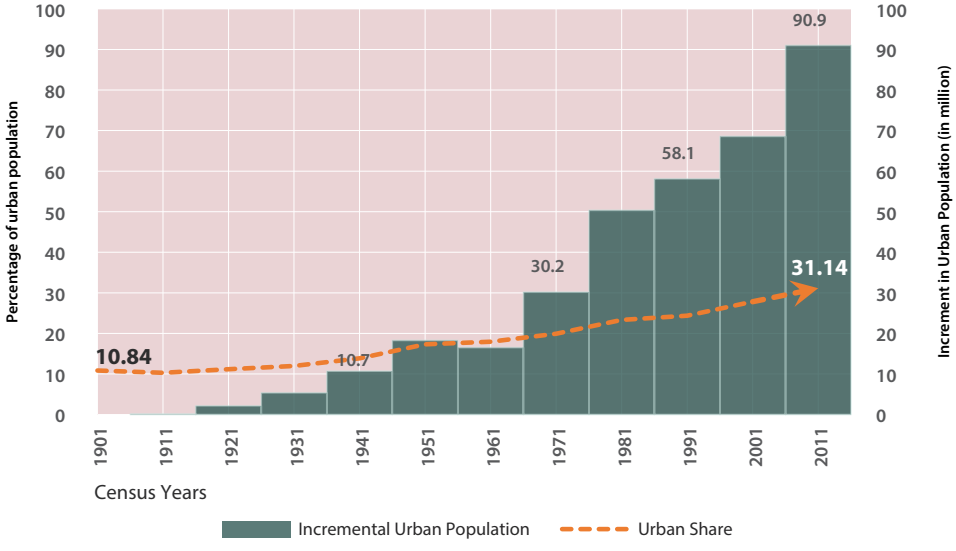
Source: Census of India, various issues. 2011.

India has witnessed an unprecedented increase in its urban population over the past several decades. From a modest total of 25.9 million in India (1901), the number of urban dwellers has risen to 377.1 million (2011), signalling a phenomenal 14-fold increase in urban population over the period 1901-2011. In the last census decade, 90.9 million people, almost equal to the increment in rural population, were added to the country's total urban population. Moreover, the urban population in India is doubling itself at a faster rate than any time in the past. It took, for instance, all of history up to the beginning of the 20th century for urban population to reach 25 million, about 43 years to increase from 25.9 million to 51.8 million, and another 26 years for it to double once again. At the current growth rates, urban population growth will keep to its upward movement, and reach a staggering total of over 600 million by the year 2030 and 870 million persons by 2050!

Table 3. Urban share in net population increment (1961-71 to 2001-2011)

Year	Net population Increment (million)	Urban share in increment population	
		Population	Share (%)
1961-71	109.0	30.2	27.7
1971-81	135.1	50.4	37.3
1981-91	163.1	58.1	35.6
1991-01	182.3	68.6	37.6
2001-11	182.1	90.9	49.96

Figure *3.* Trends in India's urbanisation



India's urban transition combines decades of high urban population growth with decades of low urban population growth with a peak annual growth of 3.79 percent in 1971-81 and a low of 2.74 percent in the decade of 1991-2001. What lends significance to this decadal behaviour is that high urban population growth can take place under conditions of low economic growth as indeed was the case in 1971-81; likewise, low urban population growth is not necessarily an impediment to high economic performance. The relationship between urbanisation and overall economic performance, although positive, is complex. It is analysed in the next chapter.

INDIA'S URBAN TRANSITION HAS PASSED THROUGH PHASES, WHERE IT ACCELERATED UNDER CONDITIONS OF LOW ECONOMIC GROWTH, AND MODERATED UNDER CONDITIONS OF HIGH ECONOMIC PERFORMANCE.

Urban transition shows itself not just in the scale of urban population growth and rising shares – it has involved a sharp increase in the number and population of cities and towns across city sizes. What is important, however, is that the average population size of cities and towns in the different size categories has remained largely unaffected. (Figures 4 and 5).

Transition shows itself not just in the scale of urban population growth and rising shares – it has involved a sharp increase in the number and population of cities and towns across city sizes. What is important, however, is that this increase has not affected the average population size of cities and towns in the different size categories.

Figure 4. Number and average population by size classes, 1991*

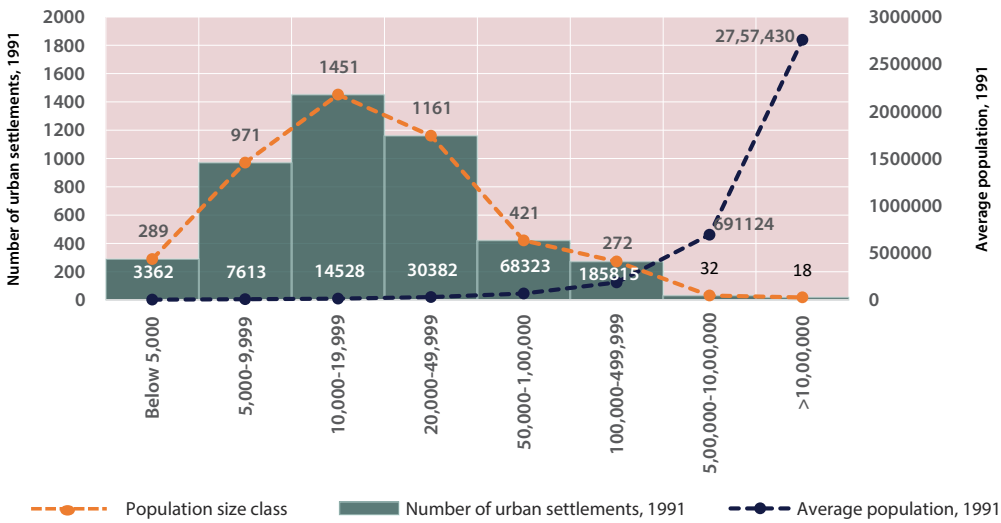
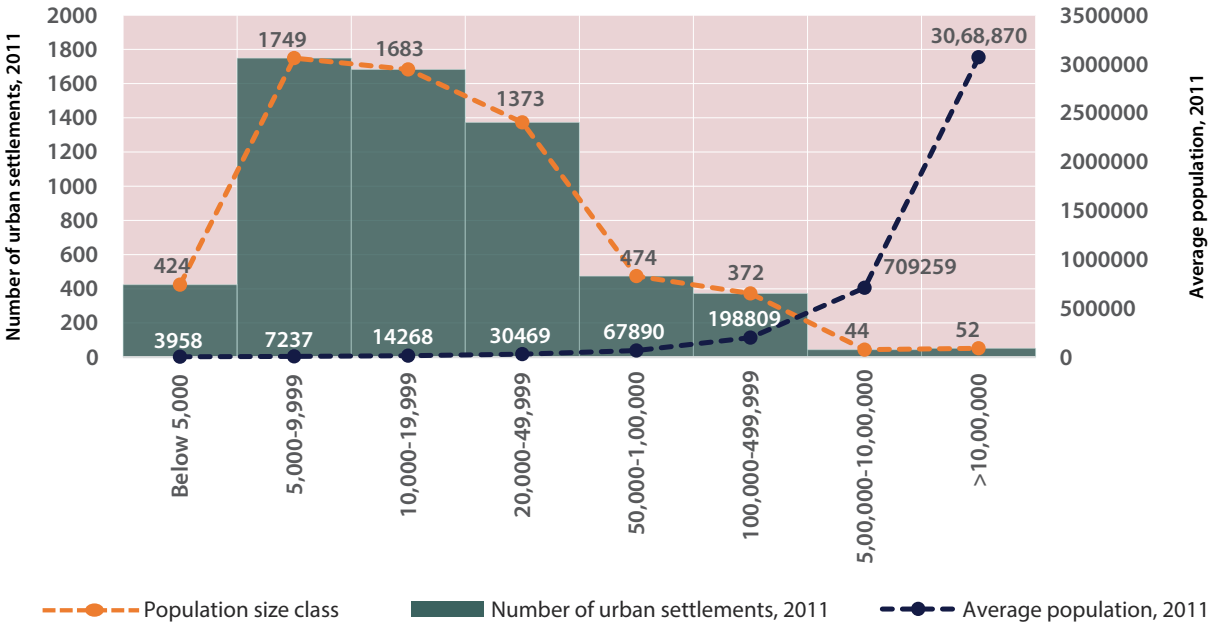


Figure 5. Number and average population by size classes, 2011*



Source: *Census of India, various issues.*

****The numbers of urban settlements as given in the two graphs represent the total of urban agglomerations and towns. See Census of India A-4 Tables***

Rural urban differences in population growth rates are a key factor in the process of urbanisation. These differences, shown in Table 4, have fluctuated over the decades, representing differences in (i) fertility rates, (ii) migration from rural to urban areas, and (iii) reclassification of rural settlements into urban. As India's demographics change with the advancement of the India's economy, the differences in rural-urban population growth, particularly those attributable to fertility have narrowed down. As a result, urban-rural shares in incremental population have changed significantly in favour of urban. The United Nations has forecast that India's rural population will begin to decline in absolute numbers around 2027. From that year onwards (or in a year between 2025 and 2030), population increase in India will be wholly an URBAN STORY.

THE UNITED NATIONS HAS FORECAST THAT INDIA'S RURAL POPULATION WILL BEGIN TO DECLINE IN ABSOLUTE NUMBERS AROUND 2027; FROM THAT YEAR ONWARDS, POPULATION INCREASE IN INDIA WILL BE WHOLLY AN URBAN STORY.

Figure 6. Proportion of urban and rural population 1901-2011

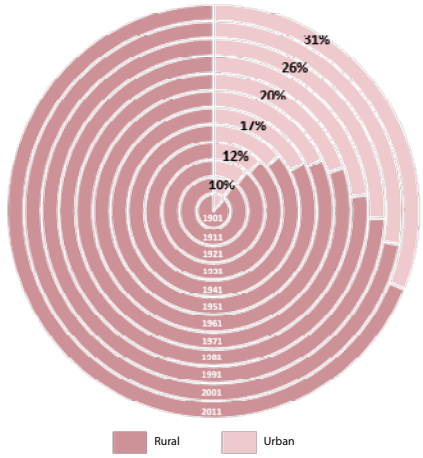


Table 4. Trends in urban-rural population growth rates

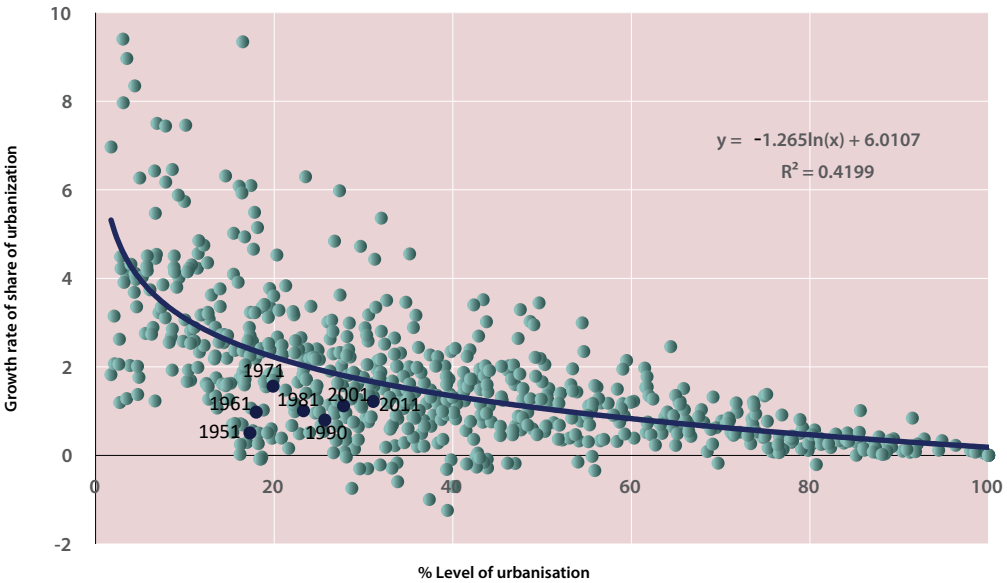
Census Year	Annual exponential percent increase		
	Total population	Rural population	Urban population
1961-1971	2.22	1.98	3.24
1971-1981	2.20	1.77	3.79
1981-1991	2.14	1.83	3.11
1991-2001	1.95	1.66	2.74
2001-2011	1.63	1.16	2.76

Source: *Census of India, various issues.*

The growth rate of the urban share of population is an important yardstick for assessing how fast India has transitioned from a rural to an urban or quasi-urban nation. In the decades of 1951 and 1961, this rate was 0.5 percent. On an annual basis, the rate rose in the decades, 1961-71 and 1971-81, reaching a high of 1.56 percent. Since then, it has declined and seen to be stabilising between 1.0 to 1.2 percent. The important point is that India's urban growth, measured in terms of the growth rate of the urban share of population, has consistently been lower than the predicted pace of urbanisation derived from the data of 234 countries.

Measured in terms of the growth rate of the urban share of population. India's urban population growth in comparison with other countries has been consistently lower.

Figure 7. India's pace of urbanisation compared with other countries



Source: *Census of India, various issues: United Nations: World Urbanization Prospects.2018*

DECOMPOSING INDIA'S URBAN TRANSITION: NATURAL INCREASE, MIGRATION, OR NEW SETTLEMENTS

With a share of about 60 percent, natural increase has historically been a dominant source of urban population growth, followed by rural-urban migration and reclassification of settlements into urban. The 2011 census shows an altogether different composition, with the share of natural increase dipping to 43 percent, followed by census towns whose share has jumped to 31.2 percent, and rural-urban migration accounting for 22.8 percent of the net urban population increase.

India's urban transition involving the addition of 90.9 million persons within a decade, 2001-2011, has been variously described. It is said to be dispersed, having taken place 'beyond municipalities', as the World Bank puts it; it is seen as an outcome of rural-urban migration directed towards large cities, it is simultaneously viewed as fertility driven. The questions are: what is the evidence on the drivers of urbanisation? Is India's urban transition a continuation of the trends observed earlier or does it signal a departure from the past? Has urban population growth taken place across city-sizes, or has the growth been size-selective? Has the process bridged the urban gap within the country or widened it? The following sections attempt to address several of these questions.

Urban population growth across countries is analysed in terms of four proximate factors, (i) natural increase, (ii) rural-urban migration, (iii) reclassification of rural settlements into urban, and (iv) changes in the physical boundaries of existing urban settlements. The relative importance of these factors varies and changes over time. In the Indian case, with a share of about 60 percent, natural increase has historically been a dominant source of urban population growth, followed by rural-urban migration and reclassification of settlements into urban. The 2011 census shows an altogether different composition, with the share of natural increase dipping to 43.3 percent, followed by the share of census towns rising to 31.2 percent, and rural-urban migration accounting for 22.8 percent of the net urban population increase. New statutory towns account for 2.8 percent of the net increase in urban population.

Natural increase is stated to have a direct positive effect on urban population increase. Literature suggests that as countries become increasingly urban, the relationship between natural increase and urban population growth begins to attenuate; this trend appears to be setting in India, with its share taking a substantial dip in the most recent census decade.

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BOX 8. THE FORM OF URBANISATION- CONCENTRIC TO POLYCENTRIC

The process of urbanization has changed fundamentally in recent years. For more than a century, the dominant form of urbanisation was concentric, with suburbs arranged like belts around an urban core. This is how the large agglomerations of the twentieth century emerged. Around the end of the century, however, the urban growth pattern began to change as manifested in a wide variety of places: the process of urbanization has become undirected; existing urban forms are beginning to dissolve; centrality is becoming polymorphous. Overarching polycentric urban regions are taking shape. Extremely heterogeneous in structure, they include old city centres as well as the once-peripheral areas.

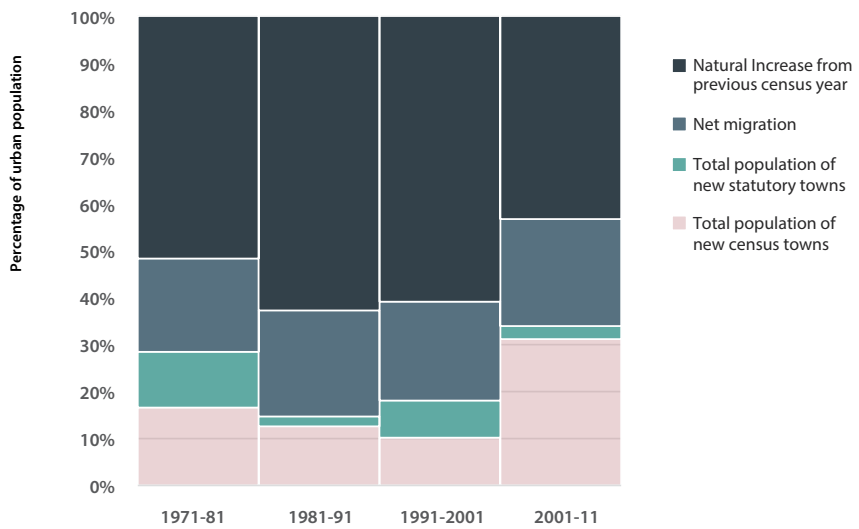
Christian Schmid. 2014. 'Networks, Borders, Differences: Towards a Theory of the Urban'. In Neil Brennan (ed.). 2014. ibid.

Table 5. Composition of urban population growth

Year	Percentage share in urban population growth			
	Natural increase	New census towns	Net migration	New statutory towns
1971-81	51.7	16.6	19.9	11.9
1981-91	62.7	12.6	22.6	2.1
1991-2001	60.9	10.2	21.1	7.9
2001-11	43.3	31.2	22.8	2.8

Source: *1971-81 and 1981-91 data: IIHS-RF paper on Indian Urban Economy, 2014*
1991-2001 and 2001-11 data: Computed using data from Census of India 2001 and 2011

Figure 8. Composition of urban population growth



IF HISTORY IS ANY GUIDE, LARGE SCALE MIGRATION TO THE CITIES IS PART AND PARCEL OF THE TRANSFORMATION ECONOMIES MUST GO THROUGH IF THEY ARE TO GROW QUICKLY. NO COUNTRY HAS EVER CAUGHT UP WITH THE ADVANCED ECONOMIES THROUGH FARMING ALONE.

- COMMISSION ON GROWTH AND DEVELOPMENT

Rural-urban migration underpins the process of urbanisation and is a universally observed phenomenon in the developing and emerging economies.

Rural–urban migration underpins the process of urbanisation and is a universally observed phenomenon in the developing and emerging economies. In 1962, Bogue and Zachariah observed that 'rural–urban migration is by far the major component of urbanisation and is the chief mechanism by which all of the world's great urbanisation trends have been accomplished. This being the case, there is a great potential in focusing on rural–urban migration as a way of deepening one's understanding of the urbanisation process'. According to the authors, 'a discussion of urbanisation in India is fundamentally a discussion of net rural–urban migration and an analysis of the migration-stimulating effects of the various demographic, economic and social factors that are at work'.[34]

BOX 9. RURAL - URBAN MIGRATION

Why do people migrate from the rural to the urban areas? This phenomenon of rural-urban migration has been long studied and examined in literature, with references dating to the latter part of the 19th century where attempts to explain it were made in terms of population pressures, food scarcity and famines, somewhat akin to what later came to be known as push factors (Ravenstein : 1885. The Laws of Migration). The orthodox economic theory on the question of geographic labour mobility as advanced by J. R. Hicks (1932) suggested differences in net economic advantages, chiefly differences in wages, as the main cause of rural to urban migration. A number of models have since been developed (Arthur Lewis (1954), Gustav Ranisand John C.H. Fei (1961) that have helped to better understand the phenomenon of rural to urban migration. It is, however, the Harris - Todaro model that has been widely held; the rate of rural-urban migration in their formulation is held to be a function of expected urban earnings and expected rural earnings. ***Their model assumes that rural-urban migration will continue as long as the expected urban real income exceeds real agricultural or rural product.***

Om Prakash Mathur.2003. "Agriculture, Rural-Urban Balance, and Social Viability". A paper prepared for the Food and Agriculture Organization. mimeo.

Rural- urban migration accounts for 22.2 percent of the total migrant population in 2011; in the earlier censuses, this percentage was 20.8 in 1991 and 21.8 in 2001, increasing with every successive year.

Overall mobility in India has risen in recent decades, but it is still a trickle compared to most large developing economies.

In its decennial population count, the Census of India collects data on migrants by last residence, classifying migrants in four categories, namely, rural-rural migration, rural-urban migration, urban-rural migration and urban-urban migration. The 2011 census places the number of migrants at 141.9 million or about 12 percent of the total population (those who moved between 2001 and 2011). Successive decades have seen the volume of migrants rise from 80.7 million in 1981-91 (9 percent of the total population) to 95.2 million in 1991-2001 (9.2 percent), and 141.9 million (11.7 percent) in 2001-11. Overall mobility in India has been rising over the years, yet it is still a trickle compared with several large developing countries. Bogue and Zachariah considered India's population largely immobile. They observed: 'It has been widely accepted that the rural population of India is comparatively non-migratory, because it is too strongly tied to its village origin by bonds of kinship, marriage customs, language, and centuries of in-group living to be easily diverted

[34] Donald Bogue and K C Zachariah. 1962. "Urbanization and Migration in India". in Roy Turner. India's Urban Future. University of California Press, Berkeley

to the comparative insecurity and strangeness of the city. So widely has this viewpoint been accepted that urbanisation has almost come to be regarded as being inconsistent with the Indian way of life'.[35]

Rural-urban migration accounted for 22.1 percent of the total migrant population in 2011; in the earlier censuses, these percentages were 20.8 in 1991 and 21.8 in 2001, increasing, albeit marginally, with every successive decade. However, the increase is not large enough to cause any disruption in the pace and pattern of urbanisation. **At the same time, urban to urban mobility has risen noticeably in the most recent decade of 2001 to 2011, providing a strong indication of the likely future course of migration and urbanisation trends.** Eighty-five percent of movements are, however, intra-state and would attest to the position Bogue and Zachariah had advanced. In states such as Bihar, intra-state mobility accounts for over 90 percent of migration. Social movements form the predominant ***raison d'être*** underlying rural-rural migration in India which account for a substantial proportion of total migration. ***The economic potential of rural-urban migration is neither adequately recognised nor fostered as a part of urban policy.*** Commenting on India's rural-urban migration, the World Bank in its 2009 report, observed, 'the economic benefits of migration are not always recognized by policy-makers. Two forms of policy have been attempted to counter migration in India. The first response has been to increase rural employment, in an attempt to stem movement out of rural areas. The second policy response is implicit. Because of the perceived negative effects, local governments remain hostile towards migrants, while employers routinely disregard laws to protect their rights and needs'.[36]

Social movements still form the predominant raison d'etre underlying rural-rural migration in India. Its economic potential is neither adequately recognised nor fostered.

The reclassification of rural settlements into urban and likewise, declassification of urban settlements into rural form a part of the process that is commonly observed across countries. Reclassification is regulated

Table 6. Share of different types of migration in India (%)

Types	% Share		
	1991	2001	2011
Rural-Urban	20.8	21.8	22.1
Urban-Urban	14.4	15.2	22.6
Urban-Rural	7.6	6.6	7.9
Rural-Rural	57.2	56.3	47.4
Total	100.0	100.0	100.0
Total no. of migrants (million)	80.7	95.2	141.9

Source: *Census of India, 2011*

[35] Donald Bogue and K C Zachariah. ibid.

[36] The World Bank.2008. World Development Report 2009. Reshaping Economic Geography. The World Bank. Washington D.C.

Table 7. Migration in India: decadal change %

Types	1991-2001	2001-2011
Rural-Urban	23.8	54.8
Urban-Urban	25.0	126.9
Urban-Rural	3.3	82.5
Rural-Rural	16.0	28.9
Total	18.0	53.0

Source: *Census of India, 2011*

BOX 10. THE CHALLENGE OF URBANISATION

One of the biggest challenges in development is urbanization in developing countries. Nearly two billion people are expected to move from rural regions into cities in the next two decades. The pace at which it will happen (in the future) will be much faster than what the world has experienced before. For instance, China's and India's economic transformation and urbanization is happening at 100 times the scale of the first country in the world to urbanize – the United Kingdom and in just one-tenth of the time. Most countries have only one chance to get it right and there is no 'one size fits all' recipe.

Ejaz Ghani, Arti Grover Goswami and William R Kerr, 2012. 'Is India's Manufacturing Sector Moving Away From Cities?' Policy Research Working Paper 6271. The World Bank. Washington D.C.

The numbers of census towns increased from 1362 in 2001 census to 3892 in 2011, and the population rose from 21.02 million to 54.28 million during the 2001-2011, provoking urban scholars to signal it as a new emerging phase in the country's urban transition.

Urban space in India stands refigured on account of outward spread of urban activities.

by a set of pre-determined criteria, fulfilment of which enables a settlement to acquire the status of an 'urban' settlement; likewise, urban settlements are declassified when they fail to meet the laid down criteria. In India, fulfilment of three criteria, viz., a population threshold of 5,000 persons; a density of 400 persons per sq.km., and 75 percent of male workers in non-primary sector activities enables a settlement to qualify for an urban status. The exercise involved is *ex-ante* where the Census of India identifies settlements with a population of 4,000 persons and above, and applies the other two criteria to determine their status.

The 2011 census witnessed an unprecedented surge in the numbers and population of such settlements, called census towns. The numbers increased from 1362 to 3894 between 2001 and 2011, and the population rose from 21.02 million to 54.28 million during the same decade, provoking urban scholars to signal it as a new ***emerging*** phase in the country's urban transition. What has lent it prominence is the follow-up research that shows it to be a potentially important source of urbanisation in the 2021 census with an estimated population of 17.9 million persons.[37]

[37] A recent paper estimates that 2,231 settlements with a population in excess of 4,000 persons will fulfil the criteria for becoming census towns in the 2021 census. These settlements currently (2011) have a population of 17.9 million. See K. C. Pradhan.2018.Predicting the Future of Census Towns'. Economic and Political Weekly, New Delhi. Also see, K.C. Pradhan.2013. "Unacknowledged Urbanisation: New Census Towns of India". Economic and Political Weekly. 48(36). Mumbai.

Table 8. Census towns in India's urban transition

Year	Numbers	Population (million)	Share of population of Census towns in total urban population
2001	1362	21.02	7.3
2011	3894	54.28	14.4

Source: *Census of India, various issues.*

EMERGENCE OF CENSUS TOWNS AS A FACTOR IN INDIA'S URBANISATION HAS IMPARTED A LOT OF UNCERTAINTY TO ITS FUTURE SHAPE AND STRUCTURE. DOES THIS DEVELOPMENT - 'BEYOND THE MUNICIPAL BOUNDARIES' - MAKE A CASE FOR A CHANGE IN THE WAY CITIES AND TOWNS ARE DEFINED?

Two important characteristics of census towns need to be recognised: (i) the distribution of census towns by population size; as the following pyramid shows, there are 20 census towns in the population range of over 100,000 and another 54 in the population range of 50,000 and 100,000; and (ii) census towns are often beyond the municipal boundaries and not necessarily within the hinterland of large cities. A large number of census towns represent an 'autonomous' growth, meeting the population, density, and occupational criteria. In a recent report, the World Bank describes it as 'messy urbanisation' that is reflected in faster population growth beyond municipal boundaries; 'for the 12 largest Indian cities satellite imaging shows that the proportion of built-up area outside a city's official boundaries exceeds that within its boundaries'.[38] The emergence of census towns on this scale has given rise to questions about what these are and what role do they play in the process of India's urbanisation. Questions have been asked if this development is synonymous with suburbanisation (the example of the USA), or peri-urban development, or rural industrialisation close to large cities, or just a sprawl, unplanned and informal development, a phenomenon driven by local factors.

However, apart from the increase in numbers, little is known about their economic contribution and effects on productivity and economies. Further, the reluctance on the part of the state governments to assign such settlements, particularly those that are within the hinterland of large cities, a statutory status, combined with a tepid growth in the population of statutory cities present an uncertain outlook for the future growth of 'urban' population.

The reluctance on the part of the state governments to assign such settlements a statutory status combined with a tepid growth in the population of statutory cities and towns present a grim outlook for the future growth of "urban" population.

[38] The World Bank. 2015. Leveraging Urbanization in South Asia. Washington. D. C.

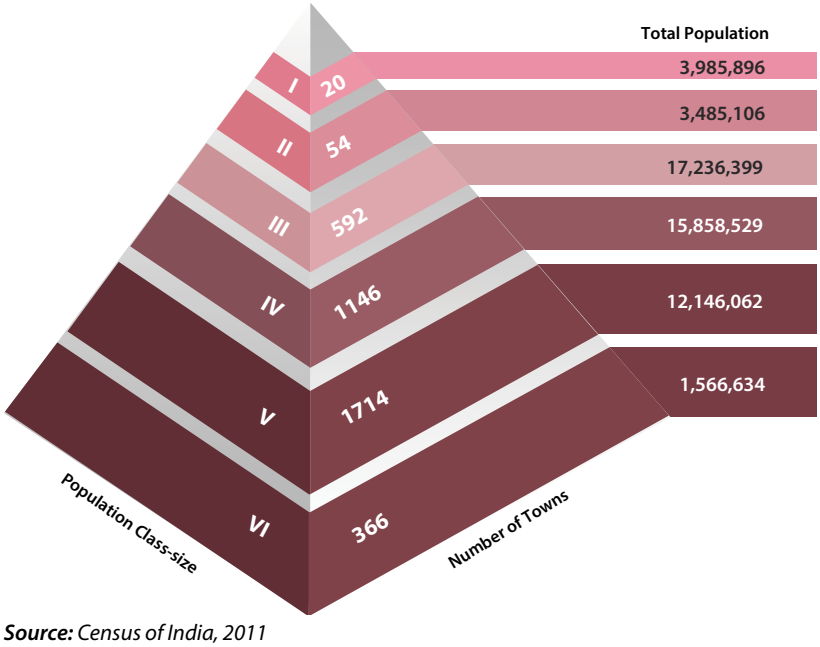
In an impressive paper titled as 'Subaltern Urbanization: Indian Insights for Urban Theory', Partha Mukhopadhyay and others have referred to this development as subaltern urbanisation, arguing that, to quote, 'we do not use subaltern to mean *subordinate*, but rather to denote *autonomous*, if lower status'. They continue, 'while some are located in the shadow of large cities, many of these invisible settlements are far from the metropolitan areas and not subject to major government intervention. We posit that the transformation taking place in these towns go beyond metropolitan influence or growth related to the relocation of activities unwelcome in the metropolis (e.g., polluting industries) or a simple expansion of banal urban functions.'[39]

BOX 11. SPRAWL INDEX

Sprawl is the result of a faster increase in the growth in urban built-up areas compared to that of population. The sprawl index is defined as the difference between the average annual growth of the urban built-up areas and the average annual population growth in the urban agglomerate. The sprawl index is equal to zero when both population and the urban built-up area are stable over time. It is above (or below) zero when both population and the urban built-up areas are larger (or smaller) than population growth, i.e., the city density has decreased (or increased).

OECD: The OECD Metropolitan Data Base. May 2015

Figure 9. Size-class distribution of Census Towns



Source: *Census of India, 2011*

[39] Partha Mukhopadhyay, Marie-Helene Zerah, and Eric Denis. 2020. 'Subaltern Urbanization: Indian Insights for .Urban Theory'. In International Journal of Urban and Regional Research, Volume 44, Issue No 4, Wiley Online Library. Urban Research Publications .Limited.

According to the World Bank, the spillover of cities across their boundaries creates challenges for metropolitan coordination in the delivery of basic services and the provision of infrastructure. It notes, ***'the scale of the challenge has grown, evident in the rapid spread of urban footprints. Analysis based on night lights data shows that the region's urban areas expanded at slightly more than 5 percent a year between 1999 and 2010. But the region's urban population grew a little less than 2 percent a year'....'These urbanization belts present an opportunity for greater agglomeration economies, but realising these opportunities require better coordination between different urban local governments'.***[40]

The unprecedented rise in the numbers and population of census towns during the 2001-11 decade, reversing the trends of the past three decades where the share of census towns in urban population increase dipped from 16.6 percent in 1971-81 to 12.6 percent in 1981-91 and further to 10.2 percent in the subsequent decade, and the share of rural-urban migration staying within a narrow range, raises vital questions about India's urbanisation. What has led to the emergence of census towns as a factor in the country's urbanisation process? In what way is the emergence of census towns linked with rural-urban migration and what implications does it have for the future of urbanisation? Is there a trade-off between rural-urban migration and census towns? Has geography come to play a greater role in defining India's urbanisation process? Is India's urbanisation a demographic transition or a geographical change?[41]

It is significant that while census towns account for 31 percent of the urban population increase (2011), its decomposition seen alongside other constituents of urban population growth show different patterns and typologies and offer important insights into their respective roles. Thus, there are states (i) where urban population increase is dominated by natural increase; (ii) states where rural-urban migration, accounting for over 35 percent of the urban population increase, plays a dominant role in the process of urbanisation, (iii) where census towns have contributed over 60 percent of the increment to urban population; and (iv) where urban population increase is shared among natural increase, the census towns, and rural-urban migration.

CITY-SIZE DISTRIBUTION: SMALL, INTERMEDIATE OR LARGE?

'Most developing countries are in the middle of the urbanization process. Examining how cities of different sizes have evolved reveals the characteristics of ongoing urbanization and the direction toward which urbanization is heading in the region'.[42]

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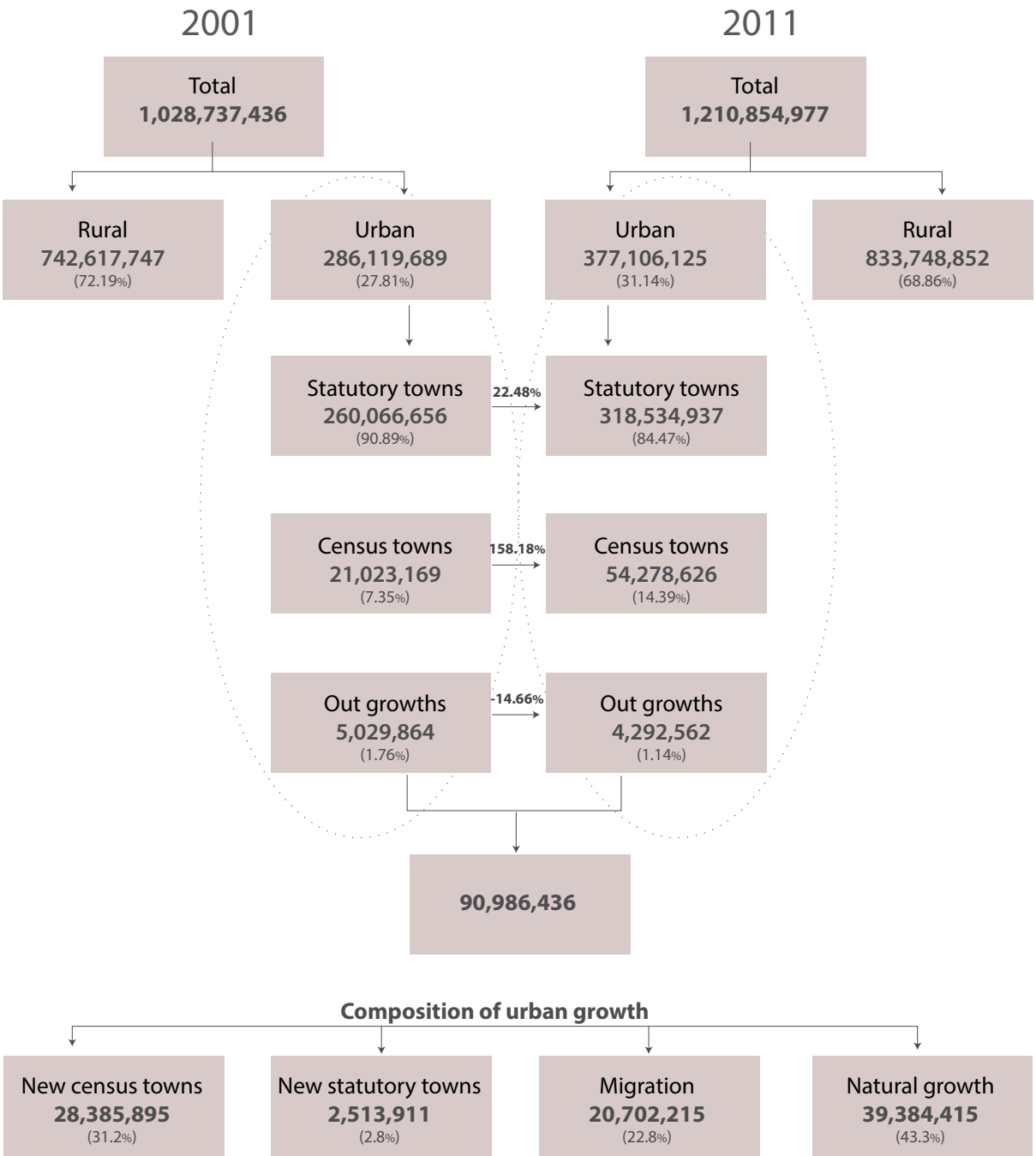
[40] The World Bank. 2015. ibid.

[41] Research on these questions is still to be initiated on a scale that will enable a grip on the role of such towns in the urbanisation process.

[42] Asian Development Bank. 2019. Fostering Growth and Inclusion in Asia's Cities pp10- Theme chapter of the Asian Development Outlook 2019 Update. Manila. The Philippines.

CHART 2. ANATOMY OF INDIA'S URBAN STRUCTURE



Source: *Census of India, 2001 and 2011*

A portfolio of cities and towns is an enduring feature of the pattern of settlements in most countries. Settlements of different population sizes complement one another. Agglomeration is said to provide a balance between centripetal and centrifugal forces***. India's urban portfolio consists of a small number of large cities and a large number of small towns.*** In 2011, the number of all urban settlements was 7,933; between 2001 and 2011, the number increased phenomenally adding 2772 urban settlements. A significant part of the increase is in the number of small towns (census towns) that accounts for 79 percent of all cities and towns; the upper tail cities have witnessed a transition of cities from one size to the next higher-size category. For reasons of a transition of cities from one size to the next higher size and variable growth rates in different size categories, their relative proportions have changed noticeably over the decades, with the most noticed change having taken place in the population share of large (>100,000) cities. Metropolitan cities with a population in excess of one million now account for 42.3 percent of the total urban population; the share of large-sized cities (the range 100,000 to one million) in total urban population is 27.9 percent, and that of small towns, 29.8 percent. In this transition, cities with a population of over ten million (Mumbai and Delhi) have come to account for 9.2 percent of the country's total urban population. However, India displays no significant urban concentration; nor are there any trends towards convergence of cities to a common size class category. ***The pattern of distribution tends to affirm that cities of different sizes have their ongoing roles and functions.***

"Urbanization is not concentrated in megacities, and urban hierarchies have not become increasingly unbalanced with urbanization. The worldwide relative size distribution of cities have been rock stable over the past forty years".

Vernon Henderson
Hyoung Gun Wang

A continuously rising share of large cities in urban population (Table 9) has often been used to suggest that large cities in India have a tendency to post higher growth rates compared to intermediate and smaller sizes- an undertone being that such trends needed to be curbed or slowed down in order to have a more balanced city size distribution. This, in fact, was a dominant theme in the five year plans of the 1970s and 1980s. Rakesh Mohan's 1983 paper 'India: coming to terms with urbanization' put out an alternative method of estimating population growth rates for cities in different size categories that involved exclusion of cities that transited from a lower size to a higher size category and meant reworking of growth rates of cities and towns in size categories that were common between two censuses. The paper showed that the differences in the growth rate in cities of different sizes were at best marginal. According to the paper, the Indian urban system exhibited remarkable stability in that the distribution of city sizes was relatively even. Redoing the growth rates (AEGR) on this methodology for cities and towns common between 2001 and 2011 attest to the above conclusion as may be seen in the following table.[43]

Metropolitan cities in India, defined as areas having a population of one million or more, comprised in one or more districts and consisting of two or more municipalities or Panchayats or other contiguous areas, are an important

[43] Rakesh Mohan.1983."India coming to grips with urbanization".in *Cities*. Vol 1, issue 1, Elsevier Ltd.

Table 9. Size class distribution of urban population

Size class	1901		1991		2001		2011	
	Population (million)	% share	Population (million)	% share	Population (million)	% share	Population (million)	% share
>= 1,00,000	6.8	26.3	142.4	66.0	200.1	69.9	264.7	70.2
50,000-1,00,000	3.02	11.7	22.7	10.5	27.2	9.5	32.2	8.5
20,000-49,999	4.1	15.9	27.7	12.8	33.6	11.7	41.8	11.1
10,000-19,999	5.3	20.3	16.5	7.6	18.3	6.4	24.0	6.4
5,000-9,999	5.1	19.7	5.6	2.6	6.2	2.2	12.6	3.4
Below 5,000	1.6	6.0	0.8	0.4	0.7	0.2	1.7	0.4
Total urban population	25.9	100.0	215.8	100.0	286.1	100.0	377.1	100.0

Source: *Census of India, various issues.*

Table 10. Size class distribution of cities and towns 2001-2011*

Class-Size	Number of cities/towns		Number of U.A.s and towns
	2001	2011	2011
>= 1,00,000	421	498	468
50,000-1,00,000	504	600	474
20,000-49,999	1,396	1,913	1,373
10,000-19,999	1,564	2,237	1,683
5,000-9,999	1,043	2,188	1,749
Below 5,000	232	499	424

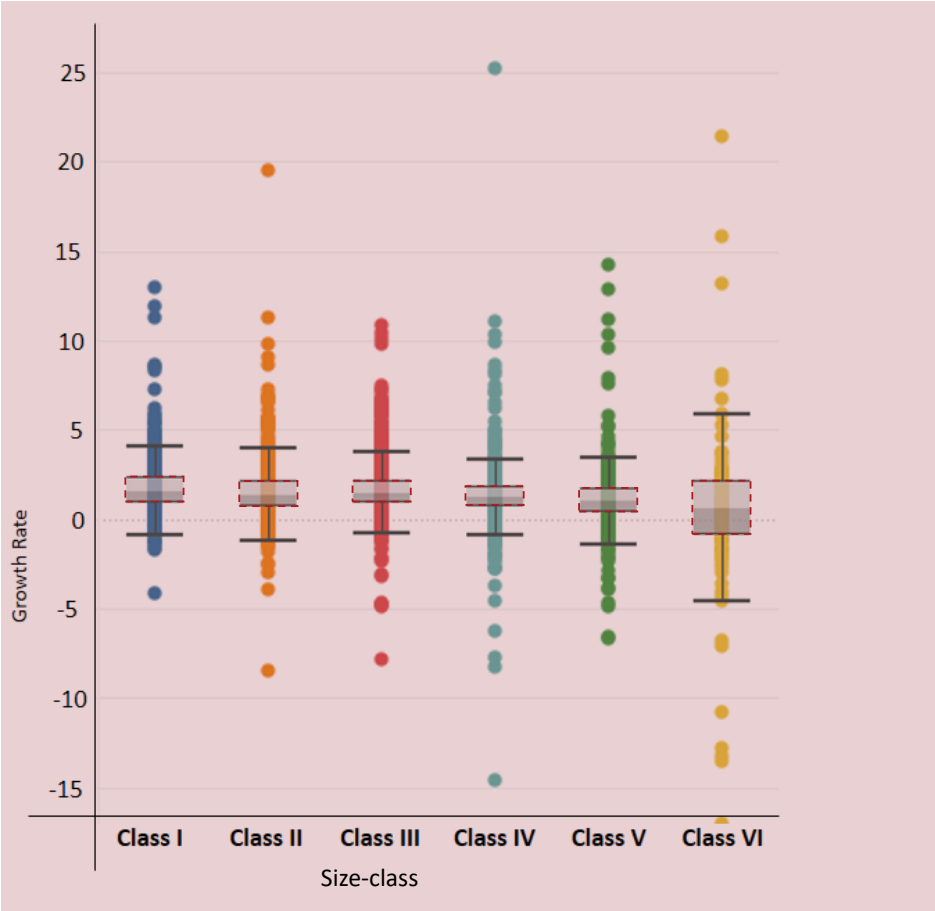
*** Census of India, several issues. These numbers drawn from census tables are marginally at variance from the numbers used elsewhere in the report. See for example, Census of India: Data Highlights, Table-4, and Table A-1 on the number of villages, towns, households, population and area.*

Table 11. Size class decadal growth of urban population between 2001-2011

Class-Size	Decadal growth, %	Decadal growth of cities and towns common in 2001 and 2011, %
>= 1,00,000	32.3	23.4
50,000-1,00,000	18.4	17.4
20,000-50,000	24.4	19.0
10,000-20,000	31.1	16.6
5,000-10,000	103.2	16.0
<5,000	142.8	35.4
ALL	31.8	21.6

Source: *Census of India, 2001 and 2011*

Figure 10. Size class population annual exponential growth rates (AEGR), 2001-2011



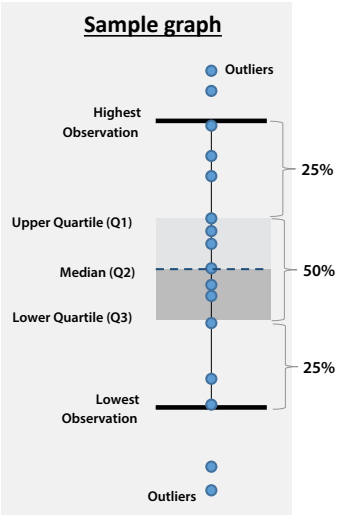
Source: *Census of India, 2001 and 2011*

A Box - Plot graph

- This **box-plot graph** which shows whether the distribution of a data set is grouped or skewed.
- The above graph represents class-wise distribution of growth rates of cities where **each circle represents a city**.

How to read the graph

- The grey box represents the values between upper and lower quartile (range = Q1 – Q3) also known as "interquartile" - this is where the **middle half of the data is distributed** i.e., half of the cities in each class-size have growth rates ranging in these boxes.
- The two whiskers, one is from the highest observation to the upper quartile (Q1) and the other is from the lowest observation to the lower quartile (Q3) have the rest of the 1/4th of the number of cities each.
- The circles beyond the highest and lowest observations are the outliers and are not considered.



part of the country's urban system and have gained considerable importance over the decades.[44] In 1901, there was only one city with a population of over one million (Calcutta), which accounted for 5.8 percent of the country's urban population. In 1991, the number of cities in this category was 23 and their shares in urban population, 32.8 percent. In 2011, the number has increased to 52[45] and the population share to 42.3 percent, heralding what would seem to be one of the most significant changes in the pattern of habitation in the country. Given the existing distribution of cities in the different size categories and there being no evidence of a self-regulating mechanism that would regulate city-size, India is likely to witness the emergence of many more such cities by the year 2030, estimated at 78 by the year 2035 (United Nations), representing yet another shift in the pattern of habitation in the country. Only recently have cities of these sizes been conceptualized as a distinct phenomenon, deserving special consideration. As Perlman notes,[46] the world has little systematic knowledge and experience to draw upon in responding to the challenges of such large cities: "no precedent exists for feeding, sheltering, or transporting so many people nor for removing their waste or providing clean water". This applies more to India as India's metropolises (over one million population) are growing at variable rates- low to moderate to high, both in terms of population and economic importance and transforming themselves functionally and physically. Several metropolitan areas have seen their peripheries posting higher population growth rates in comparison with the "cores". Between 2001 and 2011, the population of the core areas of metropolitan cities which are co-terminus with the municipal boundaries,[47] increased at an annual exponential rate of 1.87 percent; in comparison, the peripheries posted an annual average increase of 9.78 percent. There are however, interesting patterns of growth differentials of core and peripheries, with some registering growing core and growing peripheries, some growing core and declining peripheries; other declining core and growing peripheries; and declining core and declining peripheries. Scholars point out that the growth rates of metro cities are a function of the dynamics of the economy, where the identification of the core and the periphery cannot be static.[48]

"No precedent exists for feeding, sheltering, or transporting so many people nor for removing their waste products or providing clean water."

Janice Perlman

Large cities represent a range of opportunities that are propelled not only by the economic and social processes operating within the national boundaries but equally by the new role they play in the emerging production frontiers that are set in motion globally. The global factors have heightened their economic importance.

[44] Metropolitan area is defined in the Constitution of India. The Census of India does not use this term. In this report, metropolitan cities or areas are referred to as cities and urban agglomeration with a population of over one million.

[45] These 52 metropolitan cities comprise over 1200 settlements that include census towns, outgrowths, cantonment boards, municipal bodies, municipal corporations, nagar panchayats, notified area committees and several others.

[46] Janice Perlman. 1989. 'Mega-cities: Global Urbanization and Innovation'. Paper prepared for the International Workshop on Improving Urban Management Policies'. East-West Center, Honolulu. USA.

[47] There are a few exceptions; in the case of the Municipal Corporation of Delhi, a cantonment board and municipal council are included. Other metropolitan areas are inclusive of municipal councils, nagar panchayats, etc.

[48] See K.C. Sivaramakrishnan. 2015. Governance of Megacities: Fractured Thinking, Fragmented Setup. Oxford University Press. New Delhi.

METROPOLITAN CITIES CONSISTING OF A CORE AND MULTIPLE PERIPHERIES OCCUPY A PIVOTAL POSITION IN INDIA'S DEMOGRAPHIC AND ECONOMIC STRUCTURE. FUNCTIONAL INTEGRATION OF PERIPHERIES WITH THE CORE WILL DETERMINE THE PACE OF COUNTRY'S GROWTH AND DEVELOPMENT.

These cities are at the centre of the country's economic growth and progress. Their growth represents a range of opportunities that are propelled not only by the economic and social processes operating within the national boundaries but equally by the new role they play in the emerging production frontiers that are set in motion globally. Many cities such as Bengaluru, Hyderabad, Pune, Pimpri Chinchwad, Navi-Mumbai, (Gurugram and Noida - non metropolitan cities) and many more stand reshaped by global forces that have heightened their economic importance.

Two features of India's urban portfolio need to be underlined. One, the urban structure as it has evolved raises vital issues of scale and agglomeration economies, i.e., whether India's urban portfolio is able to generate enough economies so as to be able to use urbanisation as an instrument for its growth objectives. GDP does not show any sensitivity to urban densities. The one redeeming feature of the urbanisation process is the increase in the number of

Table 12. Number and population of U.A.s/ Cities with one million or more population

Census Year	Number of U.A.s/ Cities	Population (in million)	AEGR
1991	23	71.7	.....
2001	35	108.3	4.13
2011	52	159.6	3.88

Source: *Census of India*

BOX 12. HUMAN PROGRESS

Cities, the dense agglomerations that dot the globe, have been engines of innovation since Plato and Socrates bickered in an Athenian market place. The streets of Florence gave us the Renaissance, and the streets of Birmingham gave us the Industrial Revolution. The great prosperity of contemporary London and Bangalore and Tokyo comes from their ability to produce new thinking. Wandering these cities whether down cobblestone sidewalks or grid-cutting across streets, around roundabouts or under freeways – is to study nothing less than human progress.

Edward Glaeser in Triumph of the City. pp1.2011.

BOX 13. A DEFINITIONAL DIVIDE

India:

Urban agglomeration

A city or a town with a continuous outgrowth, the outgrowth being outside the statutory limits but falling within the boundaries of the adjoining village or villages; or

Two or more adjoining towns with their outgrowths; or

A city and one or more adjoining towns with or without outgrowths all of which form a continuous spread.

In India, of the 474 UAs (2011), 298 have populations in excess of 1,00,000; 100 have populations in the range of 50,000 and 1,00,000 and 76 have populations ranging between 10,000 and 50,000.

China:

Urban agglomeration

Urban agglomeration refers to a spatial format of urbanization which centres on one mega city, with three or more metropolitan areas or large cities as the fundamental composing unit. Urban agglomerations have developed transportation and communication networks. The spatial organization is often compact; the economic connections close and cities within the agglomeration very integrated.

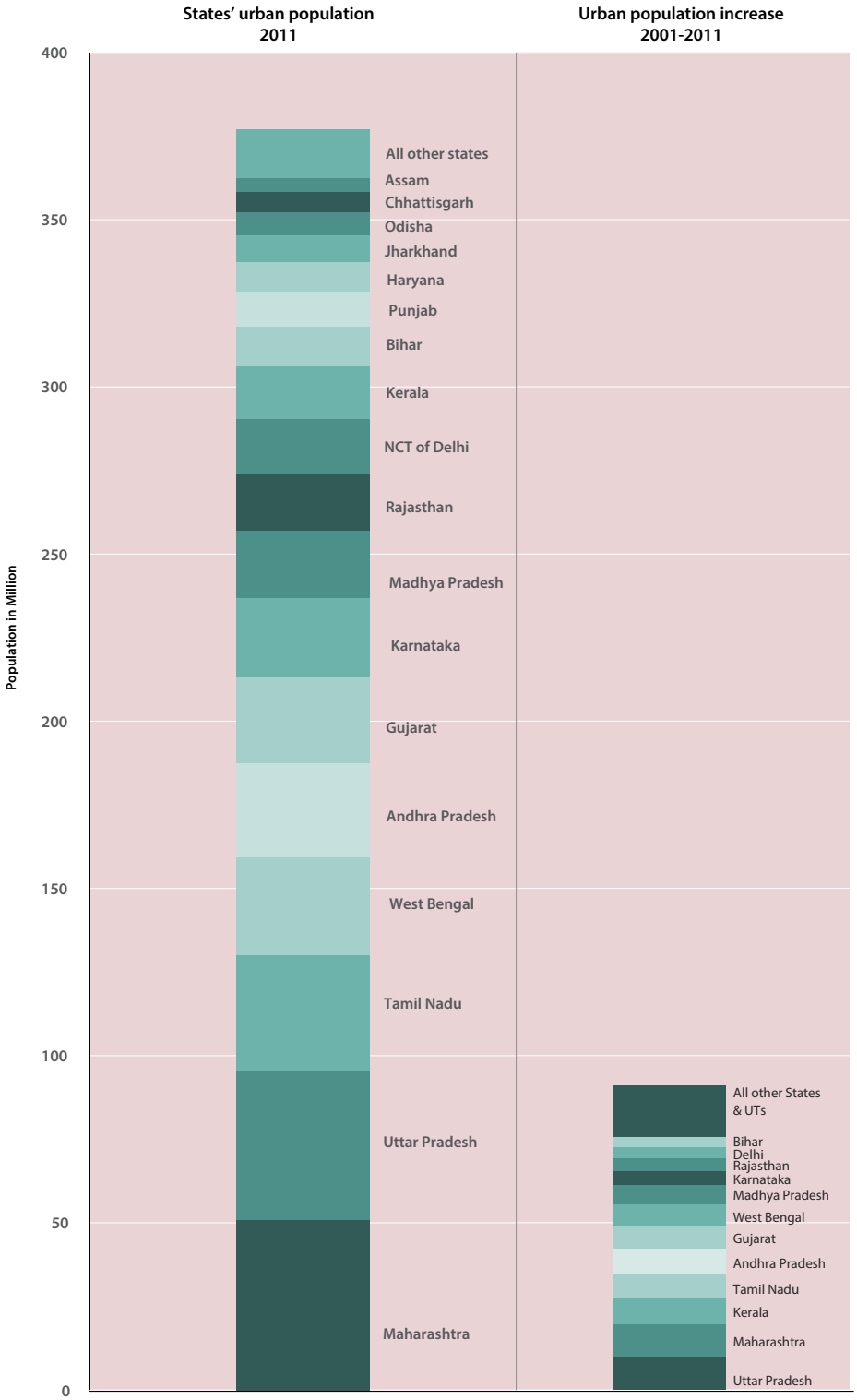
intermediate sized cities (1,00,000 to one million population), generally called second tier cities whose numbers have increased from 304 in 1991 to 416 in 2011. Two***, India's urban system is not an integrated or unified system of cities. Several states have primate city development; in a few states, greater evenness is observed in city-size distribution, while in others distribution is uneven***. While a part of the explanation may lie in India's federal structure and its large size, it does not provide adequate understanding of the different forms of size distribution. City size distributions need to be understood in terms of their extraordinary heterogeneity, the population of some size categories being greater than what typical laws such as the Zipf law stipulates and the population of other size categories, being lower than the predicated Zipf values.[49]

A SUB-NATIONAL VIEW OF URBANISATION

States urbanise at different paces, they display variation in their size composition, and make for forces that lead urbanisation to diversify its growth pattern. Studying urbanisation at the level of states is instructive and sheds important insights into the process of urbanisation. Several features deserve to be highlighted:

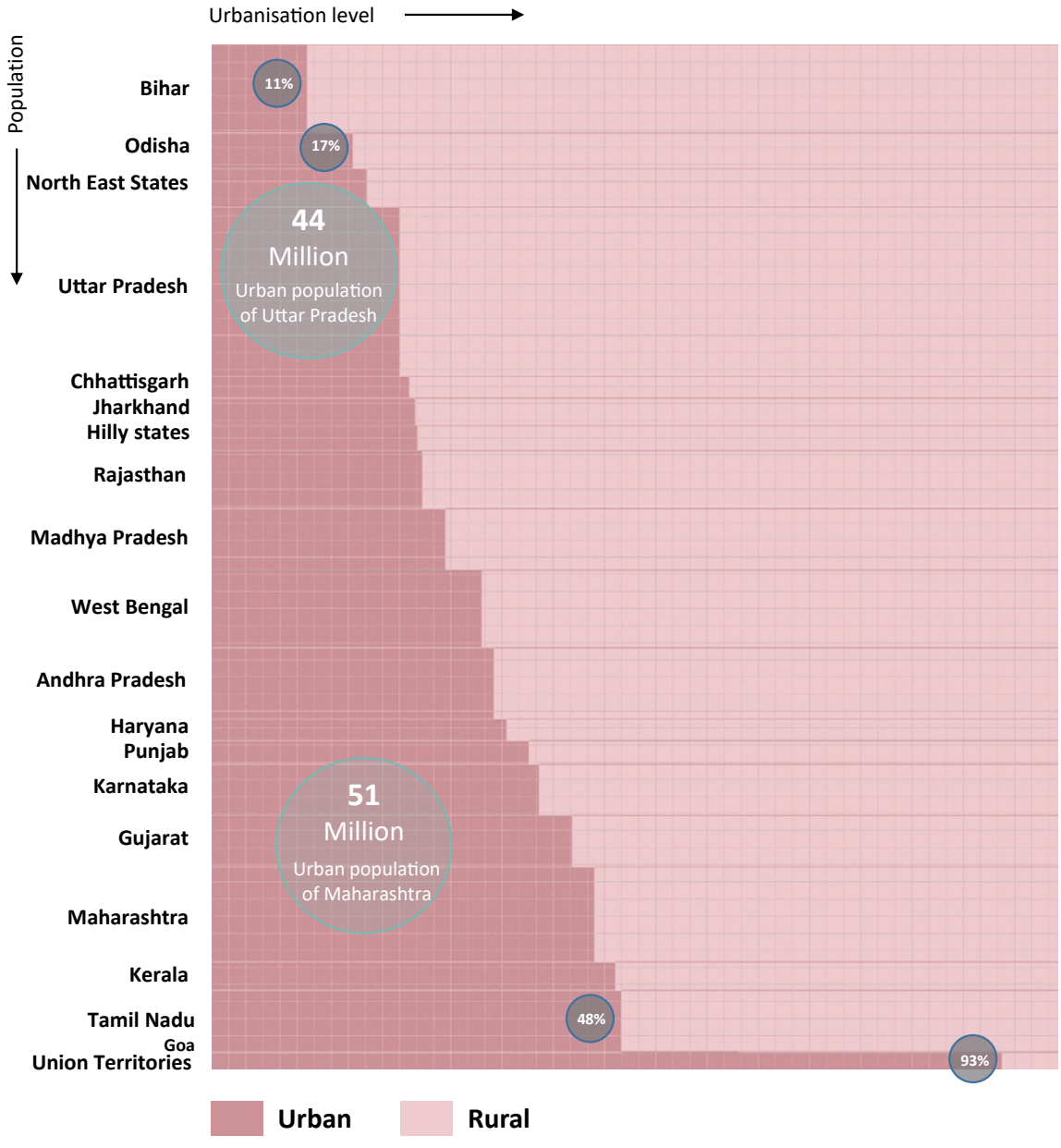
[49] George Kingsley Zipf (1949) developed a theory of human behaviour and later applied it to cities, to look at the relation between a city's rank (r) with its population (P1) for a range of cities. His postulate was that all cities and towns interact with each other and form part of an integrated system. If the second-ranking city has half the population of the largest city, the third –ranking city, the third of the largest, it is said to have rank-size regularity. This law, the Zipf law, is commonly applied to studying urban systems. See. Om Prakash Mathur.2019. "City-Size Distributions in a Quasi-open Economy". In Guanghua Wan and Ming Lu. Cities of Dragons and Elephants, Oxford University Press. London.

Figure 11. States' urban population, 2011



Source: *Census of India, 2011.*

*Figure **12.** Diverse patterns of urbanisation, 2011*



Note:

i. Each square in the grid represents 0.4 Million population
ii. Horizontal axis represents the urbanisation level while the vertical axis represents the proportion of population
iii. Hilly states include Jammu and Kashmir, Himachal Pradesh and Uttarakhand
iv. North Eastern states include Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura
v. Union Territories include Andaman & Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman & Diu, Lakshadweep, NCT Delhi, Puducherry.

Source: Computed from Primary Census Abstract, Census of India, 2011.

Figure 13. Level of urbanisation

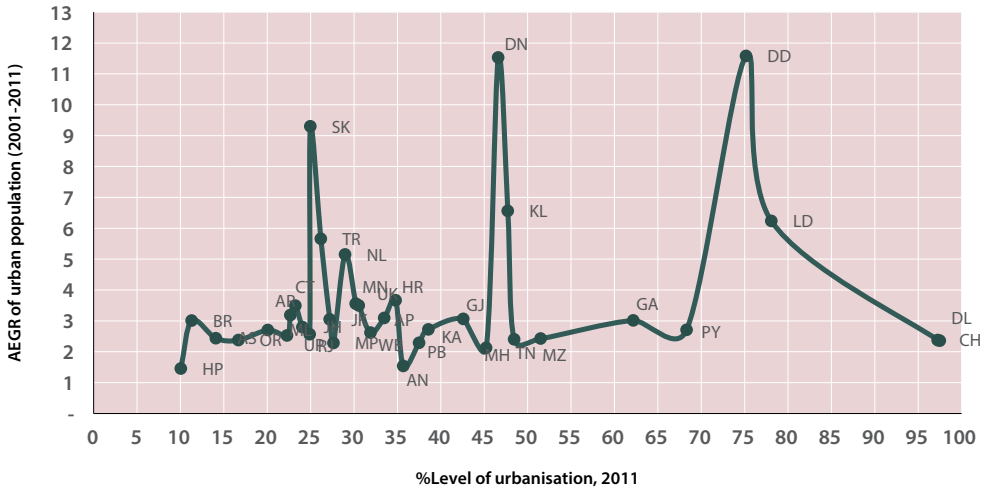
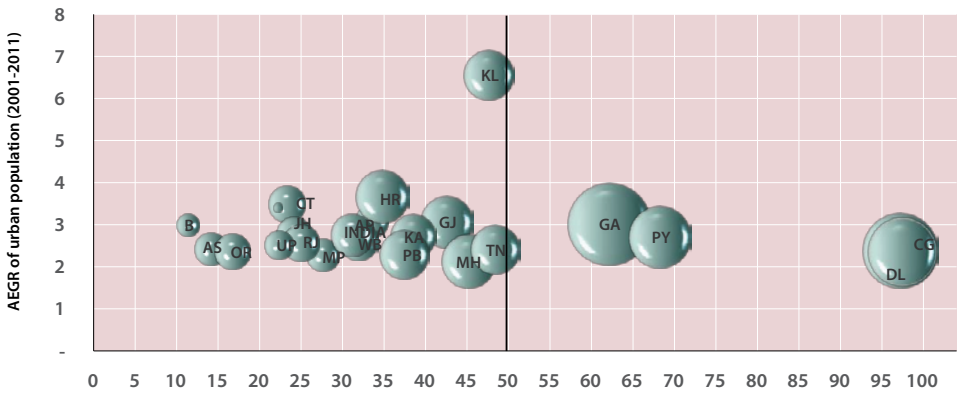


Figure 14. Urbanisation and AEGR of urban population for 2001 to 2011



R-square = 0.0282

Bubble size based on GSDP 2011 @ 2004-05 prices

State	State code
Himachal Pradesh	HP
Bihar	BR
Assam	AS
Odisha	OR
Meghalaya	ML
Uttar Pradesh	UP
Arunachal Pradesh	AR
Chhattisgarh	CT
Jharkhand	JH
Rajasthan	RJ
Sikkim	SK
Tripura	TR
Jammu & Kashmir	JK
Madhya Pradesh	MP
Nagaland	NL
Manipur	MN
Uttaranchal	UK
West Bengal	WB
Andhra Pradesh	AP
Haryana	HR
Andaman and Nicobar	AN
Punjab	PB
Karnataka	KA
Gujrat	GJ
Maharashtra	MH
Dadra and Nagar Haveli	DN
Kerala	KL
Tamil Nadu	TN
Mizoram	MZ
Goa	GA
Puducherry	PY
Daman and Diu	DD
Lakshadweep	LD
Chandigarh	CH
Delhi	DL

One: India is characterised by extreme diversity with respect to the levels of urbanisation and urban growth patterns. States such as Tamil Nadu (48.4 percent), Kerala (47.7 percent), and Maharashtra (45.2 percent) are close to achieving the tipping point of 50 percent level, while the other extreme is represented by Bihar (11.3 percent), Odisha (16.7 percent), Uttar Pradesh (22.3 percent), and Rajasthan (24.9 percent) which have not only low levels of urbanisation but also moderate rates of urban population growth. Recent trends indicate some convergence in the levels of urbanisation across states. The gini co-efficient, a measure of inequality, has dipped from 0.39 in 2001 to 0.37 in 2011. That it has taken place even under conditions of significant inter-state differences in the overall index of development and increasing inequalities in per capita non-primary net domestic product, needs to be given full recognition.

Two: Heterogeneity in the source of urbanisation, it being led in some states by high fertility (Bihar where 72 percent of urban population increase is explained by high fertility), in a few states by census towns, e.g., Kerala being its prime example and in some states by rural-urban migration. Notable is the fact that urbanisation in states such as Haryana, Maharashtra and Gujarat has, in the most recent decade, been the product of natural increase, rural-urban migration, and census towns, a pattern said to favourably contribute to long run sustainability and growth. Urbanisation in states where it is led by one of the three sources, the literature suggests, may provide short run impetus to growth but is unlikely to be sustained.

Table 13. Key factors in state urbanisation

Factors	States
Natural increase >43.3 percent population increase	Punjab (57.2), Haryana (50.7), Rajasthan (63.8), Uttar Pradesh (59.9), Bihar (72.4), Madhya Pradesh (62.5) Andhra Pradesh (56.7), Karnataka (65.5)
Led to a significant extent by census towns >31.2 percent	Uttarakhand (37.4), Assam (60.3), West Bengal (65.4), Jharkhand (39.3), Odisha (37.9), Goa (68.9), and Kerala (89.0)
Migration as an important factor >22.8 percent	Uttarakhand (26.1), Haryana (30.8), Assam (27.0), Jharkhand (28.1), Odisha (32.8), Chhattisgarh (25.1), Gujarat (35.7), Maharashtra(35.5), and Delhi (42.7)
Multiple triggers	Haryana (50.7%, natural increase, migration 30.8% and census town 18.6%); Andhra Pradesh (56.7%, natural increase, migration 35.5% and census town 17.9%), and Maharashtra (46.6% , natural increase, migration 35.5% and census town 12.9), Gujarat (50%, natural increase, migration (35.7%), and 14.3%, census towns).

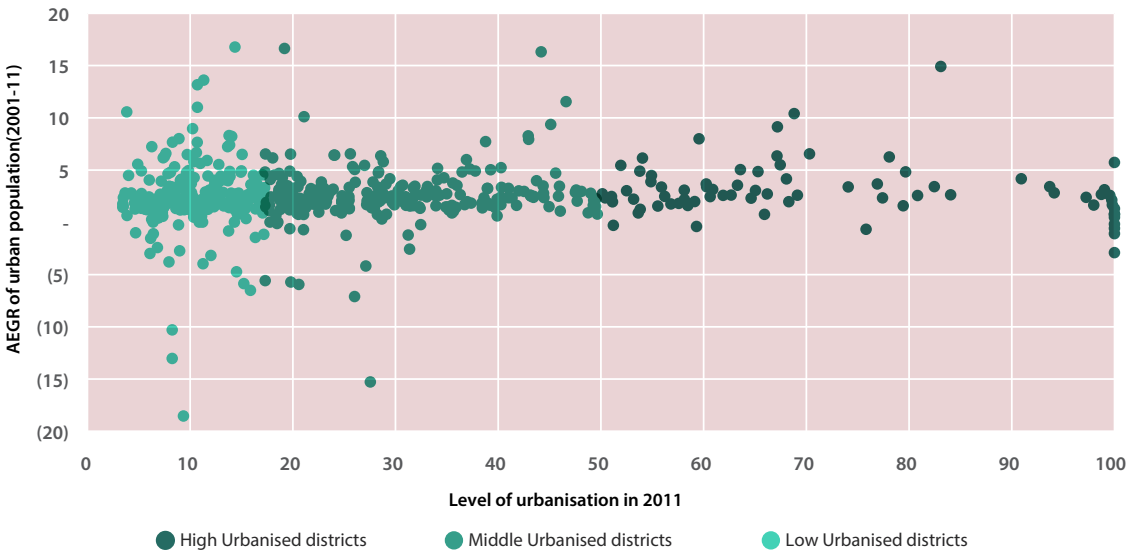
Source: *Census of India, Migration Tables. 2011.*
Figures in brackets represent the percent share of the factor in the process of urbanisation.

Three: Unequal spatial spread of urbanisation. In 2011, 81 out of 640 districts had over 50 percent of their populations living in urban areas, while the level of urbanisation in 268 districts – 41 percent of the total districts and accounting for about 11 percent of country's urban population – has not reached even the 1951 All-India level of urbanisation of 17.3 percent. Only 181 out of 640 districts have urbanisation levels in excess of the country- wide average of 31.1 percent in 2011. Even allowing for factors that may not allow concentration of large populations, such scales of spatial differences are a matter of concern and deserve attention. Subsequent analysis (chapter 4) will show that not only are these districts under-urbanised, these are under-serviced as well in terms of access to water supply, electricity and toilets and present a formidable challenge to the process of urbanisation and economic growth.

Table 14. Level of urbanisation in Districts, (2011)

Level of urbanisation	Number	Districts (% of total)
>31.1 (2011 levels)	181	28.3
25.7 to 31.1	46	7.2
19.9- 25.7	90	14.1
17.3-19.9	55	8.6
<17.3 (1951 level)	268	41.8
Total	640	100

Figure 15. AEGR 2001-11 and urbanisation at district level, 2011



THE DEMOGRAPHICS OF AGE

An important aspect of demography is the age-sex distribution of population, characteristically displayed in population pyramids. Such pyramids are basic constituents in planning and developmental exercises. Two features of age-sex pyramids that are currently in the forefront relate to "ageing" in the developed countries and "demographic dividend" in the developing countries. A limited reference is made in this report to the spatial aspects of both these features in urban India. Most discussions in India are riveted on the overall demographic dividend, with the narrative that the country's higher demographic dividend places India in a comparatively advantageously position relative to several large countries such as China. An examination of the age-sex structure of India's urban population shows two important features-

i. The average age for urban India is 28.15 years, that suggests that roughly half the population is below the age of 28.15 years, and the other half is above this age.

$$\frac{\Sigma \text{ (number of persons in the age-graph) x (mid-point of age graph)}}{\Sigma \text{ (total population)}}$$

States that have a higher average age include, inter-alia, Kerala, Tamil Nadu, Andhra Pradesh, Maharashtra, Karnataka, West Bengal, Gujarat, Chandigarh and Delhi. States that have a lower average compared to that for the country, are Bihar, Uttar Pradesh, Jharkhand, Rajasthan, Madhya Pradesh, and Chhattisgarh.

ii. The demographic dividend, that is, the population in the age-group of 15-24 years is higher in states that have firstly, lower levels of urbanisation and, secondly, lower per capita incomes. Key states among them are Uttar Pradesh, Rajasthan and Madhya Pradesh; the demographic dividend is lower in such states as Kerala, Goa, and Tamil Nadu which have comparatively higher levels of urbanisation and higher per capita incomes.

An extension of the analysis to other age-groups shows additional insights, hitherto unacknowledged, in spheres such as "ageing" in urban India. Analysis of the age distribution, that is, those falling in the age group of 60 years and above, shows 8.1 percent of country's urban population to be above 60 years; Kerala, Tamil Nadu, West Bengal and Punjab have percentages of urban population above the country's average. The

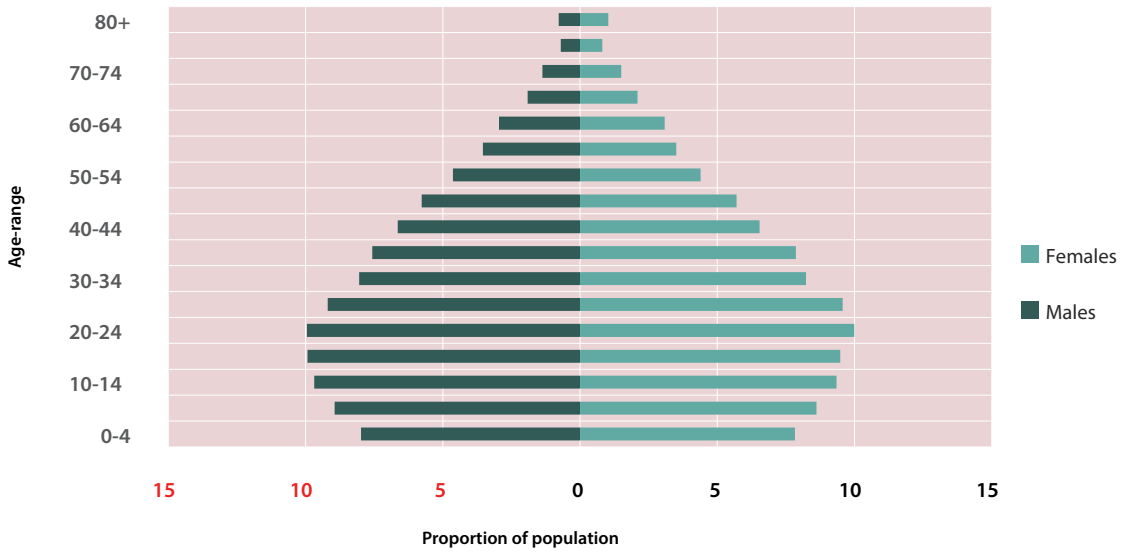
HIGHER DEMOGRAPHIC DIVIDEND (15-24 YEARS) IN LOW URBAN-LOW INCOME STATES AND AGEING (60 YEARS AND ABOVE) IN COMPARATIVELY HIGH URBAN- HIGHER INCOME STATES ARE THE DEFINING CHARACTERISTICS OF INDIA'S URBAN DEMOGRAPHICS.

Table 15. Demographic dividend and ageing in selected states (URBAN) 2011

States	Percent of population in the age group		Level of urbanisation (%)	Percent of non-primary sector GDP
	15-24 years	60 years +		
Urban India	19.2	8.1	31.1	
Higher than the country's average				
Uttar Pradesh	20.3	6.7	22.3	70.9
Rajasthan	20.0	7.0	24.9	66.0
Madhya Pradesh	19.5	7.6	27.6	64.3
Lower than the country's average				
Kerala	15.8	12.5	47.7	85.8
Goa	16.8	10.8	62.2	78.7
Tamil Nadu	17.5	10.0	48.4	86.1

Source: *Computed from C-13 tables and Primary Census Abstract tables of Census of India. 2011. GDP data computed from Handbook of Statistics on Indian Economy, Reserve Bank of India*

Figure *16.* Age-sex structure, India, 2011



pattern in case of ageing differs, in that ageing is observed in states that have higher levels of urbanisation and higher proportions of non-primary sector GDP, and lower in states that have lower levels of urbanisation and lower per capita GDP.

In a 2019 report on population projections for India and states 2011-2036, the Technical Group projects India's urban population at 469.9 million for

Figure 17. Age-sex structure, Bihar, 2011

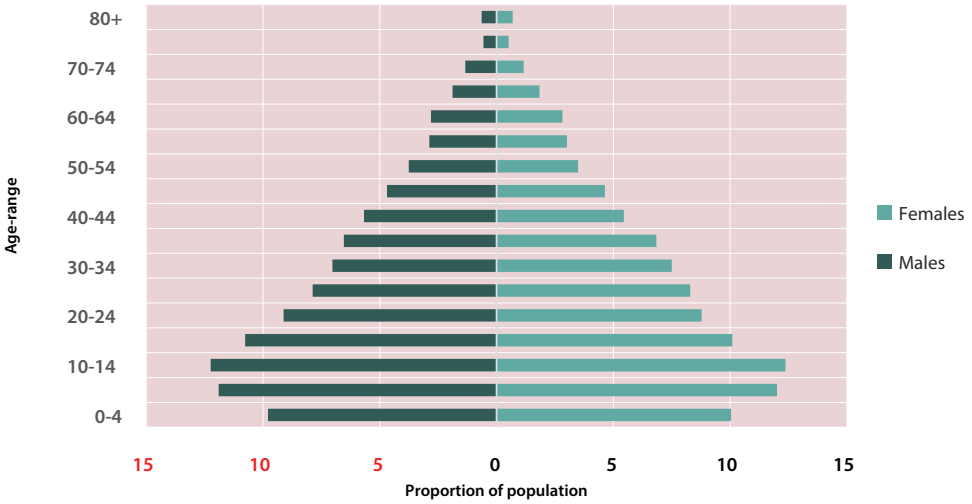
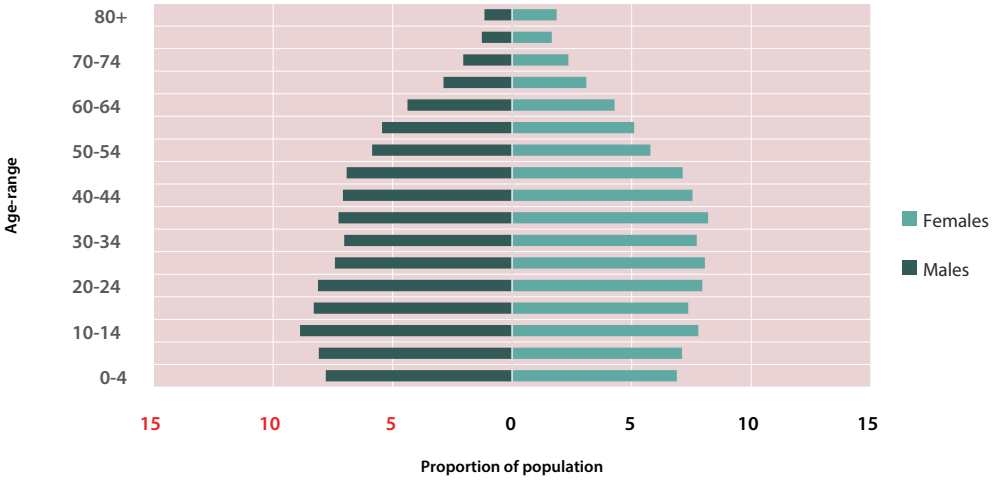


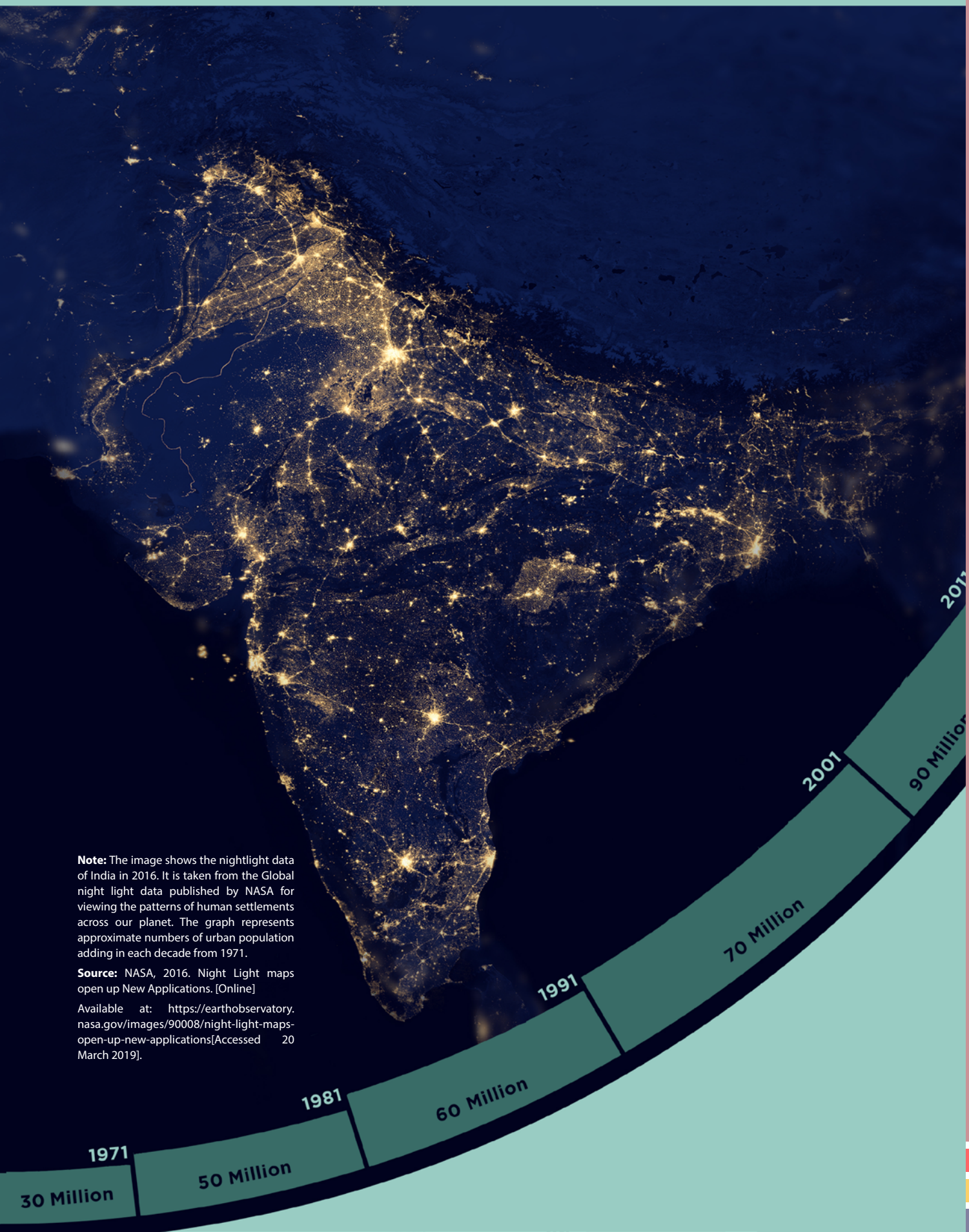
Figure 18. Age-sex structure, Kerala, 2011



Source: *Census of India, 2011*

the year 2021- the year when the decennial census is expected to take place, and 592.3 million for the year 2035. Between 2011 and 2021, India - according to the Technical Group - will add 92.8 million persons to its 2011 urban population base, only a shade higher than 90.9 million that were added during the 2001-2011 period. It would mark a substantial slowdown in the rate of urban population growth in the country, and will have important ramifications for economic growth, labour supply and other developmental parameters.[50]

[50] The Technical Group submitted the report in November, 2019, and therefore, excludes the possible impact of outmigration from cities that India witnessed following the breakout of Covid-19.



Note: The image shows the nightlight data of India in 2016. It is taken from the Global night light data published by NASA for viewing the patterns of human settlements across our planet. The graph represents approximate numbers of urban population adding in each decade from 1971.

Source: NASA, 2016. Night Light maps open up New Applications. [Online]

Available at: https://earthobservatory.nasa.gov/images/90008/night-light-maps-open-up-new-applications[Accessed 20 March 2019].

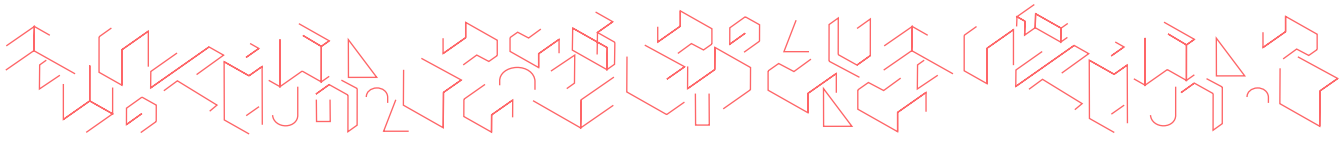
3

ECONOMIC FOUNDATIONS OF URBANISATION

Globally, urban centres are expanding due to their capacity to generate income, contribute to national wealth, attract investments and create jobs. Cities are places of mass production, consumption and service provision, with their scale, density and diversity of social, cultural and ethnic groups, setting them apart from rural contexts. This draws focus to the galvanizing power of urbanization and agglomeration which together establish the foundation of the transformative power of urbanization.

UN HABITAT
FOR A BETTER URBAN FUTURE

World Cities Report 2020



INTRODUCTION

The state of an economy is usually measured in terms of the value of goods and services, gross domestic product, the structure of employment, investment, and the pattern of consumption expenditures.

The state of an economy is usually measured in terms of the value of goods and services, gross domestic product, the structure of employment, investment, and the pattern of consumption expenditures. This framework applies as much to assessing the state of the economy of a country as to a part of a country, for instance, the 'urban' areas. While the Reserve Bank of India and the Government of India's Economic Survey undertake regular assessment of the state of India's economy, it has not been the practice to separately assess the performance of either the urban economy or the rural economy. Absence of such an assessment is a substantial handicap in our understanding of the urban-specific economic challenges that confront India. The closest to such an assessment is **via** a sectoral distribution of GDP where some sectors are assumed to have a pronounced urban or rural character. Reviews of urban literature commonly point to strong linkages between urbanisation and GDP, suggesting that urban areas account for a higher proportion of GDP and are more productive compared to the rural counterparts; expressed in term of R^2, such linkages are used to mobilise support for enhancing investment in urban areas in order to be able to tap urbanisation and agglomeration economies. Consumption expenditures, especially the non-food components, are routinely stated to be higher for the urban areas. On a somewhat lower pedestal, urbanisation is said to be closely associated with employment in such activities as manufacturing, financial services, real estate, and construction. Other aspects of an urban economy, for instance, investments are addressed, at best, marginally. In fact, investment data are rarely disaggregated between urban and rural areas, possibly on account of the indivisibilities that characterise investment portfolios. This SOCR attempts to look at three main parameters of the urban economy - GDP and net domestic product (NDP), consumption, and employment with a view to better understand the economic foundations of cities and towns in the country. It focuses on the size and structure of the urban economy, in terms of the GDP or NDP, employment, and the levels of consumption expenditure. The central focus of the analysis is on ascertaining how large is the urban economy, how rapid (or slow) has been its growth, and does its size and growth represent the importance that is assigned to and envisioned for the urban sector.

Reviews of urban literature routinely point to strong linkages between urbanisation and GDP, suggesting that urban areas account for a higher proportion of GDP and are more productive compared to the rural counterparts; expressed in term of R^2, such linkages are used to mobilise support for enhancing investment in urban areas in order to be able to tap urbanisation and agglomeration economies.

SIZE OF THE URBAN ECONOMY

The Central Statistical Organisation (CSO) publishes the rural-urban share of the NDP or net value added (NVA) periodically, coinciding with the base year revisions of the GDP. The National Sample Survey Organisation (NSSO) undertakes, once in five years, household consumption expenditure surveys for urban and rural areas. The Census of India provides data on the urban-rural workers and their distribution between main and marginal, together with the sectoral distribution on a decadal basis. A table based on the estimates provided by these organisations has been put together to get a basic understanding of the size of the urban economy and the changes that have taken place in it over time (Table 16). The following emerges from the various data sources.

Table 16. Size of the urban economy

Year	2004/05	2011/12
1. Net domestic product (NDP), current prices		
Urban share (INR)	Rs. 13,766 billion	Rs. 37,602 billion
Share in the total NDP (%)	52.0	52.3
Average per capita urban NDP (INR)	Rs. 44,223	Rs. 98,435
2. Consumption		
Urban consumption expenditure (INR)	Rs. 3,138 billion	Rs. 9,122 billion
Share of urban consumption in total consumption (%)	39.0	42.9
Average per capita urban expenditure (INR)	Rs. 12,628	Rs. 28,790
3. Work force (15 years and above)		
Urban workforce	90.7 million*	130.6 million
Share of the urban work force to total workers (%)	23.3	27.8
Share urban workforce to total urban population (%)	45.9	47.2

Sources: *National Accounts Statistics (NAS) Statement 8.19 on net value added for rural and urban areas.*[51]

**Census of India, 2001 and 2011.*[52]

National Sample Survey, 60th and 68th Rounds of Household Consumption Surveys.

One: Measured in terms of the NDP, the size of India's urban economy was estimated at INR 37,602 billion (INR 37,60,236 crore), 52.3 percent of the country's total domestic product, and a per capita of INR 98,435 in 2011-12. At an exchange rate of INR 47.9 for US$ 1.00, the urban share of the NDP for that year was about $ 0.78 trillion. The urban share of the NDP has shown an annual average growth of 13.1 percent over 1991-2011. Time series data on the NDP suggest a marginal improvement in the urban share between 1999-2000 and 2011-12, when it rose by 0.4 percentage point- insignificant amidst expectation of a substantial step-up in the urban component of the GDP. In the years following economic reforms, the increase from its share of 45.7 percent in 1993-94 to 51.9 in 1999-2000 was significantly higher, signaling the likelihood of the impact of reforms on the NDP.

Two: The annual household consumption expenditure (urban) is estimated at INR 9,122 billion for 2011/12, roughly 43 percent of the total consumption expenditures and 24 percent of urban NDP. The average per capita consumption is INR 28,790. Over the years, consumption has risen largely reflecting inflation, accompanying by a dip in the share of food expenditure vis-à-vis non-food expenditure. Inequalities across consumption have risen sharply during 1993/94 and 2011/12, and these are sharper for the non- food expenditure levels.

Measured in terms of net domestic product, the size of India's urban economy was estimated at Rs. 37,602 billion (Rs. 37,60,236 crore), 52.3 percent of the country's total net domestic product, and a per capita of Rs. 98,435 in 2011-12.

Annual household consumption expenditure (urban) is estimated at Rs. 9,122 billion, roughly 43 percent of the total consumption expenditures and 24 percent of the urban NDP.

[51] The NAS uses the population (urban) base of 382 million persons for estimating the net value added. The NSSO's data on consumption expenditure estimates the urban population to be 316.9 million persons, in 2011-12.

[52] The Census of India puts the number at 377.1 million, for estimating the work force.

Three: Urban employment is estimated at 130.6 million (2011), forming 47.2 percent of the urban population and 27.8 percent of the total. The Census of India reports an annual compound increase of 3.7 percent in the total urban workers between 2001 and 2011, urban main workers showing an increase of 3.4 percent and a higher growth of 6.7 percent for marginal workers.[53]

Over the three decades, the urban share of the net domestic product has risen from 41.1 percent in 1980-81 to 52.3 percent in 2011-12, significantly lower than 60 percent, ubiquitously perceived to be the urban share.

URBAN GROSS/NET DOMESTIC PRODUCT

Over the past three decades, the structure of GDP/NDP has undergone extraordinarily important changes which *prima facie*, have implications for the economic foundations of cities and towns, and to an extent for the economy as a whole (Tables 17-19). Tables show that the urban share of NDP has risen from about 41 percent in 1980/81 to 52.3 percent in 2011/12. While it establishes a higher share of NDP for the urban areas, it is significantly lower than 60-65 percent, ubiquitously perceived to be the urban share.[54] The annual growth rate of rural NDP has almost caught up with the growth rate of urban NDP. ***Secondly, the urban shares of NDP have declined across sectors over the time frame of 1993-94 to 2011-12, exceptions being electricity and trade, commerce and community services.***

Of particular significance is a decline in NDP accruing from manufacturing[55] in the urban areas and a consequent increase in the rural share. In 1993-94, the urban share of manufacturing NDP was 70.2 percent; in 2011, it declined to 48.8 percent giving space to the rural areas for manufacturing. Prima facie, such a decline in the urban share of manufacturing NDP at such a low level of India's urbanisation would seem to be premature, and would raise questions about the adequacy of economic infrastructure for manufacturing to expand and become competitive. Other sectors where the urban share of NDP registered a decline were construction, financing, insurance, and real estate; the rural shares of NDP from these sectors registered an increase from 43.3 to 46.9 percent in the case of construction, and in the financial services from 23.6 percent to 30 percent over the period 1999-2000 to 2011-14. Such a structural change in NDP is reflected in the rising shares of non-primary sector NDP compared with that of the urban share of NDP. A hiatus between the urban share of NDP and the non-primary sector NDP signals that rural areas have gained traction even in sectors that historically have been viewed as pronounced urban sectors.

Reasons for a decline in the urban share of historically pronounced urban sectors at this stage can at best be speculative, although it is a global trend.[56] Some analysts in India, however, attribute it to the system of maintaining NDP accounts which exclude the NDP accruing from census towns – now

[53] The Census of India divides the workers between main and marginal, the latter having employment of less than 180 days in one census year.

[54] See Government of India. Planning Commission 2010. Eleventh Five Year Plan, New Delhi.

[55] Gross Domestic Product, Net Domestic Product, Net Value Added are terms that are commonly used in the various government publications. This report uses these terms as stated in the various publications.

RURAL AREAS SEEM TO HAVE GAINED TRACTION IN NDP SHARES IN SECTORS SUCH AS MANUFACTURING, FINANCIAL SERVICES, CONSTRUCTION, AND REAL ESTATE, HISTORICALLY VIEWED AS PRONOUNCED URBAN SECTORS.

comprising 14.4 percent of urban population- from being counted as urban. Others have attempted to explain it in terms of exclusionary urbanisation and land policies practiced in cities and towns. Increasing rural industrialisation in the vicinity of metropolitan cities is cited as one of the reasons for a step-up in the rural share of manufacturing NDP and NDP from construction and financing services. As subsequent analysis will show, a somewhat similar trend is observed in the workforce, which has important implications for agglomeration and urbanisation economies that cities are associated with and the extent to which these are getting impacted by public policy responses to census towns.

EXPLORING URBANISATION – GDP IINKAGES

Cities matter for economic growth. A Mario Polese writes, 'Few things are certain in economics. However, the positive relationship between national

"The share of manufacturing in urban GDP is either stable or declining in most cities. In the vast majority of cities in developing economies- China being an exception -manufacturing contributes minimally to the economy of cities, rarely more than 15 percent, with between 5-10 percent being closer to the norm. Manufacturing is on the retreat largely because of advances in production technologies…"

Shahid Yusuf
The Buzz in Cities

Figure 19. Rural- urban share in manufacturing NDP

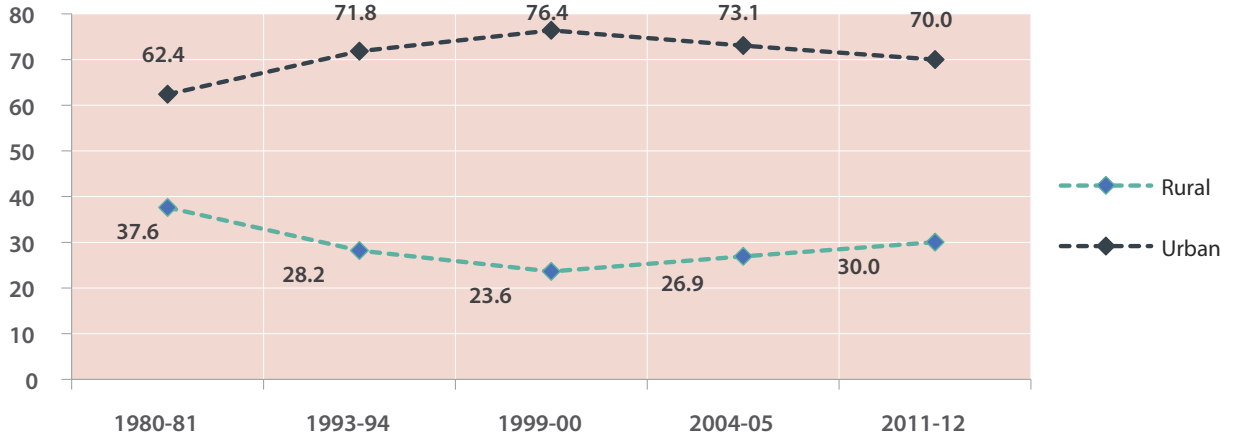
Source: *National Accounts Statistics*

[56] See Shahid Yusuf. 2015. The Buzz in Cities: New Economic Thinking. The Growth Triangle. Washington D. C.

Figure 20. Rural- urban share in construction NDP

Source: *National Accounts Statistics*

Figure 21. Rural -urban share in finance, insurance, real estate & business services/NDP



Source: *National Accounts Statistics, various issues*

Table 17. Urban share of Net domestic product (NDP)

Years	Urban share of GDP (%)	Per capita urban GDP (Rs.)	Estimated urban population (in million)	Ratio of rural-urban per capita GDP
1980-81	41.1	2,888	157	2.3
1993-94	45.7	13,525	236	2.3
1999-00	51.9	30,217	275	2.8
2004-05	52.0	44,223	311	2.7
2011-12	52.3	98,435	382	2.4

Source: *National Accounts Statistics*

Table 18. Non-Primary NDP in total NDP

Year	% Share of Non-Primary NDP
1970-71	57.9
1980-81	64.5
1993-94	67.1
1999-00	73.5
2004-05	81.0
2011-12	81.4

Source: *National Accounts Statistics and RBI*

Table 19. Structural shift in urban NDP

Sectors	Urban shares of NDP, sectorally	% Sectoral shares in total urban NDP		
	1993/94	2011/12	1993/94	2011/12
Agriculture	6.1	5.5	4.4	2.1
Mining	57.6	46.6	1.6	2.8
Manufacturing	58.4	48.8	22.8	14.9
Electricity	54.6	66.8	1.7	2.2
Construction	56.7	53.1	6.7	10.4
Trade	72.9	72.2	21.1	16.1
Transport	70.7	70.6	7.8	8.3
Financing	76.4	70.0	18.1	25.5
Community and personal services	70.8	74.4	15.9	17.6
Total urban NDP (Rs. crore)	31,92,010	3,76,02,236	100.0	100.0

Source: *National Accounts Statistics, Central Statistical Office*

economic growth and urbanization can be asserted with a high degree of certainty. Economic growth, especially in its early stages, necessarily produces urbanization. The passage from a majority rural society to a majority urban one is in sum an unavoidable outcome of economic growth.'[57]

Globally, linkages between urbanisation and per capita GDP are positive, with R^2 for 153 countries being 0.66 for the year 2001 and 0.59 for 2011. ***A one percentage point increase in the level of urbanisation, as the graph shows, is associated with 3.9 percent increase in per capita GDP, globally (2011).*** In China, R^2 is estimated at 0.77 for the year 2018. While such positive values are observed the world over, questions have been raised about the exact nature of such relations. Duranton, for instance, notes: 'the strong positive association between the share of population of a country living in cities and income per capita of countries has been known for a long time. Figure 1.1 provides an illustration using recent data for 189 countries (figure not included in this report). Each extra percentage point of urbanization is associated with about 5 points of GDP per capita. Despite both GDP and urbanization being poorly measured, the relationship is extremely tight. The R-squared of the regression is close to 60 percent. Despite its strength, what the relationship described by Figure 1.1 means, is deeply unclear. What is cause? What is consequence? ***Arguably, urbanization and growth interact but in what proportions? How much of that extra 5 percent of GDP per capita is consequence of this extra percentage point in the rate of urbanization? 0.1 percent? 1 percent? 2.5 percent? 5 percent?[58].*** In support, Polese states '…. The problem, as so often in the social sciences, is ***causation***. Do cities ***independently*** produce growth or,

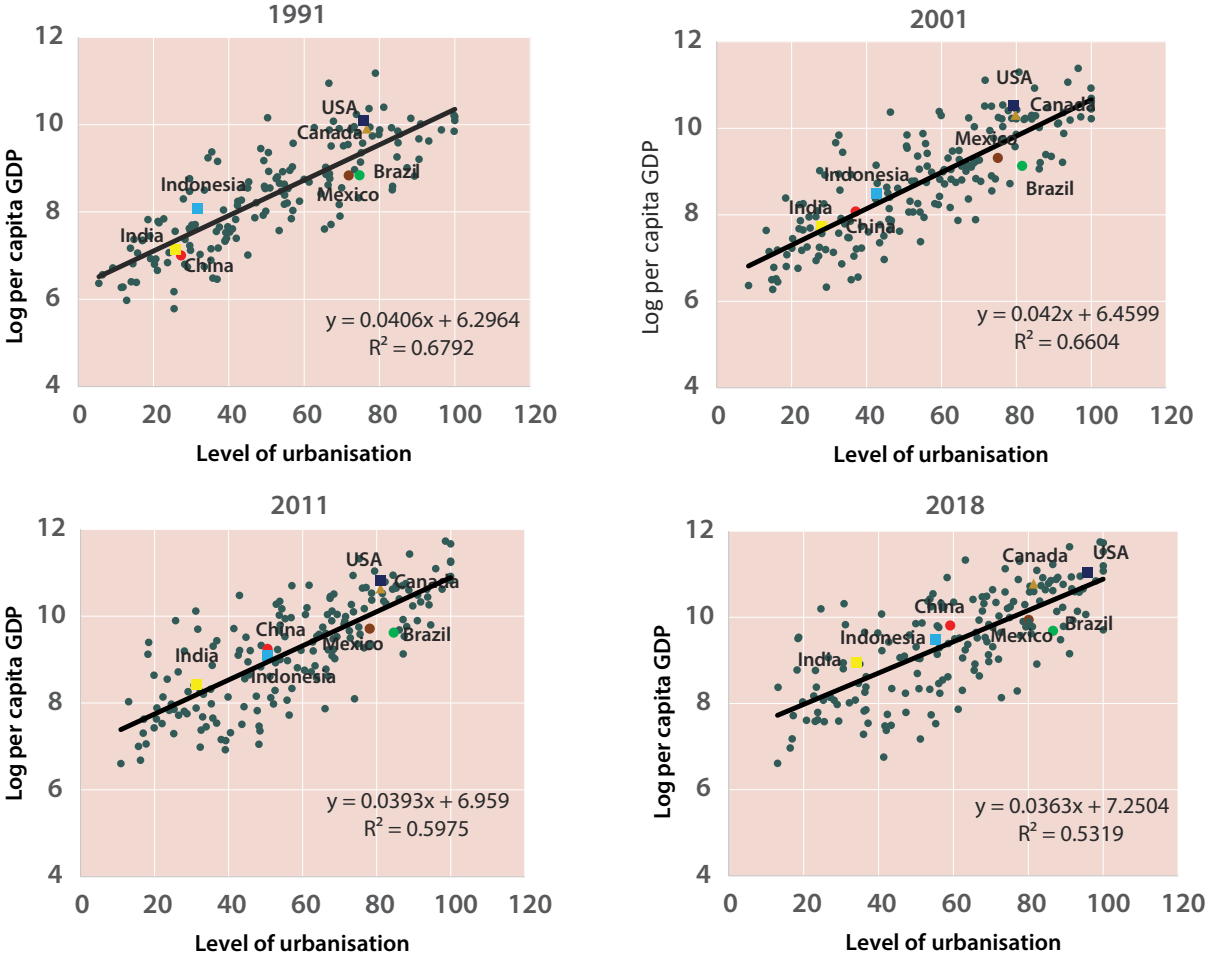
Cities matter for economic growth. As Mario Polese writes, "Few things are certain in economics. However, the positive relationship between national economic growth and urbanization can be asserted with a high degree of certainty. Economic growth, especially in its early stages, necessarily produces urbanization.

[57] Mario Polese. 2009. The Wealth and Poverty of Regions: Why Cities Matter. The University of Chicago Press. Chicago and London.

rather, are they part of a more complex process in which spatial concentration/ urbanization is but one component – although perhaps, an essential one - of social and economic change? The essential distinction is between a ***sufficient*** and a ***necessary*** condition. The evidence in favour of the former is not compelling.'[59]

It is in this context that this section examines the relationship between the level of urbanisation and per capita GDP for Indian states for years beginning with 1981. The R^2 between per capita GDP and the level of urbanisation for

Figure *22.* Regression between urbanisation and per capita GDP-153 countries, developed and less developed

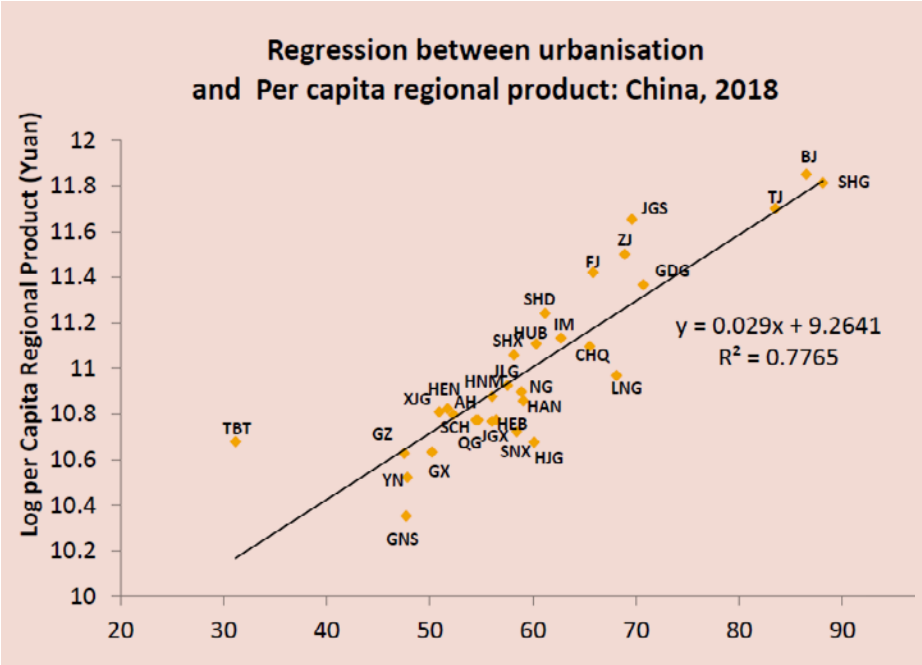


Regression Statistics	1991	2001	2011	2018
Multiple R	0.82	0.81	0.77	0.73
R square	**0.68**	**0.66**	**0.60**	**0.53**
Adjusted R square	0.68	0.66	0.60	0.53
Standard Error	0.67	0.72	0.76	0.80
Observations	163	183	183	179

[58] Gilles Duranton. 2014. 'The Urbanization and Development Puzzle', in pp3 Shahid Yusuf (ed.). The Buzz in Cities. New Economic Thinking. The Growth Triangle. Washington, D.C.

[59] Mario Polese.2014." Why do Cities in Poor Countries Not Create More Wealth? Three Simple Statements and a Window of Opportunity". In Shahid Yusuf. The Buzz in Cities: New Economic Thinking. The Growth Triangle. Washington D.C.

Figure 23. Regression between urbanisation and per capita regional product: China, 2018



Source: *(1) United Nations.2018. World Urbanization Prospects. The 2018 Revision New York*
(2) World Bank. World Development Indicators Data Base-Washington D.C. various years.
(3) Per capita GDP is in PPP US$ (USA)

these years are positive, and suggest that, firstly, 50-60 percent of variance in per capita income across Indian states is explained largely by a single factor, that is, urbanisation, and secondly, a one percentage point increase in the level of urbanisation is associated with 1.7 percent increase in per capita NDP/GDP (2011). It is significantly lower than the global average. The regression values do not indicate a kind of buoyancy that is expected in a growing economy, with a low income base. Regression values have, in fact, declined from 0.49 to 0.47 between 1981 and 1991, risen to 0.60 in 2001 displaying the short-run effects of economic liberalisation, and then plummeting again to 0.51 in 2011. A part of the economic growth in India has taken place independent of urbanisation and urban forces.[60] Additional research is necessary to adequately understand the relationship between urbanisation and income.

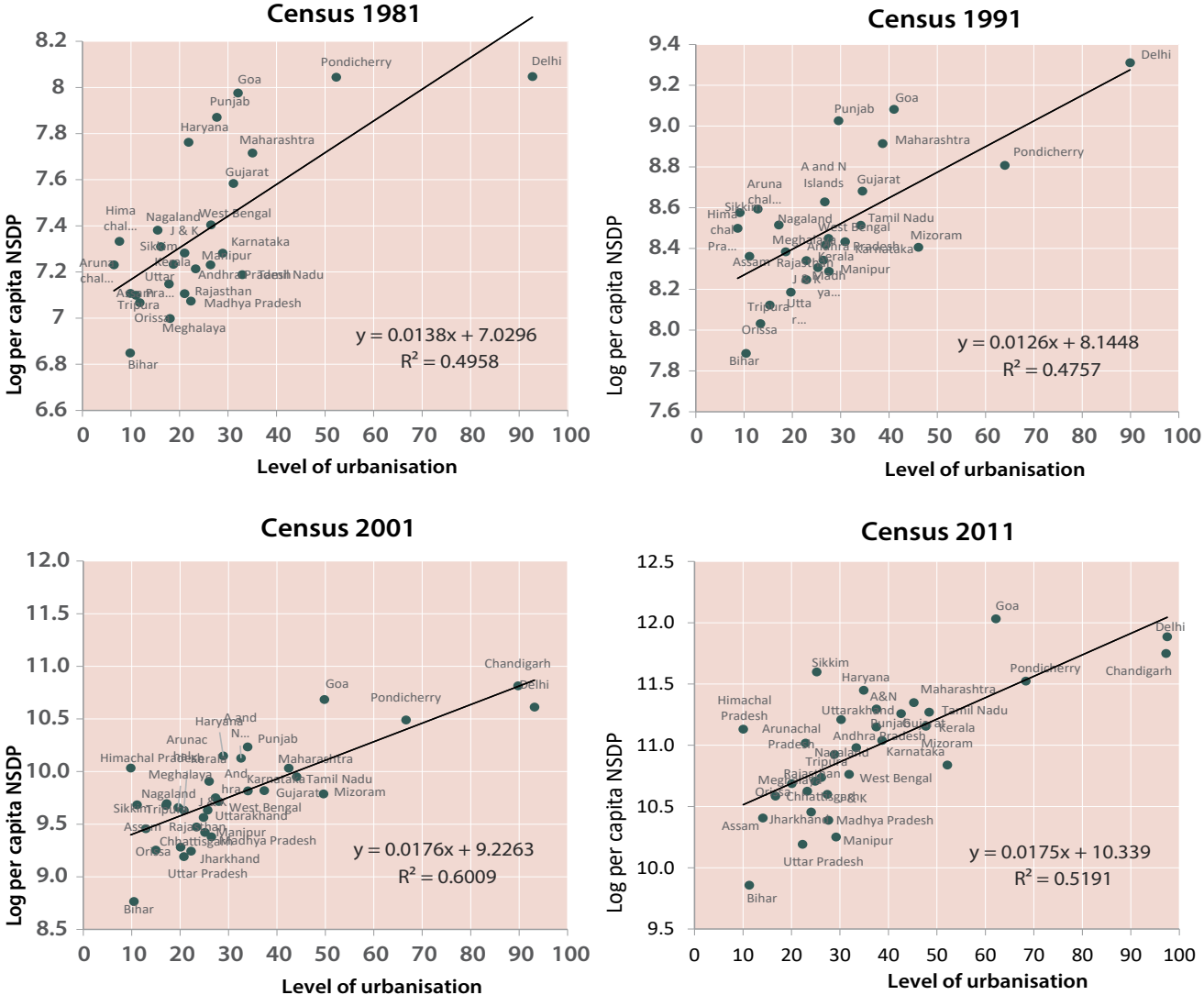
The R^2 between per capita GDP and level of urbanisation for these years are positive, but the values do not demonstrate a kind of buoyancy expected in a growing economy, with a low income base.

As a supplement to the regression, linkages between urbanisation and per capita income have been examined by dividing the Indian states into two

[60] That cities are important to economic growth is accepted worldwide. However, scholars have begun to question the intensity of the linkages- "do cities independently produce growth or are they a part of the more complex processes in which spatial concentration or urbanization is just one component".

A ONE PERCENTAGE POINT INCREASE IN THE LEVEL OF URBANISATION IN INDIA IS ASSOCIATED WITH 1.7 PERCENT INCREASE IN PER CAPITA NDP/ GDP. THIS IS SIGNIFICANTLY LOWER THAN THE GLOBAL AVERAGE.

Figure 24. Level of urbanisation and log per capita NSDP



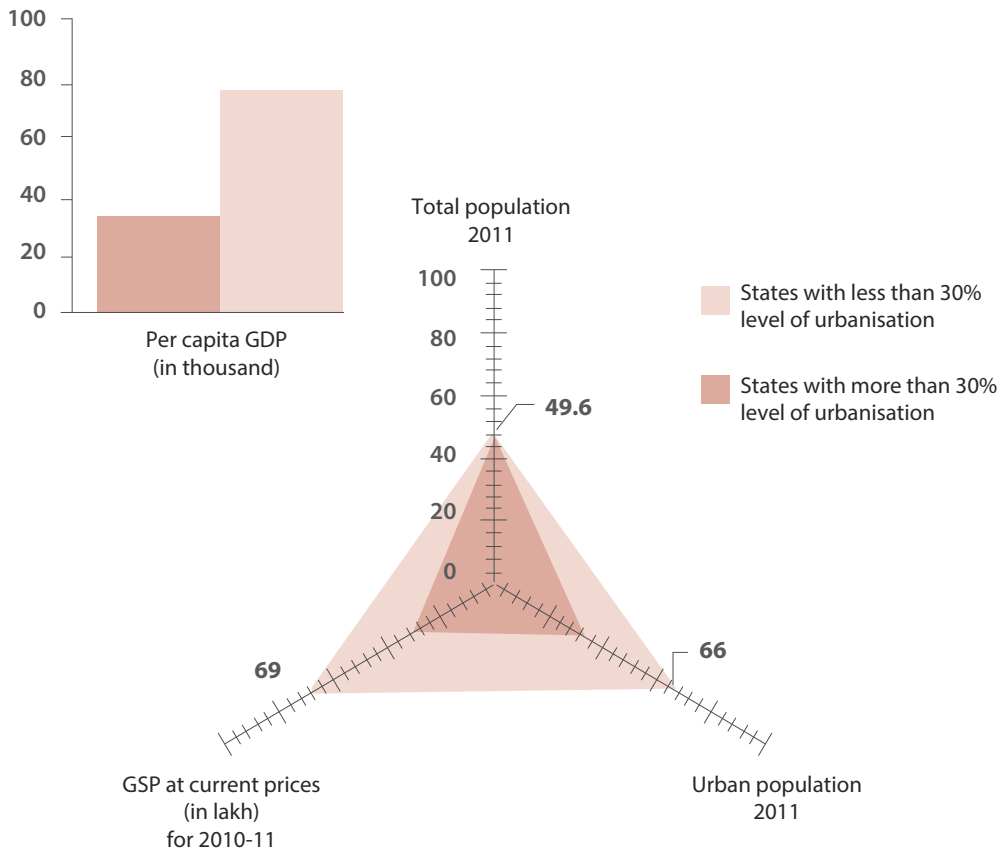
Regression Statistics	1981	1991	2001	2011
Multiple R	0.704	0.690	0.775	0.721
R Square	**0.496**	**0.476**	**0.601**	**0.519**
Adjusted R Square	0.475	0.455	0.588	0.503
Standard Error	12.501	13.034	12.971	14.792
Observations	**26**	**27**	**32**	**32**

Source: *Census of India and Central Statistical Office*

parts: i.e. states that have less than 30 percent of population as urban, and states that have more than 30 percent population as urban and compared for their shares in population, urban population, and GDP. The figure and the table provide the details, and show that -

1. The states whose urbanisation levels are less than 30 percent account for 50 percent of the total population, 33.6 percent of urban population, 31 percent of GDP, and an average GDP of INR 35,286 per capita, and
2. The states whose urbanisation levels are more than 30 percent account for 50 percent of total population, 66.5 percent of the urban population, and 68.9 percent of the GDP. The average per capita income of such states is roughly twice that of states in the first category, attesting to the close linkage between urbanisation and GDP.

Figure 25. Percent share of total population, urban population, and per capita GDP



Source: *Census of India, 2011*
Handbook of Statistics on Indian Economy 2019-20

Table 20. Percent share of total population, urban population, and per capita GDP

	States with <30% level of urbanization in 2011	States with >30% level of urbanization in 2011
Percentage of total population 2011	50.4	49.6
Percentage of urban population 2011	34.0	66.0
Percentage of GDP contributed by states in 2010-11	31.0	69.0
Per capita GDP (RS.)	35, 286	79,393

Source: *Census of India. 2011 Central Statistical Office*

Urban household consumption expenditure estimated at Rs. 9,122 billion (2011-12), accounts for 42.9 percent of total consumption expenditures and approximately one fourth of the urban net domestic product.

URBAN CONSUMPTION EXPENDITURES

Urban household consumption expenditure, estimated at INR 9,122 billion (2011-12), accounts for 42.9 percent of the total consumption expenditure and approximately one fourth of the urban NDP. These estimates are derived by applying urban population to average per capita expenditure as contained in the NSSO report on consumption expenditure. Over the years, the share of urban consumption expenditure in the total consumption expenditure has risen from about 35 percent in 1993-94 to 43 percent in 2011-12. The following facts emerge from the tables:

Table 21. Rural-urban per capita consumption expenditure

Year	Rural urban	Per capita expenditure (Rs.)		Estimated population according to NSSO report (million)	Consumption expenditure (Rs.) billion	
		Per month	Annual		Total	% Share
1983-84	Rural consumption	112.5	1,350.0			
	Urban consumption	164.0	1,968.0			
	Total	-	-			
1993-94	Rural consumption	281.4	3,376.8	584.9	1,975.1	65.1
	Urban consumption	458.0	5,496.0	192.7	1,059.3	34.9
	Total	-	-	777.6	3,034.3	100.0
2004-05	Rural consumption	558.8	6,705.4	733.1	4,915.7	61.0
	Urban consumption	1,052.4	12,628.3	248.5	3,138.2	39.0
	Total	-	-	981.6	8,053.9	100.0
2011-12	Rural consumption	1,278.9	15,347.3	792.1	12,156.8	57.1
	Urban consumption	2,399.2	28,790.9	316.9	9,122.5	42.9
	Total	-	-	1109.0	21,279.3	100.0

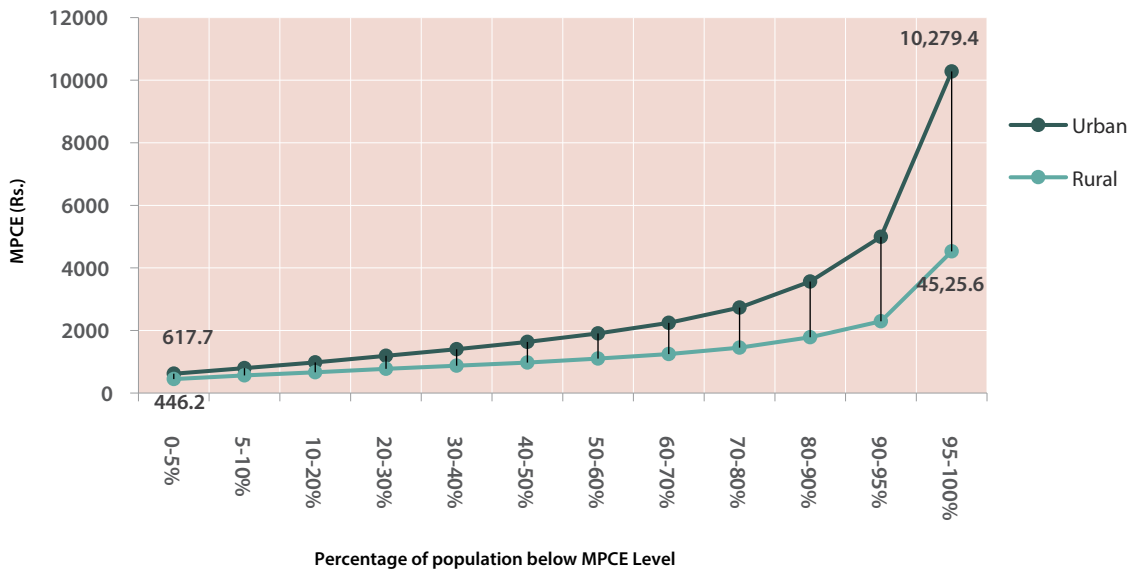
Source: *National Sample Survey Organisation, relevant year issues.*

Table 22. Monthly per capita consumption expenditure (MPCE), (Rs.), URBAN for selected states, 2011-12

States	Monthly per capita consumption expenditure (Rs) URBAN
Major states with per capita expenditure lower than the country's average	
Bihar	1,408.6
Chhattisgarh	1,613.0
Jharkhand	1,957.8
Madhya Pradesh	1,967.3
Odisha	1,766.4
Uttar Pradesh	1,889.8
Major states with per capita expenditure higher than the country's average	
Haryana	3,253.3
Karnataka	2,942.1
Kerala	3,065.7
Maharashtra	2,710.8
Punjab	2,631.1
West Bengal	2,443.6
Average, MPCE (Urban)	**2,399.2**
Compound annual growth rate for all states and UTs (2004-2005 to 2011-12)	**12.49%**

Source: *National Sample Survey Organization, 68th round.*

Figure 26. Rural and urban distribution of population by MPCE 2011/12



Source: *National Sample Survey Organization, 68th round.*

1. Urban consumption expenditure is 42.9 percent of the total consumption expenditure in the country. As shown earlier, urban NDP cnstitutes 52.3 percent of the total.
2. Urban consumption expenditure has risen at an anuual average rate of 12.5 percent over the period 2004-05 to 2011-12; it is a shade lower compared to the growth rate (12.56 percent) observed for rural consumption expenditure. With this, the rural-urban gap in expenditure may be narrowing down; indeed, ***rural consumtpion expenditure in most major states has risen at a somewhat higher rate in comparison with growth rates in urban consumtpion expenditure.***
3. Inequalities as measured by a gini coefficient in the levels of consumption expenditures have risen to 31.6 between the 1973-1988 period taken as a block and 1994-2012, as the second block period, attesting in someways the Kuznet's thesis that inequalities tend to rise in the initial period of development, and begin to taper off as development advances. Urban inequalities have risen faster compared to rural inequalities.

RURAL AREAS SEEM TO BE UNDERGOING STRUCTURAL CHANGES IN INDIA AND ARE ASSUMING CHARACTERISTICS THAT ARE URBAN.

BOX 14. THE WORLD OF WORK

The world of work is more diverse in developing countries than in developed countries. This diversity refers not only to the number of hours worked and number of jobs available, usual yardsticks in developed countries, but also to characteristics of jobs. Two main aspects stand out. First, there is prevalence of self-employment, which often makes measures of unemployment and underemployment inadequate. Second, the coexistence of traditional and modern modes of production leads to large variations in the nature of work, from subsistence agriculture and menial work to technology-driven manufacturing and services.

Work across the developing world is characterised by a high prevalence of informality, whether defined on the basis of firm registration, social security coverage, or a written employment contract. Informal employment is not under the purview of labour regulations, either because of their limited scope or because they are deliberately avoided or evaded. Regardless of this specific definition used, informal employment is generally associated with lower productivity. However, this does not necessarily mean that firm registration, social security coverage, or a written contract would result in greater efficiency. Informality can be a symptom of lower productivity as much as it can be a cause of it.

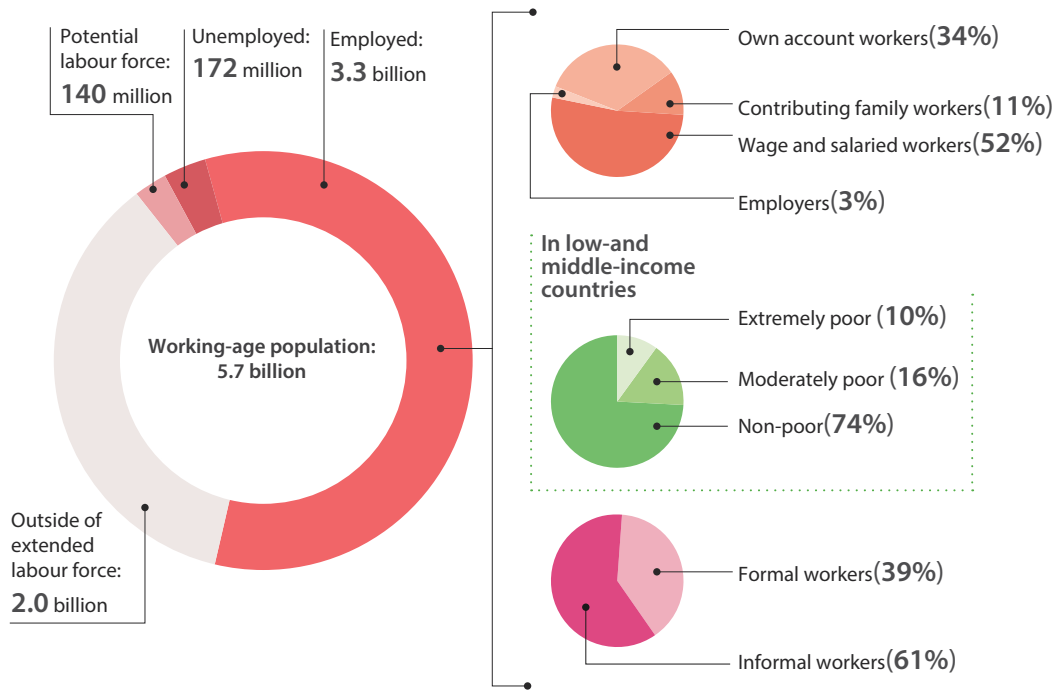
World Development Report.2013

The World Bank. Washington D.C.

TRACKING TRENDS IN EMPLOYMENT

Tracking employment trends is an important component of any exercise designed to assess the performance of an economy. The International Labour Organization (ILO), for instance, provides a snapshot of the global labour market that manifests itself in four parts: (i) working age population and its division into employed, unemployed, outside of the labour force, and potential labour force; (ii) structure of the workforce broken into employees, wage employees, own account workers, and family workers; (iii) formal and informal workforce; and (iv) workforce according to the levels of incomes, with the purpose of identifying 'working poor'. The ILO's schema is given below.

Snapshot of the global labour market, 2018



Source: *International Labour Organisation. 2019*

Estimation of the workforce, nature of work, and its sectoral composition are a complex undertaking in India, which is made complex on account of the multiple sources which collect employment data, via the household surveys (NSSO and the Labour Bureau) and the enterprise surveys (ASI) and the NSSO survey of the unincorporated non-agricultural enterprises. The Population Census has the widest coverage and is the only source that gives the distribution of workforce by various sector categories at the national, state, and the district levels. The quinquennial surveys of employment conducted by the NSSO are by far the most comprehensive survey that includes information on the general dimensions of employment and unemployment. These surveys provide activity participation characteristics of persons by occupational category. In

Tracking employment trends is an important component of any exercise designed to assess the performance of an economy. Its importance has grown in recent years and currently enjoys the same level of primacy as the Gross Domestic Product (GDP).

recognition of the increasing importance of employment, the Labour Bureau has also started to conduct surveys giving the distribution of employed and unemployed persons, using the National Classification of Occupations. The Annual Survey of Industries (ASI) is the only regular establishment survey that collects data on the composition of the organised manufacturing sector in industries that employ 100 of more workers. Using these different sources, this section brings together the results, and presents the trends, without attempting to either explain the differences or to reconcile the results. The figures, as stated, represent different years and different methodologies and caution is necessary in their usage for drawing general conclusions.

The tables provide a broad spectrum of the size and structure of India workforce.

BOX 15. DEFINITIONS USED IN CENSUS OF INDIA, NSSO AND LABOUR BUREAU

Work and workers defined by Census of India: "Work is defined as participation in any economically productive activity with or without compensation, wages or profit. Such participation may be physical and/or mental in nature. Work involves not only actual work but also includes effective supervision and direction of work. It even includes part time help or unpaid work on farm, family enterprise or in any other economic activity. **All persons engaged in 'work' as defined above are workers.** The main point to note is that the activity should be economically productive. Reference period for determining a person as worker and non-worker is one year preceding the date of enumeration."

Workers or employed defined by Labour Bureau and NSSO: "Persons who are engaged in any economic activity during the reference period or who, despite their attachment to their economic activity, have temporarily abstained from work, for reasons of illness, injury or other physical disability, bad weather, festivals, social or religious functions or other contingencies necessitating temporary absence from work constitute workers. Unpaid helpers who assist in the operation of an economic activity in the household, farm or non-farm activities are also considered as workers."

Worker Population Ratio (WPR): Worker Population Ratio (WPR) is defined as the number of persons employed per 1000 persons.

$$WPR = \frac{(\text{Number of employed persons})}{(\text{Total population})} \times 1000$$

Note: The report uses employment rate as a synonym to WPR.

Several important features of the workforce deserve to be highlighted. Firstly: according to the Census of India (2011), the urban workforce (all ages)- estimated at about 130-133 million, constitute 35.3 percent of the total urban population. The share of urban workforce, it should be stated, has risen over the decades from 30.2 percent in 1991 to 32.3 percent in 2001 and 35.3 percent in 2011. Secondly, of the total working age population (+15 years), about 47 percent or 130 million persons constitute the urban workforce. The estimates provided by the NSSO and the Labour Bureau are broadly consistent with the census figures.

Two features of the workforce, especially the urban workforce, that are often the subject of discussion relate to the nature of employment, i.e., (i) formal-informal division of the workforce, and (ii) the gender dimension of the urban

Table 23. Trends in urban employment

Urban work force			
Census of India			
Year	1991	2001	2011
Urban workforce: 15 years and above (% of total urban population: 15 years and above)	45.4	45.9	47.2
Male	73.2	72.1	72.5
Female	13.7	16.7	20.2
Labour Bureau			
Year	2012	2013	2016
Urban workforce: 15 years and above (% of employed persons to total urban population: 15 years and above)	45.8	44.2	41.8
Male	71.3	70.4	67.1
Female	17.0	15.7	14.8
National Sample Survey Organisation			
Year	2005	2010	2012
Urban workforce: 15 years and above (% of workforce to total urban population: 15 years and above)	50.6	47.2	47.6
Male	76.3	74	74.1
Female	22.7	18.3	19.5
Periodic Labour Force Survey			
Year	-	-	2018
Urban workforce: 15 years and above (% of workforce persons to total urban population: 15 years and above)	-	-	43.9
Male		-	69.3
Female	-	-	18.2

Source: Census of India; Labour Bureau's Annual Employment - Unemployment Survey & National Sample Survey, Employment and Unemployment Schedule, 61st, 66th and 68th rounds, Periodic Labour Survey 2017-18

Notes: i) For Labour bureau and NSS, Usual Principal and Subsidiary Status (UPSS) figure adopted.

ii) For details on the nature of employment statistics collected by different departments and organisations, see T.S. Papola.2014. 'An assessment of the labour statistics system in India'. International Labour Organization, Country Office for India. New Delhi.

workfroce. It is often pointed out that 60-70 percent of the workforce in the urban areas is informal; likewise, the composition of the urban workforce is said to be male dominated. The Census of India and other sources such as the NSSO and the Labour Bureau do not provide any data on the formal–informal nature of employment. The Census, however, makes a distinction between 'main' and 'marginal' employment. Gender dimension, on the other hand, is supported with data in most estimates. According to the Census of India (2011), the urban workforce (15 years and above) in the category of 'main' is 41.6 percent in the total urban employment (47.2); the balance of 5.6 percent are employed as marginal workers. What is to be noted is that

the employment rate for the **main** workforce (urban workfroce/urban working age population) has registered a dip over the decades, 1991–2001 and 2001–2011; the **marginal** workforce, on the other hand, has registered a sharp increase in its share from 1.0 percent in 1991 to 5.6 percent in 2011. Noting this phenomenon, Glaeser and Joshi-Ghani observe: 'In Indian cities, the informal sector is increasing in size relative to the formal sector. One interpretation of this increase is that density is even more valuable in the informal sector than in the formal sector'.[61] The gender dimension, as the census data show, is male dominated, accounting for 72 percent of the urban workforce. At the same time, the ratio of female workforce is seen to be increasing, from 14 percent to 20 percent over the decades 1991-2011.

Evidence on the growth card of urban workforce is disconcerting; while the

A LOWER GROWTH RATE FOR MAIN WORKERS AND A HIGHER GROWTH RATE FOR MARGINAL WORKERS ARE IMPORTANT FEATURES OF INDIA'S URBAN LABOUR MARKET, AS WITNESSED BETWEEN 2001 AND 2011.

Throughout the 1989 -2005 period, the organised sector moved from urban to rural locations, with the urban employment share declining from 69 percent in 1989 to 57 percent in 2005. On the other hand, urban employment share for the unorganised sector increased from 25 percent to 37 percent.

Ejaz Ghani, 2013.

Census of India registered an increase in the urban workforce, it was only about 0.3 percent on an annual basis. The NSSO also registered an increase, at an annual rate of 0.4 percent between 2010 and 2012. The Labour Bureau, on the other hand, registered an annual decline of 1.39 percent in employment between 2013 and 2016. Studies conducted by Ejaz Ghani and others have also pointed out to this development. In a World Bank paper, Ghani notes: 'Throughout the 1989-2005 period, the organised sector moved from urban to rural locations, with the urban employment share declining from 69 percent in 1989 to 57 percent in 2005. On the other hand, urban employment share for the unorganised sector increased from 25 percent to 37 percent. The urbanization process and trends are hetergeneous at the micro level.'[62]

The Annual Survey of Industries (ASI) collects data on the number of workers, production, value added, and wages, among others, for industries having an employment of 100 and more workers. This is the 'organised' factory sector in the country. The NSSO, on the other hand, collects data on the unorganised manufacturing sector. These sets of data, given in the following tables show (i) an increase in the number of urban workforce in the factory sector in recent years, (ii) a decline in the urban share of workforce relative to the rural share, and (iii) a similar decline in the urban share of workforce in unorganised

[61] Edward Glaeser and Abha Joshi-Ghani (Eds).2015. The Urban Imperative: Towards Competitive Cities. ppxxix Oxford. University Press. New Delhi.

[62] Ejaz Ghani et.al., 2013. The Exceptional Persistence of India's Unorganised sector. World Bank Policy Research Working Paper .No. 6454. Washington D C.

Table 24. Main-marginal, male-female urban workforce

Years	Urban workforce (million)		
	Main	Marginal	Total
1991			
Male	54.55	0.37	54.92
Female	8.01	1.01	9.02
2001			
Male	70.20	4.90	75.11
Female	12.45	3.17	15.61
2011			
Male	94.05	9.41	103.47
Female	21.14	6.00	27.14

Source : *Census of India, various years.*

Table 25. Urban workforce: compound average growth rate (CAGR)

Census of India		
Years	1991-2011	2001-2011
Urban workforce, (+15 years)	0.1	0.3
Male	-0.2	0.1
Female	2.0	1.9
Labour Bureau		
Years	2012-13	2013-16
Urban workforce, (+15 years)	-3.5	-1.39
Male	-1.3	-1.19
Female	-7.6	-1.47
National Sample Survey		
Years	2005-10	2010-12
Urban workforce, (+15 years)	-1.4	0.4
Male	-0.6	0.1
Female	-4.2	3.2

Source: *Census of India; Labour Bureau's Annual Employment - Unemployment Survey and National Sample Survey, Employment and Unemployment Schedule, 61st, 66th and 68th rounds*

manufacturing, from 66.6 percent in 1994-95 to 51.8 percent in 2015-16. Rural areas have increased their share in both the organised and unorganised workforce.

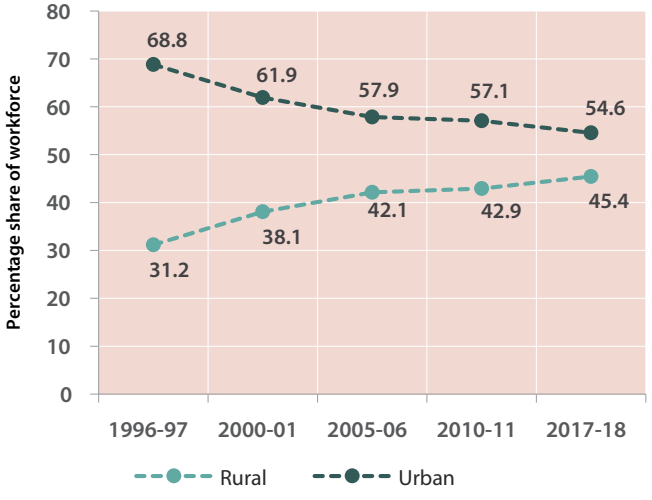
Are there interstate variations in the gender composition of employment?

Table 26. Organised Vs unorganised manufacturing sector

Annual Survey of Industries					
Year	1996-97	2000-01	2005-06	2010-11	2017-18
Urban workforce (in million)	5.0	3.8	4.1	5.7	6.7
CAGR %	-	-6.5	1.7	6.5	2.4
Unorganised manufacturing sector (NSSO)					
Year	1994-95	2000-01	2005-06	2010-11	2015-16
Urban workforce (in million)	11.1	13.1	13.0	16.4	17.4
CAGR %	-	2.8	-0.2	4.8	1.2

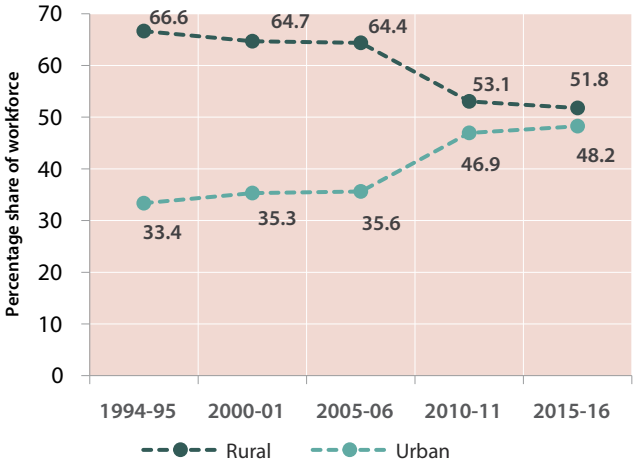
Source: *Annual Survey of Industries (ASI)*
NSSO, Unorganised Manufacturing Sector in India: 51, 56, 62, 68 and 75 rounds

Figure 27. Organised factory sector: urban - rural percentage of share of workforce



Source: *Annual Survey of Industries*

Figure 28. Unorganised manufacturing sector: urban-rural percentage share of workforce



Source: *NSSO, 51,56,62,68, and 75 rounds*

Interstate distribution of the gender composition of employment throws up interesting patterns : there are states where employment as a proportion of the total population is low for both males and females, with the other end being represented by a higher porportion of workers, both males and females. Among the major states, low incidence of male and female employment is a dominant characteristic in Haryana, Rajasthan, Uttar Pradesh, Bihar, Jharkhand, and Madhya Pradesh – that is, the low urbanised, low-income belt; in the latter category are Maharashtra, Andhra Pradesh, Karnataka, and Tamil Nadu. Most North-east states with the exception of Assam, have higher proportions of female employment. The following quadrant presents the results.

The Census of India provides a detailed break-up of occupations in 21 industrial categories, separately for urban and rural areas. For convenience, these have been grouped in 10 categories and shown in Figure 29, for all states for the census years 2001 and 2011. According to the table, public services

Table 27. State wise structure of urban employment

Low		Employment rate, females %	
		High	
Employment rate, males %	Low	Assam Daman & Diu Delhi Gujarat Punjab West Bengal	Andaman & Nicobar Islands Chandigarh Chhattisgarh Dadra & Nagar Haveli Goa Karnataka Maharashtra Sikkim Tripura Tamil Nadu
	High	Bihar Haryana Jammu & Kashmir Jharkhand Lakshadweep Nagaland Odisha Rajasthan Uttar Pradesh Uttarakhand	Andhra Pradesh Arunachal Pradesh Himachal Pradesh Kerala Madhya Pradesh Manipur Meghalaya Mizoram Puducherry
Average for All India Male % 72.5 Female % 20.2			

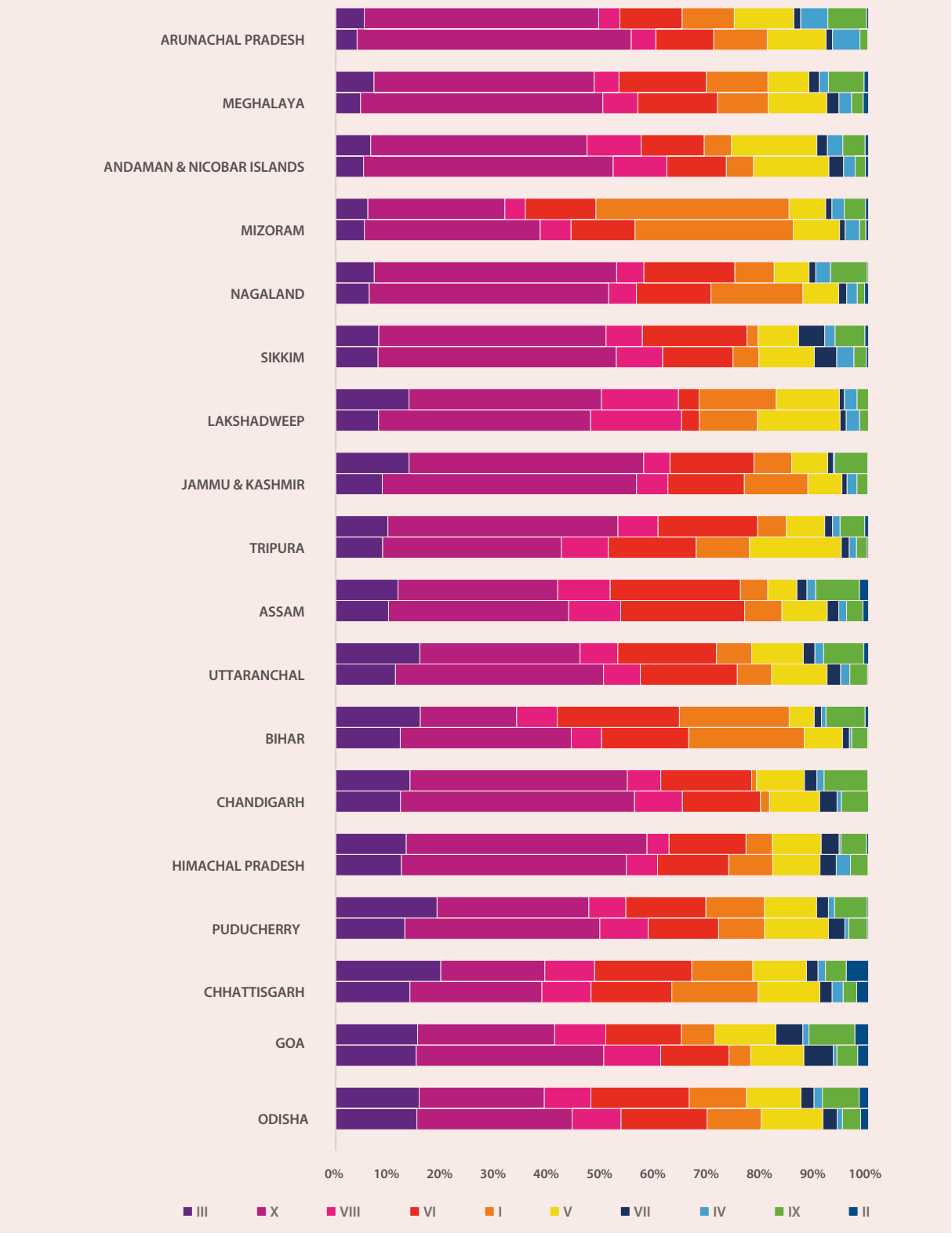
Source : *Census of India. 2011*

Table 28. Sectoral shares in Net Domestic Product (NDP) and Employment

	% of urban NDP to total NDP		% of urban workers to total employment	
	1999-00	2011-12	2001	2011
Core urban economic activities				
Manufacturing	14.5	14.9	23.7	20.1
Construction	6.8	10.4	8.1	9.9
Financing, Insurance, Real estate & Business services/proof services	19.6	25.5	7.7	3.3
Other major urban economic activities				
Agriculture, forestry and fishing + Mining and quarrying	5.7	4.9	10.5	10.6
Electricity, gas, water supply & other utility services + Transport, storage, communication & services related to broadcasting	10.6	10.5	9.3	9.8
Trade, repair, hotels and restaurants + Community ,social & personal services	42.8	33.7	40.6	46.4
Total	100	100	100	100

Source: Central Statistical organization, Census of India, 2011 & National Accounts Statistics

Figure 29. Proportion of total workers in industrial categories I to X



Source : *Census of India, 2011*

that include public administration and defence, health, education and the like accounts for 28 percent of the total urban workers, followed by manufacturing (20.1 percent), trade (16.01 percent), agriculture, forestry and fishing (10 percent), and construction (9.9 percent). The share of transportation and communication in total urban workers is 8.9 percent. Financial services and professional, scientific and technical activities account for a small percentage; moreover, between 2001 and 2011, employment in this sector, perceived to be a new generational set of activities, has declined between 2001 and 2011.

Alongside the economy-wide change in the structure of net domestic product, shown in the earlier part of this chapter, the structure of urban employment has also registered shifts, although at a macro level, such changes are not clearly noticed. Manufacturing and financial services and to an extent construction and real estate are generally identified as core urban activities. Between 2001 and 2011 the share of employment in manufacturing declined from 23.7 percent to 20.1 percent, and likewise, the share of financial services, real estate and business and professional services showed a noticeable decline during this decade. What is worth noting is a corresponding dip in the urban shares of both manufacturing NDP, declining from 58.4 percent in 1999-2000 to 48.8 percent in 2011-12, and NDP from financial and professional services from 76.4 percent to 70.0 percent over the same period.

Between 2001 and 2011 the share of employment in manufacturing declined from 23.7 percent to 20.1 percent, and likewise, the share of financial services, real estate and business and professional services show a noticeable decline during this decade.

4

INFRASTRUCTURE, ENVIRONMENT, AND URBAN CHANGE

The infrastructure story is about the role that infrastructure has played in underpinning poverty reduction, investment, and growth----it is about levels of expenditure, stocks of infrastructure assets, access to infrastructure services, and infrastructure competitiveness, and what this implies for the future.

The infrastructure story is about the demands of rapid urban growth on infrastructure, and the contribution of infrastructure to that growth and to meeting the needs of urban areas. The infrastructure story is about dealing with the impacts of infrastructure on a range of environmental concerns, air quality, emissions, the availability of clean water and sanitation, and the functioning of ecosystem that provide livelihoods and other benefits.

Connecting East Asia: A New Framework for Infrastructure

ADB – The World Bank – Japan Bank for International Cooperation. 2005

CHANGING MEANING OF INFRASTRUCTURE

Infrastructure is central to the functioning of cities. It is a prerequisite to generating growth, alleviating poverty, and improving the quality of life. Its role is to make cities more competitive and inclusive. It is a 'safety net of a social system', in the words of Benjamin Baker, a 'cornerstone of a stable and productive society'.[63] It has several characteristics that differentiates it from other sectors.

One, many of the infrastructural services are in the nature of 'natural monopolies' having important externalities, ruling out competition in the production of services. Two, several of them have low price elasticity of demand. Three, most infrastructural services need lumpy investments and consequently present challenges for conventional financing options and protocols. Four, many of the infrastructural services form a part of interconnected networks – an unreliable power grid can affect traffic signals, safety, water supply, and other activities, reducing their effectiveness when planned as discrete activities. In the early years, the importance of urban infrastructure was equated with public works; it is now referred to as a broad-based support system of hard and soft infrastructure with strong economic and social ramifications. And, its scope is evolving. The McKinsey Global Institute estimates that infrastructure typically has a rate of return of 20 percent, meaning that one dollar of investment could, in the long run, boost gross domestic product (GDP) by 20 cents. This is the estimated productivity impact of infrastructure investments.[64]

Developing countries, including India, are increasingly realising the importance of urban infrastructure, parallel with urbanisation. A 2019 report of the Ministry of Finance, *National Infrastructure Pipeline,* considers infrastructure a 'crucial enabler of growth' and central to raising India's competitiveness and achieving the planned target of $5 trillion economy by 2025. The Report draws attention to the fact that the envisaged economic growth in the country is being accompanied by a shift in the demographics – increase in urbanisation and working age population, which will require 'development of a host of infrastructure facilities' and an 'increase in coverage and quality of service delivery across the entire infrastructure spectrum.... Delivering the full spectrum of required infrastructure will ensure economic growth, ease of living as well as improved competitiveness across sectors'.[65] According to the Report, '25 percent of the urban households have drinking water on their premises; 70 percent of water is contaminated (India ranks 120th among 122 countries in the water quality index); 25 percent of municipal solid waste is treated; high proportion of population live in slums; 7 percent of daily trips is catered by public transport; high dependence on privately-owned vehicles with internal combustion engines; low penetration of electric

[63] Benjamin Baker. 1957. Urban Government. East-West Press Pvt. Ltd. New Delhi.

[64] McKinsey Global Institute. 2016. Bridging Global Infrastructure Gaps. McKinsey & Company.

[65] Department of Economic Affairs, Ministry of Finance, Government of India. 2019. Report of the Task Force on National Infrastructure Pipeline. New Delhi.

vehicles; and advanced public transport technologies, such as hyper loop and transit in conception stages'.[66]

Sporadic attempts have been made in India to estimate the infrastructure gaps and deficiencies and to monetise them in GDP terms in order to underline their importance. The McKinsey Global Institute, for instance, estimated that India will need to invest US $1.2 trillion in urban infrastructure to meet its needs over a 20-year period.[67] Another major study carried out by a High-Powered Expert Committee (HPEC) placed the investment requirements at INR 39 lakh crore (US $ 0.85 trillion) (at 2009 prices) for a period of 20 years.[68] The Report of the Task Force on National Infrastructure Pipeline envisages an investment of INR 16.3 lakh crore over the years 2020 to 2025.

In response to the increased emphasis on urban infrastructure, new instruments of financing such as the use of debt finance, land leasing and land value capture, monetisation of public assets, conversion of land rights into infrastructure assets, derivatives, and Ola/Uber type of financing are being tested and are under various stages of application and experimentation in the emerging and developing economies, including India. Multiple forms of institutional arrangements such as public–private partnerships, franchises, joint ventures, concessions, urban development funds, special purpose vehicles (SPVs), and philanthropies have emerged to support investment in urban infrastructure. The scope of infrastructure development has also broadened to include not just access, but also adequacy, quality, distribution across spaces and income groups, pricing, affordability, and impact on environment. The primary focus of this chapter is to draw attention to the extent to which urban households have access to basic infrastructural services, such as water, electricity, toilets, municipal roads, waste treatment facility, and the like. The underlying question is: has urbanisation, which is said to be closely related to income growth, helped to bridge the infrastructural deficits or exacerbated the deficits? Has public policy initiatives contributed to closing the infrastructure gaps? Another variant that is brought in is related to gender differentiation in the spheres of education and literacy. What is the extent of gender dimension in the access to basic education?

A STATUS CARD ON URBAN INFRASTRUCTURE

Development of urban infrastructure is an activity that is concomitant to the process of urbanisation. As a result, urban infrastructure has historically been an integral part of the central government's urban initiatives, earlier in initiatives such as the Environmental Improvement of Urban Slums (EIUS),

[66] Department of Economic Affairs, Ministry of Finance, Government of India. 2019.

[67] McKinsey Global Institute. 2010. India's urban awakening: Building inclusive cities, sustaining economic growth. McKinsey & Company.

[68] High-Powered Export Committee (HPEC). Government of India. 2011. Report on Indian Urban Infrastructure and Services. New Delhi.

Integrated Development of Small and Medium Towns (IDSMT), Jawaharlal Nehru National Urban Renewal Mission (JNNURM), Rajiv Awas Yojana and currently in Missions such as the Smart Cities, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), National Heritage City Development and Augmentation Yojana (HRIDAY), Swachh Bharat, and Housing for All. These Missions are also the mainstay of urban strategy in a number of states.

BOX 16. . CHANGING MEANING OF INFRASTRUCTURE

Few terms have received such a level of new and widespread meaning as the term 'infrastructure'. In the early 20th century, it was a term used to describe the permanent fixture of military installations. Economists extended the meaning of the term by including what W W Rostow called 'social overhead capital'. Towards the late 1970s, the term infrastructure replaced public works; today, the term has come to include 'almost every support system in modern society'. Infrastructure is said to include not just roads and sewers but also transport grids, communication system, housing, education, fibre-optics, etc. Unlike public works, the term infrastructure is at once a description of physical assets and as also of their economic, social, and political roles. Of these roles, the role most emphasised is economic. It includes some measures of its adequacy for future economic growth and development.

Source: David C Perry (ed.) 1995. Building the Public City. Sage Publications. Thousand Oaks, USA.

BOX 17. INFRASTRUCTURE COMPONENTS IN CENTRAL GOVERNMENT MISSIONS

Mission/Initiative	Infrastructure
Smart City	Water supply, sanitation, waste management, urban mobility and public transport, health and education, electricity, affordable housing, robust IT and digitisation
AMRUT	Water supply, sewerage facilities, septage management, storm water drains, green spaces, parks and recreation, parking spaces and pedestrians, and non-motorised public transport
HRIDAY	Sanitation, toilets, drinking water facilities, solid waste management, traffic management, street furniture, public transport, and parking
Housing for All (Urban)	Housing amenities and infrastructure
Swachh Bharat Mission	Toilets, community toilets, public toilets and urinals, solid waste management

Sources: *Mission Statements and Guidelines: Ministry of Urban Development; Ministry of Housing and Urban Affairs, Government of India, New Delhi.*

While these are no specific studies on the impact of these initiatives and missions on the stock and quality of infrastructural services or the extent to which these initiatives have contributed to improving access of urban households to services or the distribution of services among different income groups, the data as contained in the various issues of the Census of India, the National Sample Survey Organisation (NSSO), the Central Pollution Control Board (CPCB), and the Ministry of Road Transport and Highways, (covering the period up to 2011) show an impressive improvement in services such as water, sanitation, and electricity.

Infrastructure development is commonly discussed in terms of access, adequacy, distribution across spaces ad income groups, and pricing and affordability. This chapter focusses on the access and to a marginal extent on its distributional aspects.

According to the Census of India 2011, 54 percent of urban households have access to tap water within premises, electricity is available to 93 percent of households, and 81 percent of households have access to latrines. About 23 percent of solid waste generated is treated and disposed of. Per capita electricity consumption is 25.8 kWh (2011/12), having risen from 20 kWh in 2004/05. Literacy rates are 89.2 percent for males and 79.5 percent for females but the percentages sharply drop for literates above 12th grade schooling. Infant mortality rates vary between a low of 9 per 1000 live births in Kerala and 16 for Maharashtra and a high of 38 per 1000 in Uttar Pradesh and Odisha. Municipal road mileage is 377 km per 100 sq.km. of area, 3.7 km per 1000 population. Figure 30 shows the changes in performance over time.

Table 29. Status card of urban infrastructure: 2011

Households having access to:	
Tap water within premises (%)	54.1
Electricity (%)	92.7
Latrine facility (%)	81.4
Solid waste treated (cities and towns with over 50,000 population 2015) (%)	22.9
Sewage treated to the sewage treatment capacity (class 1 and 2 cities) 2015 (%)	31
Monthly per capita electricity consumption (NSSO 2011/12) (kWh)	25.8
Literacy	
Male (%)	89.2
Female (%)	79.5
Literacy beyond 12th grade	
Male (%)	19.5
Female (%)	13.6
Infant mortality rate 2013	9–38/1000
Municipal road mileage	377 km per 100 sq.km. of area
Households[69] with 3 or more persons living in one room (%)	27.2

Sources: *Census of India. 2011, CPCB*
Sample Registration System, Census of India
National Sample Survey Organisation and Ministry of Road Transport and Highways.

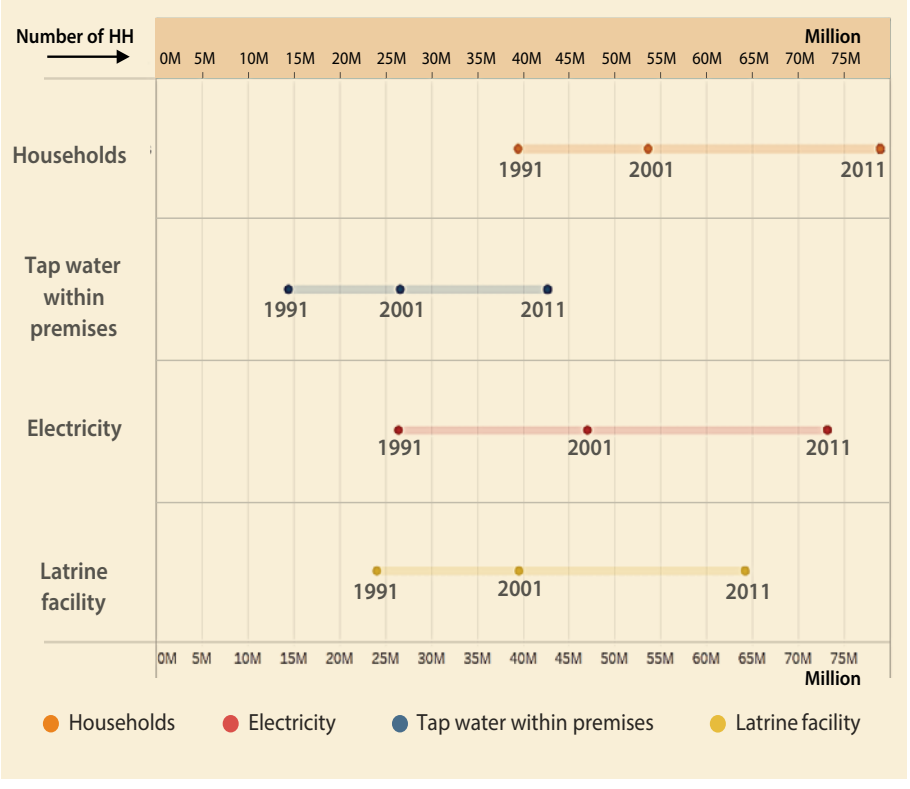
[69] This figure relates to cities, i.e., settlements with over 1,00,000 persons.

Table 30. Recent data on sanitation facilities

Best performing States		Worst performing States	
Kerala	98.7%	Maharashtra	59.8%
Gujarat	85.3%	Jharkhand	59.0%
Punjab	85.0%	Bihar	54.9%

Source: *National Family Health Survey, 2015-16*

Figure 30. Number of households availing infrastructure facilities: Change between 1991 and 2011

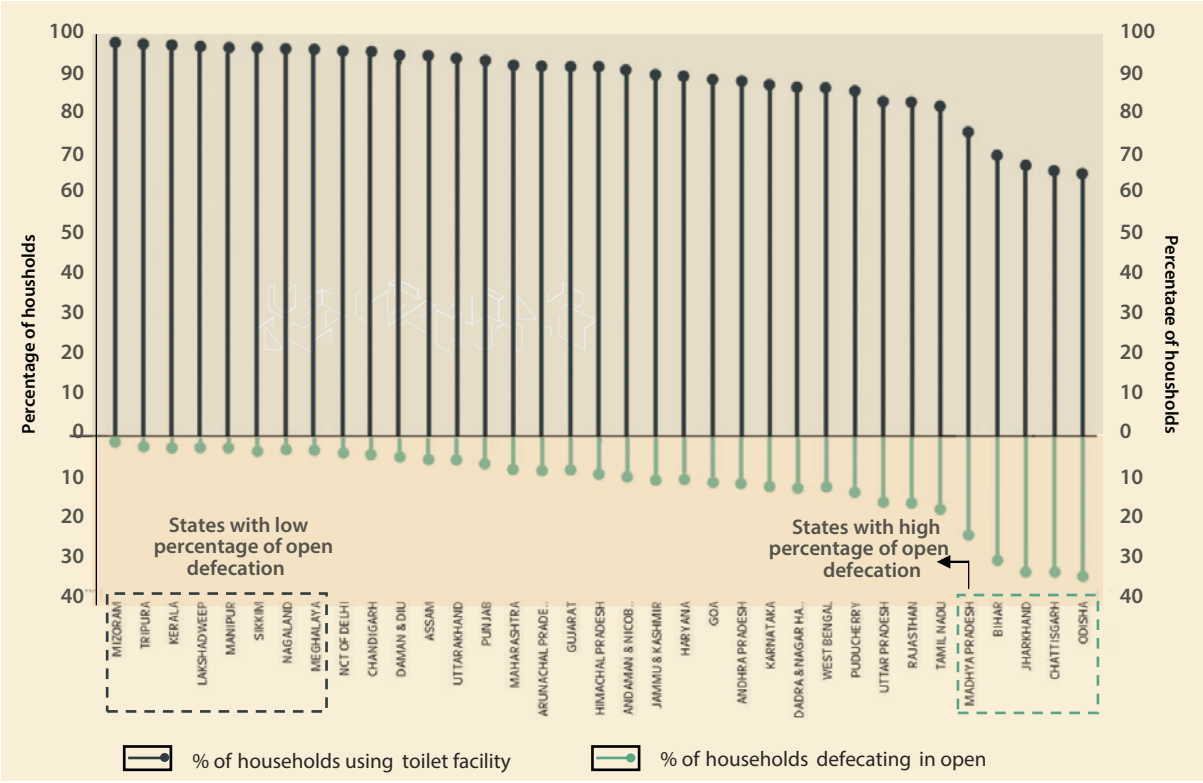


Source: *Census of India, 2011*

While electricity coverage is high, per capita consumption of electricity at 25 kWh is amongst the lowest in the world and hardly representative of the high economic growth that India has been registering over the past decades.

Of the three basic services for which the Census of India provides data on household coverage of electricity, tap water within premises, and latrine, the one service whose coverage has risen across states irrespective of the level of urbanisation or income is electricity. The pace of expansion of electricity has been higher than the pace of urban population growth, with the result that households in the urban areas of most states have over 90 percent electricity access. However, while the coverage is high, the average per capita consumption of electricity at 25 kWh is amongst the lowest in the world and hardly representative of the high economic growth that India has been registering over the past two decades (up to 2016). To a somewhat lesser extent, the same holds for latrines as well whose country-wide coverage has expanded from 62.9 percent in 1991 to 81.4 percent in 2011. This, however, is not the case with tap water within premises. The overall coverage of tap water has risen at a slower pace, with coverage expanding from 42.2 percent in 1991

Figure 31. Urban households using toilet facility in selected Indian states, 2011



Source: *Census of India, 2011*

to 54.1 percent in 2011; moreover, only a few states have been able to keep pace with the coverage of households with tap water. The income effect of water coverage is on a smaller scale and the absence of tap water in premises is a phenomenon that is common among both the high- and low-income states. Thus, in 2011, 5.78 million urban households were without access to electricity, 36.23 million urban households had no access to tap water within premises, and 14.71 million urban households were without access to latrines. Nearly 27 percent of households with three or more persons live in one room tenements.70

Absence of basic services such as electricity, water, and latrines constitutes, perhaps, the most formidable challenge in making the process of urbanisation productive and inclusive. The figures on next page show the degree of access to these services, differentiated by the level of urbanisation and level of incomes.

SERVICE-LEVEL GAPS

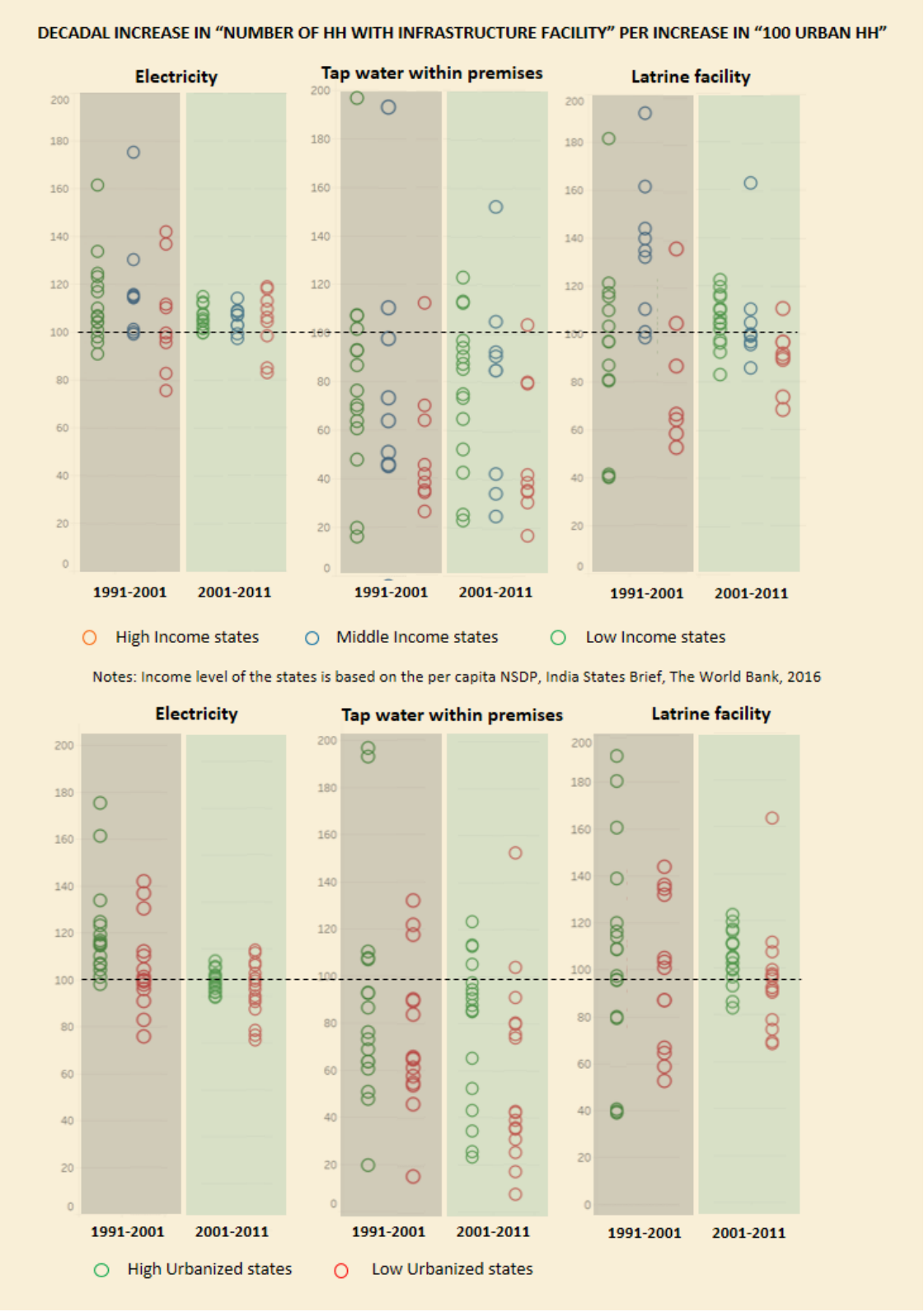
An attempt is made here to estimate the gaps in services such as water, electricity, and toilets, using two sets of benchmarks (i) coverage of services

Absence of tap water within premises is observed among both the high income and low income states.

In 2011, 5.78 million urban households were without access to electricity, 36.23 million urban households had no access to tap water within premises, and 14.71 million urban households were without access to latrines. Absence of basic services such as electricity, water and latrines constitutes perhaps the most formidable challenge in making the process of urbanisation productive and inclusive.

[70] This figure relates to those who live in cities (over 1,00,000 population).

Figure 32. Income impact on urban services



Source: *Computed from Census of India, various issues.*

Table 31. Urbanisation impact on infrastructure development, 2001–11

States	Increase per 100 urban households (%)		
	Increase in HH with electricity	Increase in HH with tap water	Increase in HH with latrine facility
High-income States			
Andaman and Nicobar Islands	103	97	110
Chandigarh	105	113	116
Dadra and Nagar Haveli	100	43	83
Daman and Diu	100	52	92
Delhi	115	88	119
Goa	105	123	122
Gujarat	106	94	104
Haryana	101	85	105
Kerala	108	25	102
Lakshadweep	100	23	110
Maharashtra	102	91	110
Puducherry	112	113	115
Sikkim	100	75	97
Tamil Nadu	112	65	96
Uttarakhand	107	73	106
Middle-income States			
Andhra Pradesh	109	85	99
Arunachal Pradesh	114	91	96
Himachal Pradesh	103	152	163
Karnataka	108	85	105
Mizoram	107	105	100
Nagaland	107	25	95
Punjab	103	92	110
Tripura	97	42	99
West Bengal	99	34	85
Low-income States			
Assam	109	30	91
Bihar	81	7	68
Chhattisgarh	113	35	74
Jammu and Kashmir	98	104	89
Jharkhand	118	17	68
Madhya Pradesh	94	35	91
Manipur	83	42	96
Meghalaya	119	80	111
Odisha	106	35	78
Rajasthan	104	80	96
Uttar Pradesh	85	38	90

Source: *Computed from Census of India, various issues.*

Table 32. Affordable housing in cities (settlements over 1,00,000 population)

AFFORDABLE HOUSING		
Population Class-size	**Category of Class I cities**	**Households with 3 or more persons living in one room (%)**
>10,00,000	A	29.6
8,00,000–9,99,999	B	26.9
6,00,000–7,99,999	C	22.3
4,00,000–5,99,999	D	25.5
2,00,000–3,99,999	E	24.4
1,00,000–2,00,000	F	24.2
Grand Total		**27.2**

Source: *Data on housing are computed from Housing tables (H-5 and HH-4), Government of India. 2001 and 2011. New Delhi: Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, India.*

BOX 18. ASSESSING INFRASTRUCTURE GAPS

Over time, societies inherit man-made infrastructure stock from previous generations. Yet different factors influence demand and supply and, as countries grow, these needs – both the type of infrastructure and the quality of service provision – are likely to evolve. According to Louis Andrés and others, assessing infrastructure gap is a five-step process: (i) where a country is today; (ii) where a country would like to be in a given point in time – the difference between the two points being the infrastructure gap, (iii) how far business-as-usual scenario will take the country towards reaching its goal, (iv) how far financial and policy options using existing resources could take the country towards reaching its goal, and (v) the remaining financial gap that will need to be bridged.

Source: Louis Andrés, et. al. 2014. Infrastructure Gap in South Asia. Policy Research Working Paper 7032, The World Bank. Washington, D.C.

averaged for three top-performing states, and (ii) 'no one to be left behind', i.e., universal coverage, a benchmark that forms part of the United Nations Sustainable Development Goal 11. Significant gaps are witnessed in respect of indicators such as households having access to tap water within premises (21.7 percent), latrines within premises (14 percent), and electricity (5.2 percent) if coverage of services averaged for top three states is applied. Inter-state variations are high, ranging between 2 percent (Rajasthan) and 58 percent (Bihar) in the case of tap water within premises, and between 1 percent (Punjab) and 31 percent (Bihar) in the case of electricity. There are several states that have no or insignificant gaps in accessing tap water within premises, for example, Gujarat and Maharashtra; Kerala in the case of latrines; and Andhra Pradesh, Punjab, Gujarat, and Goa in the case of electricity.

On the benchmark of 'no one to be left behind', proportions of households without access to basic services are significantly higher. Countrywide, 45.9 percent of urban households do not have access to tap water within premises, 19.6 percent of

households have no access to toilet facility within premises, and 7.6 percent have no access to electricity. Inaccessibility of households to basic services on such scales is a major impediment for India to improve its rank in the human development index and to make its cities and towns liveable, inclusive and productive.

Table 33. Estimate of gaps, using average of top three states as benchmark

Indicator	Households (HH) having access to tap water within premises			HH having latrine facility within premises			HH having electricity		
Target	75%			95%			98%		
States	Access (%)	Deficit (%)	Deficit (Absolute)	Access (%)	Deficit (%)	Deficit (Absolute)	Access (%)	Deficit (%)	Deficit (Absolute)
Bihar	16.7	58.3	1,174,126	69.0	25.5	513,486	66.7	30.8	620,373
Odisha	32.2	42.8	648,879	64.8	29.7	450,571	83.1	14.4	219,119
Uttar Pradesh	45.2	29.8	2,220,304	83.1	11.4	849,208	81.4	16.1	1,200,692
Chhattisgarh	34.9	40.1	496,755	60.2	34.3	424,887	93.7	3.8	47,203
Jharkhand	28.9	46.0	688,558	67.2	27.3	408,310	88.0	9.6	143,032
Rajasthan	72.8	2.2	66,582	82.0	12.5	386,368	93.9	3.7	113,223
Madhya Pradesh	41.6	33.4	1,283,121	74.2	20.3	780,582	92.7	4.8	185,139
West Bengal	34.0	40.9	2,600,347	85.0	9.5	603,261	85.1	12.4	788,273
Andhra Pradesh	59.9	15.0	1,018,548	86.1	8.4	569,371	97.3	0.2	16,712
Haryana	69.1	5.8	102,297	89.9	4.6	80,587	96.2	1.4	23,845
Punjab	71.8	3.2	66,166	93.4	1.1	23,035	98.3	-	-
Karnataka	60.5	14.5	771,008	84.9	9.6	510,309	96.4	1.1	59,293
Gujarat	75.5	0.0	-	87.8	6.8	368,309	97.2	0.4	19,131
Maharashtra	74.6	0.4	39,390	71.3	23.2	2,508,831	96.2	1.4	149,040
Kerala	27.1	47.8	1,731,262	97.4	0.0	-	97.0	0.5	19,058
Tamil Nadu	45.1	29.8	2,664,999	75.1	19.4	1,732,246	96.1	1.4	127,815
Goa	80.5	-	-	85.3	9.2	18,229	97.7	-	-
Total (17 states)	**53.3**	**21.7**	**15,572,341**	**80.4**	**14.0**	**10,116,296**	**92.4**	**5.2**	**3,714,814**

Source: *Team's calculations using Census of India 2011 data. 2019. Institute of Social Sciences. New Delhi.*

Table 34. Estimate of gaps, using 'no one to be left behind' as benchmark

Indicator	HH having access to tap water within premises			HH having latrine facility within premises			HH having electricity		
Target	100%			100%			100%		
States	Access (%)	Deficit (%)	Deficit (Absolute)	Access (%)	Deficit (%)	Deficit (Absolute)	Access (%)	Deficit (%)	Deficit (Absolute)
Bihar	16.7	83.3	16,78,349	69.0	31.0	6,24,238	66.7	33.3	6,64,511
Odisha	32.2	67.8	10,28,754	64.8	35.2	5,30,976	83.1	16.9	2,57,902
Uttar Pradesh	45.2	54.8	40,85,582	83.1	16.9	12,66,363	81.4	18.6	14,15,347
Chhattisgarh	34.9	65.1	8,06,935	60.2	39.8	4,95,495	93.7	6.3	74,324
Jharkhand	28.9	71.1	10,63,067	67.2	32.8	4,93,562	88.0	12.0	1,79,477
Rajasthan	72.8	27.2	8,40,553	82.0	18.0	5,56,369	93.9	6.1	1,85,456
Madhya Pradesh	41.6	58.4	22,45,967	74.2	25.8	9,99,760	92.7	7.3	2,69,166
West Bengal	34.0	66.0	41,90,415	85.0	15.0	9,52,517	85.1	14.9	9,52,517
Andhra Pradesh	59.9	40.1	27,15,816	86.1	13.9	9,48,952	97.3	2.7	2,03,347
Haryana	69.1	30.9	5,40,973	89.9	10.1	1,75,190	96.2	3.8	70,076
Punjab	71.8	28.2	5,90,520	93.4	6.6	1,46,585	98.3	1.7	41,881
Karnataka	60.5	39.5	21,02,063	84.9	15.1	7,97,357	96.4	3.6	2,12,629
Gujarat	75.5	24.5	13,27,008	87.7	12.3	6,49,958	97.2	2.8	1,62,489
Maharashtra	74.6	25.4	27,47,198	71.3	28.7	31,36,039	96.2	3.8	4,32,557
Kerala	27.1	72.9	26,37,884	97.4	2.6	1,08,621	97.0	3.0	1,08,621
Tamil Nadu	45.1	54.9	49,00,847	75.1	24.9	22,32,276	96.1	3.9	3,57,164
Goa	80.5	19.5	38,640	85.3	14.7	29,721	97.7	2.3	3,963
Total (17 states)	**54.1**	**45.9**	**3,29,93,672**	**80.4**	**19.6**	**1,40,96,064**	**92.4**	**7.6**	**54,65,821**

Source: *Team's calculations using Census of India 2011 data.*

GAPS IN SOFT INFRASTRUCTURE

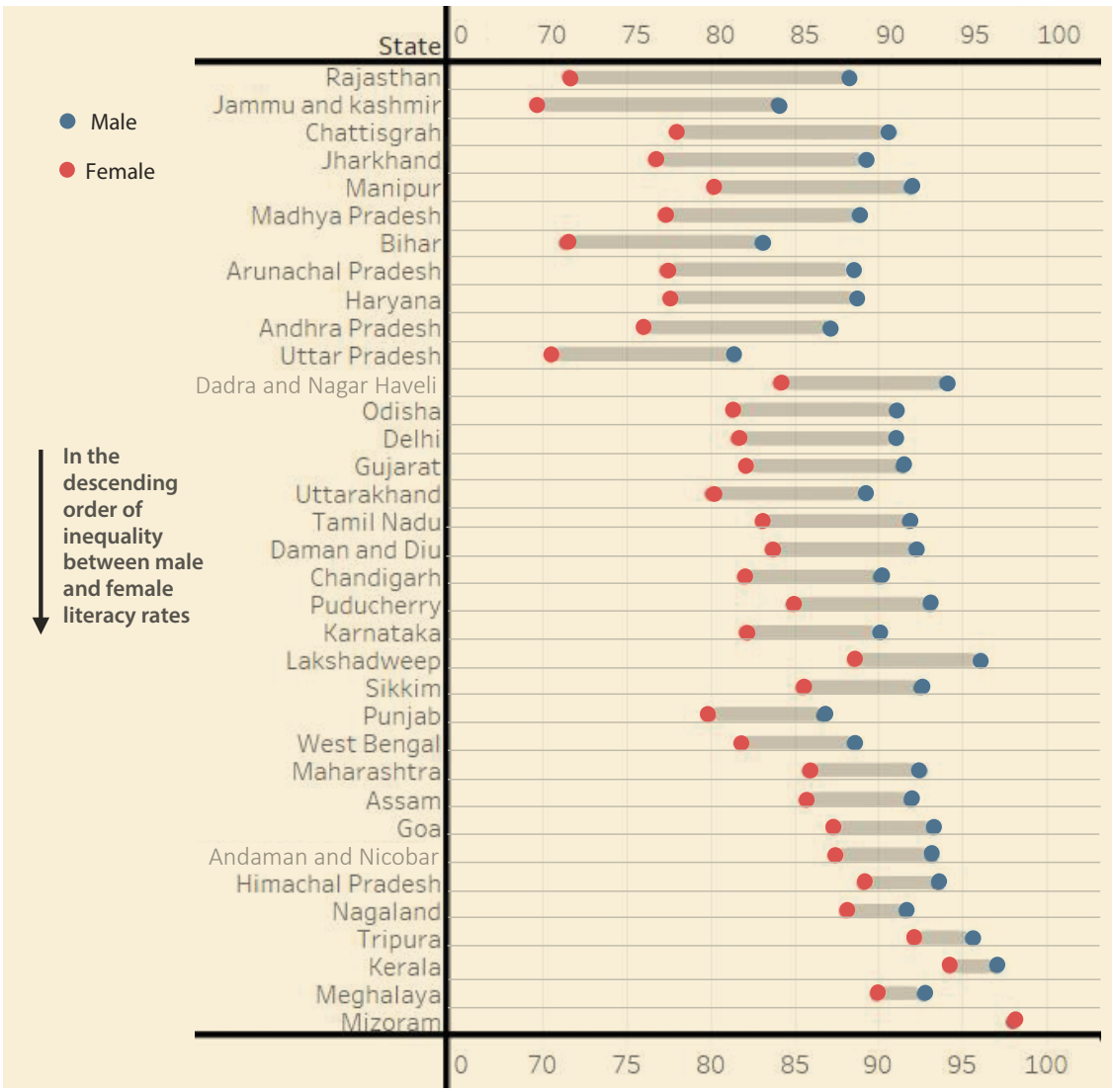
Recent years have come to place high priority to soft infrastructure, mainly education and health although the scope of soft infrastructure has been broadened to include skill development, digital training, data management and the like. There is sufficient evidence to suggest that a country's growth and inclusion objectives in any set-up are vitally dependent on the quality of education and health infrastructure. Studies have also pointed out how education and health are able to bridge the development gaps within and between human settlements. These have been a subject of debate in India as well, within the framework of skill development, New Education Policy 2020, content of school curricula, and health-related infrastructure especially in the context of Covid-19.

Education Levels

Literacy levels in urban India are high across states, with an overall average literacy rate of 84.5 percent (2011). Literacy level in male population is estimated at 89.2 percent and 79.5 percent among females. The National Family Health Survey 2015-16 places literacy levels among men at 90.8 percent and 81.4 percent among females. This represents the basic level of education in urban India. Literacy levels beyond the high school (beyond 12th grade), however, are exceptionally low, averaging at 19.5 percent for male urban population, and significantly lower, 13.6 percent for females. Between 1991 and 2011, education level beyond 12th grade has moved up marginally from 12 percent to 19.5 percent for male urban population; for females, the change has been lower, from 9.4 percent to 13.6 percent.

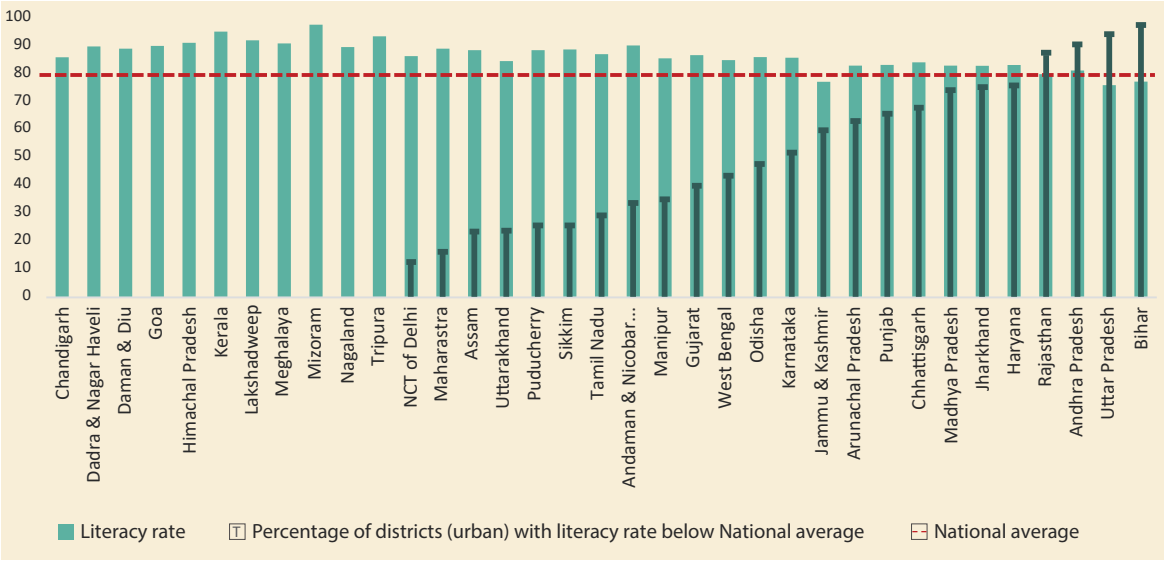
Literacy levels beyond the high school (beyond 12th grade) are exceptionally low in India, averaging at 18 percent for male urban population and 13 percent for females.

Figure 33. Gender gap in urban literacy, 2011



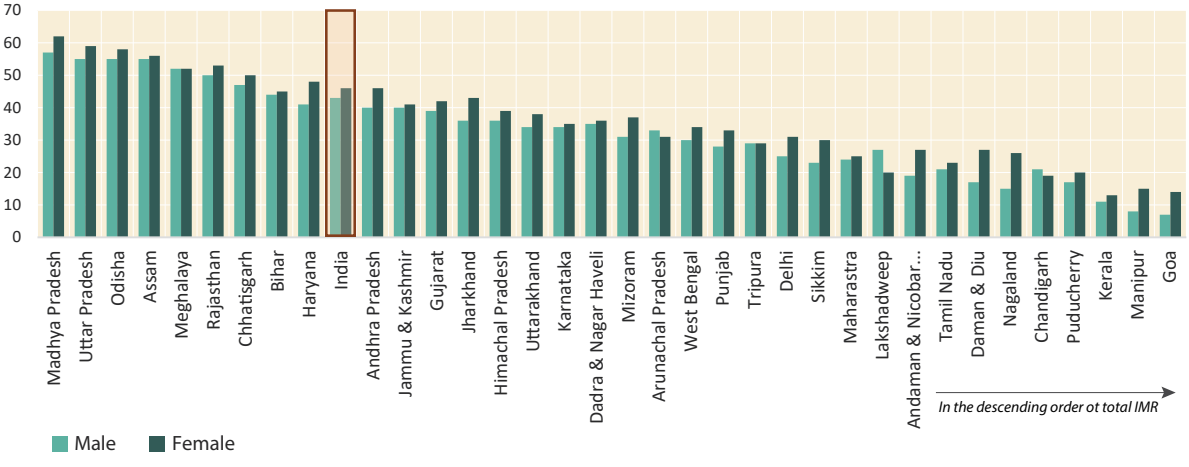
Source: *Census of India, 2011*

Figure 34. Urban districts in states with literacy rate below the national average



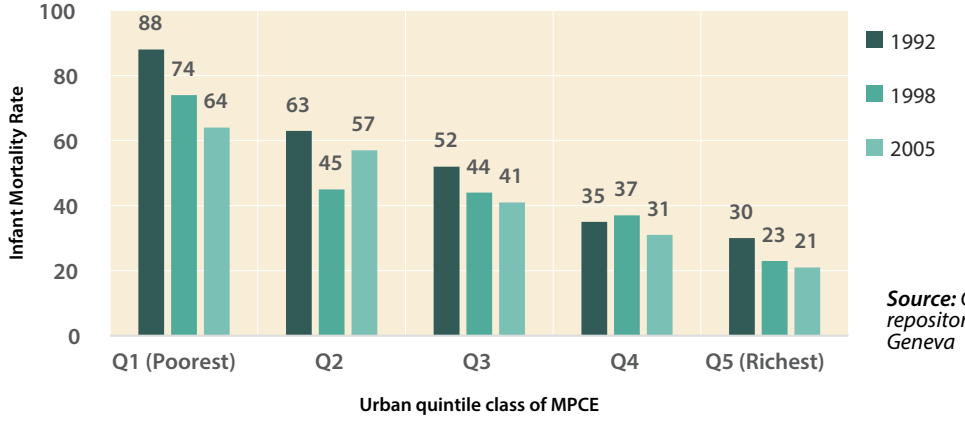
Source: *Census of India, 2011*

Figure 35. Infant mortality rate (urban), 2011



Source: *Census of India, 2011*

Figure 36. Infant mortality per 1000 births in each urban quintile class of MPCE, India



Source: *Global Health Observatory data repository, World Health Organization, Geneva*

Health Infrastructure

Infant mortality rates (IMRs) are a commonly used indicator for assessing the state of 'health' in any context. IMRs have been high in India and the progress in effecting a reduction in the rates has thus far been low. The IMRs vary between a low of 9 per 1000 population in Kerala and 10 per 1000 in Goa to a high of about 38 per 1000 in Chhattisgarh, Odisha, and Uttar Pradesh. The statistical evidence from the National Sample Survey Organisation is that IMRs are high in the poorest quintile registering lower level of consumption expenditure.

URBAN ENVIRONMENT

> **THE ENVIRONMENTAL VALUE OF URBANISATION IMPROVES QUALITY OF LIFE, PROSPERITY, AND WELL-BEING. URBANISATION OFFERS MANY OPPORTUNITIES TO ADDRESS ENVIRONMENTAL SUSTAINABILITY AND DEVELOP RESILIENCE IN CITIES**
>
> **UN-HABITAT**

In recent years, 'environment' encompassing issues relating to climate change – temperature, precipitation and heavy rainfall, drought, flooding, and environmental health risks – has attracted global attention and is currently a foremost developmental agenda for the developed and developing countries. Cities are said to be most vulnerable and risk-prone in the world. According to Aromar Revi,[71] rapid population growth, high densities, poverty, and high differentials in access to housing, public services, and infrastructure have led to an increase in vulnerability of India's urban centres. Revi further points out that (i) climate change is expected to increase the frequency and intensity of hazards and vulnerability and even spur the emergence of 'new hazards and new vulnerabilities with differential spatial and socio economic impacts', and (ii) the urban residents most vulnerable to climate change in Indian cities are the poor slum and squatter settlement dwellers and those who suffer from multiple insecurities that poor governance, the lack of serious investment in the commons and a strong nexus between the political, real estate developers and public agencies bring to cities. Because of the systematic exclusion from the formal economy and basic services and entitlements and barrier into legal land and housing markets, most poor people live on hazardous sites and are exposed to multiple environmental health risks via poor sanitation and water supply, little or no drainage and solid waste services, air and water pollution and the recurrent threat of being evicted.

[71] Aromer Revi. 2008. Climate change risk: an adaptation and mitigation agenda for Indian cities. Environment and Urbanization. Vol 20(1): .207–229.

The status of the level of urban services and the extent of exclusion of urban population to services such as water, electricity, and toilets, and the availability of soft infrastructure is outlined above. Data are sparse on such indicators as would directly impact liveability and resilience of cities and urban centres or the exposure of urban population to water contamination, insufficient management of solid and liquid waste management, inadequate drainage and poor air and fuel quality. The limited data presented in Table 35 show -

Table 35. Assessing urban vulnerability, 2011

Indicator	
(a) CO2 emissions per capita metric tonnes, India	
1991	**0.7**
2001	**1.0**
2011	**1.5**
(b) CO2 emissions per capita metric tonnes, 2011, selected cities	
High	
Jamshedpur	**2.76**
Vishakhapatnam	**2.25**
Low	
Thiruvananthapuram	**0.25**
Jabalpur	**0.30**
(c) Clean cooking fuel, urban households using clean cooking fuel in states (%)	
High	
Delhi	
1991	**50.4**
2011	**90.8**
Punjab	
1991	**45.4**
2011	**80.6**
Low	
Bihar	
1991	**17.2**
2011	**48.9**
Kerala	
1991	**16.2**
2011	**49.4**
(d) Solid waste treated (%)	
High	
Andhra Pradesh	**81.9**

Chandigarh	73.5
Low	
Odisha	1.2
Chhattisgarh	8.9
(e) Urban population below the poverty line, 2011	
High	
Bihar	31.2
Uttar Pradesh	26.1
Low	
Tamil Nadu	6.5
Gujarat	10.1
(f) Slum population, 2011	
High	
Andhra Pradesh	36.1
Chhattisgarh	32.0
Low	
Kerala	1.3
Jharkhand	4.7

Sources:

(a) World Bank data

(b) Energy and Carbon Emissions Profiles for 54 South Asian Cities, ICLEI, 2009

(c) Census of India, 1991 and 2011

(d) Central Pollution Control Board, 2015

(e) Estimated by the erstwhile Planning Commission following the Tendulkar Committee methodology, based on the NSSO data of Household Consumer Expenditure in 68th round.

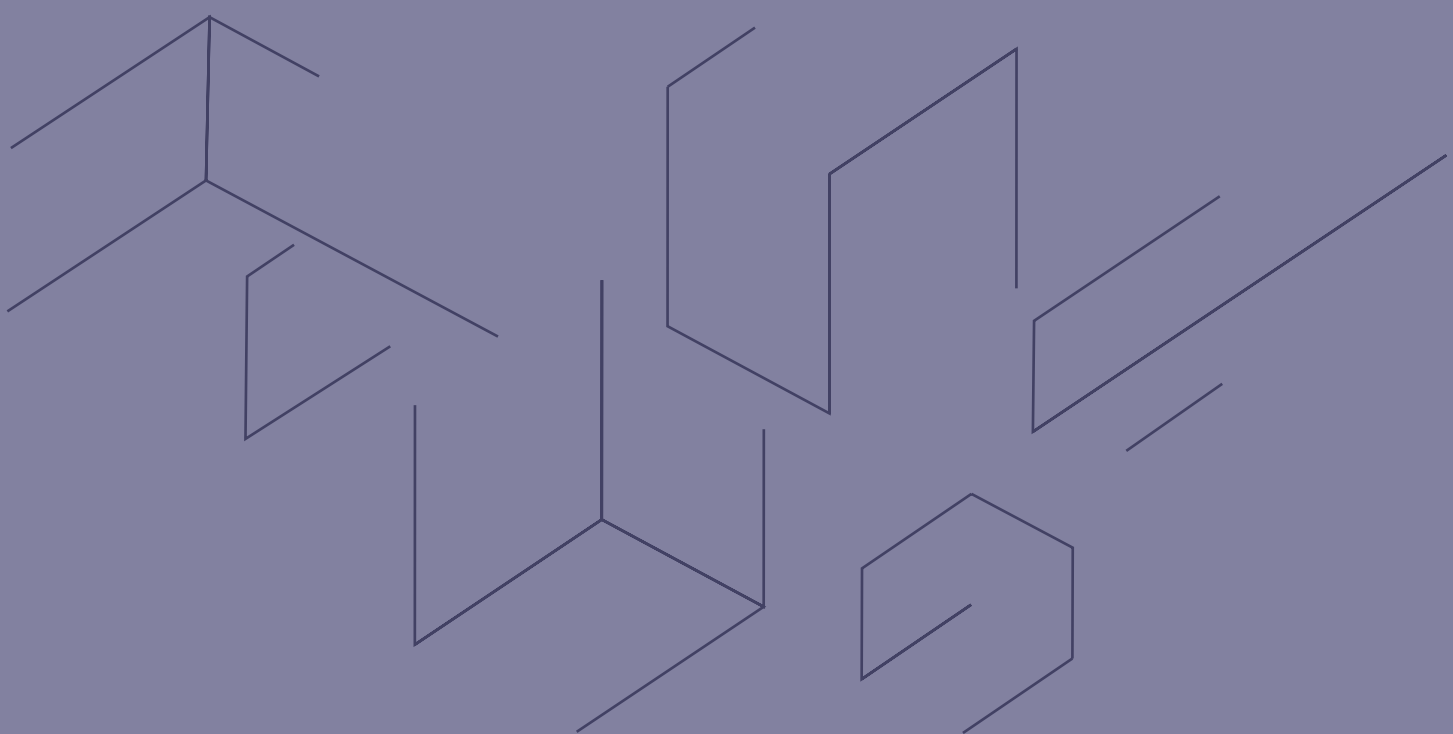
(f) Computed from Primary Census Abstract tables for Slums, 2011

i. Countrywide, about 34 percent of households do not have access to clean cooking fuels; there are large inter-state variations;

ii. While 80–85 percent of solid waste is collected, only about 23 percent of the total waste is subjected to treatment; in states such as Odisha and Chhattisgarh, less than 10 percent of waste is treated; and

iii. If the urban poor and slum population are assumed to be the most affected by lack of services and their inadequate management, the burden is being borne by 13.7 percent of population who are 'below the poverty line' and 17.4 percent who are slum dwellers.

5

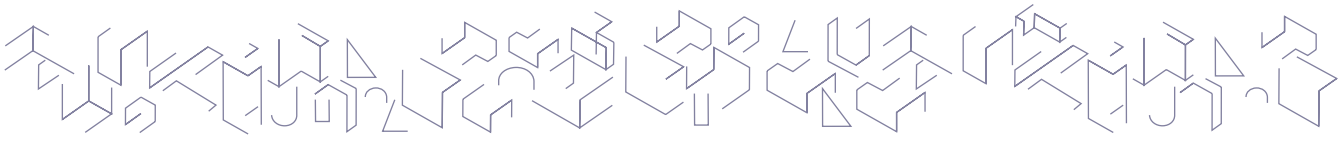


HOW URBAN IS INDIA?

Contemporary urban research stands at a crossroads. As scholars struggle to decipher current forms of urbanization, they are forced to confront the limitations of inherited approaches to urban questions, and consequently, to face the difficult challenge of inventing new theories, concepts and methods that are better equipped to illuminate emergent spatial conditions, their contradictions and their implications at diverse sites and scales around the world. The result of these efforts is an intellectual field in disarray.

Neil Brenner. 2013

Introducing the Urban Theory Lab



INTRODUCTION

Urbanisation – irrespective of how it may be looked at, interpreted, or perceived – is an integral constituent of India's development trajectory. It is given. Moreover, ***it is projected to be a continuing process***. The United Nations projects India's urban population to reach 607 million (40.1 percent of the total) by 2030 and 876 million (52.8 percent) by 2050; the Technical Group on Population Projections, (Government of India), in its 2019 report places India's urban population at 600.8 million or 39.6 percent of the total in 2036![72] These estimates are accompanied, as this study demonstrates, by a broader acceptance of the proposition that urbanisation is not just a demographic phenomenon – assessed in terms of scale, pace of growth or its distribution between cities of different sizes – but also about the form, spatial spread, and connectivity across spaces. It is about what urban areas produce in terms of gross/net domestic product (GDP/NDP) and what they consume. The economic and changing characteristics of urbanisation stand acknowledged, although questions about its quantitative dimensions continue to surface from time to time. Urbanisation is associated with a higher level of infrastructural services, innovations, and knowledge. On the other hand, cities present negative externalities, best shown in terms of housing congestion, pollution, slums, poverty, and spatial inequities. Urbanisation is seen as a threat to environmental security. As the United Nations observes: '…unplanned urbanization and poor land management can cause irreversible land cover changes, biodiversity loss, and environmental degradation. Around the world, unmanaged urban expansion (messy and hidden, in the India case), whose urban footprints are growing faster than population, poses a tremendous threat. Uncontrolled sprawl contributes to more private car ownership, distance travelled by automobile, total road miles paved, fuel consumption, alteration of ecological structures and conversion of agricultural or rural land into urban areas.[73] These features also characterise India's urbanisation in varying scales and degrees. This concluding chapter is an attempt to put together evidence on several of these characteristics, and combine them into an index that ranks Indian states according to the position they hold with respect to each other.

INDEX AND RANKING OF INDIAN STATES

Urbanisation Index is a composite index, constructed with evidence on 25 indicators belonging to three key facets of urbanisation, viz., urbanisation, urban productivity, and urban inclusion and environmental security.

An important methodological development of recent years has been in the sphere of measuring the status of performance of whatever may be the object of measurement via an INDEX – an index that is able to rank countries or smaller spatial units or a group of households stratified by income, religion, or any other criterion on the basis of their performance. It has come to be seen as a convenient device to rank the units, aggregating the results of multiple indicators that may be used for purposes of measurement reporting and often even for policy and project intervention. The Human Development Index (HDI), the Sustainability Index, the Index of Competitiveness, the Multi-dimensional

[72] United Nations. ibid. and Report of the Technical Group on Population Projections. 2019. Ministry of Health, Government of India.

[73] The United Nations. 2020. ibid

Poverty Index, and the liveability Index are among the many indexes used worldwide to rank countries. The NITI Aayog (Government of India) has recently put out a Sustainability Index, using a set of 62 indicators, chosen out of over 306 indicators that constitute the National Indicator Framework, to rank Indian states.[74]

Drawing on these practices, an attempt is made here to prepare an Urbanisation Index, using a set of 25 indicators. Indicators represent the three facets of urbanisation addressed in this report, that is, urbanisation, productivity, and inclusion and environmental safety, and are applied to 28 states, and the three union territories. Included in the index are 17 general states, eight North-Eastern states, three hilly states of Jammu and Kashmir,[75] Himachal Pradesh, and Uttarakhand, and three union territories. They represent special geographical conditions and/or have special governance structures. The following tables gives the indicators under three sub-heads:

Table 36. Indicators used for preparing Urbanisation Index, 2011

S.No.	Indicators	S.No.	Indicators
A.	Urbanisation	13	Urban economic density population (GSDP per sq.km.), 2011
1	Level of urbanisation, 2011	14	Average monthly per capita consumption expenditure (urban), 2011/12
2	AEGR of urban population, 2001–2011	15	Gini coefficient for urban consumption, 2011/12
3	Percentage of population residing in cities with 1 million-plus population	C.	Inclusion and environmental security
4	Percentage of rural–urban migrants in the increase in urban population, 2001–2011	16	Percentage of households having tap water within premises, 2011
5	Percentage of census town population in the increase in urban population, 2001–11	17	Percentage of urban households having latrine facility, 2011
6	Percentage of districts with more than 50% urbanisation, 2011	18	Percentage of urban households having electricity, 2011
7	Percentage of districts with less than 17.3 percent urbanisation (inverse), 2011	19	Per capita electricity consumption (kWh), 2011/12
B.	Productivity	20	Municipal road mileage, 2011
8	Percentage of urban workforce in the working age population, 2011	21	Percentage of solid waste treated, 2015
9	Percentage of female workers in the total workforce, 2011	22	Percentage of households having access to clean cooking fuel, 2011
10	CAGR of female workforce, 2001–11	23	Percentage of houses with three and more persons living in one room (inverse), 2011
11	Percentage of workers in manufacturing, 2011	24	Percentage of urban population below the poverty line (inverse), 2011/12
12	Percentage of workers in real estate and financial services, 2011	25	Percentage of slum population (inverse), 2011

Note: Figures relate to the year 2011.

[74] NITI Aayog. 2018. SDG India Index Baseline Report. New Delhi.

[75] The study acknowledges the change in the status of Jammu and Kashmir, effected in 2018. However, as the data used in this report relate to years when it was a state, its earlier status has been maintained.

Urbanisation is represented by seven indicators; their values are taken as positive except the value of the indicator on the 'share of districts with less than 17.3 percent level of urbanisation'. The inverse of the values of this indicator is used in the index. Eight indicators represent urban productivity; while 10 indicators form a part of indicators for inclusion and environmental security. Data have been normalised by taking an inverse of the three indicators (percentage of urban population below the poverty line; percentage of slum population to total population, and percentage of districts with less than 17.3 percent of urban population) whose higher values show lack of progress. All indicators carry equal weight. A mini-max equation serves to estimate the value for the various indicators. The arithmetic mean of the normalised values of indicators are used to calculate the Urbanisation Index, the formula being:

$$I_{1j} = \frac{s_{ij} - \text{Min}(s_{1j} \ldots\ldots s_{17j})}{\text{Max}(s_{1j} \ldots\ldots s_{17j}) - \text{Min}(s_{1j} \ldots\ldots s_{17j})} \times 100$$

Where,

- represents the value of ratio j for state i;
- Min is the minimum value observed in the dataset; and
- Max is the maximum value observed in the dataset.

Goa, Kerala, Haryana, and Maharashtra are the most urbanised states in the country on the basis of the 25 criteria used for constructing the index. Bihar, Chhattisgarh, Odisha and Madhya Pradesh are the least urbanised states.

A composite Urbanisation Index ranking the 28 states and three union territories (Table 37) shows Goa (66.5), Kerala (66.0), Haryana (56.6), and Maharashtra (53.9) to be the four most urbanised states in the country. The index puts Bihar (17.0), Chhattisgarh (27.6), Odisha (29.2), and Madhya Pradesh (32.6) as the least urbanised states. Among the North-eastern states, treated as a discrete group for the purpose of this index of urbanisation, Mizoram and Sikkim are ranked as the most urbanised, and Manipur and Assam, the least urbanised. The index values show significant inter-state variations.

This exercise has also ranked states and the union territories separately for the three constituents of the index, that is, urbanisation, urban productivity, and urban inclusion and environmental security. This was done to gain some understanding of the relationship among the three constituents and their relative strengths (or weaknesses), whether the more urbanised states are uniformly more productive and most inclusive. Regression have been run between urbanisation index values (X-axis) and productivity index values (Y-axis), and also between urbanisation index values (X-axis) and inclusion and environment index values (Y-axis). Figure 37 attest their strong relationship.

At the same time, the state ranks in respect of the three constituents vary. Goa, for example, which is the most urbanised state on the basis of the composite index, ranks second on the criterion of productivity and fifth on the criterion of inclusion and environmental security. The examples of Maharashtra and Gujarat are important to illustrate. While the index value for Maharashtra on urbanisation is high, ranked as the third most urbanised state, it ranks low on the criterion of inclusion and environmental security, weighed down on account of a high percentage of households that have three and more

Table 37. Composite Index values and ranks of states and union territories

States/Union Territories	Index	Rank
General States		
Goa	66.5	1
Kerala	66.0	2
Haryana	56.6	3
Maharashtra	53.9	4
Karnataka	51.4	5
Gujarat	48.9	6
Punjab	48.6	7
Andhra Pradesh	47.7	8
Tamil Nadu	46.0	9
West Bengal	41.3	10
Rajasthan	39.0	11
Uttar Pradesh	33.7	12
Jharkhand	33.4	13
Madhya Pradesh	32.3	14
Odisha	29.2	15
Chhattisgarh	27.6	16
Bihar	17.0	17
Hilly States		
Himachal Pradesh	63.4	1
Uttarakhand	46.8	2
Jammu and Kashmir	41.5	3
Union Territories		
NCT of Delhi	72.0	1
Chandigarh	53.8	2
Puducherry	25.8	3
North-Eastern States*		
Mizoram	62.2	1
Sikkim	54.1	2
Arunachal Pradesh	44.0	3
Tripura	42.6	4
Nagaland	40.4	5
Meghalaya	39.2	6
Assam	38.2	7
Manipur	35.3	8

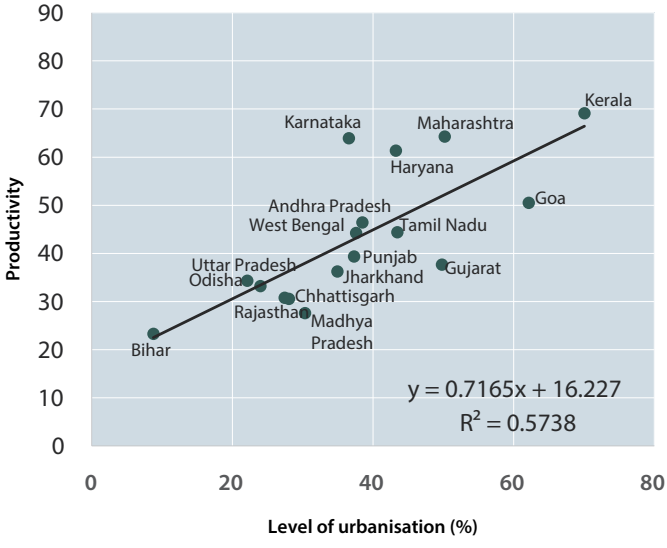
** computed from 22 out of total 25 indicators. Data on treated solid waste and slum population in urban population are not available for Manipur and data on municipal road mileage are not available for Nagaland and Arunachal Pradesh.*

Source: Team's calculations

members living in a single room and high slum population. Likewise, Gujarat ranks low on the criterion of productivity (low urban female workers to total urban workers and low average monthly consumption expenditure), despite it being the fourth most urbanised state. Punjab, on the other hand, has a high proportion of households with clean cooking fuel, and a relatively low proportion of persons below the poverty line, and is therefore ranked second on considerations of inclusion and environmental security, but low on grounds of productivity and urbanisation.

The index values for the three constituents have large inter-state variations. Some states have high urbanisation levels, having moved faster compared to economic productivity and inclusion; in other cases, for example, Karnataka, which ranks third on the criterion of productivity, has correspondingly lower level of urbanisation and low level of environmental security. This analysis shows up the challenges that different states are faced with.

Figure 37. Regression between Urbanisation Index values and productivity, and Urbanisation Index values and inclusion and environment



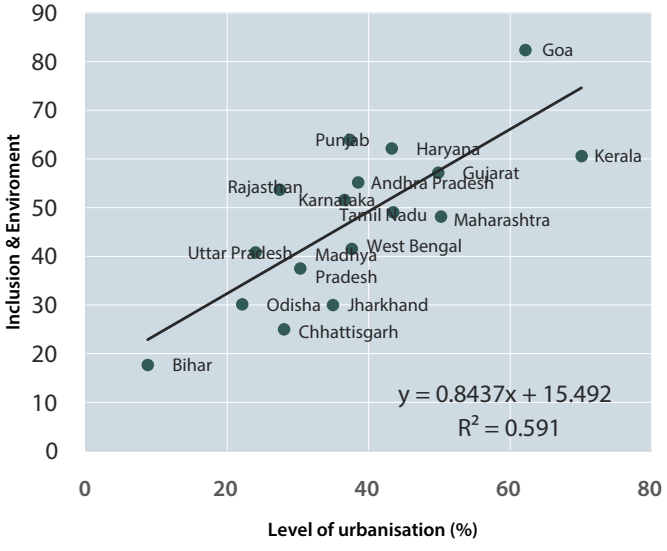


Table 38. Constituent-wise: Index values and ranks of states and union territories, 2011

	Urbanisation		Productivity		Inclusion and environment	
State/Union Territory	Index	Ranks	Index	Ranks	Index	Ranks
General States						
Kerala	70.1	1	69.1	1	60.6	4
Goa	62.1	2	50.5	5	82.4	1
Maharashtra	50.2	3	64.3	2	48.2	10
Gujarat	49.8	4	37.7	10	57.2	5
Tamil Nadu	43.5	5	44.4	7	49.1	9
Haryana	43.2	6	61.4	4	62.2	3
Andhra Pradesh	38.5	7	46.4	6	55.2	6
West Bengal	37.6	8	44.3	8	41.5	11
Punjab	37.3	9	39.4	9	64.0	2
Karnataka	36.6	10	64.0	3	51.6	8
Jharkhand	34.9	11	36.3	11	30.0	15
Madhya Pradesh	30.3	12	27.6	16	37.5	13
Chhattisgarh	28.0	13	30.6	15	25.0	16
Rajasthan	27.4	14	30.8	14	53.7	7
Uttar Pradesh	24.0	15	33.2	13	40.8	12
Odisha	22.1	16	34.3	12	30.2	14
Bihar	8.8	17	23.3	17	17.7	17
Hilly State						
Uttarakhand	64.9	1	61.0	2	19.1	3
Jammu and Kashmir	63.1	2	28.3	3	37.0	2
Himachal Pradesh	28.6	3	62.5	1	90.9	1
Union Territory						
NCT of Delhi	66.3	1	69.4	1	78.0	1
Chandigarh	53.8	2	65.0	2	44.9	2
Puducherry	14.3	3	26.9	3	33.1	3
North-Eastern State*						
Mizoram	54.5	1	43.8	5	88.2	1
Tripura	36.5	2	44.2	4	47.1	5
Arunachal Pradesh	34.6	3	45.7	3	51.8	4
Nagaland	32.6	4	42.2	6	46.2	6
Manipur	29.6	5	40.1	7	36.0	8
Assam	26.9	6	48.5	2	39.2	7
Sikkim	24.6	7	50.9	1	86.8	2
Meghalaya	14.0	8	37.3	8	66.4	3

**Indexes of productivity and inclusion and environment safety for North-Eastern states are computed from 8 and 7 indicators, respectively. Data on percentage of solid waste treated and percentage of slum population in urban population are not available for Manipur and data on municipal road mileage are not available for Nagaland and Arunachal Pradesh*

Source: *Team's calculations*

Mention may be made here of the "bare necessities index" (BNI), introduced in the recently released *Economic Survey 2020-21*.[76] Constructed with 26 indicators drawn from five dimensions, namely, water, sanitation, housing, micro-environment, and other facilities and making use of data from the 69th and 76th rounds of NSSO surveys, the BNI shows that

i. the access to bare necessities for urban housholds is significantly better in 2018 compared to 2011;

ii. the access to bare necessities in 2018 is higher in such states as Kerala, Punjab, Haryana, Gujrat, Uttarakhand, Delhi, Goa, Mizoram and Sikkim, and lowest in Odisha, West Bengal, and Tripura, and

iii. improvement is significantly higher in the rural areas compared to the urban areas.

A WORK-IN-PROGRESS

In closing, it is important to point out that while the index values and ranks enable us to understand the relative position of the states and union territories, it is not a substitute for an in-depth analysis of the process of India's urban transition. Urbanisation is a complex process and is taking place under very different circumstances. There are several narratives, each with important implications. These narratives raise fresh questions, especially in relation to the tepid growth of population of statutory cities and towns, refiguration of urban space on account of the outward spread of urban activities, low level of concern for the economic potential of rural–urban migration, and the emerging complexities with respect to the pattern of growth of metropolitan cores and peripheries. High demographic dividend in states that are low-urbanised, and ageing in high-income and more urbanised states present a challenge that needs an explicit recognition.

There are questions with respect to the productivity of cities and towns, as also the falling shares of GDP accruing from such sectors as manufacturing, financial services, and real estate. Questions about the scale, composition and informalisation of the urban economy and trends toward formalisation of the rural economy have surfaced as newer concerns for in-depth examination. Further, urban scholars have advanced certain rules of the game with respect to the processes of urbanisation, for instance, the process exhibiting a pattern in which the rate of change is slow at first, then rises steeply as the early stages of industrialisation are reached and tapers off gradually when the population begins to reach a saturation point. Examination of such questions together with the impact of technology and digitisation and artificial intelligence on agglomeration economies are an integral part of coming to grips with the process of India's urban transition.

[76] Government of India. 2021. Economic Survey 2020-21. Volume 1. New Delhi.

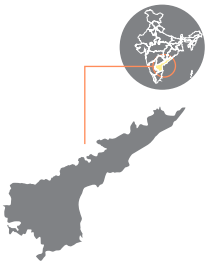
The 2019 report of the Government of India on population projections[77] had estimated India's urban population at 469.9 million in 2021, yielding an annual exponential population growth of just 2.2 percent over the 2011–21 decade. Such a low growth in population presents a major issue for the future of country's urbanisation. Although this estimate is based on the urban–rural growth differential method (URGD) under the assumption that the URGD for the period 2001–11 will remain unchanged up to 2036, it draws attention to the likely pace of urbanisation and linked questions; for example, what might explain the likely dip in the rate of urbanisation in the 2011–21 decade after posting a marginal recovery in the previous census decade of 2001–11? Is this setting a new trend? Is it connected with the recent (post-2016) economic slowdown in the country? What implications and impact would it have for the future urban policy? This SOCR is a work in progress.

[77] Government of India. 2019. Technical Group on Population Projections. ibid.

State Urban Infographics

GENERAL STATES

Andhra Pradesh



8 URBAN INDEX RANK

33.4% LEVEL OF URBANISATION IN 2011

3.05% AEGR OF URBAN POPULATION 2001-2011

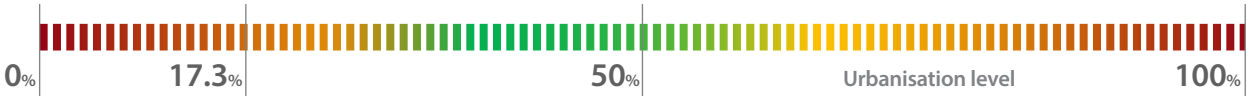
38.6% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

19.7% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

23.7% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

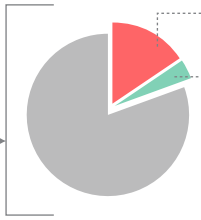
8.7% OF THE DISTRICTS ARE <17.3% URBAN

9% OF THE DISTRICTS ARE >50% URBAN



74% Rural workforce

26% Urban workforce



16% % of urban workers in manufacturing

3.3% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹5,893 GSDP/SQ.KM.

AVG MPCE URBAN ₹2,685 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

25.9% FEMALE WORKFORCE RATIO

7.1% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

5.8% ARE BELOW THE POVERTY LINE

36% LIVE IN SLUM CONDITIONS

27% LIVE IN CONGESTED DWELLING UNITS*

146% MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

60% % of HH having tap water within premises, 2011

86% % of HH having latrine facility

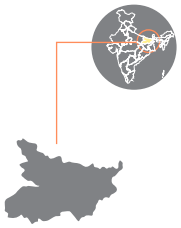
97% % of HH having Electricity

ELECTRICITY CONSUMPTION **25.6** KWH PER CAPITA

69.3% USE CLEAN COOKING FUEL

82% SOLID WASTE TREATED

Bihar

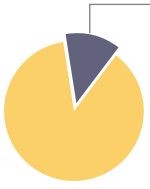


17 URBAN INDEX RANK

11.3% LEVEL OF URBANISATION IN 2011

3.03% AEGR OF URBAN POPULATION 2001-2011

17.4% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

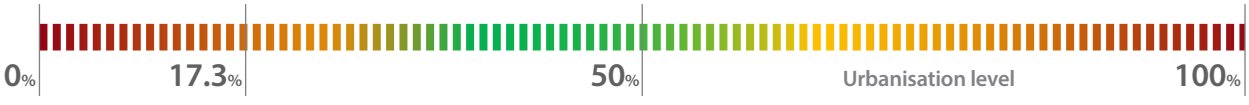


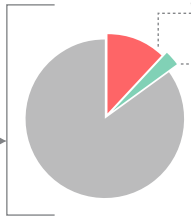
13.2% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

14.4% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

89.5% OF THE DISTRICTS ARE <17.3% URBAN

0% OF THE DISTRICTS ARE >50% URBAN





URBAN ECONOMIC DENSITY ₹6,716 GSDP/SQ.KM.

AVG MPCE URBAN ₹1,507 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

17.2% FEMALE WORKFORCE RATIO

7.4% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

31.2% ARE BELOW THE POVERTY LINE

10.5% LIVE IN SLUM CONDITIONS

31% LIVE IN CONGESTED DWELLING UNITS*

367.2 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

17% % of HH having tap water within premises, 2011

69% % of HH having latrine facility

67% % of HH having Electricity

ELECTRICITY CONSUMPTION **11.6** KWH PER CAPITA

49% USE CLEAN COOKING FUEL

27.1% SOLID WASTE TREATED

Chhattisgarh

16 URBAN INDEX RANK

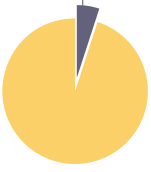
23.2% LEVEL OF URBANISATION IN 2011

3.5% AEGR OF URBAN POPULATION 2001-2011

36.8% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

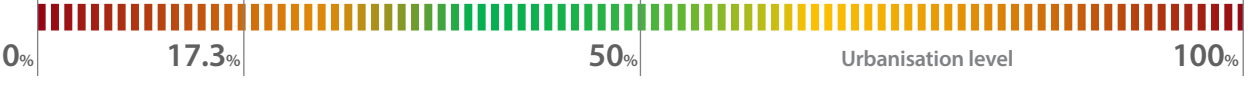
25.1% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

4.1% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)



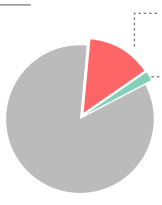
55.6% OF THE DISTRICTS ARE <17.3% URBAN

0% OF THE DISTRICTS ARE >50% URBAN



83% Rural workforce

17% Urban workforce



13.9% % of urban workers in manufacturing

2.5% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹3,052 GSDP/SQ.KM.

AVG MPCE URBAN ₹1,868 /MONTH

0.4 GINI COEFFICIENT FOR URBAN CONSUMPTION

23.9% FEMALE WORKFORCE RATIO

6.6% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

24.7% ARE BELOW THE POVERTY LINE

31.9% LIVE IN SLUM CONDITIONS

22% LIVE IN CONGESTED DWELLING UNITS*

237.1 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

35% % of HH having tap water within premises, 2011

60% % of HH having latrine facility

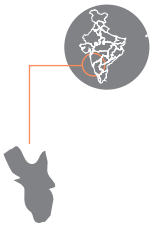
94% % of HH having Electricity

ELECTRICITY CONSUMPTION **22.3** KWH PER CAPITA

46% USE CLEAN COOKING FUEL

8.9% SOLID WASTE TREATED

Goa



1 URBAN INDEX RANK

62.2% LEVEL OF URBANISATION IN 2011

3.02% AEGR OF URBAN POPULATION 2001-2011

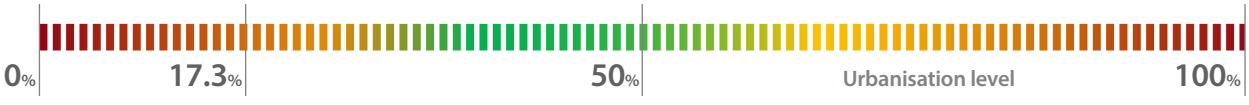
0 SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

21% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

68.8% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

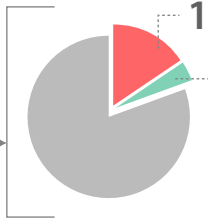
0% OF THE DISTRICTS ARE <17.3% URBAN

100% OF THE DISTRICTS ARE >50% URBAN



37% Rural workforce

63% Urban workforce



15.1% % of urban workers in manufacturing

3.9% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹4,258 GSDP/SQ.KM.

AVG MPCE URBAN ₹3,051 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

26% FEMALE WORKFORCE RATIO

4.9% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

4.1% ARE BELOW THE POVERTY LINE

2.9% LIVE IN SLUM CONDITIONS

18% LIVE IN CONGESTED DWELLING UNITS*

54.8 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

80% % of HH having tap water within premises, 2011

85% % of HH having latrine facility

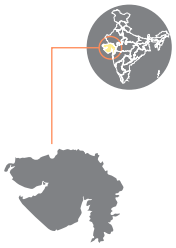
98% % of HH having Electricity

ELECTRICITY CONSUMPTION **51.9** KWH PER CAPITA

82.3% USE CLEAN COOKING FUEL

99.4% SOLID WASTE TREATED

Gujarat



6 URBAN INDEX RANK

42.6% LEVEL OF URBANISATION IN 2011

3.1% AEGR OF URBAN POPULATION 2001-2011

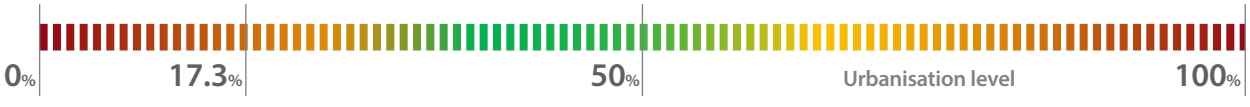
55% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

36% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

14% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

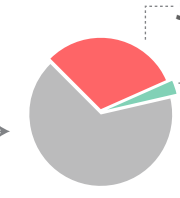
26.9% OF THE DISTRICTS ARE <17.3% URBAN

12% OF THE DISTRICTS ARE >50% URBAN



63% Rural workforce

37% Urban workforce



31.1% % of urban workers in manufacturing

3% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹5,773 GSDP/SQ.KM.

AVG MPCE URBAN ₹2,581 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

14.9% FEMALE WORKFORCE RATIO

5.1% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

10.1% ARE BELOW THE POVERTY LINE

6.5% LIVE IN SLUM CONDITIONS

31% LIVE IN CONGESTED DWELLING UNITS*

273.5 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

75% % of HH having tap water within premises, 2011

88% % of HH having latrine facility

97% % of HH having Electricity

ELECTRICITY CONSUMPTION **23.6** KWH PER CAPITA

69.7% USE CLEAN COOKING FUEL

14.7% SOLID WASTE TREATED

Haryana

3 URBAN INDEX RANK

34.9% LEVEL OF URBANISATION IN 2011

3.7% AEGR OF URBAN POPULATION 2001-2011

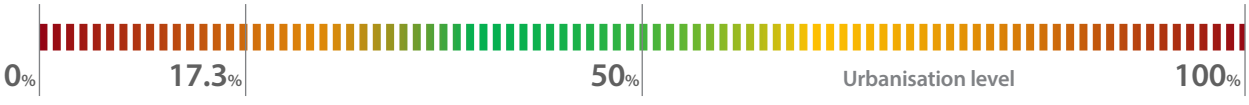
16% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

30.78% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

18.56% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

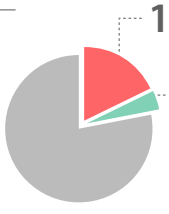
9.5% OF THE DISTRICTS ARE <17.3% URBAN

14% OF THE DISTRICTS ARE >50% URBAN



67% Rural workforce

33% Urban workforce



17.9% % of urban workers in manufacturing

3.6% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹10,575 GSDP/SQ.KM.

AVG MPCE URBAN ₹3,817 /MONTH

0.4 GINI COEFFICIENT FOR URBAN CONSUMPTION

17.1% FEMALE WORKFORCE RATIO

5.4% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

10.3% ARE BELOW THE POVERTY LINE

18.8% LIVE IN SLUM CONDITIONS

22% LIVE IN CONGESTED DWELLING UNITS*

446.2 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

69% % of HH having tap water within premises, 2011

90% % of HH having latrine facility

96% % of HH having Electricity

ELECTRICITY CONSUMPTION **36.5** KWH PER CAPITA

78.2% USE CLEAN COOKING FUEL

16.3T% SOLID WASTE TREATED

Jharkhand

13 URBAN INDEX RANK

24% LEVEL OF URBANISATION IN 2011

2.8% AEGR OF URBAN POPULATION 2001-2011

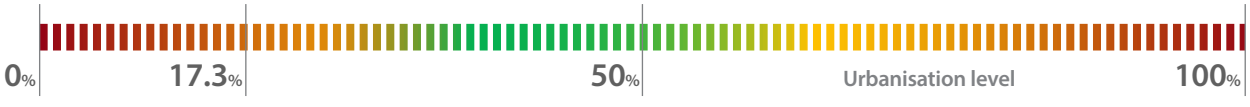
46.17% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

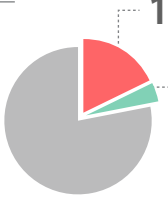
28.1% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

39.2% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

66.7% OF THE DISTRICTS ARE <17.3% URBAN

8% OF THE DISTRICTS ARE >50% URBAN





16.7% % of urban workers in manufacturing

3.9% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹4,646 GSDP/SQ.KM.

AVG MPCE URBAN ₹2,018 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

16.4% FEMALE WORKFORCE RATIO

7.7% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

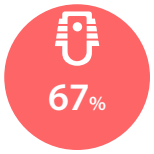
24.8% ARE BELOW THE POVERTY LINE

4.7% LIVE IN SLUM CONDITIONS

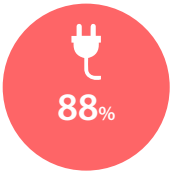
20% LIVE IN CONGESTED DWELLING UNITS*

0 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

% of HH having tap water within premises, 2011



% of HH having latrine facility



% of HH having Electricity

ELECTRICITY CONSUMPTION 22 KWH PER CAPITA

44.3% USE CLEAN COOKING FUEL

1.8% SOLID WASTE TREATED

Karnataka

5 URBAN INDEX RANK

38.7% LEVEL OF URBANISATION IN 2011

2.7% AEGR OF URBAN POPULATION 2001-2011

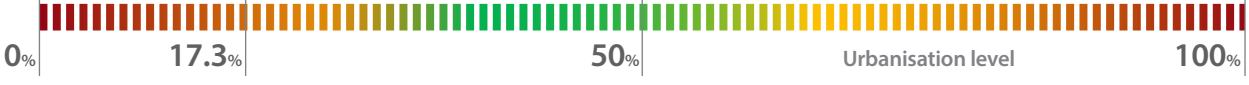
36.1% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

20.9% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

13.6% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

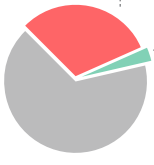
13.3% OF THE DISTRICTS ARE <17.3% URBAN

7% OF THE DISTRICTS ARE >50% URBAN



63% Rural workforce

34% Urban workforce



22% % of urban workers in manufacturing

4.1% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹5,790 GSDP/SQ.KM.

AVG MPCE URBAN ₹3,026 /MONTH

0.4 GINI COEFFICIENT FOR URBAN CONSUMPTION

25.7% FEMALE WORKFORCE RATIO

5.4% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

15.2% ARE BELOW THE POVERTY LINE

13.9% LIVE IN SLUM CONDITIONS

26% LIVE IN CONGESTED DWELLING UNITS*

386.1 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

60% % of HH having tap water within premises, 2011

85% % of HH having latrine facility

96% % of HH having Electricity

ELECTRICITY CONSUMPTION **22.8** KWH PER CAPITA

66% USE CLEAN COOKING FUEL

22.7% SOLID WASTE TREATED

KERALA

2 URBAN INDEX RANK

47.7% URBAN POPULATION

6.6% AEGR

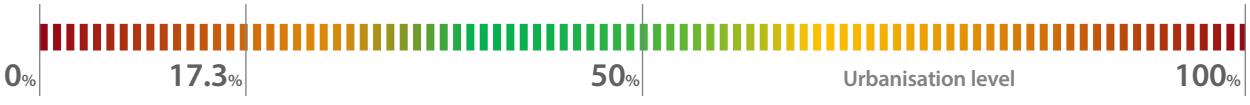
76.2% OF THE STATE'S POPULATION LIVE IN URBAN AGGLOMERATIONS

11.9% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

89% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

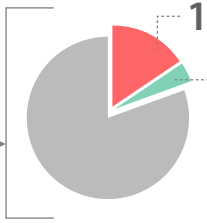
21% OF THE DISTRICTS ARE **<17.3% URBAN**

43% OF THE DISTRICTS ARE **>50% URBAN**



55% Rural workforce

45% Urban workforce



15.9% Workforce in manufacturing

4% Workforce in real-estate and financial services

URBAN ECONOMIC DENSITY **₹3,024** GSDP/SQ.KM.

AVERAGE PER CAPITA MPCE **₹3,408** /MONTH

0.4 GINI COEFFICIENT FOR URBAN CONSUMPTION

25.3% FEMALE WORKFORCE RATIO

8.7% AEGR

5% ARE BELOW THE POVERTY LINE

1.3% LIVE IN SLUM CONDITIONS

5% LIVE IN CONGESTED DWELLING UNITS*

172 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

27% % of HH having tap water within premises, 2011

97% % of HH having latrine facility

97% % of HH having Electricity

ELECTRICITY CONSUMPTION **29.7** KWH PER CAPITA

49.4% USE CLEAN COOKING FUEL

29.8% SOLID WASTE TREATED

Rajasthan

11 URBAN INDEX RANK

25% URBAN POPULATION

2.5% AEGR

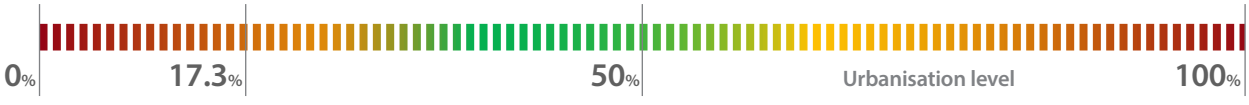
30% OF THE STATE'S POPULATION LIVE IN URBAN AGGLOMERATIONS

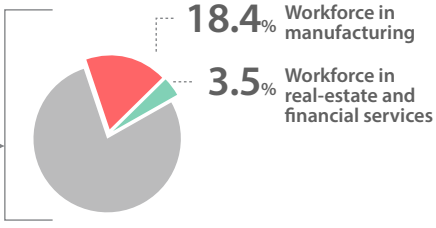
18% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

17.8% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

30% OF THE DISTRICTS ARE <17.3% URBAN

6% OF THE DISTRICTS ARE >50% URBAN





URBAN ECONOMIC DENSITY ₹3,878 GSDP/SQ.KM.

AVERAGE PER CAPITA MPCE ₹2,442 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

17.8% FEMALE WORKFORCE RATIO

5% AEGR

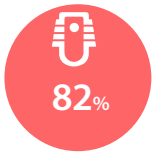
10.7% ARE BELOW THE POVERTY LINE

12% LIVE IN SLUM CONDITIONS

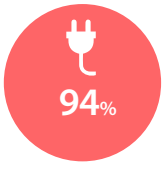
23% LIVE IN CONGESTED DWELLING UNITS*

162 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

% of HH having tap water within premises, 2011



% of HH having latrine facility



% of HH having Electricity

ELECTRICITY CONSUMPTION **23.3** KWH PER CAPITA

70% USE CLEAN COOKING FUEL

9.8% SOLID WASTE TREATED

Madhya Pradesh

14 URBAN INDEX RANK

27.6% LEVEL OF URBANISATION IN 2011

2.3% AEGR OF URBAN POPULATION 2001-2011

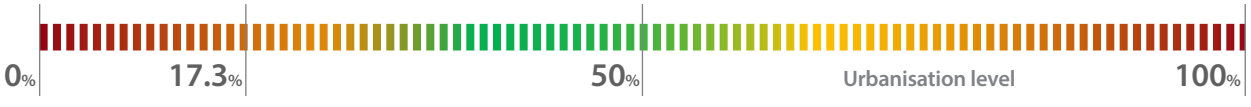
32% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

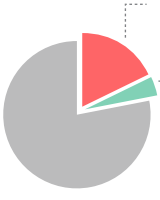
23.3% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

14.3% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

30% OF THE DISTRICTS ARE <17.3% URBAN

8% OF THE DISTRICTS ARE >50% URBAN





16.7% % of urban workers in manufacturing

2.7% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹2,636 GSDP/SQ.KM.

AVG MPCE URBAN ₹2,058 /MONTH

0.4 GINI COEFFICIENT FOR URBAN CONSUMPTION

21.2% FEMALE WORKFORCE RATIO

5% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

21% ARE BELOW THE POVERTY LINE

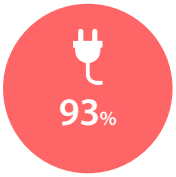
28.3% LIVE IN SLUM CONDITIONS

22% LIVE IN CONGESTED DWELLING UNITS*

169 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

% of HH having tap water within premises, 2011

% of HH having latrine facility



% of HH having Electricity

ELECTRICITY CONSUMPTION **18** KWH PER CAPITA

61.2% USE CLEAN COOKING FUEL

38.6% SOLID WASTE TREATED

Maharashtra

4 URBAN INDEX RANK

45.2% LEVEL OF URBANISATION IN 2011

2.1% AEGR OF URBAN POPULATION 2001-2011

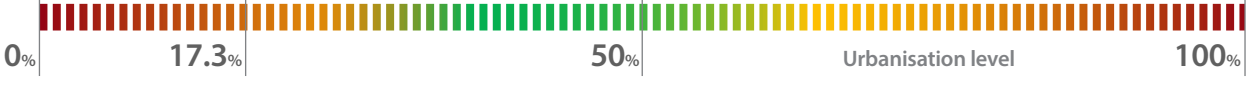
59% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

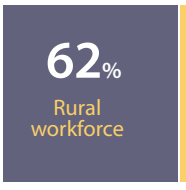
35.5% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

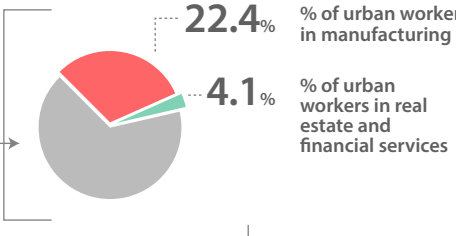
17.9% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

20% OF THE DISTRICTS ARE <17.3% URBAN

14% OF THE DISTRICTS ARE >50% URBAN







URBAN ECONOMIC DENSITY ₹10,359 GSDP/SQ.KM.

AVG MPCE URBAN ₹3,189 /MONTH

0.4 GINI COEFFICIENT FOR URBAN CONSUMPTION

21.6% FEMALE WORKFORCE RATIO

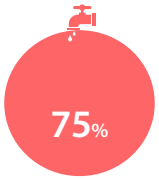
5.3% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

9.1% ARE BELOW THE POVERTY LINE

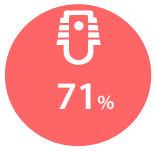
23.3% LIVE IN SLUM CONDITIONS

38% LIVE IN CONGESTED DWELLING UNITS*

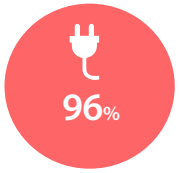
196.5 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION



% of HH having tap water within premises, 2011



% of HH having latrine facility



% of HH having Electricity

ELECTRICITY CONSUMPTION 28 KWH PER CAPITA

75.6% USE CLEAN COOKING FUEL

17.5% SOLID WASTE TREATED

Odisha

15 URBAN INDEX RANK

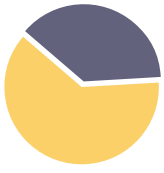
16.7% LEVEL OF URBANISATION IN 2011

2.4% AEGR OF URBAN POPULATION 2001-2011

0% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

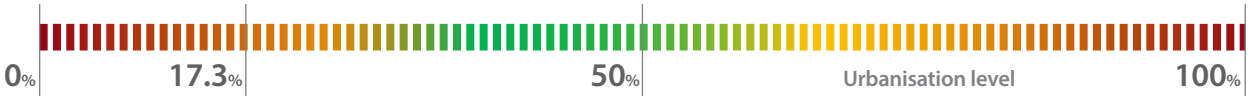
32.8% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

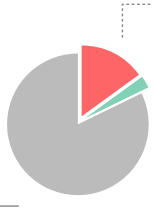
38% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)



80% OF THE DISTRICTS ARE <17.3% URBAN

0% OF THE DISTRICTS ARE >50% URBAN





15.2% % of urban workers in manufacturing

3.4% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY **₹4,951** GSDP/SQ.KM.

AVG MPCE URBAN **₹1,941** /MONTH

0.4 GINI COEFFICIENT FOR URBAN CONSUMPTION

19.6% FEMALE WORKFORCE RATIO

6% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

17.3% ARE BELOW THE POVERTY LINE

22.3% LIVE IN SLUM CONDITIONS

22% LIVE IN CONGESTED DWELLING UNITS*

543.4 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

32% % of HH having tap water within premises, 2011

65% % of HH having latrine facility

83% % of HH having Electricity

ELECTRICITY CONSUMPTION **24** KWH PER CAPITA

49% USE CLEAN COOKING FUEL

1.2% SOLID WASTE TREATED

Punjab

7 URBAN INDEX RANK

37.5% LEVEL OF URBANISATION IN 2011

2.3% AEGR OF URBAN POPULATION 2001-2011

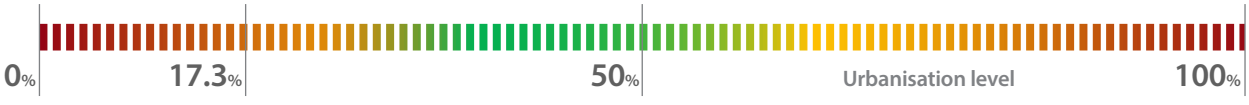
27% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

20% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

23% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

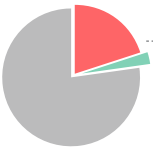
5% OF THE DISTRICTS ARE <17.3% URBAN

20% OF THE DISTRICTS ARE >50% URBAN



62% Rural workforce

38% Urban workforce



20% % of urban workers in manufacturing

3.4% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹6,479 GSDP/SQ.KM.

AVG MPCE URBAN ₹2,794 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

17.2% FEMALE WORKFORCE RATIO

5% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

9.3% ARE BELOW THE POVERTY LINE

14% LIVE IN SLUM CONDITIONS

21% LIVE IN CONGESTED DWELLING UNITS*

268.6 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

72% % of HH having tap water within premises, 2011

93% % of HH having latrine facility

98% % of HH having Electricity

ELECTRICITY CONSUMPTION **35** KWH PER CAPITA

81% USE CLEAN COOKING FUEL

0.82% SOLID WASTE TREATED

Tamil Nadu

9 URBAN INDEX RANK

48.4% LEVEL OF URBANISATION IN 2011

2.4% AEGR OF URBAN POPULATION 2001-2011

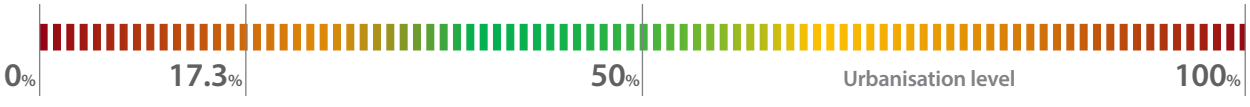
38% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

14% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

34.8% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

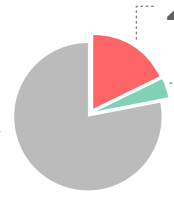
9% OF THE DISTRICTS ARE <17.3% URBAN

41% OF THE DISTRICTS ARE >50% URBAN



57% Rural workforce

43% Urban workforce



23.5% % of urban workers in manufacturing

3% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹3,786 GSDP/SQ.KM.

AVG MPCE URBAN ₹2,622 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

27% FEMALE WORKFORCE RATIO

4% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

6.5% ARE BELOW THE POVERTY LINE

16.6% LIVE IN SLUM CONDITIONS

31% LIVE IN CONGESTED DWELLING UNITS*

123 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

45% % of HH having tap water within premises, 2011

75% % of HH having latrine facility

96% % of HH having Electricity

ELECTRICITY CONSUMPTION **36.4** KWH PER CAPITA

69.5% USE CLEAN COOKING FUEL

11.1% SOLID WASTE TREATED

Uttar Pradesh

12 URBAN INDEX RANK

22.3% LEVEL OF URBANISATION IN 2011

2.5% AEGR OF URBAN POPULATION 2001-2011

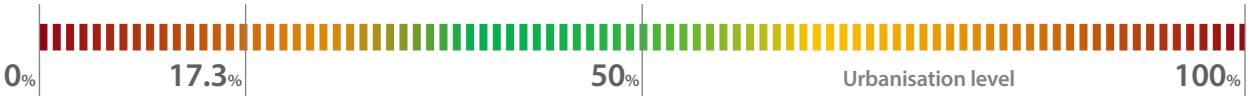
31.5% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

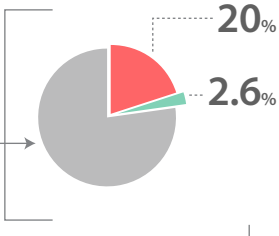
18.4% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

21.6% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

53.5% OF THE DISTRICTS ARE <17.3% URBAN

7% OF THE DISTRICTS ARE >50% URBAN





URBAN ECONOMIC DENSITY ₹5,927 GSDP/SQ.KM.

AVG MPCE URBAN ₹2,051 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

17% FEMALE WORKFORCE RATIO

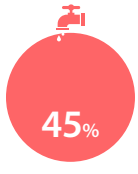
8% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

26.1% ARE BELOW THE POVERTY LINE

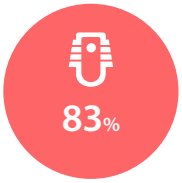
14% LIVE IN SLUM CONDITIONS

30% LIVE IN CONGESTED DWELLING UNITS*

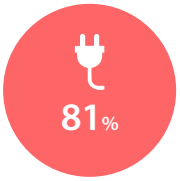
983 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION



% of HH having tap water within premises, 2011



% of HH having latrine facility



% of HH having Electricity

ELECTRICITY CONSUMPTION 19.6 KWH PER CAPITA

62.6% USE CLEAN COOKING FUEL

27% SOLID WASTE TREATED

West Bengal

10 URBAN INDEX RANK

32% LEVEL OF URBANISATION IN 2011

2.6% AEGR OF URBAN POPULATION 2001-2011

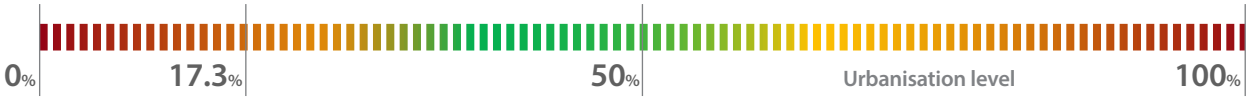
53% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

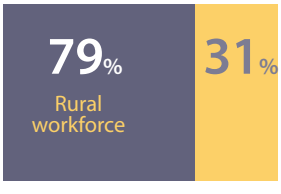
13.7% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

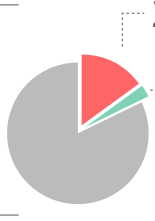
65.4% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

47.4% OF THE DISTRICTS ARE <17.3% URBAN

16% OF THE DISTRICTS ARE >50% URBAN







22.4% % of urban workers in manufacturing

2.4% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹7,310 GSDP/SQ.KM.

AVG MPCE URBAN ₹2,591 /MONTH

0.4 GINI COEFFICIENT FOR URBAN CONSUMPTION

20.3% FEMALE WORKFORCE RATIO

6% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

14.6% ARE BELOW THE POVERTY LINE

22.1% LIVE IN SLUM CONDITIONS

36% LIVE IN CONGESTED DWELLING UNITS*

1814 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

34% % of HH having tap water within premises, 2011

85% % of HH having latrine facility

85% % of HH having Electricity

ELECTRICITY CONSUMPTION **21.7** KWH PER CAPITA

50% USE CLEAN COOKING FUEL

16.3% SOLID WASTE TREATED

UNION TERRITORY

NCT of Delhi

1 URBAN INDEX RANK

97.5% URBAN POPULATION

2.4% AEGR

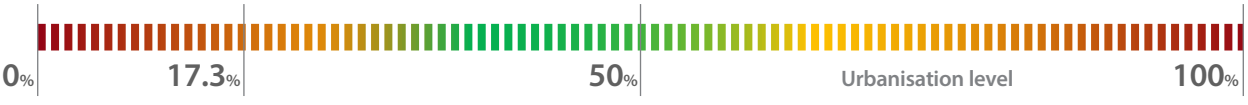
99.9% OF THE STATE'S POPULATION LIVE IN URBAN AGGLOMERATIONS

43% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

30% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

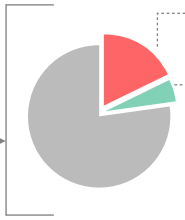
0% OF THE DISTRICTS ARE <17.3% URBAN

100% OF THE DISTRICTS ARE >50% URBAN



2% Rural workforce

98% Urban workforce



17.7% Workforce in manufacturing

4.8% Workforce in real-estate and financial services

URBAN ECONOMIC DENSITY
₹21,659 GSDP/SQ.KM.

AVERAGE PER CAPITA MPCE
₹3,298 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

14.8% FEMALE WORKFORCE RATIO

5% AEGR

9.9% ARE BELOW THE POVERTY LINE

11% LIVE IN SLUM CONDITIONS

28% LIVE IN CONGESTED DWELLING UNITS*

2470.6 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

70% % of HH having tap water within premises, 2011

90% % of HH having latrine facility

99% % of HH having Electricity

ELECTRICITY CONSUMPTION
43.2 KWH PER CAPITA

91% USE CLEAN COOKING FUEL

49.5% SOLID WASTE TREATED

Chandigarh

2 URBAN INDEX RANK

97.3% LEVEL OF URBANISATION IN 2011

2.4% AEGR OF URBAN POPULATION 2001-2011

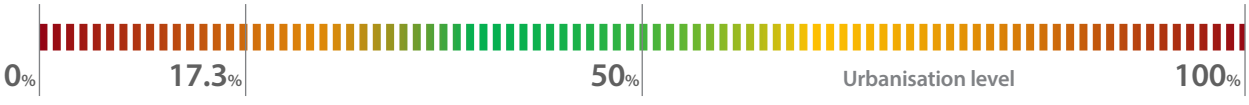
0% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

63.1% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

25.6% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

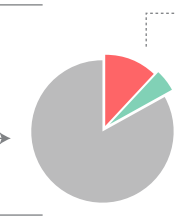
0% OF THE DISTRICTS ARE <17.3% URBAN

100% OF THE DISTRICTS ARE >50% URBAN



3% Rural workforce

97% Urban workforce



12.1% % of urban workers in manufacturing

5.1% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹18,178 GSDP/SQ.KM.

AVG MPCE URBAN ₹3,357 /MONTH

0.4 GINI COEFFICIENT FOR URBAN CONSUMPTION

19% FEMALE WORKFORCE RATIO

3.6% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

22.3% ARE BELOW THE POVERTY LINE

9.3% LIVE IN SLUM CONDITIONS

32% LIVE IN CONGESTED DWELLING UNITS*

1359 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

85% % of HH having tap water within premises, 2011

88% % of HH having latrine facility

98% % of HH having Electricity

ELECTRICITY CONSUMPTION **29.3** KWH PER CAPITA

73% USE CLEAN COOKING FUEL

73.5% SOLID WASTE TREATED

Puducherry

3 URBAN INDEX RANK

68% LEVEL OF URBANISATION IN 2011

2.7% AEGR OF URBAN POPULATION 2001-2011

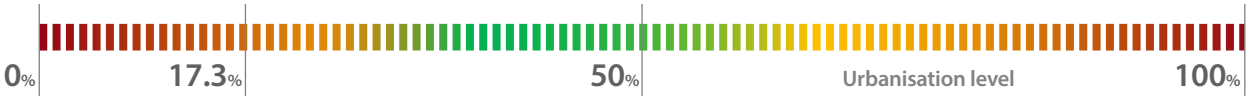
0% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

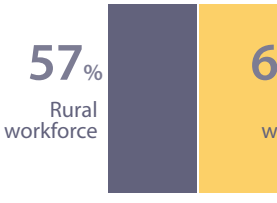
5.8% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

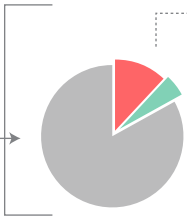
13.2% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

0% OF THE DISTRICTS ARE <17.3% URBAN

75% OF THE DISTRICTS ARE >50% URBAN







URBAN ECONOMIC DENSITY ₹8,176 GSDP/SQ.KM.

AVG MPCE URBAN ₹3,216 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

23.5% FEMALE WORKFORCE RATIO

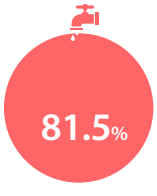
4.4% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

6.3% ARE BELOW THE POVERTY LINE

17% LIVE IN SLUM CONDITIONS

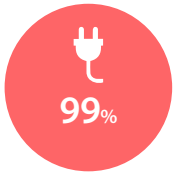
34% LIVE IN CONGESTED DWELLING UNITS*

503.4 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION



% of HH having tap water within premises, 2011

% of HH having latrine facility



% of HH having Electricity

ELECTRICITY CONSUMPTION 54.2 KWH PER CAPITA

79.4% USE CLEAN COOKING FUEL

0% SOLID WASTE TREATED

NORTH-EASTERN STATE

Meghalaya

6 URBAN INDEX RANK

20.1% URBAN POPULATION

2.7% AEGR

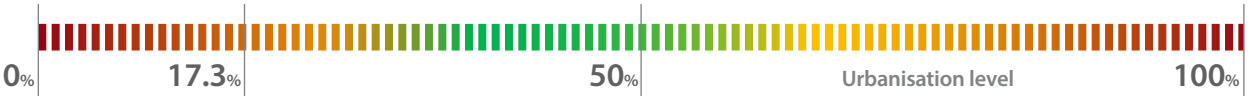
0% OF THE STATE'S POPULATION LIVE IN URBAN AGGLOMERATIONS

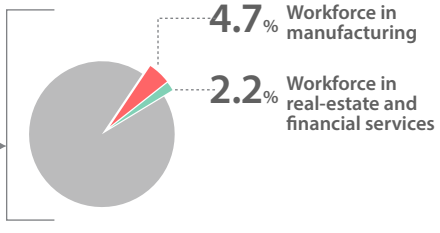
15.2% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

30.7% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

85.7% OF THE DISTRICTS ARE <17.3% URBAN

0% OF THE DISTRICTS ARE >50% URBAN





URBAN ECONOMIC DENSITY ₹4,504 GSDP/SQ.KM.

AVERAGE PER CAPITA MPCE ₹2,436 /MONTH

0.2 GINI COEFFICIENT FOR URBAN CONSUMPTION

33.1% FEMALE WORKFORCE RATIO

4.1% AEGR

9.3% ARE BELOW THE POVERTY LINE

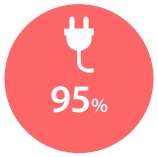
9.6% LIVE IN SLUM CONDITIONS

18% LIVE IN CONGESTED DWELLING UNITS*

10.6 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

% of HH having tap water within premises, 2011

% of HH having latrine facility



% of HH having Electricity

ELECTRICITY CONSUMPTION 20.8 KWH PER CAPITA

50.8% USE CLEAN COOKING FUEL

36.6% SOLID WASTE TREATED

Arunachal Pradesh

3 URBAN INDEX RANK

22.9% LEVEL OF URBANISATION IN 2011

3.3% AEGR OF URBAN POPULATION 2001-2011

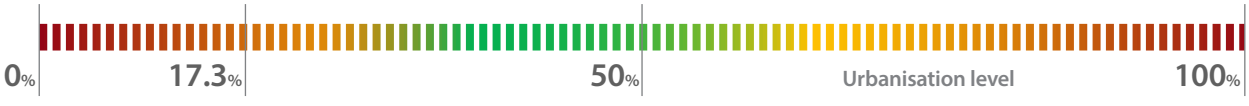
0% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

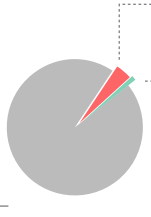
39.8% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

4.3% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

31.3% OF THE DISTRICTS ARE <17.3% URBAN

6% OF THE DISTRICTS ARE >50% URBAN





4% % of urban workers in manufacturing

1.5% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹ GSDP/SQ.KM.

AVG MPCE URBAN ₹2,654 /MONTH

0.4 GINI COEFFICIENT FOR URBAN CONSUMPTION

27.2% FEMALE WORKFORCE RATIO

6.1% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

20.4% ARE BELOW THE POVERTY LINE

5% LIVE IN SLUM CONDITIONS

17% LIVE IN CONGESTED DWELLING UNITS*

XXX MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

63% % of HH having tap water within premises, 2011

90% % of HH having latrine facility

96% % of HH having Electricity

ELECTRICITY CONSUMPTION **8.2** KWH PER CAPITA

78.8% USE CLEAN COOKING FUEL

67.3% SOLID WASTE TREATED

Assam

7 URBAN INDEX RANK

14.1% LEVEL OF URBANISATION IN 2011

2.4% AEGR OF URBAN POPULATION 2001-2011

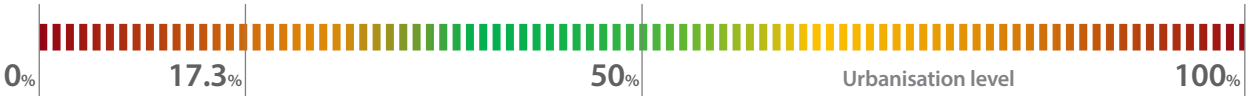
0% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

27% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

60.3% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

77.8% OF THE DISTRICTS ARE <17.3% URBAN

4% OF THE DISTRICTS ARE >50% URBAN



9.9% % of urban workers in manufacturing

3.1% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹6,996 GSDP/SQ.KM.

AVG MPCE URBAN ₹2,189 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

19.8% FEMALE WORKFORCE RATIO

6.4% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

20.5% ARE BELOW THE POVERTY LINE

4.5% LIVE IN SLUM CONDITIONS

19% LIVE IN CONGESTED DWELLING UNITS*

270.6 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

24% % of HH having tap water within premises, 2011

94% % of HH having latrine facility

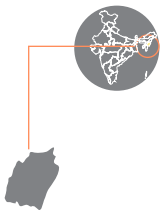
84% % of HH having Electricity

ELECTRICITY CONSUMPTION **13** KWH PER CAPITA

68.9% USE CLEAN COOKING FUEL

15.4% SOLID WASTE TREATED

Manipur



8 URBAN INDEX RANK

29.2% LEVEL OF URBANISATION IN 2011

3.7% AEGR OF URBAN POPULATION 2001-2011

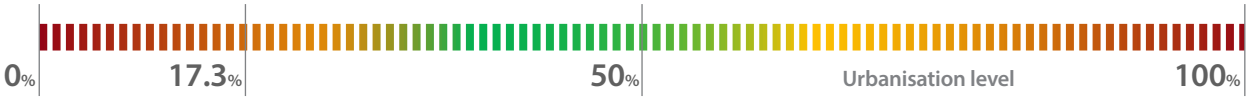
0% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

8% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

36.2% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

55.6% OF THE DISTRICTS ARE <17.3% URBAN

11% OF THE DISTRICTS ARE >50% URBAN



15.6% % of urban workers in manufacturing

1.3% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹4,126 GSDP/SQ.KM.

AVG MPCE URBAN ₹1,483 /MONTH

0.2 GINI COEFFICIENT FOR URBAN CONSUMPTION

40.6% FEMALE WORKFORCE RATIO

4.2% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

32.6% ARE BELOW THE POVERTY LINE

NA LIVE IN SLUM CONDITIONS

11% LIVE IN CONGESTED DWELLING UNITS*

68 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

% of HH having tap water within premises, 2011

% of HH having latrine facility

% of HH having Electricity

ELECTRICITY CONSUMPTION 14.4 KWH PER CAPITA

57.8% USE CLEAN COOKING FUEL

NA SOLID WASTE TREATED

Mizoram

1 URBAN INDEX RANK

52.1% LEVEL OF URBANISATION IN 2011

2.6% AEGR OF URBAN POPULATION 2001-2011

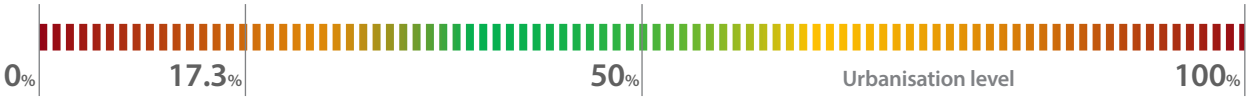
0% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

33% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

0% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

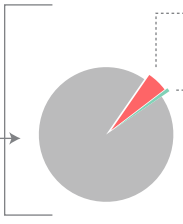
12.5% OF THE DISTRICTS ARE <17.3% URBAN

25% OF THE DISTRICTS ARE >50% URBAN



52% Rural workforce

48% Urban workforce



5.4% % of urban workers in manufacturing

1.2% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹929 GSDP/SQ.KM.

AVG MPCE URBAN ₹2,568 /MONTH

0.2 GINI COEFFICIENT FOR URBAN CONSUMPTION

37.8% FEMALE WORKFORCE RATIO

0.2% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

6.4% ARE BELOW THE POVERTY LINE

13.7% LIVE IN SLUM CONDITIONS

11% LIVE IN CONGESTED DWELLING UNITS*

51.3 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

52% % of HH having tap water within premises, 2011

99% % of HH having latrine facility

98% % of HH having Electricity

ELECTRICITY CONSUMPTION **18.4** KWH PER CAPITA

84.3% USE CLEAN COOKING FUEL

0% SOLID WASTE TREATED

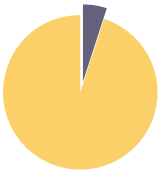
Nagaland

5 URBAN INDEX RANK

28.9% LEVEL OF URBANISATION IN 2011

5.1% AEGR OF URBAN POPULATION 2001-2011

0% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

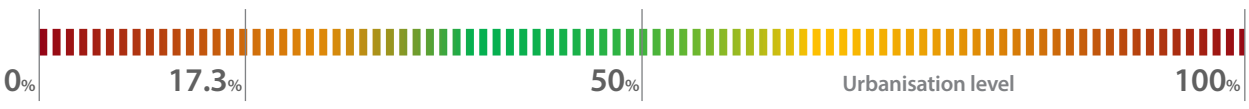


5.7% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

28.7% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

36.4% OF THE DISTRICTS ARE <17.3% URBAN

9% OF THE DISTRICTS ARE >50% URBAN



6.3% % of urban workers in manufacturing

1.4% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY **₹3,844** GSDP/SQ.KM.

AVG MPCE URBAN **₹2,284** /MONTH

0.2 GINI COEFFICIENT FOR URBAN CONSUMPTION

32.9% FEMALE WORKFORCE RATIO

11.2% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

16.5% ARE BELOW THE POVERTY LINE

14.4% LIVE IN SLUM CONDITIONS

17% LIVE IN CONGESTED DWELLING UNITS*

XXX MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

22% % of HH having tap water within premises, 2011

95% % of HH having latrine facility

97% % of HH having Electricity

ELECTRICITY CONSUMPTION **11.2** KWH PER CAPITA

53.6% USE CLEAN COOKING FUEL

6.7% SOLID WASTE TREATED

Sikkim

2 URBAN INDEX RANK

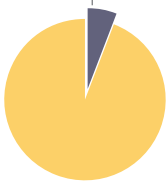
25.2% LEVEL OF URBANISATION IN 2011

9.4% AEGR OF URBAN POPULATION 2001-2011

0% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

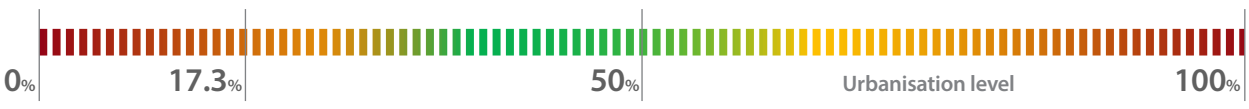
11.8% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

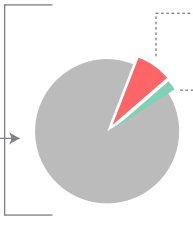
6.3% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)



75% OF THE DISTRICTS ARE <17.3% URBAN

0% OF THE DISTRICTS ARE >50% URBAN





8% % of urban workers in manufacturing

2.3% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY ₹17,897 GSDP/SQ.KM.

AVG MPCE URBAN ₹2,608 /MONTH

0.2 GINI COEFFICIENT FOR URBAN CONSUMPTION

28.3% FEMALE WORKFORCE RATIO

11.9% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

3.7% ARE BELOW THE POVERTY LINE

20.4% LIVE IN SLUM CONDITIONS

23% LIVE IN CONGESTED DWELLING UNITS*

347.7 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

79% % of HH having tap water within premises, 2011

95% % of HH having latrine facility

99% % of HH having Electricity

ELECTRICITY CONSUMPTION **17.4** KWH PER CAPITA

86% USE CLEAN COOKING FUEL

0.6% SOLID WASTE TREATED

Tripura

4 URBAN INDEX RANK

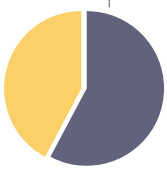
26.2% LEVEL OF URBANISATION IN 2011

5.7% AEGR OF URBAN POPULATION 2001-2011

0% SHARE OF POPULATION RESIDING IN METROPOLITAN CITIES IN URBAN POPULATION (2011)

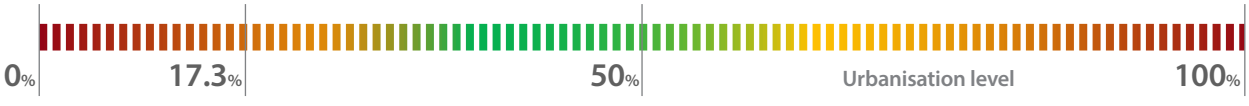
16.5% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

58.8% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)



50% OF THE DISTRICTS ARE <17.3% URBAN

0% OF THE DISTRICTS ARE >50% URBAN



8.8% % of urban workers in manufacturing

2% % of urban workers in real estate and financial services

URBAN ECONOMIC DENSITY **₹3,802** GSDP/SQ.KM.

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

21.5% FEMALE WORKFORCE RATIO

8.6% CAGR OF URBAN FEMALE WORK FORCE IN TOTAL URBAN WORKERS (2001-11)

AVG MPCE URBAN **₹2,144** /MONTH

7.4% ARE BELOW THE POVERTY LINE

14.5 LIVE IN SLUM CONDITIONS

53% LIVE IN CONGESTED DWELLING UNITS*

49.5 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

36% % of HH having tap water within premises, 2011

98% % of HH having latrine facility

92% % of HH having Electricity

ELECTRICITY CONSUMPTION **16.9** KWH PER CAPITA

50% USE CLEAN COOKING FUEL

0 SOLID WASTE TREATED

HILLY STATE

Himachal Pradesh

1 URBAN INDEX RANK

10% URBAN POPULATION

1.4% AEGR

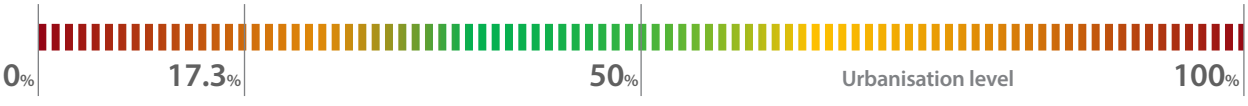
0% OF THE STATE'S POPULATION LIVE IN URBAN AGGLOMERATIONS

31.7% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

19.4% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

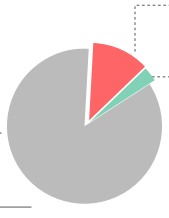
83.3% OF THE DISTRICTS ARE <17.3% URBAN

0% OF THE DISTRICTS ARE >50% URBAN



93% Rural workforce

7% Urban workforce



12.3% Workforce in manufacturing

3.3% Workforce in real-estate and financial services

URBAN ECONOMIC DENSITY ₹18,188 GSDP/SQ.KM.

AVERAGE PER CAPITA MPCE ₹3,259 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

23.3% FEMALE WORKFORCE RATIO

4.6% AEGR

4.3% ARE BELOW THE POVERTY LINE

8.9% LIVE IN SLUM CONDITIONS

19% LIVE IN CONGESTED DWELLING UNITS*

559.8 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

83% % of HH having tap water within premises, 2011

89% % of HH having latrine facility

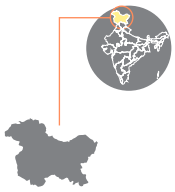
98% % of HH having Electricity

ELECTRICITY CONSUMPTION **48.6** KWH PER CAPITA

86.5% USE CLEAN COOKING FUEL

50% SOLID WASTE TREATED

Jammu & Kashmir



3 URBAN INDEX RANK

27.4% URBAN POPULATION

3.1% AEGR

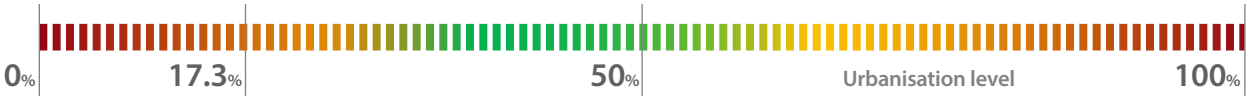
36.8% OF THE STATE'S POPULATION LIVE IN URBAN AGGLOMERATIONS

13.1% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

27.8% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

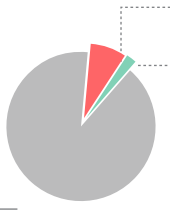
68.2% OF THE DISTRICTS ARE <17.3% URBAN

9% OF THE DISTRICTS ARE >50% URBAN



72% Rural workforce

28% Urban workforce



8.7% Workforce in manufacturing

2% Workforce in real-estate and financial services

URBAN ECONOMIC DENSITY ₹3,766 GSDP/SQ.KM.

AVERAGE PER CAPITA MPCE ₹2,485 /MONTH

0.3 GINI COEFFICIENT FOR URBAN CONSUMPTION

18.7% FEMALE WORKFORCE RATIO

6.8% AEGR

7.2% ARE BELOW THE POVERTY LINE

19.3% LIVE IN SLUM CONDITIONS

14% LIVE IN CONGESTED DWELLING UNITS*

35.4 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION

78% % of HH having tap water within premises, 2011

87% % of HH having latrine facility

98% % of HH having Electricity

ELECTRICITY CONSUMPTION 29.2 KWH PER CAPITA

78.3% USE CLEAN COOKING FUEL

17.87% SOLID WASTE TREATED

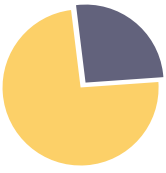
Uttarakhand

2 URBAN INDEX RANK

30.2% URBAN POPULATION

3.37% AEGR

0% OF THE STATE'S POPULATION LIVE IN URBAN AGGLOMERATIONS

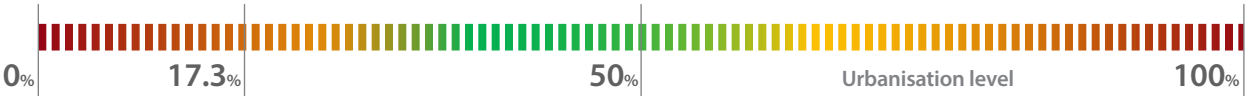


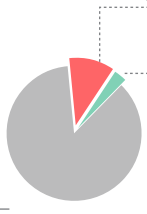
26.1% PROPORTION OF MIGRANTS IN TOTAL INCREASE IN URBAN POPULATION FROM (2001 TO 2011)

37.4% PROPORTION OF CT POPULATION IN THE INCREASE IN URBAN POPULATION (2001-11)

69.2% OF THE DISTRICTS ARE <17.3% URBAN

8% OF THE DISTRICTS ARE >50% URBAN





URBAN ECONOMIC DENSITY ₹8,358 GSDP/SQ.KM.

AVERAGE PER CAPITA MPCE ₹2,339 /MONTH

0.4 GINI COEFFICIENT FOR URBAN CONSUMPTION

16.4% FEMALE WORKFORCE RATIO

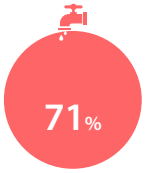
7.9% AEGR

10.5% ARE BELOW THE POVERTY LINE

16% LIVE IN SLUM CONDITIONS

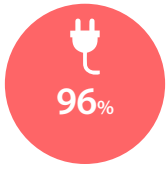
26% LIVE IN CONGESTED DWELLING UNITS*

431 MUNICIPAL ROAD MILEAGE TO 1000 POPULATION



% of HH having tap water within premises, 2011

% of HH having latrine facility



% of HH having Electricity

ELECTRICITY CONSUMPTION 21.6 KWH PER CAPITA

80% USE CLEAN COOKING FUEL

0% SOLID WASTE TREATED

ANNEX TABLES

Demographics

1.State-wise urban population, level of urbanization, annual exponential growth rate and annual rate of change of urban population

States	Urban population 1991 (in million)	Urbanization level 1991	Urban population 2001 (in million)	Urbanization level 2001	Urban population 2011 (in million)	Urbanization level 2011	AEGR of urban population (1991-01)	AEGR of urban population (2001-11)	Annual rate of change (1991-01)	Annual rate of change (2001-11)
General States										
Andhra Pradesh	17.9	26.9	20.8	27.3	28.2	33.4	1.5	3.0	1.6	3.6
Bihar	6.7	7.8	8.7	10.5	11.8	11.3	2.6	3.0	2.9	3.5
Chhattisgarh	3.1	17.4	4.2	20.1	5.9	23.2	3.1	3.5	3.7	4.2
Goa	0.5	41.0	0.7	49.8	0.9	62.2	3.3	3.0	4.0	3.5
Gujarat	14.2	34.5	18.9	37.4	25.7	42.6	2.8	3.1	3.3	3.6
Haryana	4.1	24.6	6.1	28.9	8.8	34.9	4.1	3.7	5.1	4.5
Jharkhand	4.6	21.2	6.0	22.2	7.9	24.0	2.6	2.8	2.9	3.2
Karnataka	13.9	30.9	18.0	34.0	23.6	38.7	2.6	2.7	2.9	3.2
Kerala	7.7	26.4	8.3	26.0	15.9	47.7	0.7	6.6	0.8	9.3
Maharashtra	30.5	38.7	41.1	42.4	50.8	45.2	3.0	2.1	3.5	2.4
Madhya Pradesh	12.3	18.5	16.0	26.5	20.1	27.6	2.6	2.3	3.0	2.6
Odisha	4.2	13.4	5.5	15.0	7.0	16.7	2.6	2.4	3.0	2.7
Punjab	6.0	29.5	8.3	33.9	10.4	37.5	3.2	2.3	3.8	2.6
Rajasthan	10.1	22.9	13.2	23.4	17.0	24.9	2.7	2.5	3.1	2.9
Tamil Nadu	19.1	34.2	27.5	44.0	34.9	48.4	3.7	2.4	4.4	2.7
Uttar Pradesh	26.0	18.7	34.5	20.8	44.5	22.3	2.9	2.5	3.3	2.9
West Bengal	18.7	27.5	22.4	28.0	29.1	31.9	1.8	2.6	2.0	3.0
North Eastern States										
Arunachal Pradesh	0.1	12.8	0.2	20.8	0.3	22.9	7.2	3.3	10.6	3.9
Assam	2.5	11.1	3.4	12.9	4.4	14.1	3.2	2.5	3.8	2.8
Manipur	0.5	27.5	0.6	25.1	0.8	29.2	1.3	3.7	1.4	4.5
Meghalaya	0.3	18.6	0.5	19.6	0.6	20.1	3.2	2.7	3.8	3.1
Mizoram	0.3	46.1	0.4	49.6	0.6	52.1	3.3	2.6	3.9	3.0
Nagaland	0.2	17.2	0.3	17.2	0.6	28.9	5.0	5.1	6.5	6.7
Sikkim	0.0	9.1	0.1	11.1	0.2	25.2	4.8	9.4	6.2	15.7
Tripura	0.4	15.3	0.5	17.1	1.0	26.2	2.6	5.7	2.9	7.6
Hilly States										
Himachal Pradesh	0.4	8.7	0.6	9.8	0.7	10.0	2.8	1.5	3.3	1.6
Jammu & Kashmir	1.8	23.2	2.5	24.8	3.4	27.4	3.4	3.1	4.0	3.6
Uttarakhand	1.6	23.0	2.2	25.7	3.0	30.2	2.9	3.4	3.3	4.0

Union Territories										
A & N Islands	0.1	26.7	0.1	32.6	0.1	37.7	4.4	2.1	5.5	2.3
Chandigarh	0.6	89.7	0.8	89.8	1.0	97.3	3.4	2.4	4.0	2.7
Dadra & Nagar Haveli	0.0	8.5	0.1	22.9	0.2	46.7	14.6	11.6	33.0	21.8
Daman & Diu	0.0	46.8	0.1	36.2	0.2	75.2	1.9	11.6	2.1	21.9
Delhi	8.5	89.9	12.9	93.2	16.4	97.5	4.2	2.4	5.2	2.7
Lakshadweep	0.0	56.3	0.0	44.5	0.1	78.1	-0.8	6.2	-0.7	8.7
Puducherry	0.5	64.0	0.6	66.6	0.9	68.3	2.3	2.7	2.5	3.1
INDIA	217.6	24.4	286.1	27.8	377.1	31.1	2.7	2.8	3.2	3.2

Source: Census of India, 1991, 2001, 2011

2.State-wise number and population of statutory towns, census towns and out- growths in 2011

States	Statutory Towns		Census Towns		Out-Growths		Total number of towns	Total population (in million)
	Number	Total population (inmillion)	Number	Total population (inmillion)	Number	Total population (inmillion)		
General States								
Andhra Pradesh	127	23.0	228	4.1	209	1.1	355	28.2
Bihar	139	11.2	60	0.5	4	0.0	199	11.8
Chhattisgarh	168	5.7	14	0.1	40	0.1	182	5.9
Goa	14	0.4	56	0.5	7	0.0	70	0.9
Gujarat	195	23.2	153	1.8	129	0.8	348	25.7
Haryana	80	7.9	74	0.9	15	0.1	154	8.8
Jharkhand	40	5.3	188	2.6	1	0.0	228	7.9
Karnataka	220	22.2	127	1.2	69	0.2	347	23.6
Kerala	59	5.2	461	10.3	16	0.4	520	15.9
Maharashtra	256	46.8	278	4.0	3	0.0	534	50.8
Madhya Pradesh	364	18.8	112	1.1	86	0.2	476	20.1
Odisha	107	6.0	116	0.8	50	0.2	223	7.0
Punjab	143	9.6	74	0.7	60	0.2	217	10.4
Rajasthan	185	15.7	112	1.2	39	0.1	297	17.0
Tamil Nadu	721	29.8	376	5.0	14	0.1	1097	34.9
Uttar Pradesh	648	40.7	267	3.6	66	0.2	915	44.5
West Bengal	129	21.1	780	7.9	13	0.1	909	29.1
North Eastern States								
Arunachal Pradesh	26	0.3	1	0.0	0	0.0	27	0.3
Assam	88	3.3	126	1.0	29	0.1	214	4.4
Manipur	28	0.6	23	0.2	7	0.0	51	0.8
Meghalaya	10	0.4	12	0.2	0	0.0	22	0.6
Mizoram	23	0.6	0	0.0	0	0.0	23	0.6

Nagaland	19	0.5	7	0.1	0	0.0	26	0.6
Sikkim	8	0.1	1	0.0	0	0.0	9	0.2
Tripura	16	0.7	26	0.3	0	0.0	42	1.0
Hilly States								
Himachal Pradesh	56	0.7	3	0.0	8	0.0	59	0.7
Jammu & Kashmir	86	2.9	36	0.3	93	0.2	122	3.4
Uttarakhand	74	2.5	41	0.5	19	0.1	115	3.0
Union Territories								
A & N Islands	1	0.1	4	0.0	0	0.0	5	0.1
Chandigarh	1	1.0	5	0.1	2	0.0	6	1.0
Dadra & Nagar Haveli	2	0.1	6	0.1	0	0.0	8	0.2
Daman & Diu	1	0.1	5	0.1	0	0.0	6	0.2
Delhi	3	11.4	110	5.0	0	0.0	113	16.4
Lakshadweep	0	0.0	6	0.1	0	0.0	6	0.1
Puducherry	6	0.7	4	0.1	1	0.0	10	0.9
INDIA	4043	318.5	3892	54.3	980	4.3	7935	377.1

Source: Census of India, 2011

3.State-wise demographic dividend and proportion of ageing population in urban areas in 2011

States	Demographic dividend (15-24 years)	Proportion of ageing population (60-80+ years)
General States		
Andhra Pradesh	19.9	7.7
Bihar	19.4	7.1
Chhattisgarh	20.5	6.8
Goa	17.1	10.8
Gujarat	19.9	7.4
Haryana	20.2	7.7
Jharkhand	20.4	6.6
Karnataka	19.8	8.0
Kerala	15.8	12.5
Maharashtra	19.6	8.1
Madhya Pradesh	20.6	7.6
Odisha	19.8	7.8
Punjab	19.9	8.7
Rajasthan	20.9	7.0
Tamil Nadu	17.1	10.0
Uttar Pradesh	22.1	6.7
West Bengal	18.3	9.8
North Eastern States		

Arunachal Pradesh	23.2	2.3
Assam	19.0	7.5
Manipur	18.1	8.2
Meghalaya	23.4	4.9
Mizoram	21.1	6.3
Nagaland	23.2	3.8
Sikkim	21.9	4.9
Tripura	18.2	8.7
Hilly States		
Himachal Pradesh	19.6	7.8
Jammu & Kashmir	18.8	7.9
Uttarakhand	21.4	7.4
Union Territories		
A & N Islands	19.0	5.2
Chandigarh	21.4	6.4
Dadra & Nagar Haveli	22.7	3.3
Daman & Diu	28.0	4.3
Delhi	20.4	6.8
Lakshadweep	17.9	8.3
Puducherry	16.5	9.8
INDIA	19.7	8.1

Source: Census of India, 2011

Urban Economy

4.State-wise per capita net state domestic product at current price (In Rs.)

States	1981	1991	2001	2011
General States				
Andhra Pradesh	1358	4531	17195	58733
Bihar	943	2660	6415	19111
Chhattisgarh	-	-	10744	41165
Goa	2910	8797	43735	168024
Gujarat	1967	5891	18392	77485
Haryana	2351	-	25583	93852
Jharkhand	-	-	10345	34721
Karnataka	1454	4598	18344	62251
Kerala	1385	4200	20094	69943
Madhya Pradesh	1181	4049	11862	32453
Maharashtra	2244	7439	22777	84858
Odisha	1173	3077	10453	39537

Punjab	2620	8318	27881	69582
Rajasthan	1220	4191	13020	44644
Tamil Nadu	1324	4983	20972	78473
Uttar Pradesh	1272	3590	9828	26698
West Bengal	1643	4673	16583	47245
North Eastern States				
Arunachal Pradesh	1382	5398	15260	60961
Assam	1221	4281	12803	33087
Manipur	1382	3976	12369	28336
Meghalaya	1095	4375	15657	43766
Mizoram	-	4474	17826	50956
Nagaland	1606	4990	16253	55582
Sikkim	1495	5302	16077	108972
Tripura	1211	3370	15983	46050
Hilly States				
Himachal Pradesh	1530	4910	22795	68297
Jammu & Kashmir	1455	3816	14268	40089
Uttarakhand	-	-	15285	73819
Union Territories				
A & N Islands	-	5590	25047	80558
Chandigarh	-	-	49771	126651
Delhi	3127	11057	40678	145129
Puducherry	3118	6683	35994	101072

Source: Handbook of statistics on Indian states

5.State-wise percentage share of urban workers in total urban population and share of main and marginal workers
(15 years and above) -2011

States	% share of urban workers in total urban population (urban employment)			% share of main workers in total urban employment			% share of marginal workers in total urban employment		
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female
General States									
Andhra Pradesh	48.3	72.0	24.6	41.8	64.9	18.8	6.5	7.2	5.8
Bihar	42.4	66.8	15.0	33.6	55.2	9.3	8.8	11.6	5.7
Chhattisgarh	49.1	73.5	23.7	43.6	67.8	18.5	5.4	5.7	5.2
Goa	50.2	73.0	26.6	43.4	64.5	21.5	6.8	8.4	5.0
Gujarat	47.5	77.0	14.7	44.0	73.2	11.5	3.5	3.8	3.2
Haryana	44.8	70.7	15.9	40.0	64.4	12.7	4.9	6.3	3.2
Jharkhand	41.3	66.1	14.0	34.5	57.1	9.7	6.7	9.0	4.3
Karnataka	52.1	76.3	27.0	46.6	69.9	22.5	5.5	6.4	4.5

Kerala	43.0	68.6	20.4	35.9	59.9	14.7	7.1	8.8	5.6
Madhya Pradesh	47.2	71.8	20.6	41.2r	65.0	15.7	5.9	6.9	4.9
Maharashtra	48.5	72.8	21.8	44.8	68.4	18.7	3.8	4.4	3.1
Odisha	45.8	71.5	18.3	39.3	64.0	13.0	6.4	7.5	5.3
Punjab	46.5	73.4	16.6	42.2	68.3	13.2	4.3	5.1	3.4
Rajasthan	45.5	72.4	16.6	40.6	67.1	12.1	4.9	5.4	4.4
Tamil Nadu	51.5	75.8	27.6	46.5	70.0	23.3	5.0	5.8	4.2
Uttar Pradesh	43.7	69.4	15.1	35.4	58.6	9.7	8.2	10.8	5.4
West Bengal	46.8	72.7	19.3	40.5	65.8	13.8	6.2	7.0	5.4
North Eastern States									
Arunachal Pradesh	52.6	71.3	30.5	46.1	65.0	23.7	6.5	6.3	6.7
Assam	47.3	74.0	19.0	40.9	66.9	13.4	6.4	7.1	5.6
Manipur	56.4	68.9	44.4	42.9	58.3	28.2	13.5	10.5	16.2
Meghalaya	50.3	67.9	32.9	45.4	62.5	28.6	4.8	5.3	4.3
Mizoram	57.0	71.1	42.9	48.2	63.0	33.5	8.8	8.1	9.4
Nagaland	52.8	67.3	36.6	43.7	59.9	25.5	9.1	7.4	11.1
Sikkim	54.5	74.4	32.3	48.4	67.2	27.3	6.1	7.2	5.0
Tripura	46.8	72.8	20.2	39.9	65.9	13.3	6.9	6.9	7.0
Hilly States									
Himachal Pradesh	50.3	71.7	25.2	44.9	66.4	19.9	5.3	5.3	5.4
Jammu & Kashmir	47.2	70.7	19.0	38.5	61.8	10.4	8.8	8.9	8.6
Uttarakhand	44.2	70.3	15.0	39.3	64.0	11.8	4.8	6.3	3.2
Union Territories									
A & N Islands	52.3	77.3	22.9	48.4	72.5	20.1	3.9	4.9	2.8
Chandigarh	50.4	74.4	21.1	48.3	72.0	19.2	2.1	2.4	1.8
Dadra & Nagar Haveli	62.1	87.8	20.9	58.0	84.3	15.8	4.1	3.5	5.1
Daman & Diu	67.0	90.1	19.5	65.0	88.0	17.7	2.0	2.1	1.8
Delhi	45.5	72.6	14.3	43.3	69.7	13.0	2.2	2.9	1.3
Lakshadweep	37.1	58.8	13.9	22.6	37.0	7.2	14.5	21.7	6.7
Puducherry	45.2	71.6	20.5	42.3	67.9	18.3	2.9	3.7	2.2
INDIA	47.2	72.5	20.2	41.6	65.9	15.8	5.6	6.6	4.5

Source: Census of India, 2011

6.State-wise urban share in employment

States	2004-05			2009-10			2011-12		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
General States									
Andhra Pradesh	53.1	76.9	29.8	48.8	73.5	23.3	48.3	74.0	22.5
Bihar	42.2	68.7	10.4	39.5	68.3	7.2	37.9	63.6	6.7
Chhattisgarh	49.1	71.2	24.4	44.9	69.6	19.7	53.1	72.6	32.6
Goa	47.8	70.3	24.6	42.6	75.0	12.7	43.8	67.4	20.2
Gujarat	51.9	80.5	20.3	49.8	78.6	18.4	51.1	79.7	17.7
Haryana	48.2	74.9	18.1	50.6	76.7	18.7	42.9	70.0	13.0
Jharkhand	44.2	67.7	18.5	42.8	69.1	12.8	40.2	70.0	8.8
Karnataka	52.6	78.6	24.6	50.0	75.5	22.2	49.9	75.9	21.9
Kerala	48.9	74.3	25.7	47.5	72.4	25.1	46.8	73.1	24.1
Madhya Pradesh	51.6	78.9	22.4	44.7	70.1	17.8	45.5	73.3	16.0
Maharashtra	52.4	76.3	25.9	49.5	75.2	20.6	48.3	73.9	21.6
Odisha	46.6	71.1	20.4	45.9	75.1	15.6	50.2	78.2	19.8
Punjab	49.6	77.9	18.1	47.7	75.4	15.8	48.5	75.8	17.6
Rajasthan	52.3	75.3	27.5	45.5	72.1	16.9	45.2	69.2	19.1
Tamil Nadu	55.0	78.8	31.3	49.9	75.7	24.5	50.9	76.4	26.0
Uttar Pradesh	49.4	77.7	17.0	43.0	72.6	11.0	45.4	74.3	14.2
West Bengal	48.5	74.8	19.2	47.0	75.6	17.5	49.0	74.5	21.4
North Eastern States									
Arunachal Pradesh	47.7	72.1	20.7	44.7	66.4	21.0	45.3	67.0	19.3
Assam	47.3	76.3	15.4	42.4	71.2	12.0	43.4	72.8	11.6
Manipur	49.0	67.1	31.5	46.9	72.3	21.1	48.0	70.9	25.9
Meghalaya	52.2	66.5	40.4	48.0	67.8	31.0	47.0	66.0	29.2
Mizoram	54.4	70.9	38.6	57.4	74.5	40.8	53.2	71.8	35.6
Nagaland	55.0	71.5	37.3	40.5	62.1	17.7	38.3	56.2	18.7
Sikkim	50.6	75.1	22.0	56.7	84.9	21.7	61.2	81.1	37.4
Tripura	39.0	66.5	12.6	41.2	69.5	13.8	40.7	68.0	14.3
Hilly States									
Himachal Pradesh	62.0	84.6	32.3	48.5	76.0	21.4	52.9	76.1	27.1
Jammu & Kashmir	44.7	72.7	13.0	44.4	70.4	17.4	44.2	70.5	15.4
Uttarakhand	46.5	72.6	17.8	47.8	75.2	16.0	43.1	72.5	12.0
Union Territories									
A & N Islands	50.6	75.9	20.8	50.3	75.3	24.0	51.9	78.6	26.1
Chandigarh	46.1	70.3	18.7	46.4	72.3	18.1	48.1	75.7	16.0
Dadra & Nagar Haveli	61.1	91.0	25.4	48.4	82.1	0.8	54.5	86.7	16.9
Daman & Diu	50.3	76.7	28.1	46.6	79.5	10.8	49.9	80.5	21.4
Delhi	45.3	72.5	11.9	44.5	71.8	7.8	45.6	73.2	13.8
Lakshadweep	40.1	66.5	15.3	48.9	64.9	34.1	43.7	72.0	14.0
Puducherry	46.7	73.8	20.7	49.1	73.7	25.9	45.9	72.5	19.2
INDIA	50.6	76.3	22.7	47.2	74.0	18.3	47.6	74.1	19.5

Source: NSSO, Employment and Unemployment Schedule, 61st, 66th and 68th rounds

7.State wise urban share in employment: labour bureau

States	2011-12			2012-13			2013-14			2015-16		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
General States												
Andhra Pradesh	47.4	69.9	23	49.5	74.8	23.4	53.7	75.9	31.8	42.9	66.1	20.2
Bihar	44.7	72	11.9	37.4	66.1	3.6	39.5	66.8	6.9	40.8	69.4	7.3
Chhattisgarh	49.6	73.8	25.2	46.4	71.8	19.7	49.4	72.2	25.3	45.8	68.9	20
Goa	41.4	64.1	14.8	42.7	70.1	18.9	49.2	70.9	27.5	44.7	68.7	22.7
Gujarat	43.8	75.3	9.7	42.2	72.5	9.3	44.1	75	10.7	41.9	71.1	10.2
Haryana	40.6	67.6	10.4	40.9	65.8	11.9	41	67.6	11	39.5	66.1	10.6
Jharkhand	50.1	74.2	20.5	42	67.5	11.3	50.8	77.2	20.8	42	68.5	12.6
Karnataka	51.1	74.8	25.1	50	73.8	24.9	51	74	27.1	49.9	73.2	25.7
Kerala	42.2	68.3	19	41.9	66.5	19.8	44.7	69.4	22.3	44.2	67.7	23.1
Madhya Pradesh	44.9	71.1	15.2	44.5	71.9	15.3	46.3	74.1	16.1	37.8	64.4	8.5
Maharashtra	48.6	71.2	22.3	45.1	68.5	19.1	45	69.1	18.7	39	63.5	12.3
Odisha	44.8	73.8	12.2	39.5	67.8	9.2	46.1	72.7	17.3	42.7	70.3	12.9
Punjab	41.4	69.2	9.7	41.5	67.6	11.6	42.6	70.2	10.9	39.3	66.7	9.1
Rajasthan	40.7	66.2	9.8	41.9	68	12.3	41.9	68.6	11.4	38.7	66.1	8.7
Tamil Nadu	52	75.9	27.3	48.8	74.7	23.3	50.4	74.7	26.3	45.1	67.4	23.5
Uttar Pradesh	41.2	70.3	7.1	40.9	69	7.9	41	70	7.7	35.6	62.1	5.9
West Bengal	41.4	66.3	11.4	42.3	70.6	11.8	43.8	72	13.8	43.8	72.2	14.2
North Eastern States												
Arunachal Pradesh	38	57.2	18.6	48.3	70.4	23.6	52.1	65.5	37.6	40.4	61.6	18.6
Assam	49.8	73.1	21.9	47.6	74.5	17.3	48.7	76.2	18	45.9	71.2	18.1
Manipur	48	52.6	43.1	51.2	71.6	26.6	57.4	68.3	46.3	50.9	75.8	28.4
Meghalaya	54	66.7	40.6	52.4	68.2	38	46.3	62.2	30.2	53.7	67.4	40.7
Mizoram	54.4	67.6	39.1	60.8	73.3	49.1	61.7	74.5	49.8	59.4	73.1	47.6
Nagaland	47.2	59.8	32.1	45.8	58.7	30.6	44.9	58.5	28.8	52.9	63.9	41.1
Sikkim	50.9	68.8	25.3	48.6	70.4	22.9	43.1	65.9	14.2	53.4	72.6	30.5
Tripura	45.3	69.7	20.8	43.9	61.1	24.3	44.7	75.5	13.4	50.2	80.2	22.6
Hilly States												
Himachal Pradesh	51.3	70.6	29.6	46.8	69	20.9	46.2	70.2	18.3	43.1	67.7	16.6
Jammu & Kashmir	44	73	11.2	39.4	65.6	10.8	42.4	67.7	15	38.5	64.2	10.7
Uttarakhand	42.8	70.8	12.7	40.8	68.1	10.7	39.9	63.2	14.3	39.4	64.3	10.5
Union Territories												
A & N Islands	50.5	75.4	24.1	47.1	75.3	21.8	51.2	70	28	52.1	79.9	19.8
Chandigarh	44.3	75.1	10.4	38.2	61.6	13.2	39.6	63.9	12.4	36.9	60.5	8.2
Dadra & Nagar Haveli	62.5	84.2	25.3	45.3	74	11.5	39.1	63.1	9.1	41.3	65.9	10.3
Daman & Diu	41.4	67.5	16.5	60.9	86.5	12.6	45.6	71.5	0.9	50.9	83.2	14.9
Delhi	46	72.9	14.1	41.9	68.5	11.4	40.3	66.5	10.1	40.5	65.1	11.5
Lakshadweep	41.4	67	9.4	38.8	66.4	10.1	45.6	68.2	23.4	35.5	60.3	14.1
Puducherry	52.1	80	24.8	45.4	73.6	18.3	43.8	63.8	26	48.6	72	25.7
INDIA	45.8	71.3	17	44.2	70.4	15.7	45.5	71.4	17.5	41.8	67.1	14.8

Source: LabourBureau'sAnnualEmployment-UnemploymentSurveyNote:UPSSapproachadoptedforpersons age 15 years and above; All the States/UTs are arranged in ascending order of urbanisationlevel.

8.State wise urban share employment in industrial distribution (all ages): 2011

States	I	II	III	IV	V	VI	VII	VIII	IX	X
General States										
Andhra Pradesh	11.3	0.9	16.0	1.0	12.1	13.9	2.0	10.1	3.3	29.3
Bihar	21.7	0.2	12.1	0.4	7.2	16.4	1.3	5.7	3.0	32.1
Chhattisgarh	16.2	2.2	13.9	2.1	11.5	15.2	2.3	9.2	2.5	24.8
Goa	4.0	2.0	15.1	0.7	10.0	12.8	5.5	10.7	3.9	35.2
Gujarat	7.9	0.2	31.1	1.8	8.8	17.6	1.0	7.3	3.0	21.2
Haryana	8.5	0.1	17.9	0.7	9.3	16.9	1.4	6.8	3.6	34.7
Jharkhand	8.2	5.3	16.7	1.3	12.0	16.7	1.5	10.0	3.9	24.3
Karnataka	9.2	0.4	22.0	0.7	10.4	15.4	2.4	11.7	4.1	23.7
Kerala	13.1	0.5	15.9	0.7	17.3	14.1	2.5	11.2	4.0	20.8
Madhya Pradesh	14.2	1.0	16.7	0.9	11.8	16.6	2.1	7.9	2.7	26.1
Maharashtra	6.4	0.3	22.4	0.6	9.4	14.6	2.3	10.5	4.1	29.3
Odisha	10.1	1.5	15.2	1.0	11.6	16.2	2.7	9.2	3.4	29.1
Punjab	7.3	0.0	19.6	0.7	8.8	19.4	1.4	6.7	3.4	32.7
Rajasthan	10.0	0.9	18.4	1.2	12.1	18.0	1.8	6.9	3.5	27.3
Tamil Nadu	14.0	0.4	23.5	0.6	9.7	13.0	2.6	9.2	3.0	24.0
Uttar Pradesh	12.9	0.1	20.0	0.8	7.9	16.3	1.1	6.4	2.6	32.0
West Bengal	5.9	0.7	22.4	0.5	8.2	18.2	2.0	8.8	2.4	30.9
North Eastern States										
Arunachal Pradesh	10.0	0.2	4.0	5.2	11.0	10.9	1.2	4.6	1.5	51.4
Assam	7.0	1.1	9.9	1.5	8.5	23.3	2.2	9.8	3.1	33.8
Manipur	24.4	0.1	15.6	1.1	4.9	12.6	1.2	4.2	1.3	34.6
Meghalaya	9.5	1.0	4.7	2.4	11.0	15.0	2.3	6.6	2.2	45.5
Mizoram	29.7	0.5	5.4	2.7	8.7	12.0	1.1	5.8	1.2	33.0
Nagaland	17.3	0.7	6.3	2.0	6.7	14.0	1.5	5.2	1.4	44.9
Sikkim	4.8	0.4	8.0	3.2	10.4	13.2	4.2	8.7	2.3	44.7
Tripura	10.0	0.2	8.8	1.4	17.2	16.5	1.5	8.8	2.0	33.5
Hilly States										
States/ UTs	I	II	III	IV	V	VI	VII	VIII	IX	X
Himachal Pradesh	8.3	0.1	12.3	2.7	8.9	13.4	3.0	5.8	3.3	42.2
Jammu & Kashmir	11.9	0.2	8.7	1.9	6.4	14.4	1.0	5.9	2.0	47.7
Uttarakhand	6.4	0.2	11.2	1.7	10.4	18.2	2.6	6.9	3.3	39.0
Union Territories										
A & N Islands	5.1	0.6	5.2	2.2	14.1	11.2	2.8	10.1	1.9	46.9
Chandigarh	1.7	0.0	12.1	0.8	9.4	14.7	3.3	9.0	5.1	43.9
Dadra & Nagar Haveli	5.6	0.2	60.3	0.6	2.9	7.7	1.2	3.8	0.9	16.9
Daman & Diu	3.5	0.4	68.9	0.8	3.0	5.9	2.0	6.1	0.6	8.9
Delhi	1.2	0.0	17.7	1.4	7.0	21.4	1.9	10.0	4.8	34.6
Lakshadweep	10.9	0.0	8.0	2.5	15.5	3.3	1.2	17.1	1.7	39.8
Puducherry	8.6	0.2	13.0	0.7	12.0	13.2	3.1	9.1	3.5	36.6
INDIA	10.0	0.6	20.1	0.9	9.9	16.0	2.0	8.9	3.3	28.4

Source: Census of India, 2011

Note- I: Agriculture, Forestry and Fishing; II: Mining and Quarrying; III: Manufacturing; IV; Electricity, Gas, steam and Air conditioning Supply,Water Supply; (Sewerage, Waste Management and remediation activities); V: Construction; VI: Wholesale and Retail Trade (Repair of motor vehicles and motor cycles); VII: Accommodation and food service activities, Information and Communication; VIII: Transportation and Storage; IX: Financial and Insurance activities,Real Estate activities, Professional, Scientific and Technical activities; X: Administrative and support service activities, Public Administration and Defence, Compulsory Social Security, Education, Human Health and Social Work activities, Arts, Entertainment and recreation, Other Service Activities, Activities of Households as Employers: Undifferentiated Goods and Services, Activities of Extra-Territorial Organisations and Bodies

Infrastructure and Environmental Security

9.State-wise status of solid waste treatment

States	Solid waste (in tonnes per day)		
	Generation	Collection	Treatment
General States			
Andhra Pradesh	11,500	10,656	9,418
Bihar	1,670	NA	NA
Chhattisgarh	1,896	1,704	168
Goa	183	182	182
Gujarat	9,227	9,227	1,354
Haryana	3,490	3,440	570
Jharkhand	3,570	3,570	65
Karnataka	8,784	7,602	2,000
Kerala	1,576	776	470
Madhya Pradesh	2,079	4,298	802
Maharashtra	26,820	14,900	4,700
Odisha	2,460	2,107	30
Punjab	3,900	3,853	32
Rajasthan	5,037	2,491	490
Tamil Nadu	14,532	14,234	1,607
Uttar Pradesh	19,180	19,180	5,197
West Bengal	8,674	7,196	1,415
North Eastern States			
Arunachal Pradesh	110	82	74
Assam	650	350	100
Manipur	176	125	NA
Meghalaya	268	199	98
Mizoram	552	276	0
Nagaland	270	186	18
Sikkim	49	49	0
Tripura	407	407	0
Hilly States			
Himachal Pradesh	300	240	150
Jammu & Kashmir	1,792	1,322	320
Uttarakhand	1,013	1,013	0

Union Territories			
A & N Islands	70	70	5
Chandigarh	340	330	250
Daman &Diu and Dadra &Nagar Haveli	85	85	0
Delhi	8,390	7,000	4,150
Lakshadweep	21	NA	NA
Puducherry	495	495	0
INDIA	143,449	117,644	32,871

Source: Central Pollution Control Board, 2015

10.State-wise monthly per capita consumption of electricity

States	2004-05	2011-12
General States		
Andhra Pradesh	18.8	25.6
Bihar	8.6	11.6
Chhattisgarh	21.9	22.3
Goa	21.8	51.9
Gujarat	19.0	23.6
Haryana	19.4	36.5
Jharkhand	15.2	22.0
Karnataka	18.1	22.8
Kerala	19.8	29.7
Madhya Pradesh	18.1	18.0
Maharashtra	21.9	27.7
Odisha	20.0	23.9
Punjab	29.9	35.0
Rajasthan	16.0	23.3
Tamil Nadu	26.6	36.4
Uttar Pradesh	13.4	19.6
West Bengal	17.6	21.7
North Eastern States		
Arunachal Pradesh	6.6	8.2
Assam	13.2	13.0
Manipur	13.0	14.4
Meghalaya	24.5	20.8
Mizoram	20.6	18.4
Nagaland	8.1	11.2
Sikkim	9.0	17.4
Tripura	15.1	16.9
Hilly States		

Himachal Pradesh	30.3	48.6
Jammu & Kashmir	16.3	29.2
Uttarakhand	17.7	21.6
Union Territories		
A & N Islands	26.3	35
Chandigarh	27.5	29.3
Dadra &Nagar Haveli	32.8	28.7
Daman &Diu	15.0	32.9
Delhi	39.2	43.2
Lakshadweep	25.2	62.9
Puducherry	NA	54.2
INDIA	19.9	25.8

Source: NSS Report No. 558, 2011-12 NSS Report No. 509, 2004-05

11.State-wise percentage of households with basic services

States	Percentage of HH with tap water within premises			Percentage of HH with electricity			Percentage of HH with latrine facility		
	1991	2001	2011	1991	2001	2011	1991	2001	2011
General States									
Andhra Pradesh	27.6	44.2	59.9	73.0	90.0	97.3	55.0	78.1	86.1
Bihar	28.1	21.7	16.7	58.8	59.3	66.7	56.5	69.7	69.0
Chhattisgarh	NA	34.9	34.9	NA	82.9	93.7	NA	52.6	60.2
Goa	40.1	62.1	80.5	88.8	94.7	97.7	55.8	69.2	85.3
Gujarat	59.4	67.2	75.5	83.0	93.4	97.2	65.7	80.5	87.7
Haryana	50.7	58.9	69.1	89.1	92.9	96.2	64.3	80.7	89.9
Jharkhand		33.9	28.9		75.6	88.0		66.7	67.2
Karnataka	36.8	48.3	60.5	76.3	90.5	96.4	62.5	75.2	84.9
Kerala	22.6	29.4	27.1	67.7	84.3	97.0	72.7	92.0	97.4
Madhya Pradesh	38.2	43.9	41.6	72.5	92.3	92.7	53.0	67.7	74.2
Maharashtra	60.5	69.2	74.6	86.1	94.3	96.2	64.4	58.1	71.3
Odisha	26.2	30.9	32.2	62.1	74.1	83.1	49.3	59.7	64.8
Punjab	53.5	63.4	71.8	94.6	96.5	98.3	73.2	86.5	93.4
Rajasthan	58.5	70.0	72.8	76.7	89.6	93.9	62.3	76.1	82.0
Tamil Nadu	28.5	34.9	45.1	76.8	88.0	96.1	57.5	64.3	75.1
Uttar Pradesh	45.1	48.1	45.2	67.8	79.9	81.4	66.5	80.0	83.1
West Bengal	29.6	34.0	34.0	70.2	79.6	85.1	78.8	84.8	85.0
North Eastern States									
Arunachal Pradesh	57.5	52.1	62.6	81.0	89.4	96.0	75.0	87.0	89.5
Assam	20.2	22.2	24.4	63.2	74.3	84.1	86.1	94.6	93.7
Manipur	15.5	20.1	29.0	75.5	82.0	82.4	70.2	95.3	95.8

Meghalaya	46.6	43.9	51.9	83.0	88.1	94.9	85.7	91.6	95.7
Mizoram	10.9	30.0	52.4	85.5	94.4	98.1	84.4	98.0	98.5
Nagaland	29.4	20.2	22.1	75.6	90.3	97.4	75.1	94.1	94.6
Sikkim	74.6	85.4	78.9	92.4	97.1	98.7	77.7	91.8	95.2
Tripura	23.9	30.3	36.0	80.4	86.4	91.6	96.3	97.0	97.9
Hilly States									
Himachal Pradesh	64.6	72.3	83.3	96.2	97.4	98.1	60.0	77.2	89.1
Jammu & Kashmir	NA	69.7	78.1	NA	97.9	98.0	NA	86.9	87.5
Uttarakhand	NA	70.2	71.3	NA	90.9	96.5	NA	86.9	93.6
Union Territories									
A & N Islands	69.1	77.4	83.7	90.6	95.2	97.7	65.7	76.5	87.1
Chandigarh	80.8	77.3	84.8	85.5	96.7	98.4	79.8	80.1	87.6
Dadra & Nagar Haveli	46.9	25.2	37.6	87.6	95.8	98.5	65.1	77.2	81.3
Daman & Diu	21.5	67.3	56.1	95.5	98.3	99.3	45.7	65.4	85.4
Delhi	63.0	63.2	69.8	81.4	93.4	99.1	66.6	79.0	89.8
Lakshadweep	3.2	1.1	12.6	99.1	99.7	99.7	64.7	83.8	97.7
Puducherry	46.0	65.5	81.5	71.7	91.4	98.5	50.0	65.0	82.0
INDIA	42.2	50.0	54.0	74.7	88.0	93.0	62.9	74.0	81.0

Source: Computed from tables on Houses, Household Amenities and Assets (H-12 tables for 2001 and HH 6-8 tables for 2011), Government of India. New Delhi: Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, India

12.State-wise literacy rate by sex

States	Total			Male			Female		
	1991	2001	2011	1991	2001	2011	1991	2001	2011
General States									
Andhra Pradesh	66.3	76.1	81.3	75.9	83.3	87.1	56.4	68.8	75.5
Bihar	67.9	72.0	77.3	77.7	80.0	83.0	55.9	62.6	70.9
Chhattisgarh	NA	80.6	84.2	NA	89.4	90.7	NA	71.1	77.4
Goa	80.1	84.4	90.1	86.3	89.5	93.3	73.4	79.0	86.7
Gujarat	76.5	81.9	86.8	84.6	88.4	91.5	67.7	74.5	81.5
Haryana	73.7	79.3	83.3	82.0	86.0	88.8	64.1	71.5	77.0
Jharkhand	NA	79.2	83.0	NA	87.1	89.2	NA	70.0	76.1
Karnataka	74.2	80.6	85.9	82.0	86.7	90.1	65.7	74.2	81.4
Kerala	92.2	93.2	95.2	95.6	96.0	97.1	89.1	90.7	93.5
Madhya Pradesh	70.8	79.5	83.0	81.3	87.5	88.9	58.9	70.5	76.7
Maharashtra	79.2	85.5	89.1	86.5	91.1	92.6	70.7	79.1	85.3
Odisha	72.0	80.9	86.1	81.2	88.0	91.1	61.2	72.9	80.7
Punjab	72.1	79.2	83.3	77.3	83.2	86.8	66.1	74.6	79.3
Rajasthan	65.3	76.3	80.0	78.5	86.5	88.2	50.2	64.7	71.0
Tamil Nadu	78.0	82.6	87.1	86.1	89.1	91.9	69.6	76.1	82.4
Uttar Pradesh	61.0	69.8	76.0	70.0	76.8	81.4	50.5	61.8	70.0
West Bengal	73.3	81.3	85.0	81.1	86.2	88.6	64.4	75.8	81.1

North Eastern States									
Arunachal Pradesh	71.6	78.3	83.0	78.0	85.2	88.6	62.2	69.5	76.7
Assam	79.4	85.4	88.6	84.4	89.8	91.9	73.3	80.3	85.0
Manipur	70.5	79.3	85.6	82.1	88.8	92.0	58.7	70.1	79.5
Meghalaya	81.7	86.3	91.0	85.7	89.1	92.7	77.3	83.5	89.2
Mizoram	93.5	96.2	97.7	95.2	96.5	98.1	91.6	95.8	97.3
Nagaland	83.1	84.8	89.7	85.9	87.5	91.7	79.1	81.5	87.4
Sikkim	80.9	83.9	88.8	85.2	87.8	92.5	74.9	79.2	84.8
Tripura	83.1	89.2	93.5	89.0	93.2	95.6	76.9	85.1	91.4
Himachal Pradesh	84.2	89.0	91.2	89.0	92.1	93.6	78.3	85.1	88.5
Jammu &Kashmir	NA	72.0	77.2	NA	80.1	84.1	NA	62.1	69.1
Uttarakhand	NA	81.5	84.6	NA	87.1	89.3	NA	74.8	79.4
Union Territories									
A & N Islands	81.7	86.7	90.2	86.6	90.8	93.2	75.1	81.6	86.8
Chandigarh	79.9	82.7	86.2	84.1	86.8	90.1	74.6	77.4	81.4
Dadra &Nagar Haveli	78.4	84.4	89.9	86.3	90.9	94.1	68.4	74.6	83.5
Daman &Diu	81.6	82.3	89.1	91.1	91.1	92.3	72.3	73.4	83.0
Delhi	76.2	82.0	86.4	82.4	87.4	91.1	68.5	75.3	81.0
Lakshadweep	84.0	88.6	92.1	91.3	93.8	96.1	76.1	83.1	87.9
Puducherry	79.9	84.8	88.6	87.7	91.2	93.1	72.0	78.6	84.2
INDIA	73.1	80.0	84.5	81.1	86.3	89.2	64.1	72.9	79.5

Source: Data are computed from C-8 tables and Primary Census Abstract tables, Government of India. New Delhi: Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, India

13.State-wise percentage of literates who studied above class 12th

States	Total			Male			Female		
	1991	2001	2011	1991	2001	2011	1991	2001	2011
General States									
Andhra Pradesh	12.0	15.4	20.2	15.2	19.4	23.9	7.4	10.4	13.7
Bihar	13.3	15.9	16.1	16.3	19.9	19.6	8.2	9.9	8.7
Chhattisgarh		14.0	16.5		16.1	18.2		11.2	11.9
Goa	10.8	15.5	18.8	12.1	16.4	19.3	9.2	14.5	16.3
Gujarat	10.0	12.5	14.7	11.4	13.6	15.4	8.1	11.1	10.8
Haryana	13.0	15.3	22.2	13.5	15.5	21.8	12.3	15.0	17.2
Jharkhand		14.2	17.1		17.0	19.8		10.1	10.6
Karnataka	11.9	15.5	20.5	14.5	18.6	23.5	8.4	11.7	14.8
Kerala	8.0	11.9	14.6	8.9	12.5	14.4	7.1	11.4	15.7
Madhya Pradesh	12.6	14.3	17.0	14.2	16.1	18.2	10.0	11.8	12.2
Maharashtra	11.2	13.3	18.2	12.6	14.6	19.4	9.2	11.6	14.0
Odisha	12.8	16.1	18.3	15.7	19.4	21.4	8.1	11.7	12.1
Punjab	13.1	14.4	18.8	13.1	13.8	17.2	13.2	15.2	16.6
Rajasthan	11.9	12.2	17.1	13.3	13.7	18.3	9.3	10.0	11.4
Tamil Nadu	9.2	9.9	18.8	11.4	11.8	21.1	6.4	7.6	14.5

Uttar Pradesh	14.2	14.9	18.6	15.3	16.2	19.2	12.3	13.0	13.8
West Bengal	12.3	14.2	15.9	14.5	16.4	17.9	9.3	11.4	11.7
North Eastern States									
Arunachal Pradesh	9.9	9.3	12.4	11.7	11.2	14.6	6.7	6.5	7.3
Assam	10.8	13.5	15.1	13.3	15.8	17.0	7.3	10.5	11.3
Manipur	13.2	19.1	20.3	14.4	20.2	21.6	11.5	17.6	17.0
Meghalaya	10.8	11.6	14.0	12.1	12.6	13.9	9.3	10.6	13.7
Mizoram	4.2	6.1	8.8	5.5	7.6	10.0	2.7	4.5	7.4
Nagaland	7.2	9.8	11.8	8.8	11.4	12.7	4.6	7.7	9.2
Sikkim	9.5	12.5	15.5	10.8	13.9	16.5	7.3	10.7	11.9
Tripura	12.1	13.5	11.6	14.5	16.1	13.7	9.1	10.5	8.8
Hilly States									
Himachal Pradesh	17.5	20.3	25.4	18.9	21.0	24.9	15.5	19.4	21.0
Jammu & Kashmir		14.0	18.9		14.7	18.3		13.0	13.5
Uttarakhand		19.1	24.1		19.3	23.6		18.8	19.6
Union Territories									
A & N Islands	8.8	11.3	15.7	9.2	11.6	15.7	8.2	11.0	12.7
Chandigarh	25.3	24.9	26.4	25.9	24.2	25.1	24.5	25.8	20.8
Dadra &Nagar Haveli	14.2	17.9	16.1	15.7	19.3	16.7	11.8	15.3	8.8
Daman & Diu	6.3	10.9	9.4	8.0	13.4	9.2	4.2	7.7	4.6
Delhi	19.5	19.4	22.8	19.8	19.4	22.6	19.1	19.3	17.8
Lakshadweep	4.3	4.5	6.4	5.9	6.2	7.5	2.2	2.5	4.4
Puducherry	9.0	14.5	21.8	11.6	17.7	24.7	5.7	10.9	17.8
INDIA	12.0	14.0	18.1	13.8	15.8	19.5	9.4	11.7	13.6

Source: Data are computed from C-8 tables, Government of India. New Delhi: Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, India

14.State-wise infant mortality rate (urban), 2013

States	Number of infant deaths per thousand deaths
General States	
Andhra Pradesh	29
Bihar	33
Chhattisgarh	38
Goa	10
Gujarat	22
Haryana	32
Jharkhand	27
Karnataka	24
Kerala	9
Madhya Pradesh	37
Maharashtra	16
Odisha	38

Punjab	23
Rajasthan	30
Tamil Nadu	17
Uttar Pradesh	38
West Bengal	26
North Eastern States	
Arunachal Pradesh	14
Assam	32
Manipur	10
Meghalaya	40
Mizoram	19
Nagaland	19
Sikkim	15
Tripura	19
Hilly States	
Himachal Pradesh	23
Jammu & Kashmir	28
Uttarakhand	22
Union Territories	
A & N Islands	13
Chandigarh	21
Dadra &Nagar Haveli	22
Daman & Diu	26
Delhi	22
Lakshadweep	28
Puducherry	15

Source: Sample Registration System, Office of the Registrar General & Census Commissioner, Ministry of Home Affairs, India

15.State-wise percentage of urban population living below poverty line and percentage of slum population in urban population, 2011

States	Percentage of urban population living below poverty line	Percentage of slum population in urban population
General States		
Andhra Pradesh	5.8	36.1
Bihar	31.2	10.5
Chhattisgarh	24.8	32.0
Goa	4.1	2.9
Gujarat	10.1	6.5
Haryana	10.3	18.8
Jharkhand	24.8	4.7
Karnataka	15.3	13.9
Kerala	5.0	1.3
Madhya Pradesh	21.0	28.4
Maharashtra	9.1	23.3
Odisha	17.3	22.3
Punjab	9.2	14.0
Rajasthan	10.7	12.1
Tamil Nadu	6.5	16.6
Uttar Pradesh	26.1	14.0
West Bengal	14.7	22.1
North Eastern States		
Arunachal Pradesh	20.3	4.9
Assam	20.5	4.5
Manipur	32.6	N/A
Meghalaya	9.3	9.6
Mizoram	6.4	13.7
Nagaland	16.5	14.4
Sikkim	3.7	20.4
Tripura	7.4	14.5
Hilly States		
Himachal Pradesh	4.3	8.9
Jammu & Kashmir	7.2	19.3
Uttarakhand	10.5	16.0
Union Territories		
Chandigarh	22.3	9.3
Delhi	9.8	10.9
Puducherry	6.3	17.0
INDIA	13.7	17.4

Source:Tendulkar Committee, 2011-12 and Census of India, 2011

16.Households having access to clean cooking fuels in urban India and percentage of households with 3 or more members living in one room, 2011

States	Percentage of HH access to clean cooking fuels in urban India	Percentage of HH with 3 or more members living in one room
General States		
Andhra Pradesh	69.3	26.9
Bihar	48.9	31.0
Chhattisgarh	46.0	21.7
Goa	82.3	17.9
Gujarat	69.7	31.5
Haryana	78.2	22.0
Jharkhand	44.3	19.6
Karnataka	66.0	26.3
Kerala	49.4	4.6
Madhya Pradesh	61.2	21.8
Maharashtra	75.6	38.2
Odisha	49.1	22.5
Punjab	80.6	21.2
Rajasthan	70.0	23.0
Tamil Nadu	69.5	31.0
Uttar Pradesh	62.6	30.0
West Bengal	50.1	36.1
North Eastern States		
Arunachal Pradesh	78.7	16.6
Assam	68.9	18.9
Manipur	57.8	11.0
Meghalaya	50.8	18.0
Mizoram	84.3	10.6
Nagaland	53.6	17.0
Sikkim	85.9	23.3
Tripura	50.0	52.5
Hilly States		
Himachal Pradesh	86.5	18.9
Jammu & Kashmir	78.3	14.1
Uttarakhand	80.0	25.6
Union Territories		
Chandigarh	73.0	32.3
Delhi	90.8	27.8
Puducherry	79.4	33.5
INDIA	66.3	28.0

Source: Census of India, 2011

17.State-wise municipal road mileage per 100 sq. km. of area

States	2001	2011
General States		
Andhra Pradesh	319	146
Bihar	207	367
Chhattisgarh	322	237
Goa	93	55
Gujarat	263	274
Haryana	313	446
Jharkhand	.	0
Karnataka	161	386
Kerala	405	172
Madhya Pradesh	184	169
Maharashtra	243	196
Odisha	574	543
Punjab	305	269
Rajasthan	95	162
Tamil Nadu	90	123
Uttar Pradesh	732	983
West Bengal	640	1814
North Eastern States		
Arunachal Pradesh	.	
Assam	279	271
Manipur	81	68
Meghalaya	14	11
Mizoram	51	51
Nagaland	NA	NA
Sikkim	NA	348
Tripura	138	50
Hilly States		
Himachal Pradesh	440	560
Jammu & Kashmir	46	35
Uttarakhand	341	431
Union Territories		
A & N Islands	NA	111
Chandigarh	1,877	1,359
Daman &Diu	107	70
Delhi	2,643	2471
Puducherry	486	503
INDIA	292	377

Source: Ministry of Road Transport and Highways, 2001

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State of the Cities: India provides an excellent, in- depth view of India's urbanization: shifting roles of the different constituents of urbanization, increasing instability in the nature of linkages between urbanization and growth parameters, and the newly emerging patterns of demand for environmental services. It will stand as the pre-COVID urban baseline for many years to come. It is yet another *tour de force* by one of the leading urban experts, Professor O.P. Mathur.

Michael Cohen,
Professor of International Affairs and
Director, Global Urban Futures Project,
The New School, New York

Those interested in India's urbanization and cities and their growth, this well- researched document will give a lot of information unavailable in other publications. Based largely on the Indian Census, but supplemented by additional sources and presented attractively with figures, tables, and illustrations, the study cycles systematically through India's demography, urban economy, infrastructure, and development directions. Empirical material is effectively counterposed with theoretical ideas about urbanization and cities in order to address a central question: how urban is India?

Richard Stren,
Professor Emeritus of Political Science and
Senior Fellow, Global Cities Institute,
University of Toronto, Toronto

What is different about India's urbanization? In what way is it affected by globalization and liberalization of the Indian economy? A research team led by Om Mathur, Lead author, examines these and related questions in a comparative framework, and presents what clearly are new and illuminating facts on the demographic, economic, and infrastructural aspects of India's urbanization.

Yue Man Yeung,
Professor Emeritus of Geography, Chinese
University of Hong Kong, Hong Kong

Written by one of India's prominent urban scholars who has closely studied the country's urban transformation over the past 50 years, this report provides a comprehensive and balanced overview of how the country grappled with challenges as well as promises of urbanization, learning in the process from past efforts to experiment with new concepts and aspirations. Such a continuous assessment of ideas requires data which is continually updated and analyzed with new technologies- a pragmatic advice this report offers as it acknowledges ongoing debates rather than work with one definition of urban India.

Bish Sanyal,
Ford International Professor of Urban
Development and Planning, Massachusetts
Institute of Technology, Cambridge

State of the cities: India is a thorough and beautifully integrated account of the current state and future prospects of India's cities and towns. It ably surveys and moves beyond today's somewhat sterile debate among demographers and geographers over the level of the country's urbanization, choosing instead to engage with more fundamental concerns about the links between urbanization and economic performance, and the continuing gaps in urban infrastructure that have prevented cities and towns from meeting their economic potential. Close attention is given to the phenomenon of census towns which have emerged in the 2001 to 2011 decade as a new and yet-to-be-understood form of urbanization. Students of India's urbanization will find State of the Cities a fresh and stimulating take on the urban challenge that lies ahead.

Mark Montgomery,
Professor of Economics, Stony Brook University,
New York

Publications of the
Centre for Urban Studies

Urbanization Matters: Bihar Urbanization Report 2031

Urbanization in Bihar is low, in fact, very low (11.29 percent)compared to India's 31.16 percent in 2011. Moreover, urbanization in Bihar is complex - even a high urban population growth rate of 3.06 percent which it achieved during the 2001-11 Census decade and added over 3.1million people to its urban population base, has made little difference to its share in state's total population. Urbanization in Bihar is largely fertility-driven; rural-urban migration which is said to have important transformational attributes has contributed little to the process of Bihar's urbanization. Yet, a rigorous examination of Bihar's urban portfolio at various levels of aggregation shows that urbanization in Bihar deserves attention as there are limits to growing under a rural shadow. The report shows that Bihar needs more urbanization and consolidation and expansion of urbanization forces. The report demonstrates that well-managed urbanization is desirable for Bihar, that it is necessary and that it is possible.

Cities and the NEW Economic Vibrancy

The study examines the economic vibrancy of city clusters in Bihar, Madhya Pradesh and Odisha, the three least urbanized states in the country. It sets out a methodology for constructing a city level vibrancy index and provides a set of benchmark values which give a sense of the distance that cities need to travel in order to improve their economic performance. The study complements the index with other exercises that help to better understand the role of institutions, infrastructure and human capital in the growth dynamics of cities. The core of the study lies in a framework of urban initiatives and interventions that would contribute to enhancing the vibrancy of cities.

Reforming Vertical Programmes: The Case of India

This report is a part of an inter-country exercise that aims at a review of how countries organize, implement, and manage 'Vertical Programmes'. Representing a transfer of resources from the higher governmental tier to the lower tiers via initiatives such as the Centrally Sponsored Schemes (CSS) as is the case in India, vertical programmes are designed to help attain national goals and service minima and standards considered vital for the economy and simultaneously serve sub-national development priorities. In India, the vertical programmes have, in recent years, undergone major restructuring. This study attempts to bring together key facts concerning the restructuring of such programmes together with their present role, status, and functioning.

Cities and the Sustainable Development Goal 11

Owing to the United Nations (UN) Resolution 70/1 on Transforming our world: the 2030 Agenda for Sustainable Development, CITIES AND SUSTAINABLE DEVELOPMENT GOAL 11 is among the initial attempts to come to grips with SDG 11 and other goals associated with making human settlements 'inclusive, safe, resilient, and sustainable'. It presents the results of an excercise that addresses five issues: (1) selection of indicators for assessing SDG11, (2) estimation of sustainability gaps, (3) determination of the rate of change necessary for achieving SDG11 by 2030, (4) underline the need to localise SDG11 into local government structures, and (5) establish the need to create a data system that would facilitate a statistically robust and informed assessment of SDG 11 over time.

India's urban transition has, of late, acquired multiple narratives. It is said to be rapid, moderate, slow, messy, and hidden. What underpins such multiple narratives is the central theme of the study, State of the Cities: India.

Making use of an analytical framework that permits an examination of the shifts in the pace and pattern of India's urbanisation over a period of time, this study takes an in-depth look at the evidence on three of its key dimensions: the demographics, the economy, and the status of infrastructure and the environment. Some of the key questions that this study seeks responses to are: Is India's urbanisation in the post-liberalisation period any different? Does it show the effect of the changes in the macroeconomic parameters of the post-1991 period? Is it more or less productive and inclusive and environmentally secure? Is it spatially more equal or unequal? Does it in any way signal an inflection point in India's urban transition? Drawing from the analysis of the evidence comparable over time, the study spotlights several interesting questions: what would, for example, explain the acceleration in the pace of urbanisation under conditions of low economic growth and its moderation under conditions of high economic growth? What factors would explain a fall in the rate of growth in the urban share of gross domestic product (GDP) at such a low level of urbanisation, especially the GDP accruing from the manufacturing sector?

This study makes a strong case for evidence-based assessment of India's urban transition, rather than to continue to commit, as many of us do, to the long-held, but specious narrative that India is in the midst of rapid urbanisation.

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