Swedish International Centre for Local Democracy

Political and Social Inclusion in Asian Cities – India Case Study

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ACRONYMS

ADB	Asian Development Bank
ADS	Area Development Society
AHP	Affordable Housing in Partnership
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
ASEAN	Association of South East Asian Nations
AUWSP	Accelerated Urban Water Supply Programme
AVAS	Association for Voluntary Action and Service
BATF	Bangalore Agenda Task Force
BBMP	Bruhat Bangalore Mahanagara Palike
BCC	Bangalore City Corporation
BDA	Bangalore Development Authority
BESCOM	Bangalore Electricity Supply Company
BIAAPA	Bangalore International Airport Area Planning Authority
BISAG	Bhaskaracharya Institute for Space Application and Geoinformatics
BMPC	Bangalore Metropolitan Planning Committee
BMRCL	Bangalore Metropolitan Rail Corporation Limited
BMRDA	Bangalore Metropolitan Region Development Authority
BMTC	Bangalore Metropolitan Transport Corporation
BMTPC	Building Materials & Technology Promotion Council
BPL	Below Poverty Line
BRC	Block Resource Center
BRPL	BSES Rajdhani Power Limited
BRT	Bus Rapid Transit
BSNL	Bharat Sanchar Nigam Limited
BSUP	Basic Services for the Urban Poor
BVG	Bangalore Vision Group
BWSSB	Bangalore Water Supply & Sewerage Board
CAA	Constitutional Amendment Act
CEE	Centre for Environment Education
CDP	Comprehensive Development Plan
CDPs	City Development Plans
CDS	Community Development Society
CFL	Compact Fluorescents Lamp
CID	Customer Identity
CLTS	Community- Led Total Sanitation
CNG	Compressed Natural Gas
CPCB	Central Pollution Control Board
CRC	Cluster Resource Center
CSO	Central Statistical Organization
CSR	Corporate Social Responsibility
CTC	Cash Transfer Compliant
CWPD	Central Public Works Department
DBTL	Direct Benefit Transfer for LPG
DCB	Delhi Cantonment Board
DDA	Delhi Development Authority

DGHS	Directorate General of Health Services
DJB	Delhi Jal Board
DMRC	Delhi Metro Rail Corporation Limited
DPCL	Delhi Power Supply Company Limited
DPR	Detailed Project Report
DRSDO	Delhi Rural and Slum Development Organization
DTC	Delhi Transport Corporation
DTL	Delhi Transco Limited
DTU	Delhi Transport Undertaking
DUSIB	Delhi Urban Shelter Improvement Board
EDMC	East Delhi Municipal Corporation
EGM	Expert Group Meeting
EPA	Environment Protection Act
ESCAP	Economic and Social Commission for Asia and the Pacific
EU	European Union
EWS	Economically Weaker Section
FBAS	Fund Based Accounting System
FCI	Food Corporation of India
FOV	Friends of Vrindavan
FPS	Fair Price Shop
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIS	Geographical Information System
GOI	Government of India
GOK	Government of Karnataka
GPRS	General Packet Radio Service
GVMC	Greater Vishakhapatnam Municipal Corporation
HDMC	Hubli-Dharwad Municipal Corporation
HIV	Human Immunodeficiency Virus
HMWSSB	Hyderabad Metropolitan Water Supply and Sewerage Board
HOD	Head of Department
HRIDAY	Heritage City Development and Augmentation Yojana
HSMD	Hazardous Substances Management Division
HUDCO	Housing and Urban Development Corporation Limited
ICDS	Integrated Child Development Scheme
ICT	Information and Communication Technology
IDSSMT	Infrastructure Development Scheme for Small and Medium Towns
IHSDP	Integrated Housing and Slum Development Programme
IMR	Infant Mortality Rate
INTACH	Indian National Trust for Art and Cultural Heritage
IPGCL	Indraprastha Power Generation Company Limited
IT	Information Technology
JDY	Jan Dhan Yojana
JJ	Juggi-Jhoppri
JLG	Joint Liability Group
JNNURM	Jawaharlal Nehru National Urban Renewal Mission

KHB	Karnataka Housing Board
KLP	Karnataka Learning Partnership
KMDC	Karnataka Municipal Data Center
KPTCL	Karnataka Power Transmission Corporation Limited
KSCB	Karnataka Slum Clearance Board
KSDB	Karnataka Slum Development Board
KSEP	Karnataka State Education Policy
KSRTC	Karnataka State Road Transport Corporation
KUIDFC	Karnataka Urban Infrastructure Development and Finance Corporation
KUWS&DB	Karnataka Urban Water Supply & Drainage Board
LED	Light Emitting Diode
LIG	Low-Income Group
LPG	Liquified Petroleum Gas
MCD	Municipal Corporation of Delhi
MDG	Millennium Development Goal
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MHUPA	Ministry of Housing and Urban Poverty Alleviation
MIK	Mission Indradhanush Kawach
MLA	Members of the Legislative Assembly
MMR	Maternal Mortality Rate
MMS	Migration Monitoring Software
MOEFCC	Ministry of Environment, Forests and Climate Change
MoHUA	Ministry of Housing and Urban Affairs
MOOC	Massive Open Online Courses
MOUD	Ministry of Urban Development
MRC	Municipal Reforms Cell
MRTS	Mass Rapid Transport System
MTNL	Mahanagar Telephone Nigam Limited
MUZ	Multi Utility Zone
NBO	National Buildings Organisation
NCTD	National Capital Territory, Delhi
NCHFI	National Cooperative Housing Federation of India
NCR	National Capital Region
NCRB	National Crime Records Bureau
NDMC	New Delhi Municipal Council
NEP	National Environment Policy
NFSA	National Food Security Act
NGO	Non-Governmental Organisation
NHAI	National Highway Authority of India
NHG	Neighbourhood Group
NHM	National Health Mission
NITI	National Institution for Transforming India
NMBS	National Maternity Benefit Scheme
NMT	Non- Motorized Transport
NMV	Non- Motorized Vehicle
NRC	Nutritional Rehabilitation Centre

NRCUP	National Resource Centre on Urban Poverty
NRHM	National Rural Health Mission
NSAP	National Social Assistance Programme
NSDP	National Slum Development Program
NSSO	National Sample Survey Organisation
NUA	New Urban Agenda
NUHM	National Urban Health Mission
NWCMC	Nanded Waghala City Municipal Corporation
OBC	Other Backward Caste
ODF	Open Defecation Free
OECD	Organisation for Economic Cooperation and Development
ORGI	Office of Registrar General of India
OWG	Open Working Group
PCA	Primary Census Abstract
PET	Polyethylene Terephthalate
PDS	Public Distribution System
PHC	Primary Health-care Centre
PMAY	Pradhan Mantri Awas Yojana
PMC	Pune Municipal Corporation
PMUY	Pradhan Mantri Ujjwala Yojana
PNG	Pipelined Natural Gas
PPCL	Pragati Power Corporation Limited
PPP	Public-Private Partnership
PWD	Public Works Department
RAY	Rajiv Awas Yojana
RC	Resettlement Colony
R&D	Research and Development
ROW	Right of Ways
RSBY	Rashtriya Swastha Bima Yojana
RTE	Right to Education
RTI	Right to Information
RWA	Resident Welfare Association
SAARC	South Asian Association for Regional Cooperation
SBM	Swachh Bharat Mission
SMC	Severely Malnourished Children
SC	Scheduled Caste
SDG	Sustainable Development Goal
SDMC	South Delhi Municipal Corporation
SGP	Small Grants Program
SHG	Self Help Group
SJSRY	Swarna Jayanthi Shahari Rozgar Yojana
SPEM	State Poverty Eradication Mission
SPV	Special Purpose Vehicle
SSA	Sarva Shiksha Abhiyan
SSP	Social Security and Pension
ST	Scheduled Tribe

STP	Special Training Programme
SUDA	State Urban Development Authority
SWM	Solid Waste Management
TPDS	Targeted Public Distribution System
UIDAI	Unique Identification Authority of India
UIDSSMT	Urban Infrastructure Development Scheme for Small and Medium Towns
ULB	Urban Local Body
UN	United Nation
UNCHS	United Nations Centre for Human Settlements
UNDG	United Nations Development Group
UNEP	United Nations Environment Programme
UNFPA	United Nations Population Fund
USEP	Urban Self Employment Programme
UT	Union Territory
UWEP	Urban Wage Employment Programme
VAMBAY	Valmiki Ambedkar Awas Yojana
VCF	Vrindavan Cleaning Fund
VKPP	Vrindavan Kuda Prabhandhan Pariyojna
WC	Ward Committee
WTO	World Tourist Organisation

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1. Introduction

1.1 Introduction

Over 54 per cent of the world's population lives in urban areas, a proportion that is expected to increase to 66 per cent by 2050. Projections show that urbanization combined with the overall growth of the world's population could add another 2.5 billion people to urban populations by 2050, with close to 90 percent of the increase concentrated in Asia and Africa, according to a new United Nations report (2014).[1] Cities are in the process of getting globally linked not necessarily as "machines for producing wealth" but also for "expanding inequalities". Piel (1997) has argued that the world's poor once huddled largely in rural areas have "gravitated to the cities" in the modern world. Anna Tibbaijuka, Executive Director UN-HABITAT (2008) argued that "95 percent of urban expansion is taking place in those cities least equipped to negotiate the urban transition – the secondary cities of Africa and Asia[2].

Cities are heterogeneous units of economic concentration and density. Spatial inequalities in urban areas characterize cities. This has become more conspicuous in the neo-liberal regime, manifested in terms of growing spatial inequalities in cities leading to an "urban divide". With exclusionary urbanization becoming more common, the urban poor are confined to poor neighbourhoods, termed as 'slums' in local parlance in India. Slums are found not only in the decaying city centres, but also in city peripheries and scattered 'islands' in the interstices of formal housing. A 'slum' household is characterised by the absence of any one or more of the following characteristics: access to improved water, access to improved sanitation, security of tenure, durability of housing, and sufficient living area. Unplanned urbanization in the global south has led to urban poverty and inequity, deteriorating quality of the urban environment, growth of unplanned peri-urban areas and deficiencies in access to basic urban services and India is no exception (World Bank, Messy Urbanisation).

India recorded an average growth rate of over 5% per annum during the last two decades of the 20th century. GDP grew at 7.7% per annum during 2001-11. However, most of the growth has been concentrated in a few regions and large cities. Also, only certain sections of the population benefited from it, resulting in accentuation of income and regional disparities over time.

[1] Launched http://www.un.org/en/development/desa/news/population/world-urbanization-prospects-2014.html

[2] Kundu, D."Emerging Perspectives on Urban-Rural Linkages in the context of Asian Urbanization", *UNCRD 2016*

Urban India saw a deceleration in the growth of population during the last three decades, dismissing the spectre of over-urbanisation or an urban explosion. This made policymakers at the national and state levels concerned about the slow pace of urban growth, particularly at a stage of rapid economic growth that accentuated rural-urban (RU) disparities in the economic and social spheres. The annual exponential growth rate (AEGR) of urban population in the country during the 1950s was 3.5%. This was the highest the country had seen until that time, which led to the emergence of theories of 'over-urbanisation'. The growth rate, however, came down to 3.1% in the 1980s. It went down further to 2.73% in the 1990s. Correspondingly, the percentage of population in urban areas has gone up from 17.3% in 1951 to 23.3% in 1981, and then to 27.78% in 2001. The level of urbanisation in the country increased to 31.16% in 2011 and the urban population recorded an annual growth rate of 2.76% during 2001-11, a slight increase in the second decimal point as compared to the previous decade.

The consistent decline in the growth rate of urban population over the past two decades of the last century led to the Tenth Plan expressing concern over 'the moderate pace of urbanisation'. The Eleventh Plan admitted that 'the degree of urbanisation in India is one of the lowest in the world' and considered planned urbanisation through new growth centres in the form of small and medium towns its major challenge. The Approach Paper to the Twelfth Plan also recognises the need to promote spatially-balanced urbanisation.

Since the 1990s, attempts have been made both by the central as well as state governments to make a few large cities more attractive. Macro policies adopted at state and city levels have helped in pushing out the slums and squatters from the better off areas of the city. This has accelerated the process of segmentation and accentuated intra-city disparity (Kundu 2009). This is reflected in social, political and economic spheres. Exclusionary forces have affected the marginalized communities in various forms. Two prominent categories of exclusions are discernible: institutional inequality including housing, land and basic services; structural inequality including barriers to participation of women in economic, social and political activities; and inadequate opportunities for migrant, youth and elderly to lead a decent lifestyle. It is widely recognized that different forms of exclusion and barriers to political and social equity need to be addressed to ensure full participation of the marginalized communities including women, youth, migrants and ethnic minorities in the processes of local democracy in cities and towns as well as meeting the Sustainable Development Goals (SDG) by 2030.

1.2 Research question

This study on political and social inclusion and local democracy in the Indian context attempts to examine relationships between local democracy and different forms of barriers to political and social inclusion of marginalized urban communities, particularly women, youth, migrants and ethnic minorities in India. It raises three questions:

(1) What are the barriers (structural and institutional) to political and social inclusion of the marginalized groups including women, youth, migrants and ethnic minorities in cities and towns in Asian countries?

(2) To what extent and how are the marginalized groups fully engaged in mechanisms and processes of local democracy – including local elections, community organization and participation, accountability and transparency of urban local governments, and better access to basic urban services – to cope with these barriers?

(3) What are the decentralization policy options, innovations and good practices to meet the needs and aspirations of marginalized groups and contribute to the achievement of SDG 11?

In India, elite capture of urban governance, forces of globalization and labor market restrictions have resulted in limited access of the poor and vulnerable to housing and basic services. The resident welfare associations that came up in the big cities in the last few decades as parallel agencies to wards committees[3], are increasingly responsible for the operation and maintenance of services (Kundu, 2011). Further, globalization has resulted in selective big city bias in government interventions. Exclusionary urbanization has restricted the entry of poor migrants to cities because of their low levels of skill and education coupled with high cost of living in cities. Given this background, the research in India will examine determinants of political and social inclusion of the marginalized groups including scheduled castes and scheduled tribes, women, poor migrants and minorities (Muslims) in selected cities.

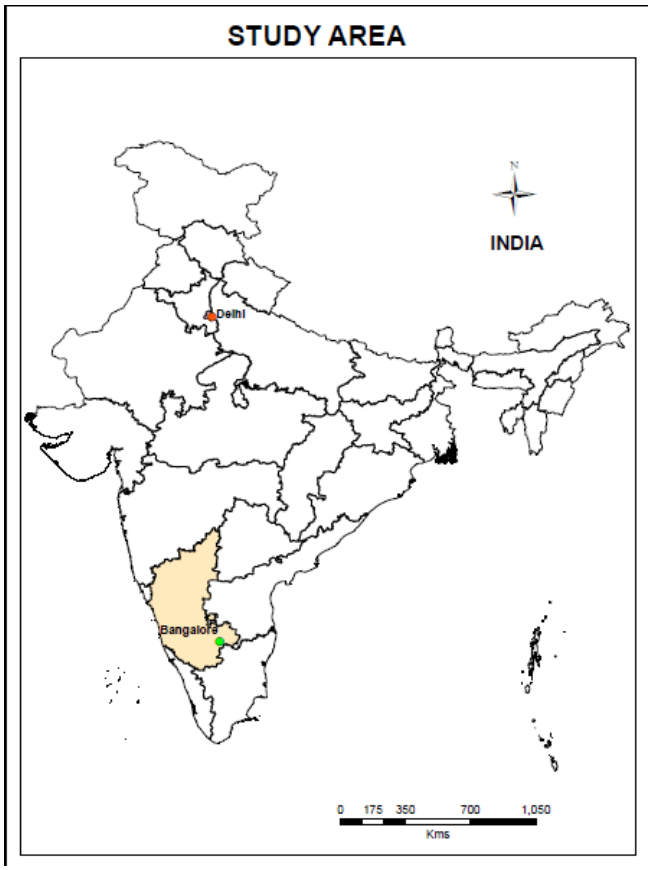
1.3 Objectives

Specifically, the study will examine the following:

- Scale of deficits in access of the marginalized groups to urban services including water and sanitation, health, education and other social exclusions in cities;
- Government policies and programs that attempt to accommodate the needs of marginalized groups;

[3] The Wards Committees are supposed to involve the citizens in local governance, as a mandate of the 74th CAA, 1992.

- Institutional mapping to understand and assess the functional mandates and boundaries of the agencies that provide services/regulate the urban affairs of cities, stock-taking of the functional gaps and overlaps, and degree of coordination;
- Structural and institutional barriers to full engagement of marginalized groups in processes and mechanisms of local democracy including local elections, accountability of local government, access to basic urban services and community based organizations and participation;
- Informing pro-marginalized group reforms with regard to urban policy and programs in selected cities, and, thus, contributes to the implementation of Sustainable Development Goal (SDG) 11.



1.4 The scope of the study

The scope of the study is pan India with reference to the institutional structure and policy interventions. However, primary survey is limited to two cities, viz, Delhi and Bengaluru. Here, two slums in each city with differential tenure status are selected for detailed analysis with regard to inclusion of poor and marginalized communities in the access to basic amenities, education and health facilities. Reference to the all India situation and states of Delhi and Karnataka have been drawn through analysis of secondary data. Delhi is the capital of India situated in the northern Indo-Gangetic plains and surrounded by state of Haryana on three sides and Uttar Pradesh on the east. Delhi or National Capital Territory (NCT) has the highest population density of 11297 people per square kilometer as per 2011 Census of India. It covers an area of 1484 square kilometers. The Delhi Urban Agglomeration (UA) consists of 16.34 million urban population while the DMC area accounts for more than 11 million urban population as per 2011 Census of India.

The other city is Bengaluru (erstwhile Bangalore); the state capital of Karnataka, situated in the southern part of India on the Mysore plateau and it covers an area of 741 sq. km. as per Census of India, 2011. Most of the city lies in the Bengaluru urban district while Bengaluru Rural District area surrounds it on the east and north, Ramanagara district on the west and Krishnagari district of Tamil Nadu on the south. Urban population of Karnataka is more than 22.1 million of which Bengaluru is home to around more than 9 million urban population (Census of India, 2011).

1.5 Methodology

The following methodology has been used in the study:

a. Institutional analysis including review of all relevant legislations, policy documents and published and unpublished materials;

b. Secondary data analysis of various indicators related to availability to basic urban amenities across the urban and slum households in India, with special reference to Delhi and Karnataka and the select cities.

c. Interviews with key informants including government officials, urban experts, policy makers and representatives of CSOs who focus on issues of gender, youth, minorities and other marginalized groups;

d. Survey of selected slums in Delhi and Bengaluru to the assess practical barriers to political and social inclusion of the marginalized groups .A primary survey was undertaken in 4 slum neighbourhoods of Delhi and Bengaluru during May-June 2017 to understanding the level of community participation, organisation and perception of the slum dwellers on issues of local governance and to estimate the levels of political, social and economic inclusion of the low-income, marginalised sections of population in the slums. A structured questionnaire pertaining to the demographic profile, economic conditions, housing amenities and challenges faced in accessing basic services was canvassed. Focused group discussions were held with community leaders, slum lords and social workers. A total of 200 slum households were interviewed; 100 each from Delhi and Bengaluru. Within each city two slum pockets namely *Jhuggi Jhopri* (JJ) cluster and resettlement colony (RC) of Lalbagh slum in north-west Delhi and Havadigara colony and Gangondanahalli slums in Bengaluru were chosen with 50 sample households in each. Five sub-groups, viz, youth, Muslim, women, other backward caste (OBC) and scheduled population were

selected for the survey through random stratified sampling to understand the differential access by socio-economic dimensions.

Database

The present study is based on both primary and secondary data. Population Census of India 2001 and 2011 and unit level data from various rounds of the NSSO were used for secondary analysis. The study is also based on an analysis of FGDs and 200 questionnaires (primary survey) in two cities.

Outcomes

The project will contribute to an understanding of the constraints in achieving the *Sustainable Development Goal 11*: making cities and human settlements inclusive, safe, resilient and sustainable, specifically target 1 (safe and affordable housing, basic services, and upgrade slums); target 2 (capacity for participatory, integrated and sustainable human settlement planning and management); target 5 (protection of the poor and people in vulnerable situations); and target 7 (support positive economic, social and environmental links between urban, per-urban and rural areas by strengthening national and regional development planning).

While inherently inspirational in pursuit of the global sustainable development agenda, the project is directly linked and grounded in *ICLD's mission* to promote local democracy and its themes of participation, accountability and equity. The research will examine institutional and structural barriers to full engagement of marginalized communities to promote and sustain local democracy in cities and towns of selected countries in Asia.

This collaborative research is likely to contribute to the *learning process* for those engaged in project design and implementation, with the secondary outcome of strengthening the capacity of national research institutions engaged in local democracy research. The three lead national institutions will benefit from collaboration with institutions with similar research interests; regional workshop to share innovations and good practices in selected countries; and the organization of national forums to engage national stakeholders to bridge gaps between theory and practice. The studies will inform and be utilized by EWC's leadership development programs. Under the overall guidance of the Knowledge Center, units of ICLD would be engaged in country and regional level activities of the project both to strengthen the respective processes, and so that the "knowledge product" outcomes can be better integrated into their respective training and capacity development activities.

Finally, the project will enhance the *knowledge and understanding* within the research community about structural and institutional barriers that impede inclusiveness, participation and equity within the urban communities, and the role of SDGs as the global platform to promote people-centered development.

1.6 Organization of Chapters

The monograph is organised in seven separate chapters. The first chapter introduces the rationale, objectives and purpose of the study. The methodology and database used for the study are also discussed in this chapter.

The second chapter analyses the coverage of basic amenities in urban India with a focus on the study area during 2001-11. It also discusses the distribution of slum population in India across states and analyses the pattern and trend over the Census periods, 2001 and 2011. The states of Karnataka and Delhi are analysed in detail regarding the distribution of slum households across socio-religious groups. Two NSSO rounds are used to comprehend the health and education status of the poor households.

Chapter three overviews the institutional structure with regard to provision of civic amenities in states of Delhi and Karnataka. It also overviews the existing policies and programmes related to provision of basic services to slums.

Chapter four attempts a detailed analysis of selected slum localities of two metropolitan cities of Delhi and Bengaluru where primary survey was conducted. The chapter focuses on the effectiveness of urban local governance in the provision of slums. It also analyses the extent of community participation in selected slums with regard to access of the marginal communities (youth, Muslim, women, OBC and SC) to basic services and their perception in this regard.

Chapter five documents select good practices developed in India in meeting the Sustainable Development Goal (SDG) 11 - Make cities and human settlements inclusive, safe, resilient and sustainable.

Chapter six is the concluding chapter which summarises the essential points that every chapter has attempted and outlines a policy perspective for sustainable development of Indian cities, where the poor and marginalized could benefit through engagement and participation in local democracy and governance.

2. Access to basic services in urban India with specific reference to slums/low-income hoseholds

2.1 Introduction

According to the Census of India, the urban population of the country stood at 377 million accounting for 31.14 per cent of the total population. The number of cities and towns in India increased by 2,772 from 5,161 in 2001 to 7,933 in 2011. The number of million plus cities also increased from 35 in 2001 to 52 in 2011, accounting for 43% of India's urban population[4]. In 2011, Census of India reported that 65 million people in India lived in slums, which constituted 17 per cent of urban India. In 2001, the total slum population was 18.3 percent of the total urban population which has declined by about one percent in 2011. It may be noted, a strict comparison is not feasible as the slum data from 2011 census is difficult to compare with previous year, because the 2011 census covered all 4041 statutory towns in India[5], as compared to 2001 where only statutory towns with a population over 20,000[6] were covered.

The present chapter makes an attempt to understand the social and economic profile of slums in India with special focus on Karnataka and Delhi. The analysis is done for Bengaluru and Delhi to bring out the city level perspective. The analyses in the chapter are based on the data from various NSSO rounds and Census of India data 2001 and 2011. This chapter is divided into four sections. Following the introductory section, section 2 briefly explains the concept of slums in the Indian context. Section 3 analyses the availability of civic amenities in India with particular reference to the states of Karnataka and Delhi and Urban Delhi and Bengaluru. The fourth section summarises the conclusions.

[4] The level of urbanisation increased from 10.8% in 1901 to 11.2% (1921), 17.3% (1951), 19.9% (1971), 25.7% (1991) and 27.8% (2001). Similarly the number of towns increased from1917 in 1901, 2047 (1921), 3059 (1951), 3126 (1971), 4615 (1991) to 5161 in 2001.
[5] As per the 2011 Slum Census, 2613 towns reported having slum households accounting to 20 per cent of the urban population of statutory towns.
[6] In Census 2001, information on slums was released only on demographic characteristics based on the population enumeration. For this purpose, Slum Blocks were identified in statutory towns having a population of 20,000 by the local authorities during the population enumeration phase.

2.2 Definitions of Slums

UN Habitat:

United Nations (UN) HABITAT defines a slum household as lacking one or more of the four criteria:

a) Durable housing of a permanent nature.

b) Sufficient living space, which means not more than three people sharing the same room.

c) Easy access to safe water in sufficient amounts at an affordable price.

d) Access to adequate sanitation in the form of a private or public toilet shared by a reasonable number of households.

National Sample Survey Organization (NSSO):

Operational definitions of different types of slum in the 69th round survey of NSSO are:

- Areas notified as slums by the concerned municipalities, corporations, local bodies or development authorities were termed *notified slums*.
- Also, any compact settlement with a collection of poorly built tenements, mostly of temporary nature, crowded together, usually with inadequate sanitary and drinking water facilities in unhygienic conditions, was considered a slum by the survey, provided at least 20 households lived there. Such a settlement, if not a notified slum, was called a *non-notified slum*.
- Slums: The word "slum" covered both notified slums and non-notified slums.

Census of India:

According to Census of India (2001) a slum is defined as the following:

a. All specified areas in the town or city noted as 'slum' by the State/ local government and Union Territories (UTs) administration under an Act including the Slum Act.
b. All areas recognized as slum by the State/local Government and UTs' administration and Housing and Slum Boards which may have not been formally notified as slum in any Act.
c. A compact area with at least 300 people or about 60-70 households of poorly built congested tenements, in unhygienic environments usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities.

This reflects that the Census restricts the definition of slums to at least an agglomeration of 300 people, resulting in underestimation of slum population.

In 2011, the Census of India included 3 types of slums in its survey, namely; notified, recognized and identified slums. All notified areas in a town or city notified as 'slum' by state, UT administration or local

government under any act including slum act are defined as *notified slum*. All areas recognized as slum by State, UT administration or local government, Housing and Slum Boards which may not have been formally notified as slum under any Act are termed as *recognised slums*. A compact area of at least 300 population or about 60-70 households of poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities are called *identified slums*.

An area can be designated as a 'slum' under the State Slum Clearance/Improvement Act 1956 when the competent authority is convinced that the area is a source of danger to health safety and convenience, or when buildings are found to be unfit for human habitation due to dilapidation, over-crowding or lack of ventilation, light or sanitation facilities. This definition of 'slum' under the Act is quite loose and a liberal application of the law may cover substantial parts of cities as 'slums'. On the other hand, 'declared slums' may not include newer squatter settlements and settlements outside the municipal boundary and, therefore, may result in underestimation of the slum population. It is interesting to observe that the criteria used for defining or declaring any area as slum (i.e. dilapidation, overcrowding, faulty arrangement and design of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light or sanitation facilities or any combination of these factors, which are detrimental to safety, health and morals) under the Slum Area (Improvement & Clearance) Act, 1956 are not supported with the parameters/standards. It is at the discretion of the slum declaring agency to decide randomly based the physical or infrastructural conditions of any area which entitles it to be declared as slums. It is important to mention that the important parameters i.e. tenure status is missed out by The Slum (Improvement & Clearance) Act 1956, Census of India and NSSO while capturing the information on status of slums. The UN has also specifically emphasized to include tenure status in its definition of slums. The tenure is an important parameter as it enables entitlement of any person to have formal access to government subsidies (NRCUP, SPA, 2009[7]).

In India, the definition of slum area adopted by the State Governments is based on Slum Acts of the respective States, i.e. based on legal stipulations unlike the definitions adopted by RGI and NSSO. The concept, perception and definition of slums vary across the states, depending on their socio-economic conditions but their physical characteristics are almost similar.

[7] Research Study on Slum Typology and Grading for Improvement Inputs, National Resource Centre on Urban Poverty, School of Planning and Architecture (2009), New Delhi

Central Statistical Organization:
Central Statistical Organization (CSO) defines a slum as 'an area of land having 25 or more *katcha* structure, mostly of temporary nature, or 50 or more households residing mostly in *katcha* structures huddled together or inhabited by persons with practically no private latrine and inadequate public latrine and water facilities'.

The local term used for slums in different cities of India are *Katras, Jhuggis* (Delhi), *Jhopad-patties, Chawls* (Maharashtra), *Bustees* (Kolkata), *Cheris* (Chennai) and *Katchi Basties* (Rajasthan). Designated slum areas may sometimes include settlements with varying range of legality and degree of deficiency of services. In India, the Slum Area (Improvement & Clearance) Act, 1956 **(**under section 3) provides the legal basis for defining or declaring any area as 'slum'. The Act uses the following criteria for defining slums:

i. Area which is unfit for human habitation in any respect;

ii. Area by reason of dilapidation, overcrowding, faulty arrangement and design of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light, sanitation facilities or any combination of these factors which are detrimental to safety, health and morals.

2.3 Characteristics of Slum Population in India

2.3.1 Distribution of Slums across India

As per the 2011 Slum Census, 2613 towns reported having slum households accounting to 20 per cent of the urban population of statutory towns. The enumerated slum population was 22.4 percent of the total population of slum reporting cities/towns and 17.4 per cent of total urban population of all the States and UTs. The largest number of slum blocks is reported in Maharashtra. At the city level, Jabalpur topped the list with 45%, followed by Greater Vishakhapatnam Municipal Corporation (44%), Meerut (42%), Greater Mumbai (42%) and Raipur (39%) (NBO, 2015)

As per the Census 2011, 38.1 per cent slum households are housed in 46 million plus cities. The enumerated slum population constitutes 5.4 per cent of the total population of the country. Almost three-fourths (73.5%) of the total slum population resides in Class I cities (Table 2.1).

Out of the total 65.4 million population enumerated in the slum areas in the 2613 slum reporting towns/cities in 2011 Census, 13.4 million were Scheduled Castes (SC) and 2.2 million were scheduled tribes (ST), which constituted 20.4 per cent and 3.4 per cent of the total slum population respectively. The

proportion of scheduled castes in the slum areas was higher (20.4%) as compared that in the non-slum areas (11.0%), and urban areas of the country (12.6%) (NBO, 2015). The slum areas of Punjab have the highest percentage of scheduled castes (39.8%), followed by Tamil Nadu (32.0%). In the slums of Rajasthan, Delhi, Himachal Pradesh, Tripura and Karnataka, one-fourth of the population are scheduled castes. In Gujarat, Chhattisgarh, Rajasthan, West Bengal, Odisha, Madhya Pradesh, Karnataka, Andhra Pradesh, and Maharashtra the scheduled tribe population in slums is more than 100,000. The percentage distribution of ST population living in slums of Chhattisgarh, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Odisha and Rajasthan are 9.2%, 7.5%, 17.9%, 5.2%, 6.3%, 12.8% and 4.8% correspondingly (NBO, 2015).

Andhra Pradesh, Chattisgarh, Madhya Pradesh, Maharashtra, Odisha and West Bengal are the top ranking five states that have the highest proportion of their urban households living in slums amounting to 35.7%, 31.9%, 28.3%, 23.3%, 23.1% and 21.9% respectively. Chandigarh (9.7%), Gujarat (6.7%), Jharkhand (5.3%), Assam (4.8%) and Kerala (1.5%) report low share of slum households, while Manipur did not report any slum population. Out of the total 35.1 million households in metropolitan cities, 5 million lived in slums. Delhi Municipal Corporation and Bengaluru are reported to have 14.6% and 8.5% slum households respectively.

The distribution of slum population across size class shows that 38.9 per cent slum population lives in metro cities. However, the percentage share of slum population in non-metro Class-I cities is 34.7 per cent which is slightly less in comparison to metro cities. Class-I cities have highest percentage share of slum population followed by Class-II and III. The lowest slum population is in Class-VI towns (Table 2.1). One of the reasons for the high concentration of slums in Class-I cities is high cost of land and infrastructure.

Table 2.1: Distribution of Slum Population across Various Size Class Categories, India, 2011

Size Class	Percentage Distribution (2011)
Urban India	100.0
Metro	38.9
Non-metropolitan Class I Cities	34.7
Class I	73.5
Class II	11.8
Class III	10.4
Class IV	3.4

Class V	0.8
Class VI	0.05
All Towns	26.5

Source: Primary Census Abstract Data for Slum, Census of India, 2011

2.3.2 Housing Amenities across the Slum Households in India

The quality of housing structure is better in non-slum areas as compared to slums. Only 3.2 per cent urban houses have temporary structures and 11.6 per cent have semi-permanent structure. The corresponding figures for slum houses are slightly higher which are 5.3 per cent and 16 per cent (Census of India, 2011). The details of the other housing amenities for slum households are as follows:

a) Drinking Water

The proportion of slum households getting access to tap water as the main source of drinking water is 74%, while 12.7% and 7.6% households depend on hand-pumps and tube-wells respectively (Table 2.2). A total of 43.3% households have the source of water outside their premises. Interestingly, the coverage of tap water among slum households was higher in metropolitan cities (84.4%) but lower in other non-metropolitan Class I cities (69.9%) and towns (64.4%) as compared to urban India (Census, 2011). However, the availability is erratic in slums which explain the dependence of the slum households on tankers during summer.

Table 2.2: Distribution of Slum Households by Main Source of Drinking Water and its Distance, India, 2011

Size Class	Main Source of Drinking Water (%)					Safe Drinking Water (%)	Distance of Main Source of Drinking Water (%)		
	Tap water	Well	Hand pump	Tube well	Others		Within Premises	Near Premises	Away
Urban India	74.0	0.8	12.7	7.6	4.9	95.1	56.7	31.9	11.4
Metropolitan Cities	84.4	0.5	6.4	5.7	3.1	96.9	65.9	27.3	6.9
Non-metropolitan Class I cities	69.9	0.8	14.9	9.2	5.2	94.8	56.1	31.2	12.7
Class I	77.5	0.7	10.4	7.4	4.1	95.9	61.2	29.1	9.6
Class II	68.0	1.0	15.2	9.0	6.8	93.2	46.5	37.6	15.9
Class III	61.8	1.3	21.1	8.4	7.5	92.5	45.1	38.4	16.5
Class IV	59.8	0.9	24.2	7.1	8.0	92.0	36.7	46.4	16.9
Class V	61.6	0.8	23.3	5.4	8.9	91.2	32.3	53.0	14.7
Class VI	87.3	0.4	6.6	3.2	2.5	97.5	55.2	35.2	9.6
All Towns	64.4	1.1	18.9	8.4	7.3	92.7	44.3	39.5	16.2

Note: Within premises — if the source is located within the premises; near premises — if the source is located within the range of 100 m from premises; away — if the source is beyond 100 m from premises.

Source: Calculations based on Census of India data, 2011: Houses, Household Amenities and Assets in Slums

Hand pump was the second largest source of drinking water in slums in all size classes of cities and towns. In terms of access to water within premises, only 56.7 per cent of the total slum households in urban India had access to drinking water within their premises. The proportion decreased with the decreasing order of cities and towns with an exception in the Class VI category. The source was away from the premises for 6.9 percent of the households in metropolitan India, 12.7 per cent in non-metropolitan Class I cities and 16.2 per cent in towns. There were 22 towns and 1 non-metropolitan Class I city (Gangapur City in Rajasthan) where piped water supply was non-existent in slums, and households were completely dependent on underground water.

Among the towns, the highest proportion of households with access to safe drinking water was found in Class VI towns (97.5%) and lowest in Class V towns (91.2%). Importantly, Class VI towns are industrial townships where the level of services is better as compared to other size classes. According to Census of India, the households having access to drinking water supplied from tap, tube-well, bore-well and hand-pump within or outside premises are considered to have access to safe drinking water supply. Nearly one half of the total households in Class II, Class III and Class VI towns had access to drinking water within

premises (Table 2.2). Only 36.7 per cent of the slum households in Class IV and 32.3 Class V had access to drinking water within premises.

Among the metropolitan cities, slum households with access to tap water varied from a maximum of 100 per cent in Kochi to 31.6 per cent in Thrissur, both in Kerala. In 5 metropolitan cities, namely Kanpur and Ghaziabad in Uttar Pradesh, Ranchi in Jharkhand, Thrissur in Kerala, and Vasai-Virar in Maharashtra, less than 50 per cent of the slum households had access to tap water.

b) Toilet

About 66 per cent of the slum households and 81.4 per cent of the urban households in India have toilets within premises. Out of the 34 per cent slum households who do not have toilets within their homes, 18.9 per cent defecate in the open (Census of India, 2011). Pit latrine is used by 6.2 per cent and water closet by 57.7 per cent slum households. Also, a total of 19 per cent households do not have access to bathroom within their premises.

In Class II towns, 62.4 per cent of the slum households had access to toilets, while this proportion decreased to 32.5 per cent in the Class V category. Only 9.5 per cent of the slum households in Class II towns were connected to a sewer system. The value further decreased in the lower order towns (Table 2.3).

Table 2.3: Distribution of Slum Households by Types of Toilet Facilities, India, 2011

Class	Type of Toilet Facility Within Premises (%)						No Toilet Within Premises (%)	
	Flush/pour Flush Latrine Connected to				Pit Toilet	Service Toilet	Alternative Source	
	Piped Sewer System	Septic Tank	Other System	Total			Public Toilet	Open
Urban India	24.5	31.4	1.8	57.7	6.2	2.2	15.1	18.9
Metropolitan Cities	43.3	19.4	1.2	63.8	2.3	2.1	24.2	7.6
Non-metropolitan Class I Cities	16.7	41.7	2.2	60.5	8.6	2.5	10.8	17.6
Class I	30.6	30.0	1.6	62.3	5.3	2.3	17.8	12.3
Class II	9.5	40.4	2.2	52.0	8.1	2.3	9.1	28.5

Class III	7.2	33.2	2.3	42.7	9.0	1.4	6.7	40.2
Class IV	3.6	26.4	1.9	31.9	9.2	1.7	5.3	51.8
Class V	3.5	19.5	1.6	24.6	6.4	1.5	5.8	61.7
Class VI	8.0	43.9	1.0	52.9	4.1	3.5	7.7	31.9
All Towns	7.7	35.2	2.2	45.0	8.5	1.8	7.6	37.0

Source: Calculations based on Census of India data, 2011: Houses, Household Amenities and Assets in Slums

c) Drainage

In 2011, a total of 44.3 per cent slum households were serviced by open drainage while 18.8 per cent households had no drainage at all. In metropolitan cities, 93.1 per cent slum households had access to drainage facilities. 67.9 per cent of the slum households in these cities had access to covered drainage, which is higher than the average percentage that prevails in slums of urban India. In non-metropolitan cities, 79 per cent of the slum households had access to drainage facilities, which is lower than the average of slums in urban India and metropolitan India. In this category, only 31.6 per cent households had access to covered drainage. In terms of waste water outlets connected to drainage, 67.1 per cent of the slum households in towns had access to either open or closed drainage. Among those, only 22.0 per cent of the slum households were connected to closed drains (Table 2.4).

Table 2.4: Distribution of Slum Households with Drainage Facilities, India, 2011

Class	Drainage (%)	No Drainage (%)	Waste Water Outlet Connected to	
			Closed drainage (%)	Open drainage (%)
Urban India	81.2	19.8	45.5	54.5
Metropolitan Cities	93.1	6.9	67.9	32.1
Non-metropolitan Class I Cities	79.0	21.0	31.6	68.4
Class I	86.4	13.6	52.1	47.9
Class II	73.5	26.5	24.3	75.7
Class III	64.4	35.6	21.4	78.6
Class IV	56.6	43.4	14.8	85.2
Class V	51.0	49.0	16.9	83.1
Class VI	60.9	39.1	37.5	62.5
All Towns	67.1	32.9	22.0	78.0

Source: Calculations based on Census of India data, 2011: Houses, Household Amenities and Assets in Slums

Among the towns, the access of slum households to drainage decreased in the lower order towns. The highest proportion of slum households with access to drainage was in Class II (73.5 per cent) cities while Class V had the lowest proportion (51 per cent). The same pattern was observed in terms of closed drainage with 24.3 per cent of the slum households covered with closed drainage in Class II categories and 16.9 per cent in Class V towns (Table 2.4).

d) Housing – Structure, Conditions, and Tenure Status

A large number of slums are settled at vulnerable locations such as in the vicinity of drains, riverbanks, landfills etc. These slums have a variety of housing typologies ranging from pucca, semi-pucca (where there is brick masonry with mud plaster) to kutcha (mud houses) and small shacks made of wood/bamboo slates and plastic sheets. Housing structures are generally single storeyed, one- to two-room houses with an average area of 200–300 square feet. The quality of housing unit depends on a combination of factors such as the age of settlement, tenure security and infrastructure provision. The impact of tenure security is largely reflected on the quality of structure (UNCHS, 2003).

The Census of India 2011 released datasets on housing stock and amenities for slums in India for the first time. As per this dataset, most of the slum houses in urban India had permanent structures, 14.8 per cent semi-permanent structures and 4.6 had temporary structures in 2011. In metropolitan cities, 86.6 per cent

of the slum households had permanent structures, 3.03 per cent had temporary structures and 9.3 per cent had semi-permanent structures. The quality of structures deteriorates in lower order towns. In Class IV and Class V towns nearly one-half of the total houses either had semi-permanent or temporary structures (Table 2.5).

Table 2.5: Type of Structures and Use of Housing Structure in Slums, India, 2011

Size Class	Type of Structures (%)				Use of Structures (%)	
	Perma-nent	Semi-permanent	Temporary	Unclassified	Residence	Residence-cum-other Use
Urban India	79.54	14.85	4.65	0.96	97.18	2.82
Metropolitan Cities	86.64	9.35	3.03	0.99	97.34	2.66
Non-metropolitan Class I cities	76.90	13.22	4.70	0.92	97.25	2.75
Class I	82.00	13.22	3.82	0.96	97.25	2.75
Class II	71.35	20.52	7.05	1.08	97.31	2.69
Class III	63.83	24.89	10.35	0.93	96.77	3.23
Class IV	56.10	31.07	11.90	0.93	96.69	3.31
Class V	53.49	29.87	15.58	1.06	96.66	3.34
Class VI	73.16	20.56	6.02	0.26	97.28	2.72
All Towns	65.97	23.83	9.20	1.00	97.00	3.00

Source: Calculations based on Census of India data, 2011: Houses, Household Amenities and Assets in Slums

The share of dwelling units in good, liveable and dilapidated conditions are similar in slums of urban India and those in metro cities (Table 2.6).

Table 2.6: Condition of Housing Structures in Slums, India, 2011

Size Class	Condition of Structures (%)		
	Good	Liveable	Dilapidated
Urban India	58.4	37.6	4.0
Metropolitan Cities	60.2	36.7	3.1
Non-metropolitan Class I Cities	58.0	37.5	4.5
Class I	59.2	37.1	3.8
Class II	59.6	36.0	4.4
Class III	54.5	40.4	5.1
Class IV	51.5	43.1	5.3

Class V	50.1	45.3	4.6
Class VI	67.1	29.9	3.0
All Towns	58.4	37.6	4.0

Source: Calculations based on Census of India data, 2011: Houses, Household Amenities and Assets in Slums

4.4 per cent of the slum households in urban India have no exclusive room. With the exception of metropolitan cities, share of slum households with no exclusive room shows secular increase from non-metropolitan class I cities to Class V towns. Metropolitan cities exhibit highest share of one room accommodation per dwelling while it is least in Class VI towns. From Table 2.7, it can be inferred that number of rooms per dwelling is less in higher order cities and towns, suggesting less affordability in larger cities as compared to the smaller ones. Moreover, it is interesting to note that, ownership of the dwelling is least in metropolitan cities as compared to any other size class of cities/towns – suggesting that high land prices make it extremely difficult for the poor, especially migrants to own a dwelling which explains a high share of poor lives in rented accommodation. With the exception of Class VI towns, ownership of the dwelling increased from Class I to Class V towns in 2011.

Table 2.7: Number of Rooms and Ownership Status of Housing in Slums, India, 2011

Size Class	Number of Rooms per Dwelling (%)						Ownership Status (%)
	No exclusive room	One	Two	Three	Four or five	Six and above	Own structures
Urban India	4.4	44.8	29.5	12.3	3.3	1.8	70.2
Metropolitan Cities	4.9	52.3	25.5	10.1	5.5	1.6	66.5
Non-metropolitan Class I Cities	3.5	41.8	31.5	13.6	7.8	1.8	69.0
Class I	4.3	47.3	28.3	11.7	6.6	1.7	67.7
Class II	4.3	38.9	33.3	13.9	7.8	1.9	72.0
Class III	4.8	38.0	32.6	13.6	8.6	2.3	79.4
Class IV	5.2	37.3	31.6	13.7	9.4	2.8	85.3
Class V	7.3	36.7	30.9	13.5	9.0	2.7	88.4
Class VI	2.5	33.5	32.4	13.1	13.4	5.2	75.3
All Towns	4.7	38.3	32.7	13.7	8.4	2.2	77.1

Source: Calculations based on Census of India data, 2011: Houses, Household Amenities and Assets in Slums

c) Cooking Fuel, Kitchen Space and Ownership of Specific Assets

Only 51.3% of slum households use LPG as cooking fuel, while 14% depend on kerosene, fire-wood (25.8%), coal (3.9%), cow dung (2.1%), crop residue (1.6%) are the other important yet polluting fuels that

the slum households use. About 65.3% slum households and 77.8% urban households have separate kitchen within house and 3.4% slum households cook outside house in open space. About 46.8% slum households reported to not avail any banking facilities. Television ownership along with mobile telephones are considerably high in slum households at 69.6% and 63.5% respectively while the figures for urban households are at 76.7% and 64.3% correspondingly. Bicycle is owned by 40.6%, scooter and motorbike by 22% and computer by 10.4% slum households. About 10.7% slum households do not possess any specified assets.

2.4.1 Availability of Civic Amenities in Delhi, Karnataka and Urban India

The pattern and trend of availability of basic amenities in urban India with special reference to states of Delhi and Karnataka have been analysed using unit level data from the NSS 58th (2002) and 69th rounds (2012). Further, the data has been disaggregated between the male and female headed households.

Female headship in India is often an outcome of death or ailment of the male members of a household and its share is more or less nominal. The widowed, separated and unmarried single household women are economically poorer and live in precarious conditions. Level of asset ownership among women is either absent or negligible. A high percentage of such women who participate in economic activities in urban centres of India are reported to draw income from informal sector work; characterised by job insecurity, low and irregular wages and poor working conditions. Women tend to engage as casual wage labours or are self-employed in petty business. Thus, with the absence of male heads and other sources of income, the economic condition of women-headed households is deplorable and weak.

This is evident also from the housing structures and living conditions between the two groups. During 2002-12, the proportion of *katcha* houses have reduced from 3.0% to 1.3% for male headed households, and 5.3% to 1.6% for female headed households. On the other hand, compared to Delhi, the proportion of *pucca* houses in urban Karnataka was lower irrespective of headship in 2002. 82.1% house structures in Karnataka were *pucca* as against 97.9% in Delhi in 2002. In 2012, the difference has minimized with figures of 92.8% and 99.6% respectively (Table 2.8).

The gap between the proportion of male and female headed houses living in *pucca* houses in Karnataka was 9.5 per cent in 2002. The gap has reduced to 0.6 per cent in 2012 (Table 2.8 and 2.9). It is interesting to note that ownership of house among both male and female headed households in Karnataka has

decreased during the period. The decrease is substantial among the women headed households whereby the percentage decline is from 60.3 per cent to 40.1 per cent.

Both the male and female headed households show a decline in the use of tap water as the principal source of drinking water in urban India. This is attributed to the emergence of bottled water as a supplementary source of water. In terms of access to tap water by household headship, it is noticed that male headed households have a higher access to tap water in 2002 as compared to their female counterparts.

Table 2.8: Male-Headed household by the structure of the Dwelling in Urban Areas

NSS 58th Round (2002)					NSS 69th Round (2012)				
	Katcha	Pucca	Semi-pucca	Total		Katcha	Pucca	Semi-pucca	Total
Delhi	0.6	97.9	1.5	100.0	Delhi	0.2	99.6	0.2	100.0
Karnataka	2.6	82.1	15.3	100.0	Karnataka	0.5	92.8	6.7	100.0
India	3.0	88.3	8.7	100.0	India	1.3	94.0	4.7	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.9: Female-Headed Household by the structure of Dwelling in Urban Areas

	NSS 58th Round (2002)				NSS 69th Round (2012)				
	Katcha	Pucca	Semi-pucca	Total		Katcha	Pucca	Semi-pucca	Total
Delhi	1.1	97.6	1.3	100.0	Delhi	0.0	100.0	0.0	100.0
Karnataka	6.4	73.4	20.3	100.0	Karnataka	0.3	92.2	7.5	100.0
India	5.3	82.8	11.8	100.0	India	1.6	91.4	7.0	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.10: Male-Headed Households by Ownership of Dwelling

NSS 58th Round (2002)						NSS 69th Round (2012)					
	Owned	Hired	No Dwelling	Others	Total		Owned	Hired	No dwelling	Others	Total
Delhi	50.0	47.7	0.0	2.3	100.0	Delhi	54.4	41.1	0.0	4.4	100.0
Karnataka	51.1	42.9	0.2	5.9	100.0	Karnataka	41.4	55.0	0.0	3.6	100.0
India	60.1	35.0	0.1	4.8	100.0	India	61.7	35.2	0.0	3.1	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.11: Female-Headed Households by Ownership of Dwelling

NSS 58th Round (2002)						NSS 69th Round (2012)					
	Owned	Hired	No Dwelling	Others	Total		Owned	Hired	No Dwelling	Others	Total
Delhi	58.2	41.3	0.0	0.5	100.0	Delhi	65.2	34.6	0.0	0.2	100.0
Karnataka	60.3	32.0	0.0	7.7	100.0	Karnataka	40.1	52.7	0.0	7.2	100.0
India	58.3	31.9	0.2	9.6	100.0	India	57.3	37.0	0.0	5.7	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

However, within a decade, this difference has blurred. In case of male headed households in Delhi, there has been a marginal increase in the usage of tap water while it declined in Karnataka during 2002 - 2012. Interestingly, a larger share of male headed households had shifted to bottled water in 2012. In case of female headed households, a decline is noticed in the usage of tap water in both states.

There has been considerable improvement in the percentage of households having toilet facility within premises exclusive for own use (Table 2.12 and 2.13). Delhi registered greater improvement with none of the households reporting to be without a latrine facility in 2012. On the other hand, about 9.3% and 8% of male and female headed households in Karnataka are without any latrine in 2012.

Table 2.12: Male Headed Households by Access to Latrine Facilities in Urban Areas

NSS 58th Round (2002)							NSS 69th Round (2012)						
Male	**Public/ community latrine**	**Shared Latrine**	**Own Latrine**	**No facility**	**Other**	**Total**		**Public/ Community Use**	**Exclusive use of the household**	**Common use latrine in building**	**Other type**	**no latrine**	**Total**
Delhi	9.3	27.8	53.2	7.2	2.4	100.0	Delhi	3.7	66.0	30.0	0.2	0.0	100.0
Karnataka	3.6	19.8	56.2	20.2	0.3	100.0	Karnataka	1.5	71.5	17.2	0.6	9.3	100.0
India	8.1	19.0	54.1	17.8	1.0	100.0	India	5.2	64.8	20.7	0.6	8.6	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.13: Female Headed Households by Access to Latrine Facilities in Urban Areas

NSS 58th Round (2002)							NSS 69th Round (2012)						
Female	**Public/ Community latrine**	**Shared Latrine**	**Own Latrine**	**No facility**	**Other**	**Total**	**States**	**Exclusive Use of the household**	**Common use Latrine in Building**	**Public/ community use**	**Other type of latrines**	**No latrine**	**Total**
Delhi	7.3	29.3	60.8	2.4	0.1	100.0	Delhi	75.1	21.9	3.0	0.0	0.0	100.0
Karnataka	5.6	25.8	48.0	19.9	0.8	100.0	Karnataka	50.2	38.9	2.7	0.0	8.0	100.0.
India	8.5	23.7	47.9	18.9	1.0	100.0	India	57.4	27.4	4.7	0.4	10.1	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

It is again worrisome that 16.7% of both male and female headed households in urban India did not have access to bathroom facilities in 2012. About 3.8% and 9.1% women headed households in Delhi and Karnataka do not have bathroom facilities. The access to attached bathrooms in the women headed households during 2002 - 2012 has seen a huge increase in Delhi from 42.5% to 83.2% which is an encouraging development. However, only 16.9% rise is seen among the male-headed households. But only 4.6% increase is registered among the counterparts in urban Karnataka up to 57.7% in 2012.

Table 2.14: Male Headed Households by the Type of Garbage Collection in Urban Areas

NSS 58th Round (2002)						NSS 69th Round (2012)					
	Disposal: by Panchayat/ Municipality/ corporation	Disposal by resident(s)	No arrangement	Others type of Garbage Collection	Total		Disposal: by Panchayat/ Municipality/	Disposal by resident(s)/ group of residents	No arrangement	Other type of collection	Total
Delhi	50.3	42.5	6.1	1.1	100.0	Delhi	49.9	37.8	8.0	4.4	100.0
Karnataka	66.8	13.7	16.9	2.6	100.0	Karnataka	67.0	17.6	14.2	1.2	100.0
India	58.9	17.7	19.9	3.5	100.0	India	51.4	22.2	24.3	2.2	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.15: Female Headed Households by the Type of Garbage Collection in Urban Areas

NSS 58th Round (2002)						NSS 69th Round (2012)					
States	Garbage disposal: by Panchayat/ Municipality/ Corporation	Disposal by resident(s)	No arrangement	Disposal by Other Type of Arrangements	Total	States	Garbage disposal: by Panchayat/ Municipality/ Corporation	Disposal by resident/group of residents	No Arrangement	Other type of collection	Total
Delhi	72.99	24.35	1.76	0.90	100.0	Delhi	61.0	35.4	1.0	2.6	100.0
Karnataka	68.45	12.50	18.84	0.20	100.0	Karnataka	65.9	21.3	12.2	0.5	100.0
India	60.12	15.83	19.79	4.26	100.0	India	55.2	17.3	23.4	4.1	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

The sanitation condition among the female headed households in urban Delhi, Karnataka and India is relatively much better than male headed households. In 2012, about 1.7% and 9.4% male headed households in Delhi and Karnataka had no drainage connectivity unlike 0.4% and 5.6% households among female headed households in the respective categories. During 2002-12, the drainage conditions have registered a higher improvement in coverage of underground drainage and covered *pucca* sewers in Karnataka than Delhi.

Table 2.14 and 2.15 depicts the methods of garbage disposal. Nearly one-fourth of male and female headed households in urban India did not have any mode of garbage collection in 2012. The situation is more worrisome in Karnataka in case of both types of households as compared to Delhi. For example, about 14.2% male headed and 12.2% female headed households in the state had no arrangement of garbage disposal in 2012.

2.4.2 Availability of Civic Amenities in Delhi and Bengaluru

The households in urban Delhi are seen to perform better than Bengaluru in the access of all types of civic amenities. As per the 69th round data, none of the male headed house structure in Bengaluru was *kutcha*, though 2.1% houses were *semi-pucca*. In Delhi, about 0.2% houses were *kutcha*. Even among female headed households about 96.1% households were *pucca* structures in 2012, which is about 10% improvement since 2002. There has also been a decline in the proportion of owned houses in Bengaluru city.

There has been rapid areal expansion of the administrative limits of Bengaluru city over the last census decade leading to population increase. Most of the growth has taken place in the outskirts and in the peri-urban areas of the city, but simultaneously, expansion of the piped tap water supply has not kept pace with the city growth. Thus, the population in the city is seen to depend on bottled water (11.1%) and other water sources such as tube-wells. The proportion of female headed households in Bengaluru sourcing water from tube-well and wells has increased from 2.5% in 2002 to 10.9% in 2012. In Delhi as well, the proportion of households using tube-well and well has increased to 11.9% in 2012 from 2.5% a decade before. But among the male headed households in Delhi, there has been a slight increase in the coverage of tap water from 85.1% in 2002 to 91.7% in 2012. In the 69th round the data on availability of latrine facilities was disaggregated into 'common use of latrine in the building' which accounted for about 32% and 25% of the male and female headed urban households in Delhi, while the same in Bengaluru stood at 17.1% and 44% correspondingly. In 58th NSS round, the category of 'shared latrine' was

canvassed. During this 10 years time, it has been observed that the proportion of urban households having own toilets for exclusive use has increased for both Delhi and Bengaluru among the male headed households. But there has been a 7% decline in the percentage of female headed households having personal toilets within the premises during 2002-2012. The proportion of attached bathroom facilities in both cities have seen considerable increase as documented in Delhi (47.4% in 2002 to 66.2% in 2012 in male headed households) and Bengaluru (62.8% in 2002 to 87.9% in 2012 in male headed households). In 2012, only about 4.2% and 0.3% of the women headed households in Delhi and Bengaluru had no toilet facilities.

As per the 69th round, the resident welfare groups in Delhi are more active in garbage disposal. More than 35% urban households dispose the household wastes through the help of resident welfare groups, while in Bengaluru the municipal corporation is relatively more active as evident from data (79% in male headed and 62% in female headed households). In Bengaluru, 9.4% male headed and 4.1% female headed households had no arrangement for garbage disposal. In between 2002 to 2012, the percentage of households serviced by underground drainage system has increased, but the rise is by 25% in the Delhi for male headed households, whereas only 7% rise is reported in female headed households. In case of Bengaluru, male headed households registered less than 4% increase as compared to 19% rise in the female headed ones.

2.5.1 Availability of Civic Amenities across Social groups in Urban India

The Scheduled Castes (SCs) and Scheduled Tribes (STs) are relatively backward economically than the other general caste. This is corroborated from the percentage distribution of households living in *pucca* house structures which is highest among the 'others' at 96.8% in 2012 while SC and ST accounts for 88.9% and 85.5% respectively in India. Delhi registers an impressive more than 99% of *pucca* houses across all social groups, but except for the STs (77.4%) all subgroups in Karnataka report more than 90% households living in *pucca* structures in 2012. It must be noted that the percentage of ST population living in slums is very high in Karnataka. There has been a marginal decline of ST households living in *pucca* structures from 80.2% in 2002 to 77.4% in 2012, while in all other groups an improvement is registered. Irrespective of location, the general castes are found to be better off in availability to all basic services.

A higher proportion of households across all social groups in Delhi had access to *pucca* households (more than 90% in 2002). These households registered an improvement in their access to *pucca* houses during 2002-2012. In case of tenure status, the other castes in Indian urban households have increased their

ownership of houses by 6.3% from 63.9% in 2012 and ST households by 2.9%. But the proportion of SC (32.4%) and Other Backward Castes (OBCs) (37.7%) households living in rented houses increased over the 10-year period. In urban Karnataka, the house ownership declined from 52.2% in 2002 to 41.1% in 2012 and the decline has been steep among the SC and ST households.

Table 2.16: Social Groups by Ownership of the Dwelling in Urban Areas

NSS 58th Round (2002)						
State	**Social Groups**	**Owned**	**Hired**	**No Dwelling**	**Others**	**Total**
	Scheduled Tribe	47.5	52.5	0	0	100.0
	Scheduled Caste	59.7	39.2	0.2	0.9	100.0
	Other Backward Caste	41.3	56.9	0	1.7	100.0
	Others	50.6	46.6	0	2.7	100.0
Delhi	Total	50.6	47.2	0	2.1	100.0
	Scheduled Tribe	62.4	26.6	0	11	100.0
	Scheduled Caste	62.2	23.2	1.2	13.3	100.0
	Other Backward Caste	57	36.3	0	6.7	100.0
	Others	47.4	48.4	0.1	4.2	100.0
Karnataka	Total	52.2	41.5	0.2	6.1	100.0
	Scheduled Tribe	53.5	33.5	0	12.9	100.0
	Scheduled Caste	64.5	28.3	0.3	6.9	100.0
	Other Backward Caste	61.6	33.4	0.1	4.9	100.0
	Others	57.6	37.7	0.1	4.7	100.0
India	Total	59.9	34.7	0.1	5.3	100.0

Source: Unit level data of NSSO, 58th (2002) on Housing Condition in India

More than 62% of both scheduled population lived in owned houses in 2002 but their share declined by over 20 per cent in 2012 (Table 2.16 and 2.18). This reflects greater marginalisation of the already backward social groups. In Delhi, the scenario is better as the share of house ownership among urban households registered a 5% increase in 2012.

In 2012, the other castes had the highest access to tap water among all social groups. About 72.6% Indian urban general caste households had access to tap water, while the lowest share was reported by SCs (66.1%) in 2012. The percentage share of tap water declined during 2002 - 2012 due to rise in the usage of bottled and other sources of drinking water in urban centres as mentioned earlier. The SCs of Delhi and OBCs households of urban Karnataka depend more on tube well as the main source of drinking water (2012).

The non-scheduled population had the highest access to toilet facilities in 2012. It is alarming to note that 17.2% ST, 10.9% OBC and 19.6% SC households in urban India had no access to toilet facility and defecated in open in 2012. The same figure among general category was 2.5% in 2012 (Table 2.17). Though the 'no toilet' category has been reduced by almost half from 2002 to 2012, yet the inter-group differences in access to latrine facility is high. Only about 50% of SC and ST households in Karnataka have exclusive toilet facility, while it is 73.8% among the 'other castes'. In Delhi the other castes report only around 4% increase in access to toilets for individual use while among the SCs, the toilets for own exclusive use has risen from 35.8% in 2002 to 60.5% in 2012. This increase may be the impact of dwelling units constructed under JNNURM, which had toilet facilities attached. The percentage increase in the access to individual toilets has been prominently high among ST and OBC households by 39% and 25% respectively during 2002-12. It is encouraging to note that there has been substantial decline (10 to 15%) in the percentage of households in Delhi having no access to latrine, especially among the SC and OBC households in 2012. On the other hand, the state of toilet facilities among the SC and OBC households in urban Karnataka are extremely poor with 16.1% and 9.9% having no latrines facilities respectively. Access to good sanitation facilities is highly polarised and general castes report higher shares (Table 2.17).

Table 2.17: Social Groups by Access to Latrine Facilities in Urban Areas

State	Social Groups	Public/community latrine	Shared Latrine	Own Latrine	No latrine facility	Others	Total
NSS 58th Round (2002)							
Delhi	ST	6.2	45.7	41.9	6.2	0	100.0
	SC	21.3	24.4	35.8	15.8	2.8	100.0
	OBC	14.5	34.8	32.7	13.1	5	100.0
	Others'	3.5	26.5	66.8	1.9	1.3	100.0
	Total	9.2	27.9	53.8	6.9	2.3	100.0
Karnataka	ST	2.4	22.4	26.3	48.9	0	100.0
	SC	8.8	23.4	28.7	38.1	1	100.0
	OBC	2.3	20.2	57.6	19.8	0.1	100.0
	Others'	3.9	20.1	60.5	15.1	0.4	100.0
	Total	3.8	20.5	55.2	20.1	0.3	100.0
India	ST	5.8	21.5	35.7	35.9	1.1	100.0
	SC	11.9	17.8	33.7	35.4	1.3	100.0
	OBC	6.9	19.8	49	23.2	1.1	100.0
	Others'	8	19.7	63.7	7.9	0.8	100.0
	Total	8.1	19.5	53.5	17.9	1	100.0

State	Social Groups	Exclusive use of the household	Common use of the latrine in the building	Public/ community use	Other type	No latrine	Total
NSS 69th Round (2012)							
Delhi	ST	80.9	8.2	10.9	0	0	100.0
	SC	60.5	33.3	6	0	0.1	100.0
	OBC	57.1	37.9	4.4	0.6	0	100.0
	Others'	70.9	26.9	2.1	0.1	0	100.0
	Total	66.8	29.4	3.7	0.2	0	100.0
Karnataka	ST	52.6	17.4	9.2	0	20.8	100.0
	SC	50.4	30.4	3	0.1	16.1	100.0
	OBC	67.9	19.6	1.9	0.6	9.9	100.0
	Others'	73.8	22.1	0.2	0.3	3.6	100.0
	Total	67.2	21.6	1.7	0.5	9	100.0
India	ST	56.7	19.6	5.8	0.7	17.2	100.0
	SC	43.9	25.8	9.7	1	19.6	100.0
	OBC	61.8	22.1	4.8	0.4	10.9	100.0
	Others'	73.2	19.9	3.9	0.5	2.5	100.0
	Total	63.9	21.6	5.2	0.6	8.8	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

The drainage facility like other amenities has also improved during 2002-2012. Data from the 69th round (2012) confirms that proportion of households with underground drainage has seen a rise since 2002, but the general castes have registered maximum increase in Karnataka from being 39.3% in 2002 to 60.6% in 2012. In the pan India average, 23.5% of ST, 20.3% of SC, 14% of OBC households are still not serviced by any drainage system as against a much lower 8.3% of the other caste households. Karnataka fares badly relative to Delhi in this indicator as well. As per 2012 figures, 20.8% ST and 16.1% SC households in urban Karnataka had no access to drainage. Across social groups, the percentage share of households with no latrine facility is insignificant in Delhi. However, open katcha drainage system is still in use by 4.4% of ST, 2.3% of SC and 2.4% of OBC households in Karnataka and by 2.1% of SC and 3% of OBC households in Delhi.

The proportion of urban households where garbage collection is done by municipal corporations has declined. Moreover, the SC, OBC and other caste households having 'no arrangement' for garbage disposal has increased from 28.3%, 21.8% and 17.7% in 2002 to 31.6%, 27% and 18.2% in 2012 respectively. The condition of housing amenities among the marginalised sections in Karnataka is poor as compared to their counterparts in Delhi. This is corroborated by the fact that about 22.5% SC households

and 13.5% OBC households in the former have no arrangement for garbage disposal as against 9.2% and 7.3% in Delhi correspondingly.

2.5.2 Availability and Access to Civic Amenities across the Social Groups in Urban Households of Delhi and Bangaluru

The percentage of households residing in pucca houses was high in 2012 among SCs (92.7%) and OBC (98.2%) in Bengaluru city as compared to 66.2% and 95.4% in 2002 (Table 2.18). Table 2.22 shows that in 2002, the proportion of STs fared better in ownership of houses followed by SCs, OBCs and others. But by 2012, 97.2% STs lived in hired accommodations. This is also because of the smaller sample size of the ST households. Among the SCs and OBCs, 60.4% and 74.4% households live in rented houses while it was 66.4% among 'others' category. In Delhi, 56.1 % other castes own their houses, whereas the most economically backward are the SCs as only 37.1% of them lived in owned houses in 2012.

Table 2.18: Social Groups by Ownership of Dwellings in Cities

Social Group	Cities	Owned	Hired	No Dwelling	Others	Total
NSS 58th Round (2002) in %						
Scheduled Tribe	Delhi	44.0	56.0	0.0	0.0	100.0
	Bengaluru	75.4	24.6	0.0	0.0	100.0
	India	53.5	33.5	0.0	12.9	100.0
Scheduled Caste	Delhi	59.5	39.4	0.2	0.9	100.0
	Bengaluru	69.1	30.7	0.0	0.2	100.0
	India	64.5	28.3	0.3	6.9	100.0
Other Backward Caste	Delhi	43.1	54.6	0.0	2.3	100.0
	Bengaluru	51.4	47.6	0.0	1.0	100.0
	India	61.6	33.4	0.1	4.9	100.0
Others	Delhi	51.8	46.0	0.0	2.2	100.0
	Bengaluru	36.3	59.8	0.0	3.9	100.0
	India	57.6	37.7	0.1	4.7	100.0

Source: Unit level data of NSSO, 58th (2002)

Table 2.19: Social Groups by Structure of Dwellings

Social Group	Cities	Katcha	Pucca	Semi-pucca	Total
NSS 69th Round (2012) in %					
Scheduled Tribe	Delhi	0.0	100.0	0.0	100.0
	Bengaluru	0.0	100.0	0.0	100.0
	India	3.3	85.5	11.2	100.0

Scheduled Caste	Delhi	0.2	99.8	0.0	100.0
	Bengaluru	0.0	92.7	7.3	100.0
	India	3.5	88.9	7.6	100.0
Other Backward Caste	Delhi	0.9	99.1	0.0	100.0
	Bengaluru	0.0	98.2	1.8	100.0
	India	1.4	92.8	5.8	100.0
Others	Delhi	0.0	100.0	0.0	100.0
	Bengaluru	0.0	98.4	1.6	100.0
	India	0.5	96.8	2.7	100.0

Source: Unit level data of NSSO, 69th (2012)

Across the social groups in Bengaluru, more than 4% of ST households and about 5% of OBCs access drinking water from tube wells in 2012, which was non-existent in 2002. The dependence of all households on bottled water in 2012 was high. About 18.5% SC and 25.2% of OBC households used bottled water as main source of drinking water in 2012. More than 90% of households in Delhi had access to pipe or tap water across all social groups in 2012.

Table 2.20: Access to Latrine Facilities in Cities by Social Groups

Social Group	Cities	Exclusive use of the household	Common use of the latrine in the building	Public/ community use	Other type	No latrine	Total
		NSS 69th Round (2012) in %					
Scheduled Tribe	Delhi	69.8	12.9	17.3	0	0	100
	Bengaluru	41.5	55.6	0.0	0.0	2.8	100.0
	India	56.7	19.6	5.8	0.7	17.2	100.0
Scheduled Caste	Delhi	55.1	36.4	8.6	0.0	0.0	100.0
	Bengaluru	69.4	23.6	3.9	0.3	2.8	100.0
	India	43.9	25.8	9.7	1.0	19.6	100.0
Other Backward Caste	Delhi	48.9	44.0	6.1	0.9	0.0	100.0
	Bengaluru	80.9	18.4	0.0	0.0	0.7	100.0
	India	61.8	22.1	4.8	0.4	10.9	100.0
Others	Delhi	70.4	26.9	2.6	0.1	0.0	100.0
	Bengaluru	77.1	22.3	0.0	0.0	0.6	100.0
	India	73.2	19.9	3.9	0.5	2.5	100.0

Source: Unit level data of NSSO, 69th Round (2012) on Housing Condition in India

Table 2.20 depicts the inequality in access to latrine facilities among social groups in cities. Data from the 69th round of NSS shows that around 3% of SCs and STs in Bengaluru defecate in the open, while none is reported in Delhi. Construction of public toilets and lack of private toilet access within slums in Delhi result in increasing the percentage share SC (8.6%), OBC (6.1%) and ST (17.3%) households using

common public toilets. The proportion of all households in Bengaluru using shared toilets of the building is more than 20% in 2012. This is because of the high proportion of rented accommodation in the city. A great divide is visible in Bengaluru among the social groups in access to attached bathroom facilities at home. STs and SCs are economically weaker sections of society and live in worse conditions as only about 41.5% and 61.4% of the same have attached bathroom while 89% of OBC and 97.3% of the other caste households have the bathroom facility at home. In Delhi, the OBC households (53.2%) fare the worst amongst all social groups having attached bathroom within their premises, while it is 75% among the general castes.

The proportion of SC households having access to underground drains in Bengaluru has improved considerably from 27.3% to 68.7% in the ten-year time span (2002-2012). In contrast there has been reduction in the same among OBC and ST households. Among OBC households the decline was from 88% (2002) to 81.9% (2012) and among the STs, it was from 48.5% (2002) to 18.4% (2012) which indicates a further decline in the level of quality of living among the already marginalised groups. About 13% SC households and 8.6% OBC households in Bengaluru had no access to any garbage disposal arrangement in 2012, while the same among the general caste households in Delhi and Bengaluru was around 6.3% and 6.7% respectively. The RWAs over the years have been mobilised and are playing a prominent role in upkeep of the residential localities in cities, which is more pertinent especially in Delhi.

2.6.1 Availability and Access to Civic Amenities in Migrant and Non-Migrant Urban Households across India

The present section examines the availability and access to basic civic amenities in migrant and non-migrant urban households with reference to Karnataka and Delhi.

It is evident from the table 2.21 that the percentage share of the migrant and non-migrant households living in *pucca* houses is very high both in 2002 and 2012. In 2002, the percentage share of the migrant households living in *pucca* houses was high in comparison to non-migrant households in urban India but this gap has narrowed down in 2012. Presently, more than 90 per cent non-migrant households live in *pucca* houses. In 2002, the percentage share of migrant households living in pucca houses was high in Karnataka as compared to Delhi, however, the pattern has changed in 2012. Now, 100 per cent migrant households live in pucca houses. In case of non-migrant households, Delhi had higher percentage share of households living in pucca households in 2002 as compared to Karnataka but the gap between these two

has narrowed down in 2012. Currently, 99.6 non-migrant households live in pucca houses in Delhi. The percentage share of households in Karnataka for this category is 92.4 per cent.

The percentage share of house ownership among the non-migrant households was higher (62% for urban India in 2002) than migrants (14.6% for urban India in 2012). In 2012, more than 85% of the migrant households resided in rented accommodation in both the states. In urban Karnataka, percentage share of households living in rented accommodation increased from 40.5% to 52.3% during 2002-12. There has been a marginal increase in the percentage share of urban households in India living in rented houses from 32.8% in 2002 to 33.1% in 2012.

In 2002, the percentage share of migrant and non-migrant households using tap water as main source of drinking water was significantly higher in comparison to other sources of drinking water (tube well/hand pump/well, river/lake/spring/pond etc.) both for India, Delhi and Karnataka. The percentage share in this category is significantly higher in 2012. Both in 2002 and 2012, the access to tap water as source of main drinking water was higher in non-migrant households in comparison to migrant households in India as well as Delhi and Karnataka. One of the possible reasons for this gap could be that a high share of migrant households living in slum areas where the percentage of households having tap water was less. In 2012, the percentage share of migrant households using tube wells/hand pumps/wells in Delhi has declined substantially. The same pattern is found for the non-migrant households of Karnataka. The emergence of bottled water as source of drinking water in 2012 is the main reason behind the changes in the main source of drinking water in migrant as well as non-migrant households.

Table 2.21: Structure of the Dwelling by Migration Status of Household in Urban Areas

Household	Cities	Katcha House	Pucca house	Semi-pucca house	Total	Household	Cities	Katcha	Pucca	Semi-pucca	Total
NSS 58th Round (2002)						NSS 69th Round (2012)					
Migrants	Delhi	1.2	94.6	4.2	100.0	Migrants	Delhi	0.0	100.0	0.0	100.0
	Karnataka	1.2	96.7	2.1	100.0		Kamataka	0.4	96.2	3.4	100.0
	India	2.7	91.6	5.7	100.0		India	0.5	96.1	3.5	100.0
Non-migrants	Delhi	0.7	97.9	1.4	100.0	Non-migrants	Delhi	0.2	99.6	0.2	100.0
	Karnataka	3.1	80.6	16.2	100.0		Kamataka	0.5	92.4	7.1	100.0
	India	3.3	87.5	9.2	100.0		India	1.4	93.5	5.1	100.0
Migrant+Non-migrant	India All	3.3	87.7	9.0	100.0	Migrant+Non-migrant	India All	1.4	93.6	5.0	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.22: Ownership of the Dwelling by Migration Status of Household in Urban Areas

Household	Cities	Owned	Hired	No Dwelling	Other	Total	Household	Cities	Owned	Hired	No Dwelling	Other	Total
NSS 58th Round (2002)							NSS 69th Round (2012)						
Migrants	Delhi	24.2	68.7	0.0	7.1	100.0	Migrants	Delhi	13.1	86.9	0.0	0.0	100.0
	Karnataka	4.4	83.1	0.0	12.6	100.0		Karnataka	12.6	85.0	0.0	2.4	100.0
	India	14.6	73.9	0.2	11.2	100.0		India	12.5	80.8	0.0	6.7	100.0
	Delhi	51.0	46.9	0.0	2.1	100.0		Delhi	56.5	39.3	0.0	4.2	100.0

Non-migrants	Karnataka	53.4	40.5	0.2	5.9	100.0	Non-migrants	Karnataka	43.2	52.3	0.0	4.4	100.0
	India	62.1	32.8	0.1	5.0	100.0		India	63.6	33.1	0.0	3.3	100.0
Migrant + Non-migrant	India All	59.9	34.7	0.1	5.3	100.0	Migrant + Non-migrant	India All	61.2	35.4	0.0	3.4	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

In urban India, the percentage share of the non-migrant households who owned toilet facility was higher in comparison to migrant households in 2002. This gap has slightly narrowed down in 2012 as 49.9 per cent migrant households and 64.6 per cent non-migrant households use owned toilet facility in comparison to 38.4 per cent and 54.3 per cent households in respective categories in 2002. Because of the significant improvement in the percentage share of the households (both migrant and non-migrants) who owned toilet facility in their households, the percentage share of the households using public/community toilets has come down in 2012 as compared to 2002 for urban India. The percentage share of the households without latrine facility has also declined between 2002 and 2012.

Table 2.23: Access to Latrine Facility by Migration Status of Household in Urban Areas

Migration Status of Households	States	Own latrine	Common Use	Public/ Community latrine	Other type of latrine	No latrine	Total
NSS 58th Round (2002)							
Migrants	Delhi	44.3	30.8	2	0.3	22.7	100.0
	Karnataka	55.7	31.9	3.6	0	8.9	100.0
	India	38.4	43.3	7.3	1.3	9.8	100.0
Non-Migrants	Delhi	53.9	27.9	9.3	2.3	6.6	100.0
	Karnataka	55.2	20.3	3.8	0.3	20.4	100.0
	India	54.3	18.3	8.2	1	18.2	100.0
Migrant & Non-migrant	India All	53.5	19.5	8.1	1	17.8	100.0
NSS 69th Round (2012)							
Migrants	Delhi	46.4	50.7	2.8	0	0	100.0
	Karnataka	54.9	38.6	0.8	0	5.7	100.0
	India	49.9	43	3.5	0.4	3.2	
Non-Migrants	Delhi	67.3	28.8	3.7	0.2	0	99.8
	Karnataka	68.1	20.4	1.8	0.5	9.3	99.5
	India	64.6	20.5	5.2	0.6	9.1	
Migrant & Non-migrant	India All	63.8	21.6	5.2	0.6	8.8	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

There has been substantial decline in the proportion of non-migrant households defecating in the open in urban Karnataka, from 20.4% in 2002 to 9.3% in 2012. (Table 2.23) The corresponding share for the migrant households were 8.9% and 5.7% respectively. A remarkable improvement in sanitation situation can be observed from the access to toilet facilities in Delhi during 2002-12. The proportions of migrant and non-migrant households in Delhi reported to have no access to toilet facilities were 22.7% and 6.6%

respectively in 2002. But in 2012, none of the households in Delhi reported to defecate in the open. The share of non-migrant households having access to toilets for exclusively own usage rose from 54% to 67% in Delhi and 52% to 68% in urban Karnataka during 2002-2012. Simultaneously, the proportion of shared toilets usage among migrant households rose in 2012 to more than 50% and 35% in Delhi and Karnataka by virtue of rise in migrants living in rented units.

In urban India a total 42.8 per cent migrant households had bathroom facility attached to their premises in 2002. This percentage share is slightly less (41 per cent) in non-migrant households. In 2012, the percentage share of the migrant and non-migrant households who have bathroom facility attached to their premises has increased to 58 per cent and 55.3 per cent respectively. The improvement in the percentage share of households with attached bathroom facility during 2002-12 has reduced the percentage share of the households (both migrant and non-migrant) with no bathroom facility.

At the state level, the percentage share of migrant households having no access to bathroom facility was almost double in Karnataka (8%) than in Delhi (4.5%) in 2012.

Table 2.24: Bathroom Facility by Migration Status of Households in Urban Areas

Household	Cities	Attached	Detached	No bathroom	Total
NSS 58th Round (2002)					
Migrant	Delhi	64.7	13.8	21.5	100.0
	Karnataka	56.7	17.5	25.8	100.0
	India	42.8	35.5	21.7	100.0
Non-Migrant	Delhi	49.4	26.1	24.6	100.0
	Karnataka	58.3	19.5	22.2	100.0
	India	41.0	27.0	32.0	100.0
Migrant+Non-migrant	India All	41.1	27.4	31.5	100.0
NSS 69th Round (2012)					
Household	**Cities**	**Attached**	**Detached**	**No bathroom**	**Total**
Migrant	Delhi	73.8	21.8	4.5	100.0
	Karnataka	72.0	20.0	8.0	100.0
	India	58.0	30.9	11.1	100.0
Non-Migrant	Delhi	68.2	24.9	6.9	100.0
	Karnataka	67.7	20.9	11.4	100.0
	India	55.3	27.8	17.0	100.0
Migrant+Non-migrant	India All	55.4	27.9	16.7	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

In 2002, 14.5 per cent migrant households in urban India did not have access to drainage facility. The percentage share of non-migrant households who did not have drainage facility was higher in 2002 as compared to migrant households. In 2012, the condition of drainage facility has improved both for migrant and non-migrant households. The improvement is more among migrant households as compared to non-migrant households in urban India.

In 2012, 11.2% and 3.9% of migrant households in Karnataka and Delhi had no drainage facility at their living place. In Delhi, the implementation of a few urban infrastructural schemes has helped to improve the conditions of living, especially among the EWS and low-income groups; owing to which the share of migrant and non-migrant households serviced by underground drainage have reported to increase from 15.3% to 62.7% and from 39.8% to 55.5% during 2002-12.

Table 2.25: Drainage Arrangement by Migration Status of Household in Urban Areas

Household	Cities	Underground	Covered Pucca	Open Pucca	Open Katcha	No Drainage	Total
NSS 58th Round (2002)							
Migrants	Delhi	15.3	32.9	38.5	8.8	4.5	100.0
	Karnataka	49.9	10.1	16.1	13.5	10.4	100.0
	India	37.9	16.6	24.5	6.5	14.5	100.0
Non-migrants	Delhi	39.8	13.2	34.7	4.0	8.2	100.0
	Karnataka	35.0	11.5	30.4	9.7	13.4	100.0
	India	28.8	12.3	31.6	8.6	18.6	100.0
Migrant + Non-migrant	India All	29.2	12.5	31.3	8.5	18.5	100.0
NSS 69th Round (2012)							
Migrants	Delhi	62.7	9.0	24.5	0.0	3.9	100.0
	Karnataka	56.5	21.6	10.7	0.0	11.2	100.0
	India	50.7	16.4	16.5	2.6	13.8	100.0
Non-migrants	Delhi	55.5	14.0	26.9	2.0	1.5	100.0
	Bengaluru	48.1	22.1	19.4	1.9	8.5	100.0
	India	45.0	14.8	22.7	5.1	12.4	100.0
Migrant + Non-migrant	India All	45.3	14.9	22.4	5.0	12.5	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

In case of garbage disposal, it is disappointing to state that about 30% migrant households and 24% non-migrant households in urban India did not have any arrangement in 2012. The figure for Delhi was 13.3% and for Karnataka 20.9% for the migrant households. The sanitation condition among the migrant

households has deteriorated over time as the share of households having no arrangement for garbage clearance increased from 18.3% in 2002 to 29.6% in 2012 for all India.

2.6.2 Availability and Access to Civic Amenities across Migrant and Non-Migrant Urban Households of Delhi and Bengaluru

In 2002, the percentage difference between the migrant and non-migrant households living in pucca structures in Bengaluru was 9.6%. 91.4% of the latter group lived in permanent houses. In 2012, the gap decreased to 1%. In urban India, 3.5% migrant households and 2.4% of non-migrant households lived in semi-pucca buildings in 2012, while the figures in 2002 stood at 5.7% and 8% respectively (Table 2.27). Interestingly, the migrant households in Delhi witnessed relative economic prosperity between 2002 and 2012. This is confirmed from the increase in the share of households living in owned houses. The situation is observed to be reverse in case of Bengaluru where, the house ownership among the non-migrants declined from 45.5% in 2002 to 30.5% in 2012.

Table 2.26: Mode of Garbage Collection by Migration Status of Household in Urban Areas

Household	Cities	Disposal: by panchayat/ municipality/ corporation	By resident(s)	No Arrangement	Others	Total
NSS 58th Round (2002)						
Migrants	Delhi	11.9	77.1	11.0	0.0	100.0
	Karnataka	65.1	10.2	23.1	1.5	100.0
	India	59.0	15.5	18.3	7.3	100.0
Non-migrants	Delhi	52.5	40.7	5.7	1.1	100.0
	Karnataka	67.1	13.6	17.0	2.4	100.0
	India	59.1	17.5	20.0	3.4	100.0
Migrant + Non-migrant	India All	59.1	17.5	19.9	3.6	100.0
NSS 69th Round (2012)						
Migrants	Delhi	76.5	10.2	13.3	0.0	100.0
	Karnataka	67.6	10.3	20.9	1.3	100.0
	India	49.7	14.8	29.6	5.9	100.0
Non-migrants	Delhi	50.1	38.3	7.3	4.4	100.0
	Karnataka	66.7	18.9	13.3	1.1	100.0
	India	52.0	21.9	23.9	2.3	100.0
Migrant + Non-migrant	India All	51.9	21.5	24.1	2.4	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.27: Structure of the Dwelling by Migration Status of Household in Cities

Household	Cities	Katcha house	Pucca house	Semi-pucca house	Total	Household	Cities	Katcha	Pucca	Semi-pucca	Total
NSS 58th Round (2002)						NSS 69th Round (2012)					
Migrants	Delhi	1.9	91.5	6.5	100.0	Migrant	Delhi	0.0	100.0	0.0	100.0
	Bengaluru	0.0	100.0	0.0	100.0		Bengaluru	0.0	98.1	1.9	100.0
		2.7	91.6	5.7	100.0		India	0.5	96.1	3.5	100.0
Non-migrants	Delhi	0.7	97.9	1.5	100.0	Non-migrant	Delhi	0.2	99.8	0.0	100.0
	Bengaluru	0.6	91.4	8.0	100.0		Bengaluru	0.0	97.6	2.4	100.0
		3.3	87.5	9.2	100.0		India	1.4	93.5	5.1	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.28: Ownership of the Dwelling by Migration Status of Household in Cities

Household	Cities	Owned	Hired	No Dwelling	Others	Total	Household	Cities	Owned	Hired	No Dwelling	Others	Total
NSS 58th Round (2002)							NSS 69th Round (2012)						
Migrants	Delhi	1.7	87.2	0.0	11.2	100.0	Migrant	Delhi	10.6	89.4	0.0	0.0	100.0
	Bengaluru	0.0	98.8	0.0	1.2	100.0		Bengaluru	16.7	80.6	0.0	2.7	100.0
	India	14.6	73.9	0.2	11.2	100.0		India	12.5	80.8	0.0	6.7	100.0
Non-migrants	Delhi	52.2	45.9	0.0	1.9	100.0	Non-migrant	Delhi	53.5	40.5	0.0	6.0	100.0
	Bengaluru	45.5	51.6	0.0	2.9	100.0		Bengaluru	30.5	68.7	0.0	0.8	100.0
	India	62.1	32.8	0.1	5.0	100.0		India	63.6	33.1	0.0	3.3	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.29: Source of Drinking Water by Migration Status of Household in Cities

Household	Cities	Tap water	Tube well/ hand pump/ well	Lake/ River/ Spring/ Pond	Others	Total	Household	Cities	Tap/piped water	Tubewell/ well/ hand pump	Pond/ River/ Tank/ Spring	Bottled water and others	Total
NSS 58th Round (2002)							NSS 69th Round (2012)						
Migrant	Delhi	69.8	30.2	0.0	0.0	100.0	Migrant	Delhi	66.3	0.2	0.0	33.5	100.0
	Bengaluru	100.0	0.0	0.0	0.0	100.0		Bengaluru	41.2	29.6	0.0	29.2	100.0
	India	66.8	24.7	0.0	8.5	100.0		India	60.0	25.8	0.1	14.1	100.0
Non-Migrant	Delhi	86.1	13.6	0.0	0.2	100.0	Non-Mgrant	Delhi	91.7	7.0	0.0	1.3	100.0
	Bengaluru	97.5	2.5	0.0	0.0	100.0		Bengaluru	73.7	5.6	0.0	20.7	100.0
	India	74.0	24.7	0.3	1.0	100.0		India	69.5	23.0	0.1	7.3	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.30: Latrine Facility by Migration Status of Household in Cities

House Hold	Cities	Own latrine	Common Use	Public/ community latrine	Other type of latrine	No latrine	Total	House hold	Cities	Exclusive use of the household	common use of the latrine in the building	public/ community use	Other type of latrine	No latrine	Total
NSS 58th Round (2002)								NSS 69th Round (2012)							
Migrants	Delhi	16.9	46.7	1.9	0.5	34.0	100.0	Migrants	Delhi	47.6	49.2	3.2	0.0	0.0	100.0
	Bengaluru	52.1	36.7	3.2	0.0	8.0	100.0		Bengaluru	44.7	51.7	1.3	0.0	2.2	100.0
	India	38.4	43.3	7.3	1.3	9.8	100.0		India	49.9	43.0	3.5	0.4	3.2	100.0
Non-Migrants	Delhi	52.4	28.5	10.1	2.1	6.9	100.0	Non-migrants	Delhi	64.4	30.4	4.9	0.3	0.0	100.0
	Bengaluru	72.6	20.5	3.9	0.0	3.0	100.0		Bengaluru	81.6	17.2	0.3	0.0	0.8	100.0
	India	54.3	18.3	8.2	1.0	18.2	100.0		India	64.6	20.5	5.2	0.6	9.1	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

The tap water share among Delhi households (91.7% for non-migrant and 66.3% for migrant 2012) was higher than in Bengaluru (Table 2.29). About 2.2% migrant households are reported to practice open defecation while it is 0.8% for non-migrants. More than 50% of migrant households in Bengaluru and Delhi use shared toilets in common buildings in 2012 (Table 2.30). But compared to Bengaluru (2.5%), about 7.4% of non-migrant households in Delhi do not have access to bathroom facility in 2012. (Table 3.31)

In Bengaluru, garbage disposal is a major problem in comparison to Delhi. About 10.5% and 8.5% of migrant and non-migrant households in the city lack any access to garbage disposal method, while the same in Delhi is 5% and 7.1% respectively. More than 80% of migrant households in both the cities are served by respective municipal corporations for collection and disposal of house wastes whereas the figures for non-migrants stand at 50.6% in Delhi and 76% in Bengaluru (Table 3.32). The above analyses show that in comparison to Bengaluru, Delhi is better placed in terms of basic amenities. Also, the condition of the migrants is marginalised as compared to non-migrants.

Table 2.31: Bathroom Facilities by Migration Status of Household in Cities

Household	Cities	Attached	Detached	No bathroom	Total	Household	Cities	Attached	Detached	No bathroom	Total
NSS 58th Round (2002)						NSS 69th Round (2012)					
Migrants	Delhi	48.8	21.7	29.5	100.0	Migrants	Delhi	78.3	18.8	2.9	100.0
	Bengaluru	34.4	41.1	24.5	100.0		Bengaluru	78.3	18.1	3.6	100.0
	India	42.8	35.5	21.7	100.0		India	58.0	30.9	11.1	100.0
Non-migrant	Delhi	47.1	27.0	25.9	100.0	Non-migrant	Delhi	67.5	25.1	7.4	100.0
	Bengaluru	63.4	22.5	14.1	100.0		Bengaluru	89.4	8.0	2.5	100.0
	India	41.0	27.0	32.0	100.0		India	55.3	27.8	17.0	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.32: Garbage Disposal by Migration Status of Household in Cities

House hold	Cities	Disposal: by panchayat/ municipality/ corporation	By resident(s)	No arrangement	Others	Total	House hold	Cities	By panchayat/ municipality/ corporation	By resident/ group of residents	No arrangement	Other type of collection	Total
NSS 58th Round (2002)							NSS 69th Round (2012)						
Migrants	Delhi	10.4	73.9	15.7	0.0	100.0	Migrants	Delhi	83.4	11.6	5.0	0.0	100.0
	Bengaluru	100.0	0.0	0.0	0.0	100.0		Bengaluru	86.3	3.2	10.5	0.0	100.0
	India	59.0	15.5	18.3	7.3	100.0		India	49.7	14.8	29.6	5.9	100.0
Non-migrants	Delhi	53.1	39.7	5.8	1.3	100.0	Non-migrants	Delhi	50.6	36.3	7.1	6.0	100.0
	Bengaluru	93.4	2.5	3.8	0.3	100.0		Bengaluru	75.5	15.7	8.5	0.4	100.0
	India	59.1	17.5	20.0	3.4	100.0		India	52.0	21.9	23.9	2.3	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

2.7.1 Availability and Access to Civic Amenities across the Income (MPCE) Groups in Urban Households across India

The availability of income data at the city level is rare in India and therefore, the consumption expenditure is used as proxy estimation to access the income level of households. The income level of a household determines not only the quality of education received by a person but also the level of education he/she attains. In this section, the analysis of availability and access to basic civic amenities across consumption groups (MPCE) is done using two rounds of NSS 58th and 69th. For the present analysis, households' monthly consumption expenditures are classified into quintile classes and cross-tabulation has been done to show the percentage distribution of the level of education across social groups by quintile classes.

The fifth quintile class represents the economically well-off urban households and the first quintile class represents the economically poorer households. The results from table 2.33 show that the percentage share of the households living in *pucca* households is highest across income groups in India and, Delhi and Karnataka. With increasing quintile classes, the percentage share of the households living in katcha and semi-pucca houses declined. In 2012, the housing conditions have been improved for all quintile classes. The percentage share of the households living in pucca houses has increased across quintile classes. However, the percentage share of the households living in katcha and semi-pucca households has declined as compared to 2002.

In urban India, the percentage share of the households who owned their house has declined from 71 per cent to 69.9 per cent during 2002-12. However, for the upper three classes i.e. Q3, Q4 and Q5, the percentage share of the households who owned their house has increased during the same period. In contrast, the percentage of households living in rented accommodation/hired accommodation has increased only for Q2 and Q5.

An important feature is that ownership housing has increased substantially in Delhi (39% in 2002 to 61% in 2012) in the poorest households while there has been no change in the house ownership among the economically well-off households in the fifth quintile (53.3% in 2002 to 53% in 2012). But the situation in Karnataka is seen to be opposite to that of Delhi. The proportion of households living in rented houses has increased. 22.1% and 30% urban households in the lowest MPCE class in Karnataka lived in rented accommodation in 2002 and 2012, whereas the figures for the highest MPCE class were 62.8% in 2002 which rose to 70.7% in 2012 (Table 2.34).

Table 2.33: Structure of the Dwelling by Quintile Classes in Urban Areas

State	Quintile	Katcha house	Pucca house	Semi-pucca house	Total	State	Quintile	Katcha	Pucca	Semi-pucca	Total
NSS 58th Round (2002)						NSS 69th Round (2012)					
Delhi	First Quintile	2.0	94.0	4.0	100.0	Delhi	First Quintile	0.5	97.6	1.9	100.0
	Second Quintile	1.4	96.2	2.4	100.0		Second Quintile	0.0	100.0	0.0	100.0
	Third Quintile	0.4	98.9	0.7	100.0		Third Quintile	0.4	99.6	0.0	100.0
	Fourth Quintile	0.2	98.0	1.8	100.0		Fourth Quintile	0.0	99.7	0.3	100.0
	Fifth Quintile	0.5	99.1	0.4	100.0		Fifth Quintile	0.0	100.0	0.0	100.0
	Delhi Total	0.7	97.9	1.5	100.0		Delhi Total	0.2	99.6	0.2	100.0
Karnataka	First Quintile	7.9	61.5	30.6	100.0	Karnataka	First Quintile	1.6	78.6	19.8	100.0
	Second Quintile	3.7	76.3	20.0	100.0		Second Quintile	0.2	90.9	9.0	100.0
	Third Quintile	1.1	84.5	14.4	100.0		Third Quintile	0.9	94.2	4.9	100.0
	Fourth Quintile	0.1	92.2	7.7	100.0		Fourth Quintile	0.0	97.4	2.6	100.0
	Fifth Quintile	0.5	99.0	0.5	100.0		Fifth Quintile	0.0	98.7	1.3	100.0
	Karnataka Total	3.1	81.0	15.9	100.0		Karnataka Total	0.5	92.7	6.9	100.0
India	First Quintile	8.4	71.9	19.7	100.0	India	First Quintile	4.5	83.3	12.2	100.0
	Second Quintile	3.7	84.7	11.6	100.0		Second Quintile	1.4	92.2	6.4	100.0
	Third Quintile	2.0	91.1	6.9	100.0		Third Quintile	0.6	95.8	3.7	100.0
	Fourth Quintile	0.4	96.3	3.2	100.0		Fourth Quintile	0.2	98.0	1.8	100.0
	Fifth Quintile	0.3	98.7	1.0	100.0		Fifth Quintile	0.1	99.6	0.4	100.0
	India Total	3.2	87.7	9.0	100.0		India Total	1.4	93.6	5.0	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.34: Ownership of the Dwelling by Quintile Classes in Urban Areas

State	Quintile	Owned	Hired	No Dwelling	Others	Total	State	Quintile	Owned	Hired	No Dwellings	Others	Total
NSS 58th Round (2002)							NSS 69th Round (2012)						
Delhi	First Quintile	39.0	60.8	0.0	0.2	100.0	Delhi	First Quintile	61.0	37.8	0.0	1.3	100.0
	Second Quintile	69.3	27.9	0.0	2.8	100.0		Second Quintile	62.8	36.8	0.0	0.4	100.0
	Third Quintile	56.3	40.6	0.1	3.0	100.0		Third Quintile	52.8	39.2	0.0	8.0	100.0
	Fourth Quintile	40.1	58.1	0.0	1.9	100.0		Fourth Quintile	54.2	40.1	0.0	5.7	100.0
	Fifth quintile	53.3	44.4	0.0	2.2	100.0		Fifth quintile	53.0	46.4	0.0	0.6	100.0
		50.6	47.2	0.0	2.1	100.0			55.3	40.6	0.0	4.1	100.0
Karnataka	First Quintile	66.3	22.1	0.4	11.2	100.0	Karnataka	First Quintile	56.8	30.0	0.0	13.2	100.0
	Second Quintile	59.4	38.0	0.3	2.4	100.0		Second Quintile	56.3	39.1	0.0	4.5	100.0
	Third Quintile	48.7	49.8	0.0	1.6	100.0		Third Quintile	35.3	58.9	0.0	5.8	100.0
	Fourth Quintile	50.1	41.6	0.0	8.2	100.0		Fourth Quintile	34.9	65.0	0.0	0.1	100.0
	Fifth quintile	32.1	62.8	0.0	5.1	100.0		Fifth quintile	28.9	70.7	0.0	0.5	100.0
		52.2	41.5	0.2	6.1	100.0			41.1	54.6	0.0	4.3	100.0
India	First Quintile	71.0	22.1	0.2	6.6	100.0	India	First Quintile	69.9	22.3	0.0	7.7	100.0
	Second Quintile	66.5	28.6	0.0	4.9	100.0		Second Quintile	66.0	30.0	0.0	3.9	100.0
	Third Quintile	56.2	38.0	0.1	5.6	100.0		Third Quintile	59.2	37.9	0.0	2.8	100.0
	Fourth Quintile	51.5	43.2	0.0	5.3	100.0		Fourth Quintile	56.0	42.2	0.0	1.9	100.0
	Fifth quintile	52.6	43.8	0.0	3.6	100.0		Fifth quintile	54.2	45.3	0.0	0.5	100.0
		59.9	34.7	0.1	5.3	100.0			61.1	35.4	0.0	3.4	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

The proportion of urban households in the country drawing drinking water from tap has seen a decline in 2012 due to increase in percentage distribution of households using bottled water. This is also reflected in the MPCE quintile classes, particularly when it is observed that about 14% of the highest MPCE class households used bottled source for drinking water in 2012. This is explained by the fact that there has been improvement in the economic conditions of the urban households and so there is progressive increase in the proportion of households using bottled water with increasing MPCE quintile classes. Around 71.4% urban households in highest quintile class drew drinking water from the tap or piped source in 2012; which is a decline from 85% in 2002. On the contrary, the poorest MPCE class is found to be dependent on tube-well as the main source of drinking water in both 2002 (37.9%) and 2012 (37.4%). It is quite surprising to see that in 2012 about 13.9% of the urban households in the lowest MPCE class in Delhi used bottled water; which was highest share among all other MPCE classes. This may be attributed to the intermittent supply of drinking water in slums in Delhi. Here, most of the families depend of bottled water to avoid health hazards. Whereas in urban Karnataka, the proportion of households using bottled water source is seen to be increasing with higher MPCE classes in the year 2012, (11.2% in second quintile class and 20% in the fifth quintile class).

In urban India, there has been considerable decline in open defecation. During 2002-2012, the households in the lowest MPCE class defecating in the open have declined from 42% to 26.5%. During 2002-12, the proportion of households in all the MPCE classes using common housing toilets is seen to have risen, especially among the economically poor classes (from 15.4% in 2002 to 23.7% in 2012). This is because of increase in access of shared toilets being provided at specific locations by the ULBs and NGOs. The ownership of personal use toilets has also seen significant improvement within the same time span among all the MPCE quintile classes. Delhi witnessed higher improvement in toilet facilities as compared to urban Karnataka. Here, barring a meagre 0.4% households in the lowest MPCE class, none of the households have reported to practice open defecation. On the other hand, the corresponding figure for urban Karnataka is depressing. Even in 2012, about 33% and 13% of urban households the first and second MPCE quintile classes in Karnataka defecate in the open. In Delhi the poorest urban households are seen to witness increased access to toilets for exclusive personal usage in between 2002 and 2012.

Table 2.35: Main Source of Drinking Water by Quintile Classes in Urban Areas

State	Quintile	Tap water	Tube well/hand pump/well	lake/ river/ spring/ pond	Others	Total	State	Quintile	Tap/piped water	Tubewell/ well/ hand pump	pond/ river/ tank/ spring	Bottled water and others	Total
NSS 58th Round (2002)								NSS 69th Round (2012)					
Delhi	First Quintile	69.5	27.1	0.0	3.4	100.0	Delhi	First Quintile	62.0	24.0	0.0	13.9	100.0
	Second Quintile	87.6	10.6	0.0	1.8	100.0		Second Quintile	83.9	11.9	0.0	4.2	100.0
	Third Quintile	81.8	17.5	0.0	0.7	100.0		Third Quintile	89.7	6.7	0.0	3.6	100.0
	Fourth Quintile	83.8	15.1	0.0	1.1	100.0		Fourth Quintile	87.0	10.6	0.0	2.4	100.0
	Fifth Quintile	94.3	5.2	0.0	0.5	100.0		Fifth Quintile	87.0	7.6	0.0	5.5	100.0
	Delhi Total	84.9	13.9	0.0	1.2	100.0		Delhi Total	85.4	10.0	0.0	4.6	100.0
Karnataka	First Quintile	81.9	17.6	0.0	0.4	100.0	Karnataka	First Quintile	87.5	7.5	0.0	5.0	100.0
	Second Quintile	80.0	19.8	0.0	0.2	100.0		Second Quintile	74.6	14.2	0.0	11.2	100.0
	Third Quintile	91.7	8.0	0.0	0.3	100.0		Third Quintile	74.6	11.2	0.0	14.2	100.0
	Fourth Quintile	93.2	6.8	0.0	0.0	100.0		Fourth Quintile	78.2	7.5	0.0	14.4	100.0
	Fifth Quintile	97.4	2.6	0.0	0.0	100.0		Fifth Quintile	69.4	10.6	0.0	20.0	100.0
	Karnataka Total	88.5	11.3	0.0	0.2	100.0		Karnataka Total	76.2	10.2	0.0	13.6	100.0
India	First Quintile	61.1	37.9	0.4	0.6	100.0	India	First Quintile	58.7	37.4	0.2	3.7	100.0
	Second Quintile	72.4	26.3	0.4	1.0	100.0		Second Quintile	68.5	24.4	0.3	6.8	100.0
	Third Quintile	74.8	23.5	0.3	1.4	100.0		Third Quintile	72.8	20.7	0.1	6.4	100.0
	Fourth Quintile	78.7	19.6	0.2	1.4	100.0		Fourth Quintile	74.4	17.8	0.1	7.7	100.0
	Fifth Quintile	84.9	12.4	0.4	2.4	100.0		Fifth Quintile	71.4	14.7	0.0	13.9	100.0
	India Total	73.7	24.7	0.3	1.3	100.0		India Total	69.1	23.2	0.1	7.6	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.36: Latrine Facility by Quintile Classes in Urban Areas

State	Quintile	Own latrine	Common use	Public/ Community latrine	Other type of latrine	No latrine	Total	State	Quintile	Exclusive use of the household	Common use	Public/ community use	Other type of latrine	No latrine	Total
NSS 58th Round (2002)								NSS 69th Round (2012)							
Delhi	First Quintile	36.3	31.3	7.3	5.2	19.9	100	Delhi	First Quintile	58.5	27.0	14.1	0.0	0.4	100
	Second Quintile	40.5	23.2	24.9	2.7	8.6	100		Second Quintile	67.3	26.1	6.7	0.0	0.0	100
	Third Quintile	44.2	27.2	16.3	2.7	9.6	100		Third Quintile	60.1	37.6	1.7	0.6	0.0	100
	Fourth Quintile	53.4	36.0	4.9	2.5	3.2	100		Fourth Quintile	65.2	30.8	4.0	0.0	0.0	100
	Fifth Quintile	75.0	21.3	1.8	0.3	1.7	100		Fifth Quintile	79.4	20.4	0.2	0.0	0.0	100
	Delhi Total	53.8	27.9	9.2	2.3	6.9	100		Delhi Total	66.8	29.4	3.7	0.2	0.0	100
Karnataka	First Quintile	28.5	17.5	6.8	0.4	46.8	100	Karnataka	First Quintile	35.6	25.0	6.3	0.1	33.0	100
	Second Quintile	45.8	25.6	3.0	0.8	24.8	100		Second Quintile	64.8	17.7	2.1	2.5	12.9	100
	Third Quintile	67.3	19.6	2.7	0.0	10.3	100		Third Quintile	69.6	26.1	1.0	0.0	3.3	100
	Fourth Quintile	67.9	22.1	3.2	0.5	6.4	100		Fourth Quintile	81.1	18.4	0.1	0.0	0.4	100
	Fifth Quintile	76.8	20.3	1.9	0.0	1.0	100		Fifth quintile	78.0	21.7	0.1	0.0	0.2	100
	Karnataka Total	55.2	20.5	3.8	0.3	20.1	100		Karnataka Total	67.2	21.6	1.7	0.5	9.0	100
India	First Quintile	32.8	15.4	8.4	1.4	41.9	100	India	First Quintile	41.3	23.7	7.5	1.0	26.5	100
	Second Quintile	46.3	21.0	10.5	1.4	20.8	100		Second Quintile	58.9	22.8	7.4	0.7	10.2	100

	Third Quintile	50.9	23.6	10.4	1.3	13.8	100		Third Quintile	64.6	24.4	6.0	0.6	4.4	100
	Fourth Quintile	63.3	22.5	8.5	0.7	5.0	100		Fourth Quintile	74.5	19.7	3.7	0.4	1.7	100
	Fifth Quintile	78.6	16.5	3.4	0.1	1.3	100		Fifth quintile	81.7	17.0	0.9	0.1	0.4	100
	India Total	53.5	19.5	8.1	1.0	17.9	100		India_total	63.9	21.6	5.2	0.6	8.8	100

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Bathroom facilities in urban India improved during 2002-12 in all classes. In Delhi, the proportion of households in lowest MPCE class having no access to bathroom declined from 70% in 2002 to 23.3% in 2012, while in urban Karnataka the decline was marginal from 38.5% in 2002 to 35.9% in 2012. The economically better-off households in Delhi and Karnataka having access to attached bathroom increased from 73.7% and 75.3% in 2002 to 84.9% and 90% in 2012 respectively.

Drainage facilities and method of garbage disposal are the next important elements of sanitation. It is disturbing to note that about one-fourth of the households in the lowest MPCE quintile category had no access to drainage facilities in urban India in 2012. Though the proportion progressively declines with the rising MPCE classes, still at least 3.2% of the richest urban households did not have drainage facilities in 2012. At the same time the percentage share of economically better off urban households in the fifth quintile class increased from 56.2% in 2002 to 70% in 2012. Thus, it is observed that even about 12.5% of the richest households in Indian cities and towns are serviced by open drains in 2012. Almost 40% of the lowest MPCE class urban households in the country have access to open drains near their residences in 2012. Urban Karnataka is worse-off in terms of sanitation as compared to Delhi. It is noted that the inequality between the poorest two MPCE classes and the richest MPCE class in urban Karnataka is much wider and sharper than what is seen in Delhi. The percentage share of covered drains is higher across urban Karnataka relative to Delhi irrespective of MPCE quintile classes whereas the share of open *pucca* drains among all the MPCE households in urban Delhi is comparatively greater than in urban Karnataka in 2012.

Table 2.37: Bathroom Facility by Quintile Classes in Urban Areas

State	Quintile	Attached	Detached	No bathroom	Total	State	Quintile	Attached	Detached	No bathroom	Total
NSS 58th Round (2002)							NSS 69th Round (2012)				
Delhi	First Quintile	15.3	15.0	69.8	100.0	Delhi	First Quintile	54.2	22.5	23.3	100.0
	Second Quintile	35.0	29.6	35.4	100.0		Second Quintile	62.4	29.3	8.3	100.0
	Third Quintile	44.1	25.7	30.2	100.0		Third Quintile	59.7	35.6	4.7	100.0
	Fourth Quintile	50.6	35.2	14.2	100.0		Fourth Quintile	70.5	22.6	6.9	100.0
	Fifth Quintile	73.7	20.6	5.7	100.0		Fifth Quintile	84.9	12.2	2.9	100.0
	Delhi Total	49.6	25.9	24.5	100.0		Delhi Total	68.3	24.8	6.8	100.0
Karnataka	First Quintile	38.3	23.1	38.5	100.0	Karnataka	First Quintile	30.1	34.0	35.9	100.0
	Second Quintile	53.7	20.1	26.2	100.0		Second Quintile	62.6	23.4	14.0	100.0
	Third Quintile	61.7	13.2	25.1	100.0		Third Quintile	68.1	24.1	7.9	100.0
	Fourth Quintile	71.4	19.3	9.3	100.0		Fourth Quintile	77.1	19.2	3.7	100.0
	Fifth Quintile	75.3	20.6	4.2	100.0		Fifth Quintile	90.0	9.6	0.3	100.0
	Karnataka Total	58.2	19.4	22.3	100.0		Karnataka Total	68.0	20.8	11.2	100.0
India	First Quintile	17.5	24.6	58.0	100.0	India	First Quintil	28.4	30.7	40.9	100.0
	Second Quintile	28.1	33.1	38.8	100.0		Second Quintile	45.3	34.3	20.3	100.0
	Third Quintile	38.8	31.1	30.1	100.0		Third Quintile	53.6	33.7	12.7	100.0
	Fourth Quintile	49.7	30.9	19.4	100.0		Fourth Quintile	68.8	24.8	6.4	100.0
	Fifth Quintile	75.0	19.6	5.3	100.0		Fifth Quintile	83.0	15.5	1.5	100.0
	India Total	41.1	27.4	31.5	100.0		India Total	55.4	27.9	16.7	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.38: Drainage Arrangement by Quintile Classes in Urban Areas

State	Quintile	Underground	Covered pucca	Open pucca	Open katcha	No drainage	Total	State	Quintile	Underground	Covered pucca	Open pucca	Open katcha	No drainage	Total
NSS 58th Round (2002)								NSS 69th Round (2012)							
Delhi	First Quintile	10.9	5.8	37.9	6.1	39.3	100.0	Delhi	First Quintile	36.6	9.3	49.6	1.1	3.4	100.0
	Second Quintile	27.6	11.8	51.6	5.3	3.7	100.0		Second Quintile	44.9	12.2	40.0	2.0	0.9	100.0
	Third Quintile	28.9	14.1	47.3	4.6	5.0	100.0		Third Quintile	47.2	16.3	30.6	4.2	1.7	100.0
	Fourth Quintile	39.0	17.2	34.4	5.6	3.7	100.0		Fourth Quintile	59.9	12.8	23.6	1.5	2.1	100.0
	Fifth Quintile	66.0	13.5	16.4	0.8	3.3	100.0		Fifth Quintile	74.5	14.9	9.9	0.1	0.6	100.0
	Delhi Total	39.5	13.5	34.8	4.1	8.1	100.0		Delhi Total	55.7	13.9	26.8	2.0	1.6	100.0
Karnataka	First Quintile	16.3	10.0	31.6	18.2	23.9	100.0	Karnataka	First Quintile	24.9	15.0	37.4	2.8	19.9	100.0
	Second Quintile	21.9	12.2	36.8	11.0	18.2	100.0		Second Quintile	32.6	20.1	26.8	4.1	16.4	100.0
	Third Quintile	34.5	15.0	37.4	5.3	7.7	100.0		Third Quintile	34.9	30.4	24.3	1.3	9.1	100.0
	Fourth Quintile	46.4	8.0	26.7	10.5	8.4	100.0		Fourth Quintile	55.2	29.7	11.4	1.0	2.6	100.0
	Fifth Quintile	64.8	12.2	16.9	1.4	4.7	100.0		Fifth Quintile	78.1	17.6	3.6	0.4	0.3	100.0
	Karnataka Total	35.3	11.5	30.0	9.8	13.3	100.0		Karnataka Total	48.7	22.1	18.8	1.8	8.6	100.0
India	First Quintile	11.9	8.4	31.1	15.1	33.4	100.0	India	First Quintile	25.5	11.7	27.8	10.6	24.5	100.0
	Second Quintile	19.3	9.8	36.5	9.9	24.5	100.0		Second Quintile	33.8	15.5	28.6	6.6	15.5	100.0
	Third Quintile	24.3	13.8	38.3	8.0	15.7	100.0		Third Quintile	44.5	16.7	24.2	4.1	10.4	100.0
	Fourth Quintile	37.0	15.8	31.3	5.8	10.2	100.0		Fourth Quintile	54.0	16.1	19.5	2.3	8.1	100.0

	Fifth Quintile	56.2	15.3	20.6	2.3	5.5	100.0		Fifth Quintile	70.0	14.5	11.4	0.9	3.2	100.0
	India Total	29.2	12.5	31.3	8.5	18.4	100.0		India Total	45.2	14.9	22.4	5.0	12.5	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

The garbage disposal situation has seen slow improvement and worsening in some situations in the ten-year span. The percentage share of urban households among the lowest MPCE class in India having no arrangement for garbage disposal has unfortunately increased from 32.1% in 2002 to 39.2% in 2012. The same pattern is observed across all other MPCE classes including the highest MPCE class (from 7.6% in 2002 to 9.4% in 2012). (Table 2.42) Interestingly, resident group associations and community organisations are seen to have become more proactive for garbage disposal within their neighbourhoods especially among the top two highest MPCE quintile classes. The percentage share of their activities in garbage clearance has been reported to be 23.5% (fourth quintile class) and 29.6% (highest quintile class) in 2012. In the case of urban Delhi, about 9% of the lowest MPCE class households have no garbage disposal arrangement in 2012, whereas it was 21.3% in urban Karnataka. It is interesting to find that resident associations are more active in disposing household garbage in urban Karnataka in 2012 than they were in 2002 as there is an increase in the percentage share of this category across all MPCE classes. The contribution of the residents in garbage disposal is much higher in Delhi for all MPCE classes as compared to Karnataka.

Secondly the proportion of households served by municipality in garbage disposal in urban Karnataka has declined marginally. Simultaneously the percentage share for the same in urban Delhi has seen a substantial increase among the lowest MPCE quintile class from 17.7% in 2002 to 56.7% in 2012. This is a positive change in the sanitation situation amongst the poorest urban households in Delhi, but in case of urban Karnataka, the share of municipal garbage disposal has remained staticat at 51.2% in 2002 and 51.5% in 2012.

Table 2.39: Mode of Garbage Collection by Quintile Classes in Urban Areas

State	Quintile	Disposal: by panchayat/ municipality/ corporation	By resident(s)	No arrangement	Others	Total	State	Quintile	By panchayat/ municipalty/ corporation	By resident/group of residents	No arrangement	Others	Total
NSS 58th Round (2002)							NSS 69th Round (2012)						
	First Quintile	17.7	66.2	15.8	0.3	100.0		First Quintile	57.6	33.1	9.0	0.3	100.0
	Second Quintile	60.1	33.9	5.0	0.9	100.0		Second Quintile	54.0	25.2	17.1	3.6	100.0
	Third Quintile	59.3	32.7	7.5	0.4	100.0		Third Quintile	45.6	37.2	10.2	7.1	100.0
	Fourth Quintile	44.3	52.9	2.6	0.2	100.0		Fourth Quintile	51.3	42.3	4.8	1.7	100.0
	Fifth Quintile	63.8	29.9	3.2	3.0	100.0		Fifth Quintile	52.2	41.5	0.6	5.7	100.0
Delhi	Delhi Total	51.9	41.2	5.8	1.1	100.0	Delhi	Delhi Total	50.8	37.6	7.4	4.2	100.0
	First Quintile	51.2	20.9	27.9	0.0	100.0		First Quintile	51.5	25.9	21.3	1.4	100.0
	Second Quintile	64.4	15.5	20.1	0.0	100.0		Second Quintile	60.1	20.6	17.6	1.7	100.0
	Third Quintile	77.3	12.3	10.0	0.5	100.0		Third Quintile	63.3	10.8	24.7	1.2	100.0
	Fourth Quintile	68.5	8.5	20.3	2.7	100.0		Fourth Quintile	75.3	14.8	9.2	0.7	100.0
	Fifth Quintile	79.0	7.1	4.5	9.3	100.0		Fifth Quintile	76.9	18.9	3.5	0.7	100.0
Karnataka	Karnataka Total	67.0	13.5	17.1	2.3	100.0	Karnataka	Karnataka Total	66.8	18.3	13.8	1.1	100.0
	First Quintile	46.7	18.5	32.1	2.7	100.0		First Quintile	42.8	15.2	39.2	2.8	100.0
	Second Quintile	56.0	17.0	23.8	3.1	100.0		Second Quintile	51.1	18.6	28.8	1.4	100.0
	Third Quintile	59.9	17.6	19.2	3.4	100.0		Third Quintile	52.3	21.1	24.6	2.0	100.0
India							India						

	Fourth Quintile	64.4	16.9	14.3	4.5	100.0		Fourth Quintile	57.3	23.5	17.5	1.7	100.0
	Fifth Quintile	71.3	16.8	7.6	4.4	100.0		Fifth Quintile	56.7	29.6	9.4	4.4	100.0
	India Total	59.1	17.4	19.9	3.6	100.0		India Total	51.9	21.5	24.2	2.4	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

2.7.2 Availability of Civic Amenities across the MPCE groups in Urban Households of Delhi and Bengaluru

Bengaluru city has a very small proportion of households living in katcha houses both in 2002 and 2012. But in comparison to Delhi where almost all households irrespective of the MPCE class categories live in pucca houses; in Bengaluru, households live in semi-pucca buildings as well. The percentage share of households living in rented buildings in Bengaluru has doubled in 2012 as compared to 2002. About 61.3% and 71.1% households in the lowest and highest MPCE quintile classes in Bengaluru city lived in rented houses in 2012. The corresponding shares in case of Delhi are much lower, -45% and 42.9% in 2012, thereby indicating the economic prosperous condition among its residents in general in comparison to Bengaluru.

Table 2.40: Structure of the Dwelling by Quintile Classes in Cities

Million Plus City		Katcha house	Pucca house	Semi-pucca house	Total
NSS 58th Round (2002)					
	First Quintile	2.3	93.6	4.1	100.0
	Second Quintile	0.9	97.1	2.0	100.0
	Third Quintile	0.4	98.9	0.8	100.0
	Fourth Quintile	0.2	97.7	2.1	100.0
	Fifth Quintile	0.6	99.0	0.4	100.0
Delhi	Delhi Total	0.7	97.8	1.5	100.0
	First Quintile	0.4	62.4	37.3	100.0
	Second Quintile	0.0	96.7	3.3	100.0
	Third Quintile	1.3	88.4	10.3	100.0
	Fourth Quintile	0.3	99.7	0.0	100.0
	Fifth Quintile	0.6	99.1	0.3	100.0
Bengaluru	Bengaluru Total	0.6	91.7	7.7	100.0
Million Plus City		**Katcha**	**Pucca**	**Semi-pucca**	**Total**
NSS 69th Round (2012)					
Delhi	First Quintile	1.2	98.8	0.0	100.0
	Second Quintile	0.0	100.0	0.0	100.0
	Third Quintile	0.6	99.4	0.0	100.0
	Fourth Quintile	0.0	100.0	0.0	100.0
	Fifth Quintile	0.0	100.0	0.0	100.0
	Delhi Total	0.2	99.8	0.0	100.0
Bengaluru	First Quintile	1.0	63.4	35.5	100.0
	Second Quintile	0.0	97.7	2.3	100.0
	Third Quintile	0.0	97.8	2.2	100.0
	Fourth Quintile	0.0	97.3	2.7	100.0
	Fifth Quintile	0.0	98.6	1.4	100.0
	Bengaluru Total	0.0	97.6	2.4	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

The unprecedented growth of Bengaluru city in terms of population and area meant that the share of households living in the fringes and peri-urban zones of the city has shot up radically in the last two decades. The households in these areas are not served by tap water and thus the proportion of households using bottled source for drinking water is reported to be more than 20% in all MPCE quintile classes except the lowest class consisting the economically worse-off population (6.2%). Table 2.41 shows that tube well is the third most important source of drinking water especially for the lowest two MPCE groups at 16% and 10.2% respectively in 2012. However, the situation in Delhi is relatively better with more than 90% of the households irrespective of the MPCE quintile classes using tap water for drinking purposes. Only about 6% of the richest class households in Delhi purchase bottled water for the same in 2012. The proportion of households depending on tube well in Delhi has dwindled sharply since 2002. In 2012, about 5.3% of the poorest households in Delhi had reported to use tube-well drawn water as against 27.8% households under the same in 2002.

In terms of access to latrine facilities, Bengaluru has not undergone perceptible changes in 10 years. 9.7% households in the lowest MPCE class in Bengaluru defecate in the open in 2012. Total 80.3% of the economically well-off households in the Bengaluru have toilets for exclusive use in 2012. The same in Delhi stood at 76.9 per cent. Dependence on public and community toilets in Delhi is more than in Bengaluru with about 40.8% and 9.9% of households in the first and second quintile classes using such service in 2012 respectively, whereas the same for Bengaluru is 0% and 1.9% respectively. There has been hardly any change in the percentage share of households in the lowest MPCE class in Delhi having access to own toilet which has increased slightly from 2002 (33%) to 2012 (36%). About 50.4% of the poorest MPCE quintile class households had no access to bathroom facilities in 2012 in Delhi. In Bengaluru, the share for the same has declined from 32.2% in 2002 to 17.5% in 2012. On the other hand, the economically well-off households in Bengaluru are found to be relatively better than their counterparts in Delhi in terms of having access to attached bathrooms in 2012. About 98.2% households under the fifth quintile class reported to have access to attached bathroom in 2012, while the same in the households in Delhi was lower at 83.2% in 2012.

Table 2.41: Main Source of Drinking Water by Quintile Classes in Cities

Cities	MPCE Quintile Class	Tap water	Tube well/hand pump/well	lake/ river/ spring/ pond	Others	Total
NSS 58th Round (2002)						
Delhi	First Quintile	71.7	27.8	0	0.5	100
	Second Quintile	87.6	12.2	0	0.2	100
	Third Quintile	82	18	0	0	100

	Fourth Quintile	86.6	13.4	0	0	100
	Fifth quintile	93.9	5.5	0	0.5	100
	Delhi_total	85.9	13.8	0	0.2	100
	First Quintile	99.1	0.9	0	0	100
	Second Quintile	86.6	13.4	0	0	100
	Third Quintile	96	4	0	0	100
	Fourth Quintile	100	0	0	0	100
	Fifth Quintile	99.6	0.4	0	0	100
Bengaluru	Bengaluru Total	97.6	2.4	0	0	100
Million Plus City	**MPCE Quintile Class**	**Tap/piped water**	**Tubewell/ well/ hand pump**	**pond/ river/ tank/ spring**	**Bottled water and others**	**Total**
NSS 69th Round (2012)						
	First Quintile	94.2	5.3	0	0.5	100
	Second Quintile	91.1	6	0	2.9	100
	Third Quintile	95	4.2	0	0.8	100
	Fourth Quintile	90.3	9.1	0	0.6	100
	Fifth quintile	86.8	7.2	0	6	100
Delhi	Delhi_total	90.8	6.8	0	2.4	100
	First Quintile	83.6	10.2	0	6.2	100
	Second Quintile	57.7	16	0	26.2	100
	Third Quintile	63.9	5.9	0	30.3	100
	Fourth Quintile	74.5	4.6	0	20.9	100
	Fifth quintile	71.5	8.9	0	19.5	100
Bengaluru	Bengaluru_total	70.3	8.1	0	21.6	100

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.42: Latrine Facility by Quintile Classes in Cities

Million Plus City	Quintile	Own latrine	Common Use	Public/ community latrine	Other	No latrine	Total	Million Plus City	Quintile	Exclusive use of the household	common use of the latrine in the building	public/ community use	Other	No latrine	Total
NSS 58th Round (2002)								NSS 69th Round (2012)							
Delhi	First Quintile	33.0	35.0	7.3	3.6	21.1	100.0	Delhi	First Quintile	36.0	23.0	40.8	0.0	0.2	100.0
	Second Quintile	36.0	25.3	29.0	1.4	8.4	100.0		Second Quintile	66.3	23.7	9.9	0.0	0.0	100.0
	Third Quintile	41.4	26.9	18.1	2.9	10.7	100.0		Third Quintile	54.2	42.4	2.4	1.0	0.0	100.0
	Fourth Quintile	49.7	39.3	5.2	3.1	2.7	100.0		Fourth Quintile	62.7	32.1	5.3	0.0	0.0	100.0
	Fifth quintile	76.1	19.8	2.0	0.3	1.9	100.0		Fifth Quintile	76.9	22.8	0.3	0.0	0.0	100.0
	Delhi Total	52.0	28.7	10.0	2.1	7.2	100.0		Delhi Total	63.9	31.0	4.9	0.3	0.0	100.0
Bengaluru	First Quintile	55.1	16.3	17.5	0.0	11.1	100.0	Bengaluru	First Quintile	28.7	61.6	0.0	0.0	9.7	100.0
	Second Quintile	48.6	39.0	1.8	0.0	10.7	100.0		Second Quintile	56.9	35.2	1.9	0.2	5.8	100.0
	Third Quintile	67.1	28.3	2.1	0.0	2.5	100.0		Third Quintile	69.6	26.6	2.2	0.0	1.7	100.0
	Fourth Quintile	78.2	19.1	1.9	0.0	0.7	100.0		Fourth Quintile	86.7	13.3	0.0	0.1	0.0	100.0
	Fifth Quintile	84.3	14.3	1.4	0.0	0.0	100.0		Fifth Quintile	80.3	19.5	0.0	0.0	0.2	100.0
	Bengaluru Total	71.9	21.1	3.8	0.0	3.2	100.0		Bengaluru Total	77.8	20.8	0.4	0.0	0.9	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.43: Drainage Arrangement by Quintile Classes in Cities

Million Plus City	Quintile	Underground	Covered pucca	Open pucca	Open katcha	No drainage	Total	Million Plus City	Quintile	Underground	Covered pucca	Open pucca	Open katcha	No drainage	Total
Delhi	First Quintile	11.0	1.8	37.6	6.8	42.8	100.0	Delhi	First Quintile	36.0	4.7	49.8	3.3	6.2	100.0
	Second Quintile	28.0	10.0	54.0	5.3	2.8	100.0		Second Quintile	52.4	9.3	37.3	0.8	0.3	100.0
	Third Quintile	28.7	14.9	45.3	5.5	5.6	100.0		Third Quintile	59.1	17.8	20.9	0.0	2.1	100.0
	Fourth Quintile	42.3	18.2	28.5	6.8	4.2	100.0		Fourth Quintile	70.4	16.1	11.9	0.0	1.6	100.0
	Fifth Quintile	69.0	13.3	13.9	0.9	2.9	100.0		Fifth Quintile	74.5	17.7	7.4	0.0	0.4	100.0
	Delhi Total	41.6	13.1	31.9	4.6	8.7	100.0		Delhi Total	65.1	15.8	17.5	0.2	1.4	100.0
Bengaluru	First Quintile	50.5	8.5	18.2	14.3	8.5	100.0	Bengaluru	First Quintile	66.6	15.2	4.1	1.5	12.6	100.0
	Second Quintile	61.4	10.6	9.7	3.7	14.6	100.0		Second Quintile	47.3	28.5	2.4	1.1	20.7	100.0
	Third Quintile	60.6	16.2	20.3	1.3	1.7	100.0		Third Quintile	62.4	26.9	9.1	0.0	1.7	100.0
	Fourth Quintile	81.6	1.9	15.7	0.8	0.0	100.0		Fourth Quintile	86.1	12.2	0.4	1.1	0.1	100.0
	Fifth Quintile	93.1	4.0	2.8	0.1	0.0	100.0		Fifth Quintile	88.6	10.6	0.7	0.0	0.0	100.0
	Bengaluru Total	74.6	7.6	12.1	2.7	2.9	100.0		Bengaluru Total	80.9	14.7	1.9	0.4	2.2	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

Table 2.44: Garbage Disposal by Quintile Classes in Cities

Cities	Quintile	Disposal: by panchayat/ municiipality/ corporation	By resident(s)	No arrangement	Other	Total	Million Plus City	Quintile	By panchayat/ municipalty/ corporation	By resident/group of residents	No arrangement	Other	Total
NSS 58th Round (2002)							NSS 69th Round (2012)						
Delhi	First Quintile	13.8	68.6	17.2	0.4	100.0	Delhi	First Quintile	61.1	32.7	5.0	1.2	100.0
	Second Quintile	65.2	31.4	2.4	1.0	100.0		Second Quintile	55.1	21.2	18.5	5.2	100.0
	Third Quintile	60.8	29.7	9.0	0.5	100.0		Third Quintile	46.9	31.1	11.7	10.3	100.0
	Fourth Quintile	45.4	52.2	2.1	0.3	100.0		Fourth Quintile	52.6	41.0	4.5	1.9	100.0
	Fifth Quintile	63.8	29.5	3.3	3.4	100.0		Fifth Quintile	52.8	40.6	0.2	6.4	100.0
	Delhi Total	52.6	40.1	5.9	1.3	100.0		Delhi Total	51.7	35.5	7.0	5.8	100.0
Bengaluru	First Quintile	79.5	1.9	18.4	0.2	100.0	Bengaluru	First Quintile	77.4	5.7	16.9	0.0	100.0
	Second Quintile	91.0	7.4	1.6	0.0	100.0		Second Quintile	71.3	1.5	27.2	0.0	100.0
	Third Quintile	94.5	4.0	1.5	0.0	100.0		Third Quintile	60.5	7.1	32.4	0.0	100.0
	Fourth Quintile	94.4	1.6	2.6	1.4	100.0		Fourth Quintile	80.3	14.7	5.0	0.0	100.0
	Fifth Quintile	98.7	0.8	0.5	0.0	100.0		Fifth Quintile	79.6	18.3	1.5	0.6	100.0
	Bengaluru Total	93.6	2.5	3.6	0.3	100.0		Bengaluru Total	76.6	14.4	8.7	0.3	100.0

Source: Unit level data of NSSO, 58th (2002) and 69th Round (2012) on Housing Condition in India

The drainage situation in Bengaluru is seen to have worsened at least for the poorest households in 2012. The proportion of households from lowest MPCE quintile class having no access to drainage facilities have risen from 8.5% in 2002 to 12.6% in 2012. Across the higher MPCE classes there has been no change. On the other hand, the share of households with access to open drainage system has seen noticeable decline by 2012. Total 12.2% and 10.6% households from economically well-off fourth and fifth MPCE classes have access to covered drains in 2012, while the same in 2002 was 1.9% and 4% respectively. In case of Delhi there has been drastic decline in the poorest households having no access to drainage facilities from 42.8% in 2002 to 6.2% in 2012. The proportion of poorest and the richest households serviced by underground drains have also risen in Delhi. Among the poor, the rise was from 11% (2002) to 36% (2012) and among the rich it increased from 69% (2002) to 74.5% (2012). In 2012, the share of households having access to open katcha drains has reduced to almost nil across all the MPCE classes, with only 3.3% poorest households being serviced by open drains (Table 2.43).

Finally, with regard to the garbage disposal scenario in both metropolises, it is observed that except for the poorest households in both cities, the proportion of all other households having no arrangement in garbage disposal has increased from 2002 to 2012. Among the rich in both Delhi and Bengaluru, about 41% and 18.3% households are served up by resident organisations in garbage collection. The RWAs have lowest share among the poor in both the metropolises (Table 2.44).

2.8.1 Availability and Access to Civic Amenities across the Religious groups in Urban Households across India

The religion-wise disaggregated data is analysed only for the 69th round during 2012. About 93.8% of Hindu households had *pucca* house structure which is slightly higher than the Muslims (91.7%). In Delhi the corresponding figures stand at 99.8% and 98% for Hindu and Muslims, while in Karnataka the *pucca* house owning Hindu and Muslim households are much less, at 92.7% and 92.1% respectively. The inter-religion difference is also much less at 0.6%. From the data one can deduce that the economic condition of the Muslim households in urban Karnataka is relatively better than that of Delhi. This is exemplified from the 2012 NSS data, whereby about 1.4% Muslim households live in *kutcha* house in Delhi, but it is 0.3% only in Karnataka, while the India average stands at 2.2%. Given the sample size of Christian and other religion households being smaller, the proportions of *pucca* house owners and in other housing amenity variables; are skewed. Most households who do not live in permanent concrete house structures live in semi-pucca houses in Karnataka such as with 7.6% Muslim and 6.8% Hindu urban households.

Table 2.45: Religious Groups by Structure of the Dwelling in Urban India, 2012

States	Religious Groups	Type of Household Structure (69th Round, 2012)			
		Katcha	Pucca	Semi-pucca	Total
Delhi	Hinduism	0.0	99.8	0.2	100.0
	Islam	1.4	98.0	0.6	100.0
	Christianity	0.0	100.0	0.0	100.0
	Others	0.0	100.0	0.0	100.0
	Total	0.2	99.6	0.2	100.0
Karnataka	Hinduism	0.5	92.7	6.8	100.0
	Islam	0.3	92.1	7.6	100.0
	Christianity	0.0	94.0	6.0	100.0
	Others	0.0	99.0	1.0	100.0
	Total	0.5	92.7	6.9	100.0
India	Hinduism	1.3	93.8	4.9	100.0
	Islam	2.2	91.7	6.1	100.0
	Christianity	1.0	92.4	6.5	100.0
	Others	0.3	98.1	1.6	100.0
	Total	1.4	93.6	5.0	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

Table 2.45 shows the tenurial status across the religious groups. As assumed the proportion of Muslim and Christian households living in rented or hired houses is significantly more than Hindus. The difference between Hindu and Muslim households in rented houses is by 7 to 7.5%. The owned houses include the ones which are owned and also possessed under leasehold. The hired houses are the ones which are rented, with and without written contracts and also the employer quarters. The other type of house tenure category includes the ones which are encroached houses. About 68% of Christian households in Delhi and 60.4% in Karnataka live in rented houses which is a higher figure compared to 40.5% of Hindus in Delhi and 55.5% in Karnataka. One may also note that for the average ownership status of Christian households is higher (58.6%) than their rented status (38.8%), while in both Delhi and Karnataka the proportion of households living rented houses outnumber the owned ones. This can be reasoned on the basis of migration phenomena. Delhi and urban centres of Karnataka are centres of migrant destination and thus the percentage of non-Hindu and non-Muslim migrants are higher at these centres.

Table 2.46: Religious Groups by Tenure Status of the Dwelling in Urban Areas, 2012

State	Religious Groups	Tenure Status of the Dwelling, 69th Round (2012) in %				
		Owned	Hired	No dwellings	Other type of Tenurial Status	Total
Delhi	Hinduism	55.0	40.5	0.0	4.5	100.0
	Islam	51.4	47.2	0.0	1.4	100.0
	Christianity	31.3	68.7	0.0	0.0	100.0
	Others	79.4	20.6	0.0	0.0	100.0
	Total	55.3	40.6	0.0	4.1	100.0
Karnataka	Hinduism	40.4	55.5	0.0	4.1	100.0
	Islam	45.9	48.6	0.0	5.5	100.0
	Christianity	35.8	60.4	0.0	3.9	100.0
	Others	45.1	54.9	0.0	0.0	100.0
	Total	41.1	54.6	0.0	4.3	100.0
India	Hinduism	60.3	36.2	0.0	3.5	100.0
	Islam	64.0	32.5	0.0	3.4	100.0
	Christianity	59.6	38.8	0.0	1.6	100.0
	Others	73.2	23.5	0.0	3.3	100.0
	Total	61.1	35.4	0.0	3.4	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

In 2012, apart from tap water, tube–well is the second major source of drinking water in urban India, though the proportion of households relying on bottled water has also seen an increase. The inter-religious inequality in availability and access to housing amenities is evident from the data. A larger section of Muslim households is seen to draw drinking water from tube-well in Delhi than in Karnataka. The Muslim households in the latter fare better economically and thus only about 7.2% rely on community tube-well connection as against 28.1% in Delhi. Apart from that, about 7% of Muslim and 4% of Christian households in urban Karnataka depend on other sources for water supply; which includes tanker truck, cart drawing water in small tank or drum. The same for the Hindus remain lower at 2.7%. Another interesting finding points out to the economic disparity among the religions which is manifested through the access of bottled water. The relatively well Hindu (10.7%) and Christian (17.3%) households in Karnataka get their drinking water quota from bottled water as compared to 6.4% of Muslim households. On the other hand, all religions use more of the piped water service and tap water in Delhi than in urban Karnataka. Therefore, usage of bottled water by all religions in Delhi is much smaller. About 5.7% of Hindu households in urban centres of India consume bottled water as one of the principal drinking water sources unlike only about 2.3% of Muslim households.

Table 2.47: Religious Groups by the Main Sources of Drinking Water in Urban Areas, 2012

State	Religious Groups	Principal source of drinking water (69th Round, 2012)					
		Bottled water	Tap/piped water	Tube well/well	Pond/ Tank/River/ Spring	Others	Total
Delhi	Hinduism	2.5	86.5	8.7	0.0	2.4	100.0
	Islam	0.0	69.8	28.1	0.0	2.1	100.0
	Christianity	6.8	91.6	1.6	0.0	0.0	100.0
	Others	1.7	98.3	0.0	0.0	0.0	100.0
	Total	2.3	85.4	10.0	0.0	2.3	100.0
Karnataka	Hinduism	10.7	75.9	10.8	0.0	2.7	100.0
	Islam	6.4	79.5	7.2	0.0	6.9	100.0
	Christianity	17.3	66.3	12.3	0.0	4.0	100.0
	Others	0.0	98.9	1.1	0.0	0.0	100.0
	Total	10.2	76.2	10.2	0.0	3.4	100.0
India	Hinduism	5.7	69.7	22.0	0.1	2.5	100.0
	Islam	2.3	63.7	31.2	0.2	2.6	100.0
	Christianity	9.2	70.2	17.5	0.6	2.5	100.0
	Others	0.9	73.2	25.7	0.0	0.2	100.0
	Total	5.2	69.1	23.2	0.1	2.4	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

The proportions of households having access to individual toilet or exclusive toilet for own use is more or less similar between the Hindus and Muslims. About 63 - 65% of urban Muslim and Hindu households have individual latrine facility in urban India. Usage of common toilet was 21.6%. But the households practicing open defecation was unfortunately 9.2% and 8.5% among Hindu and Muslim households respectively in India. 9% Hindu and 11.4% Muslim households in urban centres of Karnataka resort to open defecation. The use of public community toilets was 9.2% Christian households in Delhi and 5.2% Muslim households in Karnataka, while the figure among the Hindus was yet again low at 3.9% and 1% in both the areas. Most of the non-Hindu households live in rented houses and thus the percentage share of those households depending on public toilets, shared toilets and open defecation is much higher than the Hindus. The same pattern is found in the access to bathroom facilities. About 17.4% and 18.9% of Muslim households in Delhi and Karnataka have no access to bathroom facilities at their premises, while among Hindus the figure is 6.1% and 10% respectively. Nearly 70% Hindu households in both states and 56% in pan India have attached bathrooms.

Table 2.48: Religious Groups by Access to Latrine Facilities in Urban Area, 2012

State	Religious Groups	Access to latrine Facilities (69th Round, 2012)					
		Exclusive Use of The Household	Common Use of Latrine in Building	Public/ Community Use	Other Type	No Latrine	Total
Delhi	Hinduism	66.9	29.1	3.9	0.1	0.0	100.0
	Islam	57.6	39.0	2.0	1.4	0.0	100.0
	Christianity	64.7	25.9	9.4	0.0	0.0	100.0
	Others	90.6	8.6	0.7	0.0	0.0	100.0
	Total	66.8	29.4	3.7	0.2	0.0	100.0
Karnataka	Hinduism	66.9	22.5	1.0	0.6	9.0	100.0
	Islam	66.9	16.5	5.2	0.0	11.4	100.0
	Christianity	74.1	25.0	0.7	0.0	0.1	100.0
	Others	59.6	39.3	0.0	0.0	1.1	100.0
	Total	67.2	21.6	1.7	0.5	9.0	100.0
India	Hinduism	63.3	21.9	5.1	0.6	9.2	100.0
	Islam	62.4	22.0	6.5	0.6	8.5	100.0
	Christianity	73.5	18.0	3.9	0.4	4.2	100.0
	Others	74.7	15.8	3.4	0.0	6.1	100.0
	Total	63.9	21.6	5.2	0.6	8.8	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

In 2012, drainage facilities were highly skewed and households across all religions in India categorised under 'no drainage' was reported in double digits. Among all, the condition of the Muslim households was the poorest as 25% and 7.2% households were serviced by open drainage facilities; pacca and kutcha respectively.

Table 2.49: Religious Groups by Type of Drainage Arrangement in Urban Areas, 2012

State	Religious Groups	Drainage Arrangement (69th Round, 2012)					
		Underground	Covered pucca	Open pucca	Open katcha	No drainage	Total
Delhi	Hinduism	57.1	14.2	24.7	2.1	1.8	100.0
	Islam	34.7	8.8	55.3	1.2	0.1	100.0
	Christianity	63.4	9.4	27.3	0.0	0.0	100.0
	Others	74.3	18.7	6.0	0.0	1.0	100.0
	Total	55.7	13.9	26.8	2.0	1.6	100.0
Karnataka	Hinduism	46.4	23.9	18.6	1.9	9.1	100.0
	Islam	52.3	14.9	23.4	1.6	8.0	100.0
	Christianity	71.1	20.6	4.3	0.4	3.7	100.0
	Others	81.7	1.1	17.2	0.0	0.0	100.0

State	Religious Groups	Drainage Arrangement (69th Round, 2012)					
		Underground	Covered pucca	Open pucca	Open katcha	No drainage	Total
	Total	48.7	22.1	18.8	1.8	8.6	100.0
India	Hinduism	46.0	14.6	22.2	4.7	12.5	100.0
	Islam	39.7	16.1	24.9	7.2	12.1	100.0
	Christianity	36.9	23.4	17.8	4.8	17.2	100.0
	Others	58.2	8.5	22.1	3.0	8.1	100.0
	Total	45.2	14.9	22.4	5.0	12.5	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

The degree of inter-religion disparity in garbage disposal methods in Delhi is sharp compared to Karnataka. The percentage of Muslim households having no arrangement of garbage disposal in Delhi was 16.3% in 2012 as against 6.8% for Hindu households. The difference in urban Karnataka is less and reversed with 15.3% Hindu and 10.2% Muslim households categorised the same.

Table 2.50: Religious Groups by Collection of Garbage in Urban Areas, 2012

State	Religious Groups	Arrangement Made for Collection of Garbage from The Household				
		By Panchayat/ Municipality/ Corporation	By Resident/Group of Residents	No Arrangement	Other Type of Collection	Total
Delhi	Hinduism	51.1	37.3	6.8	4.8	100.0
	Islam	52.1	31.4	16.3	0.2	100.0
	Christianity	25.8	74.2	0.0	0.0	100.0
	Others	38.7	60.3	1.0	0.0	100.0
	Total	50.8	37.6	7.4	4.2	100.0
Karnataka	Hinduism	66.3	17.5	15.3	1.0	100.0
	Islam	65.7	23.1	10.2	1.0	100.0
	Christianity	77.9	15.0	4.2	2.9	100.0
	Others	81.7	18.3	0.0	0.0	100.0
	Total	66.8	18.3	13.8	1.1	100.0
India	Hinduism	52.6	21.6	23.2	2.6	100.0
	Islam	51.0	18.1	29.4	1.4	100.0
	Christianity	49.7	18.7	28.5	3.1	100.0
	Others	40.2	37.1	21.6	1.1	100.0
	Total	51.9	21.5	24.2	2.4	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

2.8.2 Availability and Access to Civic Amenities across the Religious groups in Urban Delhi and Bengaluru

As per the 2012 NSS data, Delhi performs better than urban Karnataka in house structure and house ownership. Except for the 2.4% Muslim households, all house structures in Delhi are *pacca*. In case of Bengaluru, though none of the households live in *katcha* structures but about 3.5% and 2% of Muslim and Hindu households live in semi-pucca houses. Both Delhi and Bengaluru attract migrants for employment and other reasons. Thus, the proportion of households living in rented accommodation is relatively higher. 55.5% households in Delhi and 66.8% in Bengaluru live in rented houses.

Table 2.51: Religious Groups by Structure of the Dwelling, 2012

Million Plus City	Religious Groups	Katcha	Pucca	Semi-pucca	Total
Delhi	Hinduism	0.0	100.0	0.0	100.0
	Islam	2.4	97.6	0.0	100.0
	Christianity	0.0	100.0	0.0	100.0
	Others	0.0	100.0	0.0	100.0
	Total	0.2	99.8	0.0	100.0
Bengaluru	Hinduism	0.0	98.0	2.0	100.0
	Islam	0.0	96.5	3.5	100.0
	Christianity	0.0	95.4	4.6	100.0
	Others	0.0	100.0	0.0	100.0
	Total	0.0	97.6	2.4	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

Table 2.52: Religious Groups by Ownership of the Dwelling in Cities, 2012

Million Plus City	Religious Groups	Owned	Hired	No Dwellings	Others	Total
Delhi	Hinduism	51.7	42.0	0.0	6.3	100.0
	Islam	42.1	55.5	0.0	2.4	100.0
	Christianity	25.0	75.0	0.0	0.0	100.0
	Others	83.6	16.4	0.0	0.0	100.0
	Total	52.1	42.2	0.0	5.8	100.0
Bengaluru	Hinduism	26.9	72.6	0.0	0.5	100.0
	Islam	31.4	66.8	0.0	1.8	100.0
	Christianity	48.0	46.6	0.0	5.4	100.0
	Others	76.9	23.1	0.0	0.0	100.0

	Total	29.1	70.0	0.0	1.0	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

Table 2.53: Religious Groups by Access to Latrine Facilities in Cities, 2012

Million Plus City	Religious Groups	Exclusive Use of The Household	Common Use of Latrine in Building	Public/ Community Use	Other Type	No Latrine	Total
Delhi	Hinduism	63.7	30.9	5.3	0.1	0.0	100.0
	Islam	50.7	45.3	1.6	2.4	0.0	100.0
	Christianity	51.7	35.5	12.8	0.0	0.0	100.0
	Others	95.2	4.0	0.8	0.0	0.0	100.0
	Total	63.9	31.0	4.9	0.3	0.0	100.0
Bengaluru	Hinduism	74.8	23.7	0.6	0.0	0.9	100.0
	Islam	87.9	10.5	0.0	0.0	1.6	100.0
	Christianity	93.1	6.9	0.0	0.0	0.0	100.0
	Others	100.0	0.0	0.0	0.0	0.0	100.0
	Total	77.8	20.8	0.4	0.0	0.9	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

Table 2.54: Religious Groups by Bathroom Facility in Cities, 2012

Million Plus City	Religion	Attached	Detached	No Bathroom	Total
Delhi	Hinduism	68.2	24.8	7.0	100.0
	Islam	53.6	32.6	13.8	100.0
	Christianity	61.1	38.9	0.0	100.0
	Others	89.1	10.1	0.8	100.0
	Total	67.9	24.8	7.3	100.0
Bengaluru	Hinduism	88.0	9.5	2.5	100.0
	Islam	90.1	8.2	1.6	100.0
	Christianity	86.5	6.9	6.5	100.0
	Others	100.0	0.0	0.0	100.0
	Total	88.3	9.1	2.6	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

Table 2.55: Religious Groups by Main Source of Drinking Water, 2012

Million Plus City	Religious Groups	Tap/Piped Water	Tubewell/ Well/ Hand Pump	Pond/ River/ Tank/ Spring	Bottled Water and Others	Total
Delhi	Hinduism	90.2	7.3	0.0	2.5	100.0
	Islam	95.4	3.7	0.0	0.9	100.0
	Christianity	90.6	0.0	0.0	9.4	100.0

	Others	98.1	0.0	0.0	1.9	100.0
	Total	90.8	6.8	0.0	2.4	100.0
Bengaluru	Hinduism	70.3	7.7	0.0	22.0	100.0
	Islam	71.8	5.0	0.0	23.2	100.0
	Christianity	64.2	20.6	0.0	15.2	100.0
	Others	100.0	0.0	0.0	0.0	100.0
	Total	70.3	8.1	0.0	21.6	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

The inter-religion difference in tap water usage in Bengaluru is negligible but the access to bottled water among Hindus is slightly higher in Delhi (2.5%) than Muslim counterparts (0.9%). As per the latrine facilities are concerned, Muslims in Bengaluru (87.9%) and Hindus (63.7%) in Delhi have the highest proportion of exclusive toilets at home, yet 1.6% Muslim households in the former city defecate in the open. These are constituted by EWS and mostly slum dwelling habitants. The use and access of common toilets in the building is higher among Muslim households in Delhi, which amounts to 46% in 2012. About 13.6% and 32.6% Muslim households in Delhi have no access to bathroom or avail detached bathroom. In Bengaluru city about 76.6% households are served by the municipal corporation for garbage disposal, followed by 14.4% of households catered by the resident groups. Both Hindu and Muslim households in Bengaluru about more than 9% of them each have no arrangement for garbage disposal.

Table 2.56: Religious Groups by Type of Drainage Arrangement in Cities, 2012

Million Plus Cities	Religious Groups	Underground	Covered Pucca	Open Pucca	Open Katcha	No Drainage	Total
Delhi	Hinduism	66.9	16.1	15.3	0.2	1.5	100.0
	Islam	36.0	13.4	50.5	0.0	0.1	100.0
	Christianity	67.6	12.8	19.5	0.0	0.0	100.0
	Others	79.2	12.8	6.8	0.0	1.1	100.0
	Total	65.1	15.8	17.5	0.2	1.4	100.0
Bengaluru	Hinduism	80.9	13.8	2.4	0.5	2.4	100.0
	Islam	81.7	16.6	0.0	0.0	1.6	100.0
	Christianity	76.5	23.5	0.0	0.0	0.0	100.0
	Others	100.0	0.0	0.0	0.0	0.0	100.0
	Total	80.9	14.7	1.9	0.4	2.2	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

Table 2.57: Religious Groups by Arrangement of Garbage Collection from the Household, 2012

Million Plus City		By Panchayat/ Municipality/ Corporation	By Resident/Group of Residents	No Arrangement	Other Type of Collection	Total
Delhi	Hinduism	51.1	34.7	7.6	6.5	100.0
	Islam	68.1	28.6	3.0	0.3	100.0
	Christianity	18.3	81.7	0.0	0.0	100.0
	Others	37.3	61.6	1.1	0.0	100.0
	Total	51.7	35.5	7.0	5.8	100.0
Bengaluru	Hinduism	75.3	15.4	9.2	0.0	100.0
	Islam	79.6	11.2	9.3	0.0	100.0
	Christianity	84.4	9.6	0.6	5.4	100.0
	Others	100.0	0.0	0.0	0.0	100.0
	Total	76.6	14.4	8.7	0.3	100.0

Source: Computed from unit level data of NSSO, Drinking water, sanitation and Housing Condition in India, 69th Round, 2012

2.9 Caste and Education in Urban India

The caste system in India is very rigid. It imposes certain restrictions on its members in the matter of social intercourse. It is evident in Indian society that historically members of certain castes were excluded from attending formal education and acquiring capitals such as land (Dubey et al., 2004). Therefore, up to certain extent, education level of a person is affected by the social group from which they belong. Even after implementation of many affirmative action for the betterment of the education level of Scheduled Castes and Scheduled Tribes by Government of India, it has not improved substantially. The following table from two rounds of NSS (55th and 68th) shows the changing pattern of level of education by social groups.

Table: 2.58: Level of Education by Social Groups in Urban India (in Percentage)

Social Groups	Illiterate	Below Primary	Primary	Middle	Secondary	Higher Secondary	Graduation & Above	Total
55th (1999-2000)								
STs	37.19	17.56	11.36	14.51	8.81	4.83	5.73	100.0
SCs	40.58	18.93	13.42	13.25	7.21	3.69	2.92	100.0
OBCs	31.86	18.42	14.39	15.23	10.18	5.38	4.54	100.0
Others	20.64	16.33	11.98	14.39	13.84	9.09	13.73	100.0
68th (2011-12)								
STs	24.70	15.02	13.78	15.94	10.68	9.24	10.64	100.0
SCs	27.58	15.92	14.18	15.57	11.37	7.31	8.07	100.0
OBCs	22.98	16.44	13.33	14.27	12.47	9.02	11.49	100.0
Others	14.94	13.10	11.13	13.25	14.29	11.74	21.56	100.0

Source: Unit Level data of 55th and 68th round of NSS.

As compared to other category, the percentage share of illiteracy was very high in Scheduled Castes (SCs) followed by Scheduled Tribes (STs) and Other Backward Classes (OBCs) in 1999-2000. The recent data of level of education shows that the percentage share of illiteracy has declined in all social groups in 2011-12, still it is high for Scheduled Castes and Scheduled Tribes. In below primary, primary and middle, the percentage share of SCs, STs and OBCs is high as compared to others. It can be explained by the fact that a certain number of persons from these social groups drop out after attaining these classes. However, the persons from other social group attain higher education after completing these classes. The figures from above table show that with increasing education level from secondary education onwards, the percentage share of other category is much high as compared SCs, STs and OBCs. The social group wise level of education from 68th round shows this gap is narrowing, now more persons are attending secondary and higher education in SCs, STs and OBCs. It can be linked to the increasing awareness among these social groups through media, social networking and changing nature of jobs in urban labour markets.

Table: 2.59: Level of Education by Social Groups in Karnataka and Delhi (in Percentage)

Karnataka								
Social Groups	**Illiterate**	**Below Primary**	**Primary**	**Middle**	**Secondary**	**Higher Secondary**	**Graduation & Above**	**Total**
55th (1999-2000)								
STs	41.89	11.04	11.88	15.88	10.99	3.21	5.11	100.00
SCs	42.72	13.81	12.35	13.41	10.09	4.12	3.50	100.00
OBCs	30.43	14.68	13.25	17.87	13.44	5.11	5.21	100.00
Others	17.80	11.63	11.21	15.77	19.48	10.35	13.76	100.00
68th (2011-12)								
STs	38.34	16.41	9.93	11.10	11.36	4.47	8.39	100.00
SCs	22.66	15.16	12.41	14.88	14.82	8.06	12.01	100.00
OBCs	19.00	14.00	10.88	13.27	15.31	12.05	15.49	100.00
Others	13.82	12.66	8.34	11.26	16.46	13.22	24.24	100.00
Delhi								
55th (1999-2000)								
STs	36.07	26.45	6.45	10.09	11.15	2.32	7.47	100.00
SCs	32.01	21.42	15.56	13.39	11.45	3.75	2.43	100.00
OBCs	28.45	18.83	17.12	13.97	10.17	6.57	4.89	100.00
Others	14.62	14.65	9.77	12.01	13.21	10.55	25.19	100.00
68th (2011-12)								
STs	15.39	16.93	6.90	15.07	11.41	15.19	19.10	100.00
SCs	24.27	17.92	16.22	13.94	11.09	8.68	7.86	100.00

OBCs	18.31	20.52	16.50	12.02	17.47	6.33	8.85	100.00
Others	12.77	12.75	9.52	8.62	12.13	14.64	29.57	100.00

Source: Unit Level data of 55th and 68th round of NSS.

The pattern of level of education across social groups in Karnataka and Delhi is similar to India. The percentage share of illiteracy is high in SCs, STs and OBCs as compared to other. In below primary, primary and middle level of education, the percentage of SCs, STs and OBCs is high as compared to others. From secondary onwards the percentage share of other category is higher in comparison to SCs, STs and OBCs both in Delhi and Karnataka but the recent data shows that a significant improvement in the percentage share of SCs, STs and OBCs with secondary, higher secondary and higher education. The improvement in SCs and OBCs is higher in Karnataka in comparison to Delhi. In Delhi, the improvement in the STs is much higher for secondary, higher secondary and higher education. It may be possible because of low samples in this category. Another fact is that a significant number of SCs are also Christians and among them the awareness about level of education has increased drastically in last two decades.

2.10 Religion and Level of Education

For a very long time, education was linked to religion. In modern society, religion is not a sole factor which affects/decide the education level of a person, but still, it is one of the determining factors.

Table 2.60: Level of Education in Urban India by Religion (in Percentage)

Religion	Illiterate	Below Primary	Primary	Middle	Secondary	Higher Secondary	Graduation & Above	Total
55th (1999-2000)								
Hindu	26.16	16.87	12.71	14.77	12.06	7.46	9.98	100
Muslim	38.73	20.79	14.06	12.60	7.22	3.68	2.91	100
Christian	14.36	14.20	11.84	18.13	18.47	10.62	12.37	100
Sikh	23.04	17.35	12.41	11.23	16.66	8.17	11.13	100
Others	18.62	15.18	13.45	16.40	13.17	9.59	13.59	100
68th (2011-12)								
Hindu	18.90	14.24	11.99	14.13	13.39	10.56	16.79	100.00
Muslim	29.25	19.28	15.37	14.31	10.21	5.86	5.71	100.00
Christian	12.39	11.70	11.90	13.93	14.96	12.03	23.10	100.00
Sikh	16.67	10.95	11.09	10.52	19.28	15.03	16.46	100.00
Others	14.09	11.31	12.59	13.55	15.16	13.33	19.97	100.00

Source: Unit Level data of 55th and 68th round of NSS.

The results from the above table show that in 1999-2000, the level of education was low in all categories of education for Muslims as compared to other religions. The percentage share of illiterate was highest among

Muslims followed by Hindus in 1999-2000. Christian and Sikh are the religions in which, with increasing levels of education, the percentage shares are increasing. The recent data of level of education across religions shows that the percentage share of illiterate in all religions has declined. The decline is highest in Muslims and Hindus as compared to other religions. The percentage share of Hindus, Christians, Sikhs and Others with secondary, higher secondary and graduation and above has increased significantly in 2011-12. The increment in higher secondary and graduation & above is highest in Christians followed by Others, Hindus and Sikh. However, there is no significant improvement in the secondary, higher secondary and graduation & above level of education among Muslims. There are several factors recognized by *Sachar Committee* (2006) for the low level of education among Muslims which some are as follows:

1) **Muslim Identity:** Muslim identity comes in the way of admitting their children to good educational institutions. Muslim parents often face overt discrimination from school authorities when trying to get admission or availing of scholarship schemes for their children. Small acts such as lack of civility in behavior, rude questioning, and an atmosphere which treats them and their children as 'second class' citizens - all these combines to create a powerful deterrent, distancing the Muslim community from the school system. Parents are less likely to send girls (than boys) into such a hostile environment. This has given rise to a number of Muslim denominational schools, which according to some, are the only source of good education for Muslims today.
2) **Poverty:** The high level of poverty among Muslims is one of the main reasons for the high dropout rate among Muslims. The drop out rate is higher in girls as compared to boys. Children are expected to provide for their families by working in small workshops, as domestic help or by looking after their siblings while their mothers go to work. It was felt that the incidence of child labour was much higher among Muslims as compared to other minorities and socially backward groups.
3) **Low Perceived Returns from Education:** Muslims do not see education as necessarily translating into formal employment. The low representation of Muslims in public or private sector employment and the perception of discrimination in securing salaried jobs make them attach less importance to formal 'secular' education in comparison to other minorities and socially backward groups.

In 1999-2000, the percentage share of illiterate was highest in Muslims followed Hindus both in Karnataka and Delhi. In comparison to Karnataka, the percentage share of illiterate Muslims is high in Delhi. Except Muslims, the percentage share of illiterate in other religious groups is low in Delhi as compared to Karnataka.

Table 2.61: Level of Education across Religious Groups in Karnataka and Delhi (in percentage)

Karnataka								
Religion	**Illiterate**	**Below Primary**	**Primary**	**Middle**	**Secondary**	**Higher Secondary**	**Graduation & Above**	**Total**
55th (1999-2000)								
Hindu	24.54	11.41	10.91	16.59	17.27	8.24	11.04	100.0
Muslim	32.11	17.58	15.79	15.20	11.52	4.99	2.80	100.0
Christian	17.95	11.96	14.43	16.58	13.32	8.32	17.45	100.0
Sikh	19.73	19.73	0.00*	19.73	39.46	1.34	0.00*	100.0
Others	23.45	12.66	8.29	12.18	23.52	10.84	9.07	100.0
68th (2011-12)								
Hindu	17.43	13.30	9.57	12.02	15.32	12.36	20.01	100.0
Muslim	24.36	17.79	14.08	16.57	14.54	8.00	4.66	100.0
Christian	14.13	7.18	7.18	10.67	19.75	15.21	25.89	100.0
Others (Jainism)	16.80	6.39	4.83	8.69	24.88	12.32	26.10	100.0
Delhi								
55th (1999-2000)								
Hindu	17.87	15.10	12.09	12.68	13.38	9.56	19.33	100.0
Muslim	40.02	29.88	9.35	10.25	5.85	2.59	2.06	100.0
Christian	7.36	6.85	5.80	16.13	7.35	2.59	53.91	100.0
Sikh	10.54	12.01	14.23	14.43	13.76	10.38	24.65	100.0
Others	7.80	17.08	3.91	10.28	7.84	5.53	47.57	100.0
68th (2011-12)								
Hindu	15.87	15.71	11.25	10.69	12.98	12.21	21.28	100.0
Muslim	25.25	18.15	21.78	12.93	12.57	4.60	4.71	100.0
Christian	10.83	0.00	14.99	9.27	15.25	11.15	38.51	100.0
Sikh	8.02	3.75	14.70	6.29	16.20	19.97	31.08	100.0
Others	9.00	13.53	5.96	2.12	8.95	14.39	46.06	100.0

Source: Unit Level data of 55th and 68th round of NSS. Note- in 68th round, the samples of Sikhs are not available for Karnataka.

** (No Sample available in this category)*

In 1999-2000, the percentage share of below primary, primary and middle across social groups was high in Karnataka in comparison to Delhi. The percentage share of Christians was highest in graduation and above category in Karnataka and Delhi for the same year. In Karnataka, the second highest percentage share in Graduation & above category was in Hindus. However, in Delhi others religious groups (Jain, Buddhist etc.) had high percentage share in Graduation & above category after Christians. The results from above table clearly indicate that in 2011-12, the percentage share of illiterate has decreased in Karnataka and Delhi for all religious groups, and the percentage share of Higher Secondary and Graduation & above degree holders have

increased substantially for all religious groups except Muslims. The reasons for low level of higher education in Muslims have discussed above.

2.11 Education and Consumption Level in Urban India

The availability of income data is rare in India and therefore, the consumption expenditure is used as proxy estimation to access the income level of households. The income level of a household determines not only the quality of education received by a person but also the level of education he/she attains. For present analysis, households' monthly consumption expenditures are classified into quintile classes and cross-tabulation has been done to show the percentage distribution of the level of education across social groups by quintile classes.

Table 2.62: Level of Education across Consumption Groups

MPCE/Level of Education	Illiterate	Below Primary	Primary	Middle	Secondary	Higher Secondary	Graduation & Above	Total
55th (1999-2000)								
Q1	49.36	20.67	12.89	10.06	4.23	1.86	0.93	100.0
Q2	34.84	20.89	14.90	15.07	8.46	3.63	2.21	100.0
Q3	25.94	18.60	14.46	17.14	11.81	6.40	5.65	100.0
Q4	18.32	15.51	13.14	17.12	16.06	9.48	10.38	100.0
Q5	9.78	11.36	9.19	13.09	17.19	13.59	25.80	100.0
68th (2011-12)								
Q1	35.11	20.98	15.36	14.14	7.96	3.81	2.64	100.0
Q2	25.74	18.17	15.38	16.18	11.60	6.94	5.99	100.0
Q3	19.36	14.99	13.36	16.14	15.09	10.50	10.55	100.0
Q4	14.05	12.52	11.57	14.32	16.43	13.07	18.05	100.0
Q5	7.79	8.09	7.18	9.70	13.89	15.15	38.19	100.0

Source: Unit Level data of 55th and 68th round of NSS.

The results from above table show that with increasing quintile class, the percentage share of illiterate is declining. The result is identical in below primary and primary category, but the reasons are different. The low percentage share of illiterate in higher quintile classes is because persons from these classes attend schools from very early period. However, a significant percentage of population from lower income groups was not attending schools because most of them belongs to certain castes which were deprived from education and still the drop outs from the lower income groups is high in comparison to higher quintile group. With increasing quintile classes, the percentage shares of secondary, higher secondary and graduation and above are increasing. The highest 20 percent (fifth quintile class) has highest share in Graduation & above category. The recent data of level of education shows that it has improved across quintile classes. The percentage share of

illiterates has come down; however, the percentage share of higher secondary and Graduation & above category has gone up.

Table 2.63: Level of Education in Urban Karnataka and Urban Delhi by MPCE (in Percentage)

MPCE/Level of Education	Illiterate	Below Primary	Primary	Middle	Secondary	Higher Secondary	Graduation & Above	Total
Karnataka								
55th (1999-2000)								
Q1	48.05	14.78	15.19	11.22	6.70	2.47	1.60	100.0
Q2	33.73	16.77	15.71	17.68	10.93	3.16	2.02	100.0
Q3	29.55	14.72	13.13	19.45	14.37	5.03	3.75	100.0
Q4	18.03	11.15	11.61	19.05	21.41	9.13	9.61	100.0
Q5	9.88	8.63	6.84	13.37	22.49	14.74	24.05	100.0
68th (2011-12)								
Q1	34.11	20.59	12.76	14.68	10.86	4.39	2.62	100.0
Q2	24.16	16.89	14.58	15.98	13.82	7.54	7.03	100.0
Q3	17.20	12.58	12.31	17.16	14.79	11.94	14.03	100.0
Q4	14.46	13.36	8.92	13.03	23.65	10.38	16.20	100.0
Q5	7.89	8.20	4.54	5.37	14.47	20.43	39.09	100.0
Delhi								
55th (1999-2000)								
Q1	44.20	28.28	12.66	10.63	4.13	0.10	0.00	100.0
Q2	39.40	25.77	17.89	8.75	6.29	1.22	0.69	100.0
Q3	29.96	21.75	13.45	13.61	12.91	5.21	3.12	100.0
Q4	20.21	17.21	13.00	15.89	14.41	9.94	9.34	100.0
Q5	7.99	10.49	8.69	10.99	13.42	12.17	36.26	100.0
68th (2011-12)								
Q1	29.49	27.12	17.64	11.75	9.06	0.76	4.17	100.0
Q2	27.77	20.81	19.12	14.62	12.46	4.24	0.99	100.0
Q3	21.40	19.30	15.62	14.14	15.85	8.65	5.05	100.0
Q4	14.57	11.86	10.32	11.26	14.91	18.01	19.07	100.0
Q5	6.21	10.60	7.12	5.55	10.61	15.01	44.89	100.0

Source: Unit Level data of 55th and 68th round of NSS.

The results from above table show similar trends to national level results. The percentage share of illiterate is declining with increasing quintile classes both in Delhi and Karnataka. However, with increasing MPCE, the percentage share of higher secondary education and Graduation & above is increasing. The levels of education across quintile classes have improved over the period as the percentage share of illiterate has come

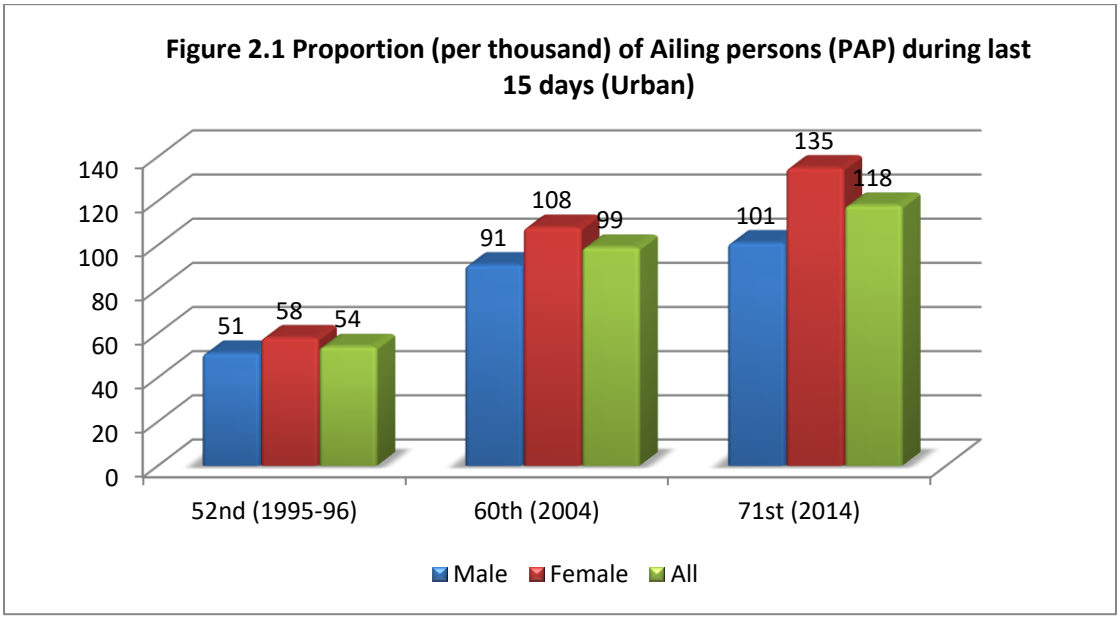
down and percentage shares of secondary, higher secondary and graduation & above have gone up. It can be explained by the economic growth experienced by Indian economy in the last one and half decades which not only increased the consumption capacity of all classes but gave boost to the education infrastructure in different states and regions.

2.12 Status of Health in Urban India

Urban areas are known for better health services and infrastructure. The present section provides brief analyses on the status of health in urban India which mainly includes the level of morbidity and utilization of health care services by type of hospitals. These analyses are based on three rounds of NSS- 52nd (1995-96), 60th (2004) and 71st (2014).

2.12.1 Morbidity Level in Urban India

The morbidity rate is defined as proportion of ailing person (PAP) which is measured as the number of living persons reporting ailment (per thousand persons) for 15 days reference period. The morbidity rate in urban India is increasing over the time period for male as well as female. In 1995-96, it was 51 per thousand for male which is two times more in 2014. The female morbidity rate in urban India has also increased from 58 per thousand to 135 per thousand. In comparison to male, the female morbidity rate has increased more. One of the most prominent reasons for increasing morbidity rate in India is high number reporting. Earlier people does not report the small spell of ailment in fever, cold etc. but now the reporting has increased because of more awareness about these diseases.



Source: NSS Report No. NSS KI (71/25.0).

2.12.2 Regional Pattern of Morbidity Level in Urban India

The regional pattern of morbidity level in urban India clearly indicates that morbidity rate or Proportion (per thousand) of Ailing persons commonly referred to as PAP is very high in southern states/UTs as compared to North India. Kerala has highest PAP (306 per thousand) followed by Puducherry (227 per thousand), Lakshdweep (219 per thousand) and Andhra Pradesh (204 per thousand). The two states from which samples are drawn for present study show different level of morbidity. The level of morbidity in Karnataka is much higher as compared to Delhi. The morbidity levels in most of the northern states are below national average. The reason for high level of morbidity in south Indian states is better reporting of ailments in comparison to north Indian states. The literacy and level of education is high in south Indian states and it is one of the reasons for better reporting.

Table 2.64: Regional Pattern of Morbidity Level in Urban India (2014)

States	Per thousand persons reporting Ailments	Per thousand persons hospitalized
Andhra Pradesh	204	55
Arunachal Pradesh	49	41
Assam	47	36
Bihar	62	33
Chhattisgarh	44	42
Delhi	**41**	**36**
Goa	194	40
Gujarat	103	49
Haryana	75	50
Himachal Pradesh	51	33
J & K	41	37
Jharkhand	96	35
Karnataka	**103**	**49**
Kerala	306	99
Madhya Pradesh	71	44
Maharashtra	70	47
Manipur	4	35
Meghalaya	26	35
Mizoram	31	41
Nagaland	19	22
Odisha	97	51
Punjab	170	40
Rajasthan	83	43
Sikkim	67	33
Tamil Nadu	184	59
Telangana	95	49
Tripura	51	57
Uttar Pradesh	91	40
Uttarakhand	111	37
West Bengal	179	51
A&N Islands	156	61

Chandigarh	135	35
Dadra & Nagar Haveli	165	54
Daman & Diu	186	53
Lakshadweep	219	76
Puducherry	227	63
India (Urban)	**118**	**49**

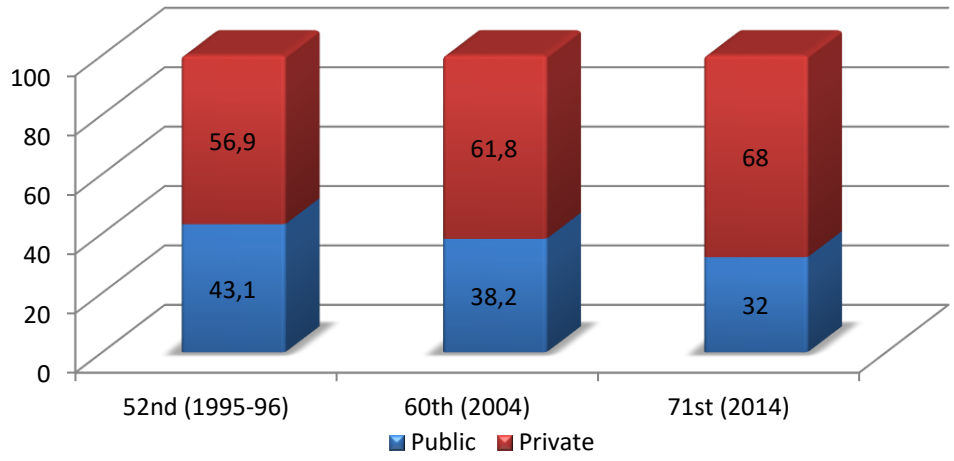
Source: NSS Report No. NSS KI (71/25.0).

The access to hospitalization is also high in Southern states as Kerala (99 per thousand) has reported highest per thousand cases of hospitalization followed by Lakshadweep (76 per thousand), Puducherry (63 per thousand), A & N Islands (61 per thousand) and Tamil Nadu (59 per thousand). The access to hospitalization in Karnataka is equal to the national average (49 per thousand). However, it is below national average in Delhi (36 per thousand).

2.12.3 Utilization of Health Care Services in Urban India

It is evident from the following bar diagram that the utilization of private hospitals in Urban India is increasing over time. In 1995-96, total 56.9 per cent population reported that they went to private hospitals in case of ailments. This percentage share has further increased to 61.8 per cent in 2004 and the recent percentage share shows that total 68 per cent population use private hospitals for treatment of their ailments. The main determining factors of utilization of private hospitals in case of ailments can be- i) increasing per capita purchasing power or increasing income ii) poor conditions of government hospitals as compared to private hospitals iii) availability of better facilities and advance care services in private hospitals and iv) easy to get appointments to the specialists of certain diseases such as hearth, cancer, kidney transplant etc.

Figure 2.2 Utilisation of Health Care Services in Urban India by Different Types of Hospitals



Source: NSS Report No. NSS KI (71/25.0).

2.12.4 Utilization of Health Care Services across Consumption Groups in Urban India

As mentioned above, monthly per capita consumption expenditure is used as proxy for income level of the households/individuals in NSS. The income level of a person decides the nature of utilization of different types of health care services one could avail.

Table 2.65: Percentage of Hospitalization cases by Types of Hospital across Consumption Groups in Urban India (2014)

	Percentage of Hospitalization Cases		
MPCE	**Public Hospital**	**Private Hospital**	**Total**
Q1	48.0	52.0	100
Q2	43.5	56.5	100
Q3	32.7	67.3	100
Q4	28.3	71.7	100
Q5	18.7	81.3	100
India (Urban)	32.0	68.0	100

Source: NSS Report No. NSS KI (71/25.0)

The figures from above table clearly indicate that with increasing quintile classes of monthly per capita consumption expenditure, the utilization of private hospitals is increasing in Urban India. A significant percentage of persons from poor strata of society are still dependent on public hospitals for treatment of different diseases.

2.13 Conclusion

This chapter has provided in depth information about the nature of basic infrastructure services and their access in Delhi city and Bengaluru vis-a-vis Delhi state and urban Karnataka. The urban housing amenities are unequally accessed by different sub-sections of the population. The migrant households and the scheduled households; especially STs in Bengaluru and SCs and OBCs perform poorly in accessibility to specific amenities such as pucca and owned houses, tap water supply, underground drainage system and garbage disposal, and attached bathroom coupled with personal usage of toilet facilities. The improvements in the availability and access to good quality amenities over the period of ten years in urban Indian households have been prominently marked by various indicators. Likewise, notwithstanding this betterment in upgradation of housing basic services, the disparity between the male and female headed urban households is still wide in 2012. Also, the poor households have low access to basic services. The incidence of low coverage of services is higher in Karnataka and Bengaluru as compared to Delhi. It is evident from the analyses of education that Christians have high percentage share in graduation & above level of education while Muslims

have lowest level of education in this category. With increasing income, the chance of getting better education is also increasing. In case of access to health services, the utilization of private hospitals is higher which indicates the poor conditions of public health infrastructure in India. A significantly higher percentage of poor are utilising public health services in urban India. With increasing income, even the poor people also prefers to avail services of private hospitals along with other higher income groups because of availability of better health care services in these hospitals as compared to public hospitals.

3. Institutional framework, policies and programmes for socio-economic inclusion

3.1 Introduction

India is a federal system, with powers constitutionally divided between the central and state governments. India also has seven union territories which are under the direct control and administration of the central government and thus prominently display the unitary features. Under this structure, housing and urban development is a state subject[8]. State governments define state-specific housing and urban development policies, establish institutions including urban local governments for advancing the policy agenda, design and implement housing and urban development programmes and projects. The role of the central government is to define an overall approach to urban development, compatible with macroeconomic policy. In 1992, the Constitution was amended for a major local government reform. This 74th Constitutional Amendment gave constitutional recognition to the urban local bodies. A new Twelfth Schedule to the Constitution provided a recommended list of functions to be performed by Urban Local Bodies (ULBs). States were mandated to transfer various responsibilities to municipalities and to strengthen urban local governance. However, even till date, the devolution of administrative and financial resources has not managed to keep pace with the devolution of responsibilities. Nevertheless, the intention of the 74th Constitutional Amendment Act in particular reflects the increasing importance of cities in the national economy. Consequently, the central government has, in partnership with the state and local governments, introduced a number of initiatives to enable the participation of local governments in the urban agenda, making urban development a shared responsibility.

This chapter details out the governance and institutional structure for the delivery of urban basic services in India. Following the introductory section, section two builds an understanding on the functional mandates of agencies involved in delivery of services at national, state and local level. It also discusses the role of NGOs to create participatory governance. The third section discusses various policies and programmes undertaken by the government for provision of basic services and ensuring social security to urban poor. The fourth section concludes.

[8] Seventh Schedule of the Constitution

3.1.1 Institutional Structure at the National Level

Ministry of Housing and Urban Affairs (MoHUA) - This is the apex ministry responsible for formulating policies, financing and managing programmes for urban development and poverty alleviation in urban areas, coordinate with state governments, financial institutions, monitoring of matters concerning housing infrastructure and urban poverty alleviation. It came into existence in 1952 and manages various activities as per the Government of India (Allocation of Business) Rules 1961. These include the following:

- All government civil works, construction and maintenance of government buildings, development of government colonies
- Planning and coordination of urban transportation systems along with fixing of fares
- Schemes of large scale acquisition, development and disposal of land in Delhi
- Town and Country Planning; matters relating to the Planning and Development of Metropolitan Areas, International Cooperation and Technical Assistance in this field
- All matters related to Housing and Urban Development Corporation (HUDCO), National Trust for Art and Cultural Heritage (INTACH), Central Public Works Department (CPWD), National Cooperative Housing Federation (NCHF)
- Water supply (subject to overall national perspective of water planning and coordination assigned to the Ministry of Water Resources, River Development and Ganga Rejuvenation), sewage, drainage and sanitation relating to urban areas and linkages from allocated water resources.

National Buildings Organisation (NBO) - Established in 1954 under MHUPA for interchange of innovative techniques, development and exchange of statistical data on matters related to housing, construction of buildings and technology. The existing National Housing Policy has helped proactive operation of this institution.

Housing and Urban Development Corporation Limited (HUDCO) - It is one of the prime government agencies for housing in India. Established in 1970 as a financing body for urban housing and infrastructural development, the institute has now diversified in areas of consultation, research and development, technology upgradation and interchange of collaborative housing works programs even with foreign agencies and private sector. In its operations, HUDCO lays a considerable emphasis on the housing need of the Economically Weaker Sections (EWS) and Low-Income Groups(LIG). During the situation of earthquakes, cyclone, floods, tsunami etc, HUDCO has extensively contributed in the rehabilitation of the calamity affected households, through its technical and financial help for housing reconstruction.

National Cooperative Housing Federation of India (NCHFI) – This is the primary public-sector body on cooperative housing in the country. It came into being in 1969, and looks after the development, propagation and coordination of housing cooperative activities in India.

Building Materials & Technology Promotion Council (BMTPC) – This is a subsidiary body under MHUPA set up in 1990 for promotion and development of housing using economically viable, energy-efficient, cost-effective building materials supported by efficient and scientific technology. It carries out collaborative research, interactions and dissemination of resources with industries, construction companies, institutional financial bodies, NGOs and research institutes.

Table 3.1: Institutions and their Mandate at the National Level

Institute	Mandate
Ministry of Housing and Urban Affairs	Apex ministry responsible for formulating policies, financing and managing programmes for urban development and poverty alleviation in urban areas
National Buildings Organisation	Development and exchange of statistical data on matters related to housing, construction of buildings and technology
Housing and Urban Development Corporation Limited	A financing body for urban housing and infrastructural development
National Cooperative Housing Federation of India	Development, propagation and coordination of housing cooperative activities
Building Materials & Technology Promotion Council	Research, promotion and development of using economically viable, energy-efficient, cost-effective building materials supported by efficient and scientific technology for housing

Source: Various Institutions of the Government of India

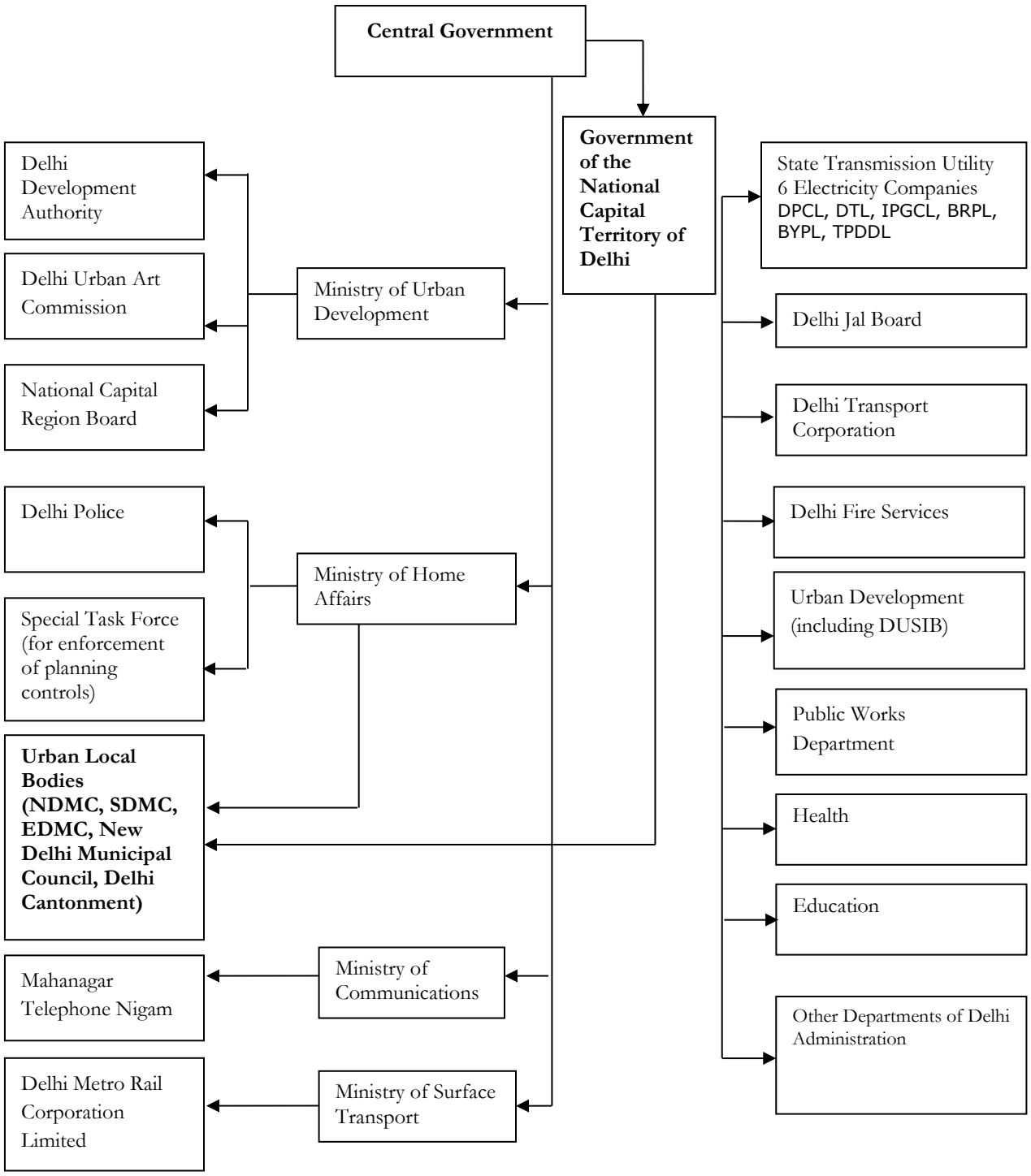
3.1.2. Institutional Structure in National Capital Territory of Delhi

The governance structure of Delhi is different from other states and union territories. The current political set up in Delhi is the result of the 69th Constitutional Amendment, passed by the Parliament in 1991. Delhi was declared as the National Capital Territory (NCT) through the Government of National Capital Territory of Delhi Act, 1991. According to the provisions of this act, Delhi will continue to be a union territory but it also provides for setting up of the state assembly for the NCT of Delhi with appropriate powers[9].

[9]Article 239AA was inserted by 69th amendment act, 1991. This article provides special provisions for the union territory of Delhi. After the 69th Amendment Act 1991, w.e.f from February 1, 1992, the UT of Delhi is called National Capital Territory of Delhi. The administrator of the NCT is appointed by the President as Lieutenant Governor. Via Article 239AA, a legislative assembly for NCT of Delhi was also provided. The power to decide the number of the seats and reservation of the seats was vested in the parliament. With this, Delhi became a state and the constitutional provisions with regard to Elections (Article 324-327 and 329) became applicable in NCT. Since then, Delhi has been struggling for a status of full-fledged state of India.

The city of Delhi is characterized by multiple layers of formal governance. Delhi state is coterminous with Delhi city which has resulted in a two-tier elected governance structure - a state legislature and a municipal corporation - each of which controls a different set of public services. Being a union territory, it is also administered by the President through Lieutenant Governor. The Delhi state government has an elected assembly of 70 members and is headed by a Chief Minister with limited powers unlike other states. The Article 239 AA of the constitution has kept the matters of law and order, police and land outside the purview of state government of Delhi. As a result, Delhi Police and Municipal Corporation of Delhi (MCD) etc. are controlled by central government. While the Union Home Ministry deals with law and order, the Delhi Development Authority (DDA) - which owns a major chunk of land in Delhi - is part of the Union Housing and Urban Affairs Ministry. The Lieutenant Governor (appointed by the central government), is the chairman of DDA. The police commissioner of Delhi too reports to the Lieutenant Governor. Moreover, the four municipal corporations report directly to the central government, as opposed to the state. The central government appoints the municipal commissioner of the three local governments, who reports to the Lieutenant-Governor of Delhi.

Figure 3.1: Institutional Structure in National Capital Territory of Delhi



Source: Various Institutions of the Government of India

In Delhi the responsibility for provision of municipal services, city planning, land management, urban infrastructure services (urban transport, electricity, and water and sanitation) rests with urban local governments and various para-statal agencies.

Urban Local Body - Delhi is governed by five urban local bodies. These include North Delhi Municipal Corporation, South Delhi Municipal Corporation, East Delhi Municipal Corporation, New Delhi Municipal Council (NDMC) and Delhi Cantonment Board (DCB). The former single Municipal Corporation of Delhi (MCD) serving 95 per cent of the area of Delhi with 98 per cent of total population got trifurcated in 2012 for better delivery of services to the public into three smaller Municipal Corporations, i.e. North DMC, South DMC and East DMC. NDMC governs an area of 44 square kilometers. DCB was established in 1914 and oversees the services in the Delhi Cantonment area and is under administrative control Ministry of Defence.

The municipal corporations handle civic administration for the city which includes city cleanliness, solid waste management, maintenance of gardens/dividers/circles, street light, bio-medical waste, slaughter house, encroachment removal, stray cattle management, community toilets, community halls, parking lots, development works, advertisement, property tax, and licensing. The ULBs have the unique feature that they provision civic amenities to rural and urban villages, resettlement colonies, regularized unauthorized colonies, slum settlements etc.

Delhi Development Authority (DDA) - is a central government parastatal agency with responsibility for planning and development of land and housing in Delhi. It was created in 1955 under Delhi Development Act for transforming Delhi into a well-planned capital city of India. The major functions of DDA are to formulate a Master Plan for the present and future growth of Delhi; to promote and secure the development of Delhi according to the plan covering all the possible activities. The DDA is also entrusted with preparing schemes and advising the concerned departments and agencies in formulating and undertaking schemes for the development of Delhi; to acquire, hold, manage and dispose of land and other property; to carry out building, engineering, mining and other operations; land for institutional and industrial development. DDA formulated the first Master Plan for Delhi in 1962. The plan was revised in 1982, to formulate Master Plan 2001 and in 2007 for Master Plan 2021. DDA has developed many housing projects targeted towards EWS, LIG and middle-income groups.

Special Task Force - (for enforcement of planning controls) another central agency was created in 1997 which looks after the town planning controls. This is one area where both MCD and DDA have failed to perform.

Delhi Jal Board (DJB) - is responsible for the production and distribution of portable water after treating raw water from various sources. DJB was formed in 1998 as a state agency, when responsibilities for these services were transferred from the MCD. The Delhi Jal Board also provides water in bulk to the NDMC and Cantonment areas. DJB is also responsible for treatment and disposal of sewerage and drainage within the NCT of Delhi.

Delhi Vidyut Board - Until 2002 the generation and distribution of electricity was the responsibility of Delhi Vidyut Board, formed in 1996. Government of Delhi has introduced power sector reforms in 2002 with the corporatisation of transmission and generation of power and privatization of distribution of power. At present, both transmission and generation are with three government owned companies[10], the distribution is divided between six companies[11] including three private companies. Prior to 1996, Delhi Vidyut Board remained under the control of central Ministry of Power.

Delhi Fire Service - came into existence in the year 1942 after amalgamation of 2 fire stations, which were separately functioning under the control of erstwhile Delhi Municipal Corporation and New Delhi Municipal Committee. The administrative control of Delhi Fire Service, which was previously with Municipal Corporation of Delhi, rests with the Government of National Capital Territory of Delhi since 1994.

Delhi Transport Corporation – Ministry of Transport, Government of India, took over the management of local bus services in Delhi when they found that Delhi Transport Undertaking as an extension of Municipal Corporation of Delhi had not been functioning efficiently and adequately resulting in leakage of revenue and very high operation cost. Thus, the Delhi Transport Corporation (DTC) was set up in 1971. DTC is the largest public transport entity and one of the largest compressed natural gas (CNG) powered bus services in the world. It operates 4352 buses on 578 city routes and maneuvers the feeder bus routes for metro services. DTC which was functioning under the administrative control of central government was taken over by Government of NCT, Delhi in 1996.

[10] Delhi Transco Limited, Indraprastha Power Generation Company Limited (IPGCL) and Pragati Power Corporation Limited (PPCL)
[11] Delhi Power Supply Company Limited (DPCL); Delhi Transco Limited (DTL) - TRANSCO; Indraprastha Power Generation Company Limited (IPGCL) - GENCO; BSES Rajdhani Power Limited (BRPL) - DISCOM; BSES Yamuna Power Limited (BYPL) - DISCOM; North Delhi Power Limited (NDPL) - DISCOM

Delhi Metro Rail Corporation Limited (DMRC) - has equal equity participation of the Government of the NCT of Delhi and the Central Government to implement construction and operation of a Mass Rapid Transport System (MRTS) in Delhi. Presently, the Delhi Metro network consists of about 218.17 km with 171 stations. DMRC is involved in implementation of metro rail, mono-rail and other high-speed railway projects in India.

Road Transport - The road network of 33868 km in Delhi is being developed and maintained by National Highway Authority of India (NHAI), Public Works Department (PWD), DDA, 3 Municipal Corporations of Delhi, NDMC and Delhi Cantonment Board.

Delhi Urban Shelter Improvement Board (DUSIB) - formed in 2010 is the nodal agency for implementation of scheme of relocation/rehabilitation of slum clusters in Delhi, the improvement of environment, relocation and in-situ development of slums in Delhi. DUSIB is primarily responsible for the qualitative improvement of slum settlements and providing various kinds of services for slum dwellers in the city. It also undertakes work relating to provision of shelters to the urban poor and slum dwellers including housing.

Health related Institutions - There is multiplicity of public health institutions in Delhi. The central government and NCT of Delhi have specialized as well as general hospital and dispensaries. Municipal Corporations also provide the same facilities. Besides these, non-government organisations and private sector also provides health care facilities in Delhi. Directorate General of Health Services (DGHS) under the Government of NCT of Delhi, is the major agency related to health care delivery. It coordinates with other government and non-government organizations to provide health care facilities at primary and secondary level to the citizens of Delhi through dispensaries and health centres, school health clinics and mobile health clinics. The **Health and Family Welfare department** of the Delhi government conducts the monitoring of hospitals, clinics and dispensaries, carries out registration of ambulances, doctors, and lays down guidelines for health-related issues in the state.

Table 3.2: Institutions and their Mandate in Delhi

	Institute	Mandate
Ministry of Urban Development		
	Delhi Development Authority	Planning and development of land and housing, formulate a Master Plan
	National Capital Region Board	Inter-state regional planning and development authority for promotion of balanced and harmonized development of the region which includes entire National Capital Territory of Delhi, thirteen districts of State of Haryana, seven districts of State of Uttar Pradesh and two districts of State of Rajasthan, with the Nation Capital as its core.
	Delhi Urban Art Commission	*Advise the Government of India in the matter of preserving, developing and maintaining the aesthetic quality of urban and environmental design within Delhi*
Ministry of Home Affairs		
	Special Task Force	Enforcement of town planning controls
	Delhi Police	Law and order
	Urban Local Bodies (NDMC, SDMC, EDMC, New Delhi Municipal Council, Delhi Cantonment)	Handle civic administration for the city which includes city cleanliness, solid waste management, maintenance of gardens/dividers/circles, street light, bio-medical waste, slaughter house, encroachment removal, stray cattle management, community toilets, community halls, parking lots, development works, advertisement, property tax, and licensing
Ministry of Communications		
	Mahanagar Telephone Nigam	Provides telecom services such as fixed-line telecommunication service, mobile service, internet, broadband etc
Ministry of Surface Transport		
	Delhi Metro Rail Corporation Limited	Construction and operation of a Mass Rapid Transport System (MRTS) in Delhi
NCT of Delhi		
	Delhi Jal Board	Production, treatment and distribution of potable water
	Delhi Vidyut Board	Generation and distribution of electricity
	Delhi Fire Service	Fire prevention services
	Delhi Transport Corporation	Provides local bus services for public transport
	Delhi Urban Shelter Improvement Board	Qualitative improvement of slum settlements, implementation of schemes for relocation/rehabilitation of slum clusters
	Public Works Department	Developed and maintain roads
	Directorate General of Health Services	Health care delivery

Source: Various Institutions of the State Government

Educational Institutions - The educational facilities are provided in stages i.e. pre-primary, primary, middle, secondary, senior secondary and university level. Pre-primary and primary educations are mainly the responsibility of the local bodies in Delhi. Middle, secondary and senior secondary education is primarily looked after by Directorate of Education, Government of Delhi. Although pre-primary and primary education is mainly the responsibility of the local bodies, the NCT of Delhi has converted its 326 schools into composite schools now known as *Sarvodaya Vidyalayas* having classes from I to XII. Apart from this, a number of private organizations are also engaged in imparting education at all levels of schooling. The NCT of Delhi has a total of 1222 government and government aided schools, which is 21% of the total schools running in Delhi, whereas the share of enrollment in these schools is 37.86% of total enrollment of all schools during 2015-16.

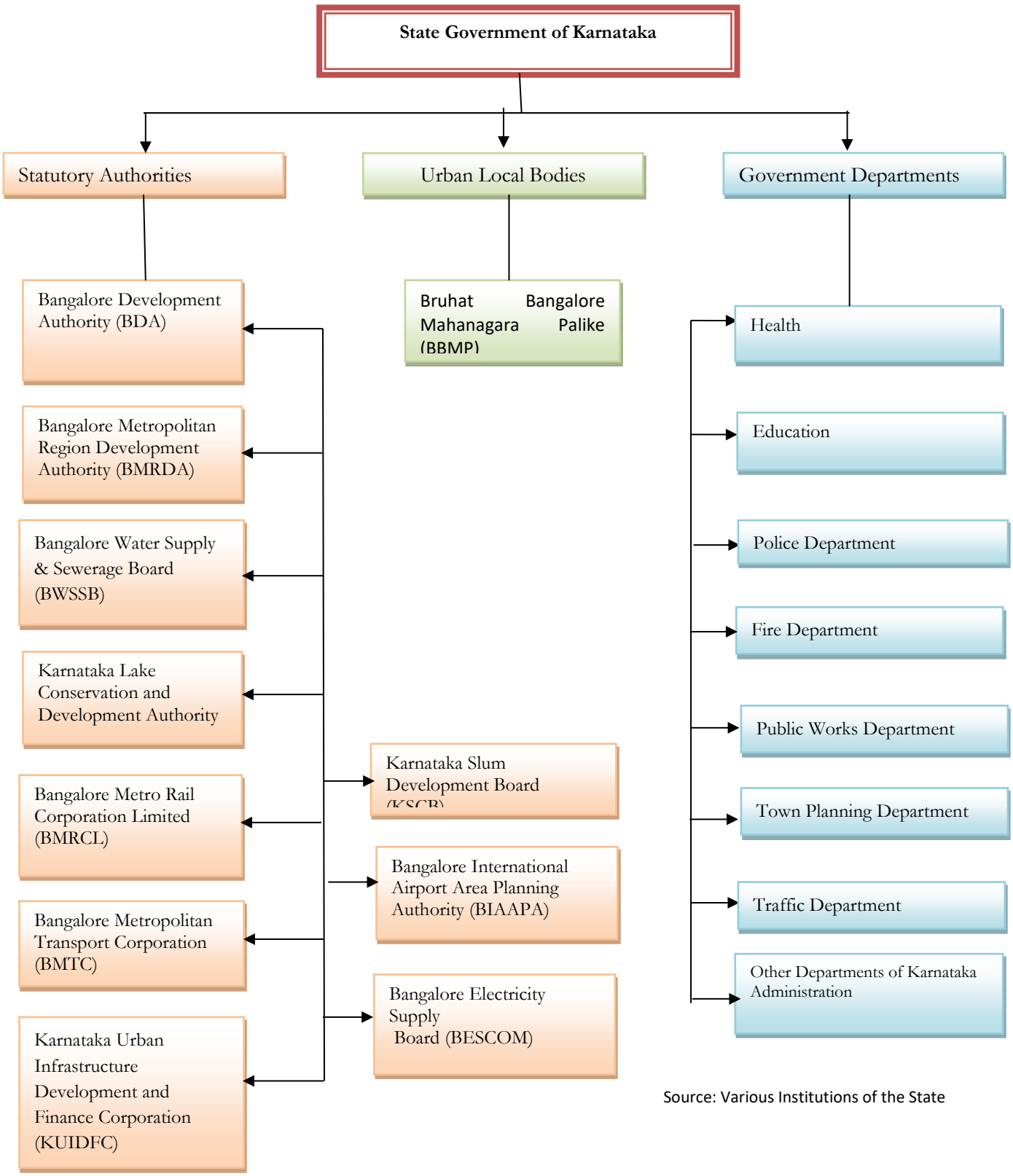
3.1.3 Institutional Structure in Bengaluru

There are a number of institutions responsible for provision of municipal services, city planning, and urban infrastructure services. These institutions can be classified as Urban Local Body, Statutory Authorities and government departments.

Urban Local Body - Bruhat Bengaluru Mahanagara Palike (BBMP) is the only urban local body for Bengaluru city. The city is divided into 150 wards[12], spread over an area of 696 sq km. The major responsibilities of BBMP are storm water drainage, solid waste management, street light, roads and infrastructural assets, building plan approval, slaughter house, encroachment removal, stray cattle management, community toilets, development works, health services and corporation schools, advertisement, property tax, licensing of trade etc. The BBMP has to perform its functions in respect of land use and development with the concurrence of Bangalore Development Authority.

[12] A councilor is elected as a representative of each ward. The councilors are headed by the mayor who is the executive head. The commissioner who is government official is the administrative head.

Figure 3.2: Institutional Structure of Governance in Bengaluru



Source: Various Institutions of the State

Bangalore Development Authority (BDA) formed in 1976, is the planning and development agency for the Bengaluru Metropolitan Area. The mandate of BDA is to control, monitor, and facilitate urban development in Bengaluru Metropolitan Area. BDA also defines building norms, develops the Comprehensive Development Plan (CDP) and town planning schemes. In addition to the planning functions, the BDA also undertakes development functions such as planning and implementation of schemes to provide for residential, commercial and industrial sites, parks and playgrounds, construction of commercial complexes, construction of houses, development of major infrastructure facilities and land acquisition. The housing need of the EWS population is also under their purview. No urban development can take place in Bengaluru Metropolitan Region (BMR) without prior permission of BDA.

Bangalore Metropolitan Region Development Authority (BMRDA) is responsible for planning, coordinating, and supervising the development of the areas that lie within the Bengaluru Metropolitan Region which includes Bengaluru urban district, Bengaluru rural district and Ramanagara district. BMRDA also prepare and implement structure plan and town planning schemes for the Bengaluru metropolitan region, assist local authorities in the region for the execution of projects. After National Capital Region (NCR), BMRDA covers the second largest metropolitan area in India.

Bangalore Water Supply & Sewerage Board (BWSSB) is one of the first water supply and sanitation utilities in India with jurisdiction of entire BBMP Area of nearly 700 square km. It is responsible for augmenting, treatment, distribution of water supply; creation of sewerage network and safe disposal of sewage, collection of water charges, operation and management of all assets created for water supply and sewerage.

Bangalore Metropolitan Transport Corporation (BMTC) was incorporated in 1997 as separate entity after being bifurcated from the Karnataka State Road Transport Corporation (KSRTC). It operates bus services inside the city and to about 400 villages within 25 kilometres radius of the city. It is contemplating to adopt usage of electric buses by 2017 end under the aegis of union government electric vehicle scheme of National Electric Mobility Mission Plan 2020.

Bangalore Metropolitan Rail Corporation Limited (BMRCL) is the agency responsible for the construction and operation of metro rail in Bengaluru city. The metro rail project has an East-West corridor - 18.10 km long and a 24.20 km North-South corridor with 40 stations.

Karnataka Lake Conservation and Development Authority formed in 2014 with the mandate of regulating, planning and policy making for protection, conservation and integrated development of lakes and wetlands in Bengaluru Metropolitan Region.

Karnataka Slum Development Board (KSDB) - The KSCB was constituted in 1975 under the provisions of the Karnataka Slum Areas (Improvement and Clearance) Act 1973. It was re-designated as "Karnataka Slum Development Board" in 2010. The mandate of KSDB includes rehabilitation or resettlement of all the declared slum areas in the urban areas of Karnataka. It also carries out slum surveys, identifies and declares areas as slums, construct houses for the slum dwellers at cheap loans from HUDCO assistance and loan assistance from external source agencies, provision of basic amenities to slums, prevent unauthorized construction in slums, improve and redevelop slum areas, rehabilitate of slum dwellers etc.

Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC) was set up in 1993 to assist the urban agencies in planning, financing, and providing expertise to develop urban infrastructure. It is a nodal agency of the state for implementation of various urban infrastructure development projects.

Bangalore International Airport Area Planning Authority (BIAAPA) is an authority set up for management of the new international airport project at Devanahalli. The organization is responsible to review the construction, building plan, land-use planning, safety norms in the area under its jurisdiction.

Bangalore Electricity Supply Company (BESCOM) was constituted in June 2002 following the unbundling of the transmission and distribution business of Karnataka Power Transmission Corporation Limited (KPTCL), which is the sole electricity transmission and distribution company in the state. It has the responsibility of distribution of electricity to 8 districts and operates in Bengaluru Metropolitan Area, Bengaluru Rural Area and Chitradurga Zones.

Table 3.3: Institutions and their Mandate in Bengaluru

	Institute	**Mandate**
	Urban Local Body Bruhat Bengaluru Mahanagara Palike	Responsible for storm water drainage, solid waste management, street light, roads and infrastructural assets, building plan approval, slaughter house, encroachment removal, stray cattle management, community toilets, health services and schools, advertisement, property tax licensing of trade Functions in respect of land use development with the concurrence of Bangalore Development Authority
Statutory Authorities		

	Bangalore Development Authority	Control, monitor, and facilitate urban development in Bangalore Metropolitan Area, develops Comprehensive Development Plan and town planning schemes, defines building norms, undertakes planning and implementation of schemes for residential, commercial and industrial, parks and playgrounds, construction of commercial complexes, construction of houses, development of major infrastructure facilities and land acquisition. The housing need of the EWS population is also under their purview.
	Bangalore Metropolitan Region Development Authority	Planning, coordinating, and supervising the development of areas that lie within the Bangalore Metropolitan Region which includes Bangalore urban district, Bangalore rural district and Ramanagara district. Prepare and implement structure plan and town planning schemes, assist local authorities in the region for the execution of projects.
	Bangalore Water Supply & Sewerage Board	Responsible for preparation and implementation of schemes for augmenting water supply, treatment, distribution of water supply; creation of sewerage network and safe disposal of sewage, collection of water and sewerage charges.
	Bangalore Metropolitan Transport Corporation (BMTC)	Operates bus services within the city and to about 400 villages within 25 kilometres radius of the city for public transport
	Bangalore Metropolitan Rail Corporation Limited (BMRCL)	Construction and operation of metro rail
	Karnataka Lake Conservation and Development Authority	Regulating, planning and policy making for protection, conservation and development of lakes and wetlands
	Karnataka Slum Development Board	Rehabilitation or resettlement of all the declared slum areas. Carries out slum surveys, identifies and declares areas as slums, construct houses for the slum dwellers, provision of basic amenities to slums, prevent unauthorized construction of slums
	Karnataka Urban Infrastructure Development and Finance Corporation	Assist urban agencies in planning, financing, and providing expertise to develop urban infrastructure. It is a nodal agency of the state for implementation of various urban infrastructure development projects
	Bangalore International Airport Area Planning Authority	Responsible to review the construction, building plan, land-use planning, safety norms in the area under new international airport project.
	Bangalore Electricity Supply Company (BESCOM)	Responsible for generating and distribution of electricity
State Government		
	Police Department	Law and order
	Public Works Department	Developed and maintain roads and government buildings
	Town Planning Department	Preparation of Master Plan and approval of layouts
	Karnataka Housing Board (KHB	Development of sites and services and construction of houses
	Karnataka State Industrial Area Development Board	Orderly development of industrial area and other amenities, expeditious acquisition of lands for industrial and infrastructure purposes
	Health Department	Health care delivery

Source: Various Institutions of the State Government

State Government Departments

In addition to the elected ULBs and statutory authorities in Karnataka, state government departments perform a number of regulatory and development services. Key among them are the Police Department, Public Works Department, Health Department, Education Department, Revenue Department, Town Planning Department, Horticulture Department and the Motor Vehicles Department. Karnataka Housing Board (KHB) and Karnataka State Industrial Area Development Board. Each of these departments have their respective mandates.

3.1.4 Functional Overlaps

The institutional framework for urban governance in India needs a major overhaul if cities are to be inclusive. The present institutional structure is politically weak and administratively cumbersome. Within ULBs, the set-up consists of ceremonial mayors, standing committees, and state government-appointed chief executives. The executive power of the corporations is vested principally in the commissioner. Kolkata is the only exception where the system of mayor-in-council is recognised as a municipal authority. The commissioner is the chief administrative head functioning under the supervision and control of the mayor-in-council. The tenure of the mayor varies from five years in Kolkata and Chennai (coterminus with that of the corporation), to one year in Bengaluru, and two and a half years in Mumbai.

State Governments have created a large number of functional bodies - development authorities, housing boards, Slum Boards, and Water and Sanitation Boards. Growth of such specialized bodies has weakened ULBs. Presence of parastatals creates fragmentation and leads to functional bodies working in isolation. An example of administrative fragmentation on the one hand and functional overlap on the other can be found in Bengaluru. In Bengaluru, there are three organisations dealing with basic services in slums- BBMP, KSDB and BDA. Each of them is mandated to undertake development work in slum areas. For social security schemes, other organisations called the State Urban Development Authority (SUDA) and the District Urban Development Authority (DUDA) comes into the picture. This arrangement has led to confusion particularly in areas of doubtful jurisdiction. Similarly, the road maintenance is the responsibility of BBMP, BDA and PWD depending of their jurisdiction. However, as per the Municipal Act, this function is to be under the BBMP. In respect of street lights, while BBMP is responsible to carry out the function of street lighting and meet all related expenditure, the functioning of lights and supply of power is with BESCOM, which leads to divided responsibilities. The traffic management is the responsibility of the traffic police department, however, the funds for installation of traffic signals, road marking etc. are provide by BBMP.

The lack of multiple institutions and coordination among them has resulted in delays in execution of projects, underutilization of funds, and loss of revenues for the ULB.

3.2 Role of NGOs

The NGOs help the slum dwellers and government agencies in the provision of basic services to the slum localities, community development, social mobilisation etc. The debate over the functioning of NGOs in slums have been there since long where it is argued that the benefits accrued from NGO participation lead to enhanced people participation. NGOs provide a platform to poor for building their consensus on issues and voice for their rights. NGOs play a vital role in bridging the gap between the top-down and bottom-up communication interchange and is one of the essential elements in inculcating community organization and fostering democratic approach to problem solving in particular and development at large. NGOs have also cooperated with the central and state government to implement policies or to show innovative and alternative ways of program and policy implementation. At the same time, they opposed government policies that they believed did not serve the best interests of the poor.

Recently, the government has recognized the role of NGOs and set distinct roles for them in implementation of policies and programmes. These roles include; create an enabling environment by information dissemination, facilitating the process of community engagement, conducting and managing the survey; identification of slums and slum pockets, identification and listing of beneficiaries through participatory tools, such as FGDs, group meetings. NGOs also provide support in prioritizing and developing the framework for slum redevelopment; micro-planning in the selected slums with the objective of preparing the DPR, facilitating development of community proposals and their technical feasibility including negotiating for change in existing layouts to create more road and open spaces, assist ULBs and communities in implementation of slum redevelopment/up-gradation/ re-location projects including infrastructure and housing development; assist the slum households in accessing institutional credit by supporting them in doing the necessary documentation and meeting other requirements of the lending institutions, create sustainable communities structures for maintenance of assets created e.g. setting up of resident associations etc.

NGOs Working in Slums of Delhi

Jagori is a women centric NGO working for upliftment and empowerment of women through campaigns, entrepreneurial training, and education to the women residing in slum. They also organize workshops, production and distribution of education materials, scholarship to women of EWS households, advocates for women safety in partnership with state government and other public agencies.

ASHA was established primarily for improving the sanitation and health conditions of slums in Delhi. It now operates in 71 slum settlements in Delhi. The area of operation has expanded and now includes financial inclusion, education and health care initiatives such as mobile dispensaries, ambulances, environmental improvements and empowering of slum communities through skill development.

Centre for Urban and Regional Excellence a development organization working with urban informal and low-income communities to innovate, design and find better solutions to include and integrate people in the processes of city development. They base their activities on community participation approach in achieving sustainable development. They empower and train slum population to build toilets, scientific disposal of garbage, rain water harvesting etc.

Delhi Rural and Slum Development Organization was established in 2010 with focus to improve the living conditions of the people living in slums. Its objective is to generate awareness and sensitize people regarding the basic causes of their backwardness and to persuade them to change the course of life, to make arrangements for quality education in slum areas, to promote better health and hygiene, to create opportunities for better livelihood. They provide legal aid, set up health camps, carry out slum survey for problem scouting, provide scholarships for education etc.

World Vision India, a child focused relief and development agency, started its operation in India in 1975 and receives donations and sponsorships from more than 18 countries. It had successfully worked for child education and health improvement in slums alongside providing disaster relief. The organization also works in areas of balanced nutrition, livelihood interventions, sanitation and hygiene and gender based development.

NGOs Working in Slums of Bengaluru

Association for Voluntary Action and Service (AVAS) registered as a Trust in Bengaluru, came into existence in 1980. It was initiated by a group of professionals and social activists who shared common concerns for the deprivations of the city's poor, especially its slum dwellers. AVAS work reflects an intense involvement and a prolonged interaction with slum communities in Bengaluru.

Akshara Foundation is a charitable trust dedicated for promotion of education for slum dwellers. Established in 2003, the organization has formulated various education based programmes for the children in the state so as to enable better coverage of primary school. The NGO has set up a forum called Karnataka Learning Partnership (KLP) in 2006 for channeling change through collective action of multiple organisations addressing the education in Karnataka. It is a unique framework that uses multiple contemporary technologies like web-based data analysis and visualisation, mobile applications, interactive voice response systems, and paper-based data to help create a transparent and accountable pre-school and primary education sector in Karnataka.

Sumangli Seva Ashrama dedicated to the facilitate services to destitute women, orphan, youth and under privileged. It addresses health, education, environment, and economic through activities like awareness creation, capacity building, skill development, and sustainable livelihoods. It also provides relief in form of free food, shelter, health care to victims of atrocities, harassment and natural calamities. It engages community leaders and concerned government officials in the programs in order to establish transparency, good governance, sustainability, accountability, credibility and effective leadership.

Paraspara makes interventions in the area of child labourers, child rights, women rights and human rights in slum areas. It also focuses on women empowerment as it is one of the important elements in the eradication of child labour. Some initiatives include release and rehabilitation of child labourers, re-enrollment of the drop out children in schools, rehabilitating run-away children and street children, maintenance of juvenile protection units and secured home for rescued girls among many others.

3.3 Policies and Programmes

The Government of India's policies on slums have undergone a paradigm shift in recent decades. In the decades of 1970 and 1980, the government emphasised 'no slum cities', which implied forceful resettlement or rehabilitation of the slum dwellers. Removing slums from central areas and transportation nodes of cities meant that the new settlements where those slum dwellers were relocated, remained on the outskirts of the city, far from their workplace, thus further worsening the welfare of the slum dwellers. With this realisation, the government started focusing on slum upgrading and slum rehabilitation programmes. The government focused on infrastructural development of slums through schemes such as Environmental Improvement of Urban Slums (1972) and Sites and Services schemes (1980), and the Community Development Programme (1988). With time, slum upgradation policies shifted their focus from providing and improving infrastructure in the slums to improving the quality of life of slum dwellers. At present the government has adopted a multi-stakeholder partnership approach to achieve the goal of slum free cities.

The initiatives taken by the government for housing the poor over the last 60 years include: Integrated Subsidised Housing Scheme (1952) for industrial workers and economically weaker sections; Low Income Group Housing Scheme (1956); Slum Improvement/Clearance Scheme (initiated in 1956 and discontinued in 1972 at the national level); Environmental Improvement of Urban Slums (1972); National Slum Development Programme (1996), Scheme for Housing and Shelter Upgradation (SHASHU as part of Nehru Rozgar Yojna, introduced in 1989 and discontinued in 1997); Night shelters (1988–1989); Two Million Housing Programmes, Valmiki Ambedkar Awas Yojana launched in 2001–2002 (VAMBAY); Jawaharlal Nehru National Urban Renewal Mission (JNNURM); Rajiv Awas Yojana (RAY); Rajiv Rinn Yojana (RRY); and the latest Pradhan Mantri Awas Yojana (PMAY). In addition, various ministries have had their own programmes targeted towards their area of work.[13] Some of the major initiatives are discussed below:

3.3.1 National Slum Development Programme (NSDP)

In 1996, the NSDP; a slum upgradation programme was initiated to cover 47,124 urban slums throughout India. The objective of NSDP was upgradation by providing physical amenities like water supply, storm water drains, widening and paving of existing lanes, sewers, community toilets, street lights etc. Besides, funds could also be used for provision of community infrastructure and social amenities such as non-formal education, adult education, maternity and child health and primary health care including immunisation etc. The programme also had a component of shelter upgradation and convergence of various social sector

[13] Nation Resource Centre, School of Planning and Architecture, New Delhi (2009), "Affordable Housing for Urban Poor".

programmes. The attention was also given on training and skill upgradation for urban poor women and participation of NGOs, private institutions and civil societies. NSDP was subsumed in Integrated Housing and Slum Development Programme under Jawaharlal Nehru Urban Renewal Mission (JNNURM) and was discontinued from the financial year 2005-2006. During the years 1996-97 to 2004-2005, a total amount of Rs. 3089.63 crores were released to the states/UTs by the central government. Of the total funds released, an amount of Rs. 2512.39 crore (80%) was spent and about 4.60 crores slum dwellers, covering 69,333 slum pockets in 2586 cities and towns, have benefited from this programme[14].

The scheme was criticized to be highly subsidized wherein there was no contribution from beneficiaries. Being primarily a centrally sponsored scheme, the funding pattern was guided by the proportion of slum population in each state. Yearly financial provisions through 30 per cent grants and 70 per cent loans from the central government to the states and UTs were made. Another major drawback of NSDP was that it does not target illegal slums or non-notified slums. The non-notified slum settlements as per the NSS 58th round report in the year 2002 were 25,000 as compared to notified slums which were 27,000 settlements in number. Thus, it was comprehended that the NSDP program targeted only 50 per cent of the slum settlements.

3.3.2 Swarna Jayanti Shahari Rozgar Yojana (SJSRY)

SJSRY, launched in 1997, aimed at providing gainful employment to the urban unemployed and under-employed poor by encouraging them to set up self employment ventures, providing skill training and also through providing wage employment by utilizing their labour for construction of public assets. The Swarna Jayanti Shahari Rozgar Yojana consisted of two schemes, namely: (i) The Urban Self Employment Programme (USEP) and (ii) The Urban Wage Employment Programme (UWEP). The program aimed at developing community empowerment, promoting community organisations and structures to provide supporting and facilitating mechanism for local development.

3.3.3 Valmiki Ambedkar Awas Yojana (VAMBAY)

In 2001, the government launched the VAMBAY. It was a centrally sponsored scheme with an in-built subsidy for undertaking construction and upgradation of dwelling units for people living below the poverty line (BPL) who do not possess adequate shelter. It was the first scheme of its kind that was meant exclusively for slum dwellers with a central subsidy of 50 per cent. The remaining 50 per cent was to be arranged by the state government with ceiling costs prescribed for dwelling units. The programme was implemented in partnership with state governments, who were to set up the implementation agency and provide land where

[14] http://mhupa.gov.in/writereaddata/UploadFile/AR0607eng.pdf

required. HUDCO was in charge of releasing the subsidy and loan amounts directly to the state nodal agencies. The beneficiaries were involved in all aspects of the house construction including arrangements for construction material. Community infrastructure and access to schools, hospitals, transport links etc. were mandatory for the sanction of VAMBAY projects. The Urban Local Bodies (ULBs) were tasked to formulate projects, prepare estimates in consultation with beneficiaries and submit the same to State Urban Development Agencies (SUDA), which in turn send the same to the Government of India/HUDCO for release of funds. The beneficiaries were provided title as a pre-condition for the loan or subsidy. This was done either by the state government or by the Local Body either by regularization in-situ or by relocation.

A new National City Sanitation Project under the title of "Nirmal Bharat Abhiyan" was an integral sub component of VAMBAY. This programme was integrated to ensure availability of drinking water, sanitation, and drainage facilities in slum projects. During the years 2001-02 to 2006-2007, a total amount of Rs. 936.80 crores were released to the States/UTs for construction and upgradation of 4,58,699 dwelling units and 65331 toilets [15].

3.3.4 Jawaharlal Nehru Urban Renewal Mission (JNNURM)

JNNURM, credited to be the first programme having exclusively an urban focus, was launched in December 2005 in mission mode. The JNNURM incorporates four sub-missions – (i) Urban Infrastructure and Governance (UIG) with a focus on infrastructural development covering 65 mission cities (ii) Urban Infrastructure Development of Small and Medium Towns (UIDSSMT) aimed at planned urban infrastructural improvement in all towns/cities except 65 mission cities (iii) Basic Services to the Urban Poor (BSUP) with a focus on integrated development of slums covering the same 65 cities as UIG and (iv) the Sub-Mission for Integrated Housing and Slum Development Programme (IHSDP) aimed at holistic slum development in all cities/towns except covered under BSUP.

The two components i.e BSUP for mission cities and IHSDP for non-mission cities aimed at integrated development of slums through provision of basic services to the urban poor, including security of tenure at affordable prices, improved housing, water supply, sanitation etc. Under BSUP, project cost is shared in the ratio of 50:50 for cities with population more than 1 million (as per Census 2001), 80:20 for other smaller mission cities and 90:10 for North Eastern and special category states. Under IHSDP, project cost is shared in the ratio of 80:20 for smaller cities and 90:10 for North Eastern and Special Category States. Cost ceiling of

[15] http://mhupa.gov.in/writereaddata/UploadFile/AR0607eng.pdf

Rs. 1 lakh per dwelling unit including cost of infrastructure was applicable for projects taken up under IHSDP Scheme.

The two components of JNNURM were mandated to pursue 3 key pro-poor reforms, namely (a) earmarking of 25% of municipal budget for the urban poor for provision of basic services including affordable housing to the urban poor; (b) implementation of 7- Point Charter, namely provision of land tenure, affordable housing, water, sanitation, education, health and social security to the poor in a time-bound manner ensuring convergence with other programmes and (c) reservation of 25% of developed land in all housing projects, public or private, critical for slum improvement.

The progarmme came to an end in 2014-15 financial year. Nevertheless, the JNNURM contributed significant investments and induced improvements in the physical infrastructure of cities and towns. Under BSUP, a total of 477 projects for construction of 7,88,953 dwelling units were undertaken at a project cost of Rs 23,128 crores in 62 cities. Construction of 6,96,599 dwelling units (88%) is complete and 5,86,823 units (84%) are occupied as on September 2017. Under IHSDP a total of 1030 projects for construction of 4,51,951 dwelling units were undertaken at a project cost of Rs 9,591 crores in 877 cities. Construction of 3,90,460 dwelling units (86%) is complete and 3,53,692 units (78%) are occupied as on September 2017[16].

3.3.5 Affordable Housing in Partnership (AHP)

Realising that mere effort of the government would be insufficient to address the housing shortage, the scheme of Affordable Housing in Partnership (AHP) was introduced in 2009. AHP sought to promote various kinds of public-private partnerships such as government with the private sector, cooperative sector, financial services sector, state parastatals, ULBs etc. to create affordable housing stock. The scheme aimed to encourage private sector participation in the creation of affordable housing stock. The scheme was launched as a part of the BSUP component of JNNURM. Under the scheme, the government provided subsidy at the rate of Rs. 50,000 per dwelling unit or 25% of the cost of infrastructure (internal and external), whichever is lower. Later the scheme became part of Rajiv Awas Yojana and the central support was provided at the rate of Rs. 75,000 to EWS and LIG for a dwelling unit of 21 to 40 sqm in size. A project size of minimum 250 dwelling units was eligible for funding under the scheme. Under AHP scheme, a total of 21 projects from 3 States (Karnataka, Gujarat & Rajasthan) for construction of 24,141 dwelling units were sanctioned at a total project cost of Rs 1,398.41 crore. Construction of 21655 (90%) dwelling units has been completed of which 15,088 (62%) dwelling units have been occupied till September 2017.

[16] http://mhupa.gov.in/User_Panel/UserView.aspx?TypeID=1445

3.3.6 Rajiv Awas Yojana (RAY)

RAY, a mission mode programme was launched in 2011. The programme envisaged a 'slum-free India' by encouraging states to tackle the problem of slums in a definitive manner. It called for a multi-pronged approach focused on bringing existing slums within the formal system, redressing the failures of the formal system that lie behind the creation of slums, and tackling the shortages of urban land and housing that keep shelter out of reach of the urban poor, thus forcing them to resort to extra-legal solutions in a bid to retain their sources of livelihood and employment.

Two step implementation strategy was adopted under RAY, i.e. preparation of Slum-free City Plans of Action (SFCPoAs) on 'whole city' basis and Detailed Project Reports (DPRs) on 'whole slum' basis. Cities prepared their SFCPoA which was an overall action plan of the ULB with investment requirements projected and prioritized for improving/developing the existing slums and providing houses including basic civic infrastructure and social amenities for the urban poor for the next 10-15 years. On the basis of prioritization of slums in SFCPoAs, cities prepared DPRs following an integrated 'whole slum' approach with the provision of housing, basic civic infrastructure and social amenities in each selected slum.

Under the scheme, central government provided assistance of 50 per cent of the project cost for cities with population more than 5 lakhs, 75 per cent for cities having population less than 5 lakhs. For North-Eastern region and special category states central, the share was 80 per cent. The central assistance under RAY was contingent upon implementation of reforms as per the timelines agreed upon. The mandatory reforms include: giving long term, mortgageable, renewable leasehold rights to slum dwellers; Reserving 15 per cent of FARI or 35 per cent of dwelling units for EWS whichever is higher; Reserving 25 per cent of municipal budget to provide basic services to the urban poor; Establishment of municipal cadre to deal with issues of slums and urban poor.

RAY was later subsumed in Pradhan Mantri Awas Yojana (Urban). A total of 240 projects were approved in 119 cities/towns for construction of 1,17,707 dwelling units. The total project cost approved was Rs 6323.04 crore. Up till September 2017, construction of 41,942 units (36%) was completed but only 21,949 units (1.8%) were occupied[17].

[17] http://mhupa.gov.in/writereaddata/Ray_all_India.pdf

3.3.7 Pradhan Mantri Awas Yojana (PMAY)

PMAY was launched in June 2015 for a period 2015–2022. Under this scheme, the central government provides financial and technical assistance to ULBs and other implementing agencies through states/UTs for the purposes of in-situ rehabilitation of existing slum dwellers using land as a resource through private participation; credit linked subsidy; affordable housing in partnership and subsidy for beneficiary-led individual house construction or enhancement. The mission provides flexibility to the states for choosing the best options amongst four verticals of the mission to meet the demand of housing in their states. The process of project formulation and approval in accordance with the mission guidelines is left to the states so that projects can be formulated, approved and implemented faster.

A Technology Sub-Mission under the mission is also set up to facilitate adoption of modern, innovative and green technologies and building material for faster and quality construction of houses. The Technology Sub-Mission facilitates preparation and adoption of layout designs and building plans suitable for various geo-climatic zones. It also assists states/cities in deploying disaster resistant and environment friendly technologies.

A total of 5,974 projects were approved in 35 states/UTs for construction of 28,57,321 dwelling units. The total project cost involved is Rs 154,180.15 crore. Up till September 2017, construction of 200,096 units (7%) was completed and 162,916 units (1.8%) were occupied[18].

3.3.8 Other Urban Missions

The Government of India has now embarked upon transformative new initiatives in the urban sector. In 2015, various flagship schemes were launched, aiming to change the face of urban India with expected investments around Rs. 4 trillion over the next few years. Missions are directed towards innovative interventions and inducing private sector participation in financing urban development in India. The involvement of the private sector in the creation and maintenance of urban infrastructure is expected to have a multiplier effect and attract more investment in the urban sector. The launch of the new missions does bring to the forefront the priorities of the government in ensuring adequate and equitable access to housing and basic amenities to all city dwellers.

[18] http://mhupa.gov.in/writereaddata/PMAY%20Progress.pdf

Swachh Bharat Mission (SBM)

SBM was launched in 2014 with the objectives of the elimination of open defecation, eradication of manual scavenging, modern and scientific solid and liquid waste management, and creating awareness about sanitation, along with its linkage with public health by 2019. The mission has been successful in promoting inculcation of cleanliness habits among people. The estimated cost of implementation of SBM (Urban) is Rs. 62,009 crores. The central share as per approved funding pattern amounts to Rs. 14,623 crores. In addition, a minimum additional amount equivalent to 25 per cent of central funding, will be contributed by the states. The balance funds are to be generated through various other sources including private sector; additional resources from state government/ULBs; beneficiary share user charges; land leveraging; innovative revenue streams; Swachh Bharat Kosh; corporate social responsibility; market borrowing and external assistance.

Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and Smart Cities Mission (SCM)

In 2015, AMRUT, a reform based programme akin to the erstwhile JNNURM was launched to provide basic services to households and build amenities in 500 cities. It aims at providing robust basic services such as water supply, sewerage, public transportation with more focus on developing walking and cycling, open space, parks and civic amenities in cities which will improve the quality of life.

To address the challenges of urban infrastructure deficit, another initiative adopted is the Smart Cities Mission to promote cities that provide core infrastructure and give a decent quality of life to its citizens. With an estimated investment of Rs 50,000 crore during 2015-2020, the core infrastructure elements to be provided in a smart city include adequate water supply, electricity, sanitation, solid waste management, efficient urban mobility and public transport, affordable housing for the poor, robust IT connectivity and digitalization, good governance and citizen participation, sustainable environment, safety and security of citizens, health and education.

National Urban Livelihoods Mission (NULM)

NULM was launched in September 2013 by replacing the Swarna Jayanti Shahari Rozgar Yojana (SJSRY). The NULM focuses on organizing urban poor at grassroots level institutions, creating opportunities for skill development leading to market-based employment and helping them to set up self-employment venture by ensuring easy access to credit. The mission is aimed at providing shelter equipped with essential services to the urban homeless in a phased manner. In addition, the mission also addresses livelihood concerns of the urban street vendors. The core belief of NULM is that the poor are entrepreneurial and have an innate desire

to come out of poverty. The challenge is to unleash their capabilities to generate meaningful and sustainable livelihoods. The first step in this process is motivating the urban poor to form their own institutions. They and their institutions need to be provided sufficient capacity so that they can manage the external environment, access finance, expand their skills, enterprises and assets. This requires continuous and carefully designed hand holding support.

3.3.9 Social Sector Schemes

Aadhaar

Aadhaar is a 12-digit unique-identity number which has been issued to all Indian residents based on their biometric information by a statutory authority established in 2009 by the Government of India, under the Ministry of Electronics and Information Technology. Many direct cash transfers such as PDS, PAHAL scheme of LPG benefit to the poor, Jan Dhan Yojana, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has been linked with Aadhar for eliminating leakages and scope for any discretionary action.

Pradhan Mantri Jan Dhan Yojana (PMJDY)

PMJDY is a financial inclusion scheme launched in August 2014 to ensure access to financial services, such as banking services, savings accounts, remittance facilities, credit, insurance, and pension services in an affordable manner especially to the marginalised and low-income groups. The scheme envisages achieving universal access to banking facilities with at least one basic banking account for each households, financial literacy, and access to credit, insurance and pension facility. In addition, the beneficiaries would get RuPay debit card having inbuilt accident insurance cover of Rs 1 lakh. The scheme also envisages channelling of all government benefits (from Centre/State/Local Body) to the beneficiary accounts and pushing the Direct Benefits Transfer (DBT) scheme of the government. As in April 2017, the deposit balance in PMJDY accounts was Rs. 63,971 crores in 28.23 crore accounts. As many as 22.14 crore RuPay cards have been issued under PMJDY[19].

PAHAL Direct Benefit Transfer for LPG (DBTL)

The PAHAL (DBTL) scheme launched in 2013 requires the consumer to have an Aadhaar number for availing LPG subsidy. This scheme has enabled many low-income households to convert their cooking fuel from polluting sources such as coal, kerosene, and firewood into cleaner liquefied petroleum gas (LPG) and thus reduce indoor air pollution. The LPG consumers now receive subsidy in their bank accounts.

[19] http://pib.nic.in/newsite/PrintRelease.aspx?relid=162075

Pradhan Matri Ujjwala Yojana (PMUY)

PMUY is a welfare program of the government of India, launched in 2016. The primary objective of the program is providing 50 million LPG connections to women belonging to below the poverty line (BPL) families. The scheme is aimed at replacing the unclean cooking fuels with the clean and more efficient LPG. From May 2016, the government is providing free cooking gas connections to women from extremely poor households. This has increased India's active LPG users to about 200 million. With this scheme, India has set an ambitious target of increasing LPG usage to cover 80% of the households by March 2019.

Public Distribution System (PDS)

PDS is a food security system established by the Government of India under Ministry of Consumer Affairs, Food, and Public Distribution and is managed jointly by state governments. This scheme was launched in 1947 for distribution of subsidized food and non-food items to poor. Major commodities distributed include wheat, rice, sugar, and kerosene, through a network of fair price shops. One must have a ration card in his/her name to buy items. Food Corporation of India, a Government-owned corporation is responsible for the procurement and maintenance of the PDS. The National Food Security Act, 2013 (NFSA) has also been notified which seeks to make the right to food a legal entitlement by providing subsidised food grains to nearly two-thirds of the population. The Act relies on the existing Targeted Public Distribution System (TPDS) mechanism to deliver these entitlements (Balani, 2013). TDPS (Control) Order, 2015 and PDS (Control) Order, 2001, stipulate that State/UT Governments to review the lists of beneficiaries every year for the purpose of deletion of ineligible families and inclusion of eligible families.

The PDS continues to absorb substantial public resources at almost 1% of GDP. While it covers up to 25% of the households, its benefits for the poor have been limited (World Bank, 2011). Leakage and diversion of grains from the PDS are high. In 2001 the Planning Commission estimated the leakage of grains at 58% nationally.

Rashtriya Swastha Bima Yojana (RSBY)

RSBY is a government run health insurance programme for the poor. The objectives of this scheme are to provide financial protection against catastrophic health costs by reducing out of pocket expenditure and to improve access to quality health care for BPL households and workers in the unorganised sector. It provides cashless insurance for hospitalisation in public as well as private hospitals. It has covered more than 34 million families and has emerged as one of the largest health insurance scheme globally which has provided

financial support to more than 5 million hospitalisation cases since inception. Since the amount provided under the scheme is low, it does not sufficiently take care of catastrophic cases.

Nevertheless, RSBY has changed the way health sector in India is perceived. It is apparent that private investments in healthcare in India substantially have been focused on tertiary or specialized care in urban areas. But with the introduction of RSBY, for the first time, IT applications are being used for social sector scheme on such a large scale. Every beneficiary family is issued a biometric enabled smart card containing their fingerprints and photographs. All the hospitals empanelled under RSBY are IT enabled and connected to a server at the district level. This will ensure a smooth data flow regarding service utilization periodically.

National Urban Health Mission (NUHM)

The National Urban Health Mission (NUHM) envisage to meet health care needs of the urban population with the focus on poor, by making primary health care services accessible and affordable. The programmatic components include health system strengthening in rural and urban areas, Reproductive Maternal-Neonatal-Child and Adolescent Health (RMNCH+A) and Communicable and Non-Communicable Diseases. The NUHM envisages achievement of universal access to equitable, affordable and quality healthcare services that are accountable and responsive to people's needs. Major initiatives under NUHM are:

- Accredited Social Health Activists (ASHAs) are in place across the country and serve as facilitators, mobilizers and providers of community level care. ASHA is the first port of call in the community especially for marginalized sections of the population, with a focus on women and children.
- Janani Suraksha Yojana (JSY) aims to reduce maternal mortality among pregnant women by encouraging them to deliver in government health facilities. Under the scheme, cash assistance is provided to eligible pregnant women for giving birth in a government health facility. Since the inception of 8.55 crore women have benefited under this scheme.
- Healthcare service delivery requires intensive human resource inputs. NUHM has attempted to fill the gaps in human resources by providing additional health human resources to States. NUHM has also focused on multi skilling of doctors at strategically located facilities identified by the States. Due importance is also being given to capacity building of nursing staff and auxiliary workers such as ANMs.

Programmes for Basic Service for Urban Poor in Delhi

Housing for Economic Weaker Section (EWS)

Under JNNURM, Government of India had approved 15 projects at a cost of Rs. 2514.27 crore for construction of 52,584 dwelling units for EWS category in Delhi. One half of the dwellings units are completed and remaining are at various stages of completion. Only 717 dwelling units were occupied at the end of March 2016. The reasons for non-occupancy are very low eligibility rate qualifying for getting the dwelling unit, non-availability of required peripheral infrastructure facilities, apprehension of allottees of losing livelihood after shifting.

Night Shelters

The state government of Delhi provides services of night shelters in Delhi. There are a total number of 266 night shelters with the capacity of 22,000 (81 permanent shelters, 115 in porta cabins, 68 in tents and 02 subways to be used in winter only). It is ensured by the implementing agencies that there is availability of electricity and water, adequate number of clean toilets, blankets, mats etc. to serve the people in the night shelters. Medical facilities are also provided in the night shelters and in 10 night shelters, skill and vocational training is also provided.

Basic Services in Slums

The minimum basic amenities are currently being provided in all the slum clusters. A number of schemes like "pay and use jan suvidha complexes" (public toilets) "Basti Vikas Kendra" (community development center) to meet the social consumption requirement of the slum dwellers, "Shishu Vatika" (crèche) etc. to create space for slum children are under implementation for betterment of lives of slum dwellers.
As per the survey conducted by DUSIB in 2016, 256 open defecation sites were identified at 216 locations. There were 17405 WC seats available in these settlements. DUSIB has planned to construct more than 15000 WC seats and to renovate 4000 WC seats during 2016-17 and during 2017-18. New toilet complexes are built with innovative design. DUSIB has also planned portable mobile toilets for those locations where there are no water and toilet facilities. Such toilets will have chemical technology to recycle the water for flushing and discharge of flush in the nearby sewerage system after 70 to 80 uses.

Health and Social Security Programmes for Urban Poor in Delhi

In order to ensure quality healthcare system, the government of Delhi has initiated three tier systems for health care delivery system. At the first tier is 'Mohalla Clinic' for primary care of people. At present, 107 such Mohalla Clinics are functional and a total of 1000 such clinics will be set up. Polyclinic is the second tier where specialist doctors and diagnostic test facilities are available. 23 polyclinics have already been operationalised and it is planned to establish 150 polyclinics. The third tier comprises of hospitals. The smooth operations of mohalla clinics and polyclinics will decongest hospitals and thus efficiencies of overall health care system will improve. Various schemes and programmes implementation for reduction of MMR and IMR are as follows:

- Strengthening and augmentation of institutional delivery through 'Janani Suraksha Yojna', under which pregnant women of BPL, SC and ST families get financial assistance of Rs 500- 600.
- Strengthening of maternity homes and creation of PHCs in the un-served populations.
- Under 'Janani Shishu Suraksha Karyakarm' free facilities are provided to pregnant women and infants (below one year) for diagnostic services, drugs, two-way transportation and blood transfusion in all government health centers for purpose of delivery or post-natal complications.
- Routine immunization services are available twice a week at 650 health centers and daily in government hospitals. Delhi is the only state to have included through its own resources, vaccines of MMR (1999), Typhoid (2004) and Hepatitis B (2001). All these additional vaccines are a strategy in itself for improved child survival. The Mission Indradhansh Kawach (MIK) was launched in 2015 for improving full immunization coverage.
- Nutritional Rehabilitation Centre (NRC) is functioning in 8 hospitals to take care of severely malnourished children (SAM) under 5 years who have medical complication.
- In order to reduce the incidence of anemia, weekly Iron Follet Supplementation Programme is implemented in all government and government aided school for students of class 6th to 12th since 2013.

Social Security

Integrated Child Development Scheme (ICDS) launched in 1975 is the largest and unique programmes for early childhood development. In Delhi, nearly 10,000 Aanganwari Centers are functioning covering approximately 12 lakh children up to the age of 6 years and pregnant/nursing mothers, who are economically deprived. Six services including supplementary nutrition, immunization, health check up, referral services, pre-school education, nutrition and education are being provided from the centers.

Ladli Scheme launched in 2008, is education- linked financial assistance programme for girl child. Financial assistance is provided to a girl child born in Delhi to a family where annual income is less than Rs 1 lakh. Under the scheme, Rs 11,000 is deposited in the name of the girl child and Rs 5000 is added on admission in class I, VI,IX, X and XII. The maturity amount can be claimed when the girl child attains 18 years of age and pass class X and takes admission in class XII.

Pension to Women in Distress scheme, introduced in year 2007-08, helps economically poor women in distress (widow, divorced, separated and destitute) with regular source of income in term of monthly pension. The women resident of Delhi for the last five years, with age proof and having family income less than Rs. 60,000 per annum are eligible.

The scheme for **"senior citizens"** ensures welfare of senior citizens and improving quality of their lives. It aims at providing assistance in form of 'old age pension'.

Under **Antyodaya Anna Yojna** the poorest of poor who are at the starving threshold are being provided food grains per month at a very minimal price.

Programmes for Housing and Basic Service in Karnataka

The **100-housing scheme** is implemented since the year 2002-03. Under this, 96 schemes have been completed at a cost of Rs.1002.94 crores for construction and development of 6067 houses and 26,748 sites. Other 4 schemes are at various stage of construction. The **225-housing scheme** is implemented since the year 2010-11 for construction and development of 305,786 sites and 131,051 houses. Nine schemes have been completed, 31 schemes are at various stages of construction. The procurement of land is in progress for the remaining schemes.

Other schemes include, the **Urban Ashraya Scheme** and **Vajpayee Urban Housing Scheme** implemented since 1991-92 which provides housing to beneficiaries with income below Rs 32,000 per annum. The **Devraj Urs Housing Scheme** started in the year 2014-15 provides housing to the physically challenged, leprosy cures people, HIV affected families, nomadic tribes, *devadasis*, sanitation workers, people affected by communal riots, free bonded labour, widows, orphans living on foot-path, transgender community and others. **Nanna Mane** (Affordable housing for Low-income groups-LIG), introduced in 2010-11 provides housing to people belonging to LIG category such as auto drivers, beedi workers etc, with annual income upto Rs 1 lakh. Apart from these various other central government programmes such as BSUP under JNNURM, RAY, AHP and PMAY are also implemented.

Nirmala Toilets were constructed in the city as a part of public sanitation program. BBMP has handed over the maintenance of these toilets to a private company. The private company provides the service free of cost and recovers it through advertisements which are displayed at the outside the toilet complex.

Night Shelters are provided with basic facilities to the shelterless. These night shelters are managed by NGOs under the supervision of BBMP. The programme also tries to bring urban homeless to the mainstream of the society by converging the benefit under various welfare programmes of the government and provisions the same to the urban homeless.

Participatory Planning

The **Bengaluru Infrastructure and Development Task Force (ABIDe)** was constituted in the year 2010 with the mandate of identifying issues that are cropping up in Bengaluru and propose practical solutions to them. The group comprised of elected representatives, bureaucrats, individuals, business community and urban experts in equal number. They came up with a report titled "Plan Bengaluru 2020,". The report proposed a doable list for various sectors such as governance, lakes and environment preservation, health, education, roads, economy, housing, tourism etc. The group also recommended to conduct studies on transport demand growth, prioritising high mobility pathways, making the outer ring road signal-free, establishes Bengaluru Heritage Commission.

Health and Social Security Programmes for Urban Poor in Karnataka

Health:
The Government of Karnataka is implementing the **Vajpayee Aarogyashree** scheme in 2010 with the aim to provide health care services free of cost to BPL families for treating major diseases that require hospitalisation and surgical procedures. The scheme also has provisions for follow up treatment for one year.

Prasooti Araike Scheme for Pregnant Women and **Madilu Scheme** provide benefits in the form of financial assistance and free health checkup for pre- and post natal care to reduce MMR and increase institutional deliveries.

In **Jana Sanjivini Stores** generic drugs are provided at subsidised cost to reduce out-of-pocket expenditure of the poor people.

The **Aarogya Bhagya-**an Aadhar linked scheme approved in September 2017 aimed at providing free medical assistance, free rice and milk to school students belonging to socially and economically backward classes.

Social Security Schemes:
Pension Schemes: Government of Karnataka has initiated various pension schemes for people below the poverty line. **Sandhya Surakhsha Yojana** is implemented since the year 2007 to help senior citizens to get a monthly pension. The people above 65 years with annual income less than Rs 20,000, are provided with Rs 400 per month as direct cash transfers. The other state sponsored schemes include **Destitute Widow Pension** initiated in 1984 to assist destitute widows in the age group of above 18 years. **Physically Handicapped Pension Scheme** is implemented since 1977 to provide financial assistance to disabled people (blind, mentally retarded, deaf, handicaps and mentally ill). Any child born with disability mentioned under or disability accrued due to accident with disability above 40% is eligible for pension. Under **Manaswini scheme** state government provides a monthly pension of Rs 500 to unmarried/divorcee poor women in the age group of 40 and 64 years. If the beneficiaries get married or get a job, then they become ineligible for the pension. Unmarried or divorcee women above 65 years of age are eligible for financial support under the Indira Gandhi National Old Age Pension Scheme. **Mythri scheme** for transgender started since 2013 to help transgender community and bring them to the mainstream.

Udyogini launched during 1997-98 to assists women in gaining self-reliance through self employment, especially in the trade and service sector. It empowers women by providing loans through banks and other financial institutions. The scheme has gone a long way in preventing women entrepreneurs from private borrowing at higher rates of interest.

3.4. Conclusion

Most of the ULBs in India are weak both in terms of capacity to raise resources and in financial autonomy. Their precarious state of finances as well as their complex institutional and fiscal framework poses a challenge. An important step was taken to empower them to undertake self-resource mobilisation activity through providing them democratic status in 1992 through the 74th Constitutional Amendment Act (CAA). Despite the empowerment and delegation of powers envisioned in the 74th CAA more than two decades ago, most ULBs in India still face resource constraint to even carry out their routine functions. The Financial Reforms Expansion (Debt) component of the USAID launched in the nineties also tried to improve local governance in the country by bringing about financial discipline among the ULBs. However, these piecemeal efforts failed to bring about the desired change in the urban governance structure.

In order to bring about infrastructural development and address the issue of inclusive development, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched in 2005 as a reform-linked investment mission to ensure financially sustainable development of the cities through efficient governance, better infrastructure and improved service delivery. The Eleventh and Twelfth Plan documents envisage the government strategy to "establish the macroeconomic preconditions for rapid growth and support key drivers of this growth". The Eleventh and Twelfth Plan document further adds that the strategy must also include sector-specific policies to ensure that the structure of growth and the institutional environment in which it occurs, achieves "the objective of inclusiveness in all its many dimensions". The main thrust of this mission-mode programme was to ensure improvement in urban governance so that the ULBs become financially sound with enhanced credit rating and ability to access capital market for undertaking new projects.

Most of the ULBs do not have the mechanisms and the requisite skills to carry out project preparation. Capacity building of the ULB officials is perhaps the single most important activity required in today's urban sector. Thus, most of the smaller ULBs could not avail the JNNURM grants as they were unable to prepare DPRs and generate matching resources. It is a fact that the JNNURM has provided for substantial central assistance to cities for infrastructure development, and has indeed been effective in renewing the country's focus on the urban sector. However, the Mission brought about a move towards polarised development with an inbuilt big-city bias.

The present government replaced the former mission with AMRUT, increasing its coverage to all the 500 cities above 100,000 population. However, disbursements under this programme is also linked to reform measures undertaken by the city and much is left to be desired from the small cities which do not have the

wherewithal to adhere to reforms and prepare requisite DPRs for their projects. These cities also suffer from weak municipal finances as the coverage of property tax, which is the most important source of revenue, is very low. The Fourteenth CFC data has also highlighted the decline in the share of own revenues of the local governments. Enforcement of local taxation is weak along with an absence of database on inventories in almost all local bodies. In addition to this, cities covered under the Smart Cities Mission are likely to become more vulnerable as their most important and lucrative revenue streams are to be tied to financing the projects under the Mission[20]. Also, given the recent inclusion of the non-poor in the Housing for All Mission, the focus of the programme is likely to be diluted.

India is currently implementing various urban development and social security programmes. Several reforms have been introduced in recent years and many states are demonstrating innovations in moving towards effective delivery of programs. However, the overall returns of spending in terms of poverty reduction have not reached its potential. Poor administrative structures for delivery of services and lack of capacities in institutions have hindered the effective implementation of programmes. Also, there is multiplicity of programmes and policies since they are administered by various ministries and departments all working in silos. The current Missions are all based on convergence of schemes. This notion should be taken to the grassroot level where the Missions are being implemented. This highlights the need of comprehensive urban and social policy at the national level. The programmes have limited outreach as implementing agencies faces the problem in identifying the right beneficiary. Most of the targeted schemes have not worked efficiently due to inclusion of non-beneficiaries. People working in the unorganised and informal sector are often excluded from such schemes due to income criteria. These people are very vulnerable as they face the risks associated with sickness, accident, unemployment, disability, maternity and old age but are not covered under any of the social security schemes. Many of the evaluation studies of the programmes have reported high leakages of resources especially in PDS scheme and mid-day meal programmes.

Experiences in India and in many other countries have highlighted the benefits of targeted cash transfer. Bihar, for example, has already introduced food stamps or coupons to improve access. At the same time, states such as Tamil Nadu and Chhattisgarh, by enabling effective community participation, robust monitoring and smart IT solutions, have done particularly well in ensuring universal access to transfers in the form of subsidized grain. These diverse experiences stress the fact that immediate and medium-term solutions may facilitate in achieving the ultimate outcome of programmes.

[20] New Urban Agenda in Asia-Pacific: Governance for Sustainable and Inclusive Cities, forthcoming 2018

4. Political and social exclusion in slums: Case studies from Delhi and Bengaluru

4.1 Introduction

The growth scenario in Indian economy in the last one and half decades is viewed optimistically by several development economists and scholars. It is believed that this growth will transform the development pattern in India to be more inclusive. But the regional growth pattern in India shows that the growth is being concentrated around pre-existing agglomeration economies with increasing intra-urban inequality. Migrants from economically backward regions are migrating towards metro cities in search of a better employment, studies and other facilities. A majority of these migrants who are from the poor strata of the rural society live in slums because the land values and rents in the better parts of the city are very high, and the poor cannot afford to live in these areas.

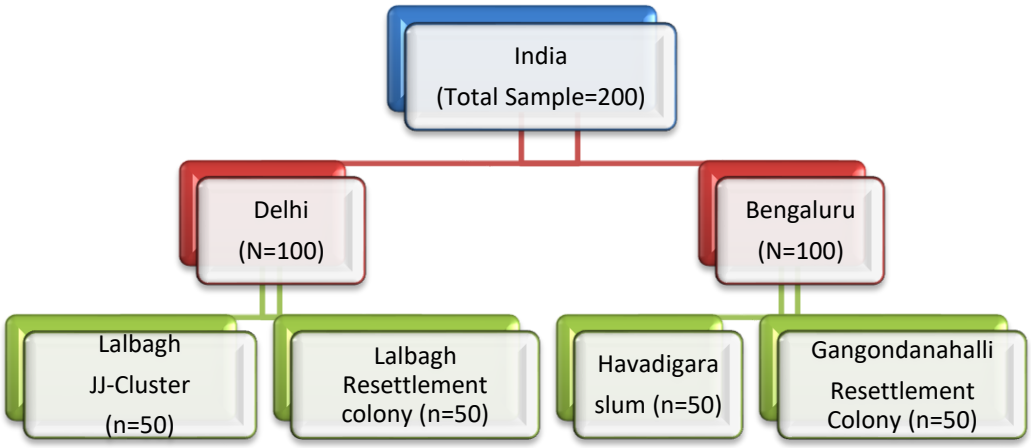
The approach papers to the 11th and 12th Five Year Plans (FYP) have accepted the fact that migrants are the most vulnerable among the poor. Recent literature (Kundu & Saraswati, 2012; Kundu, 2003, 2009, 2011b; Bhagat, 2012) shows that cities are increasingly becoming exclusionary. The policy environment with regard to poor migrants is not conducive. Many city master plans aim to keep migrants at bay; rural development and agriculture policies aim to control out-migration; and migration is viewed as a socially and politically destabilizing process. In the last few decades, demolition and eviction drives of slums have become a routine practice in a bid to make Indian cities world class. This scenario has made the lives of slum dwellers more vulnerable.

In the above context, it is imperative to know the nature of socio-political exclusion faced by slums dwellers in terms of service delivery and governance. It has been observed in the previous analyses of secondary data that there exist considerable differences in the access to urban basic services in the slum households of Delhi and Karnataka (Bengaluru). In order to understand the dynamics at the micro level, the present chapter analyses the condition of basic urban services, gaps in coverage especially with regard to marginalised sections of population residing in slums, and the shortcomings of governance for both the metropolises of Delhi and Bengaluru. Importantly, this chapter is based on primary survey of two slum localities in each city as well as focused group discussions with various stakeholders.

The census of India 2011 shows that Delhi and Karnataka have 10.91 and 13.93 per cent slum population respectively which is lower to the percentage of slum population in India (17.37 per cent). Delhi has five local

bodies namely Delhi Municipal Corporation (DMC), New Delhi Municipal Corporation (NDMC), North Delhi Municipal Corporation (NDMC), East Delhi Municipal Corporation (EDMC) and Delhi Cantonment Board. The primary survey was conducted in a slum area which is located in DMC. DMC has 14.66 per cent slum population and 14.63 per cent slum households. Lalbagh slum was selected for the primary survey from DMC. This slum is located in the north-western part of the city. This slum has two different types of slums, a) resettlement colony and b) Jhuggi-Jhompri cluster. A total of 100 households were surveyed from Lalbagh slum - 50 from each type of squatter. Bengaluru (capital city of Karnataka) is the second city selected for the present study. Bengaluru has only one local body - Bruhat Bengaluru Mahanagara Palika (BBMP). In Bengaluru, the primary survey was conducted in a slum area located in BBMP. It has 8.44 per cent slum population and 8.47 per cent slum households. Havadigara slum and Gangondanahalli/Ahmadnagar resettlement colony were selected from BBMP to conduct the primary survey. Similar to Delhi, 100 households were surveyed from Banglore - 50 from each slum area.

Figure 4.1: Sampling Framework

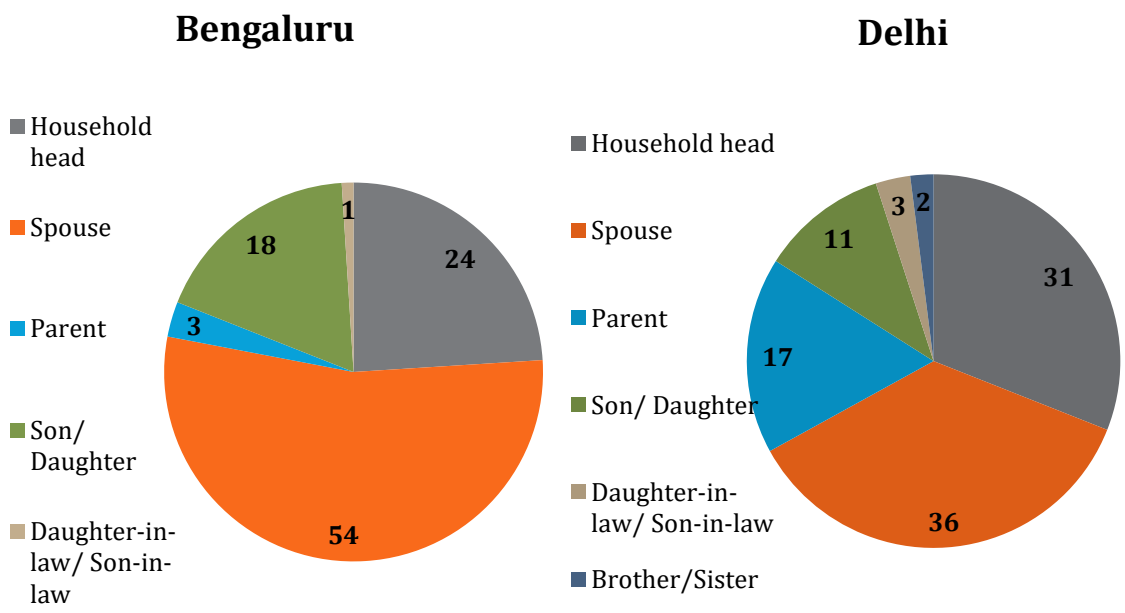


4.2 Socio-Economic characteristics of the surveyed households

4.2.1 Background Characteristics of the respondents

The background characteristics of the respondents were collected during field survey. It is evident from the pie-diagram that majority of the respondents in Bengaluru and Delhi were spouse/wives of the head of the households. Since the survey was conducted during daytime when the head of the households had left for their daily jobs, the respondents were mainly spouses of the head of the households. The head of the households have second highest percentage share among respondents both in Delhi and Bengaluru.

Figure 4.2: Relationship of the respondents with Head of the Households (in %)



Source: Primary Survey, 2017

The other respondents which reported significant shares are parents and son/daughter of the head of the households.

In India, historically social-group (caste) is one of the factors which affect the economic and human capital of a person. In the present study, the percentage share of respondents from general category is highest in Bengaluru followed by Scheduled Castes (SCs) and Other Backward Caste (OBCs). However, the percentage share of the respondents from OBCs is highest in Delhi followed by Scheduled Castes. A total of 7 percent respondents of Delhi also reported that they are not aware about the particular castes from which they belong. The percentage distribution of the respondents across social-groups shows that in comparison to Bengaluru, the percentage share of the respondents from marginalized sections is higher in Delhi.

Table 4.1: Background Characteristics of the Respondents

Background Characteristics	Bengaluru	Delhi
Social-Group (in %)		
Scheduled caste	31	35
Other Backward Caste	20	36
General	49	22
Not Known	0	7

Total	100	100
Religion (in %)		
Hindu	33	79
Muslim	60	21
Sikh	2	0
Christian	3	0
Other	2	0
Total	100	100
Household-Size (in %)		
Single	1	0
2	6	0
3-6	83	63
7 -10	10	33
11 and above	0	4
Total	100	100
Marital Status (in %)		
Married	56	58
Single	19	30
Widower	1	2
Widow	16	9
Separated	8	1
Total	100	100

Source: Primary Survey, 2017

More than 90 per cent of the respondents in present study were only from two religions - Hindu and Muslim. However, there is dissimilarity in the religious composition of the respondents in Delhi and Bengaluru. The households from Hindu religion are more in Lalbagh, Delhi and slums of Bengaluru are populated with Muslim households.

The distribution of the respondents according to household-size shows that in the selected slums for the present study, share of households with more than 2 members is very high. In Bengaluru, 83 per cent households had 3-6 members in the household and 10 per cent households had 7-10 members in the household. The percentage share of the households in these two categories is also very high in Lalbagh slum, Delhi. Total 63 per cent households had 3-6 members in the household and 33 per cent households had 7-10 members in the household.

The marital status of the respondents shows that half of the respondents were married at the time of survey in Delhi and Bengaluru. The percentage share of the respondents who were single at the time of survey is higher in Delhi (30 per cent) in comparison to Bengaluru (19 per cent). A total of 19 per cent respondents in the sample were widows in Bengaluru, however in Delhi, the percentage share was only 9 per cent.

4.2.2 Background information of the Head of the Households

The information about the head of the households was collected during field survey. It was observed that most of the head of the households were principal bread earners of their households. The age-group wise percentage distribution of the head of the households show that majority of them were in their forties or fifties. In comparison to Delhi, the percentage share of the head of the households who were less than 30 years of age at the time of survey was higher in Bengaluru. It shows that head of the households in the sample in Bengaluru are relatively younger than Delhi.

Table 4.2: Background Characteristics of the Head of the Households

Background Characteristics	Bengaluru	Delhi
Age of the Head of the Households (in %)		
Less than 30	22	8
31-40	47	26
41-59	27	52
60 & Above	4	14
Total	100	100
Education Level of the Head of the Households (in %)		
Illiterate	41	39
Up to primary	46	20
Middle	3	12
Secondary	8	23
Higher secondary	2	3
Graduation/ Diploma	0	3
Total	100	100
Employment Status of the Head of the Households (in %)		
Casual Labour (including piece rate workers/contractual workers)	49	26
Self Employed	32	46
Regular Salaried Private	11	10
Regular Salaried Public	2	1
Unemployed/out of Labour force	6	17
Total	100	100

Source: Primary Survey, 2017

The percentage shares of the head of the households who were illiterate and educated up to primary level were high both in Bengaluru and Delhi. However, in comparison to Bengaluru, the education level of the head of the households in Delhi was much better.

The employment status of the head of the households shows that half of the head of the households in Bengaluru were casual labourers and 32 per cent were self-employed. In casual workers, majority of the head of the households were labour in construction sector, working as porters and freight-loaders. Among self-employed, working as driver, doing petty business like selling ready-made garments, making incense sticks and vegetable-vending were the main occupation in which head of the households were involved. In Delhi, the head of the households who were self-employed (mainly street vendors selling fruits and vegetables) have highest percentage share followed by casual labourers.

A majority of the head of households in Delhi were migrants (83%) and three-fourth of them were from rural areas. The two states from which a significant percentage of head of the households belong are Uttar Pradesh

(53%) and Bihar (24%). Aligarh and Agra districts of Uttar Pradesh and Arrah and Begusarai districts of Bihar are the main districts from which a majority of the head of the households migrated to Delhi. In case of slums of Bengaluru, 31 per cent head of households were migrants of which 92 per cent were intra-state migrants from villages within different districts of Karnataka such as Chitradurga, Bidar and Gulbarga. Another 5% were from Tamil Nadu. 84 per cent head of the households from Bengaluru and 85.3 per cent of head of the households from Delhi reported "in search of employment" and "to take a better employment" as primary reasons for migration. Other minor reasons were health and personal issues (6.1%) and higher education and marriage (8.5%) etc.

In Delhi and Bengaluru, the percentage of the head of the households who were working in the primary sector before migration was 13 per cent and 8 per cent respectively. Migration was a household decision for more than 90 per cent migrants in both cities, though a small percentage of migrants in Delhi and Bengaluru migrated with relatives and co-villagers. Thus, evidently social network played an important role in the process of migration. In the initial period of stay in both the cities, head of the households relied on friends and relatives who not only provided food and shelter but also helped the head of the households financially and in searching jobs.

4.3 Status of Housing and Basic Amenities

The ownership of the house in slums provides a great sense of security which plays an important role in the quality of lives of households. 53 per cent of the households in Delhi and 36 per cent in Bengaluru reported that they owned their houses. However, one third of the households in the selected slums of Delhi and Bengaluru reported that they live in houses allotted by government on lease. A total of 29 per cent households in Bengaluru and 11 per cent households in Delhi lived in rented houses.

Table 4.3: Housing conditions and status of basic civic amenities in sample households (in %)

Housing and Basic Amenities		Bengaluru	Delhi
Ownership status of House			
Owned	Owned/Purchased	36	53
	Allotted by Government on Lease	35	36
Rented		29	11
Total		100	100
Housing Structure			
Katcha		4	0
Semi-Concrete (pucca)		29	6
Concrete (Pucca)		67	94
Total		100	100
Availability of Kitchen			

Yes	53	22
NO, Outside Premises	7	2
NO, Inside premises	40	76
Total	100	100
Types of Cooking Fuels		
Firewood	17	0
Kerosene	2	0
LPG	80	100
Electricity	1	0
Total	100	100
Availability of Bathroom Facility		
Attached (inside premises)	59	33
Detached (outside premises)	40	10
No bathroom	1	57
Total	100	100
Availability of Toilet Facility		
Inside	53	12
Outside	27	6
No toilet	20	82
Total	100	100
Drainage Facility of Households		
Covered Pucca	79	53
Open Pucca	21	44
Open Katcha	0	2
No Drainage	0	1

Source: Primary Survey, 2017

The housing structure reported by respondents shows that a majority of the households in Bengaluru (67%) and Delhi (94%) lived in concrete houses. The percentage share of the households who lived in semi-concrete houses was much higher in Bengaluru (29%) as compared to Delhi (6%). However, households living in *katcha* houses were reported only in Bengaluru and their percentage share was very low (4%).

Availability of a separate kitchen is an indicator which is linked to the well-being of the households. The results from the field study show that availability of kitchen is higher in Bengaluru as compared to Delhi. However, a very high percentage of households in Delhi (76%) and Bengaluru (40%) reported that they do not have separate kitchen and they cook inside their premises. It was observed during field survey that the walls of houses in slums adjoined to each other and there were hardly any windows. In this context, indoor cooking becomes one of the major catalysis for respiratory diseases. Among the members of the households, children and women were the most affected groups because they spend most of the time indoors.

The positive impacts of interventions of government schemes to avail clean fuel such as 'Kerosene Free Delhi' and 'Ujjawala Yojana' is reflected in the use of fuels in the slums of Delhi and Bengaluru. All households in Delhi reported that they use LPG as cooking fuel whereas 80 per cent of the households in Bengaluru used the same for cooking. In Bengaluru, firewood is the second most important fuel as 17 per cent of the households reported that they use it for cooking.

In terms of availability of bathroom facility in households, the situation is far better in Bengaluru in comparison to Delhi. 59 per cent of the households in Bengaluru had bathroom inside their premises, 40 per cent had bathroom outside their premises and only 1% of the households reported that they did not have a bathroom facility. In contrast, the percentage share of the households who did not have bathroom facility in their house is 57 per cent in Delhi. Only one third of the households in Delhi reported that they had bathrooms inside their premises.

The condition of sanitation is very poor in Delhi as 82 per cent households reported that they do not have toilets in their houses. In comparison to Delhi, the situation is much better in Bengaluru where 53 per cent households reported that they have toilets inside their premises and 27 per cent reported that they have toilet facilities outside their premises. Only 20 per cent households reported that they do not have toilet facility.

The drainage facility in slums of Bengaluru is better in comparison to Delhi as 79 per cent households reported that they have covered pucca drainage attached to their house. However, 21 per cent households reported that they have open pucca drainage attached to their house. In contrast, the percentage share of the households with access to covered pucca drainage attached to their house is 53 per cent. 44 per cent households in Lalbagh Delhi had open pucca drainage attached to their house, 2 per cent had open katcha drainage and 1 per cent households had no drainage attached to their houses.

4.4 Possession of different types of documents

Possession of certain documents that provide various social security and access to welfare schemes help in empowering the urban poor. The *Jan Dhan Yojana (JDY)* and *Aadhar* have been successful in slums of Bengaluru and Delhi as a very high percentage of slum households own *Aadhar* card and savings bank account. The current scheme of the government to link *Aadhar* card with PDS scheme is likely to plug the leakages in distribution of food to the poor. In Delhi and Bengaluru, the percentage of ration card holders which ensures food supply through public distribution system at subsidized rates is also significantly high, 81% and 95% respectively. One of the interesting findings is the possession of voter-identity card by 80 per

cent of respondents in Delhi and Bengaluru. The possession of a voter ID gives a sense of the slum dwellers right to the city.

It is always difficult for slum dwellers to obtain caste certificate at place of destination because the list of scheduled castes differs from one state to the other. It is evident from the results of primary survey as only 46 per cent respondents from Bengaluru and 49 per cent respondents from Delhi reported that they have caste certificate. The percentage of respondents with possession of pension documents, disability cards and health cards of any member of family is insignificant/very low. A total of 19 per cent respondents in Bengaluru and 32 per cent in Delhi had driving license at the time of survey.

Table 4.4: Possession of different documents by sample households (in %)

Documents Owned	Bengaluru	Delhi
Ration card	81	95
Passport	1	7
Electricity Bill	75	97
Driving License	19	32
Voter Card	81	80
Bank Account	85	80
Caste Certificate	46	49
Pension Documents	5	20
Disability Card	2	4
Health Card	4	14
Aadhar Card	97	99

Source: Primary Survey, 2017

4.5 Community Organisation and Participation

Participation in community living is one of the important aspects of urban living as it strengthens local democracy and aids in collectivizing voices for safeguarding interests. Knowledge of the local surrounding with regard to the social, physical and economic environment of the slums forms the foundation of community organisation. Mass media and in recent times ICT have empowered residents to be aware of the situation and voice their demands. However, the relatively poor financial condition, instability in employment, and illiteracy has stood in the way of empowerment of the slum dwellers.

4.5.1 Use of Communication Media

The information about use of communication media by slum dwellers can be used by government at different level to effectively communicate the benefits of different programmes and schemes running for the urban poor. The government can also engage itself by reaching out to the marginalized sections of slums through the most effective mode of communication media.

Table 4.5: Frequency of use of communication media by respondents

Communication Media	Frequency of Use (in %)					
	Never	Rarely	Occasionally	Regularly	Very regularly	Total
Bengaluru						
Newspaper	84	12	3	0	1	100
Television	10	0	1	22	67	100
Mobile Phone	7	1	5	26	61	100
Radio	89	2	7	2	0	100
Internet	97	0	2	0	1	100
Public Announcement	41	16	33	10	0	100
Delhi						
Newspaper	64	6	11	8	11	100
Television	7	5	8	43	37	100
Mobile Phone	15	9	9	34	33	100
Radio	86	3	7	2	2	100
Internet	70	3	8	11	8	100
Public Announcement	78	8	10	1	3	100

Source: Primary Survey, 2017.

The results from the above table show that television and mobile phones are the main modes of communication in Bengaluru and Delhi as the percentage share of the respondents who are regular users of mobile phones and television is significant in both cities. Havadigara colony in Bengaluru, where the proportion of Hindu families is higher, performs better in ownership of television, newspaper reading habit, and in mobile coverage. This reflects that this slum is socio-economically more prosperous than Gangondanahalli. In case of Delhi, there is not much visible difference between the JJ cluster and Resettlement Colony except the proportion of regular to very regular users of television and mobile phones being high in the resettlement colony. A significant percentage of households from the JJ-Cluster and Resettlement colony never read newspaper, use radio, internet and public announcement as medium of mass communication. It is striking to note that internet users are comparatively higher in Delhi than Bengaluru. Therefore, to improve the outreach of the slum dwellers of Delhi and Bengaluru, government and civil society can use television, mobile phones and internet. To spread information related to health and hygiene, immunization programmes and other schemes of government, local bodies use loudspeakers as mode of

communication for public announcement. But, the percentage share indicates that it is used occasionally in Delhi (33%) and Bengaluru (10%).

4.5.2 Involvement in Community Organisation and Activities

Functioning of Mohalla Sabha/Ward Committees and peoples' participation

The 74th Constitutional Amendment Act in India made a provision of ward committees for effective ward level governance. The ward committee is empowered to control all local issues which could be handled at ward level such as street lighting, sanitation, water supply, drainage, road maintenance, maintenance of public buildings etc. and the maximum participation of citizen in meetings of ward committee is ensured to discuss the affairs related to local governance. However, in many cities empowerment of the ward committees is yet to happen. In order to bring about decentralized governance, Jawaharlal Nehru Urban Renewal Mission (JNNURM) which was launched in 2005, had a provision of Area/Mohalla Sabha to ensure citizen participation in local governance. In this context, the information related to functioning of Mohalla Sabha/ward committees and peoples' participation was collected during field survey to ascertain the degree of decentralization of local government.

The results from the primary survey show that the knowledge about existence of Ward Committee/ Mohalla Sabha is higher among respondents of Bengaluru (76%) as compared to Delhi (17%). The respondents in Bengaluru also reported that ward committee/mohalla sabha meet regularly (weekly-16%, monthly-59%) to discuss the issues related to local governance and a high percentage of respondents (65%) were aware about the last meeting of ward committee/mohalla sabha. The condition is not very promising in Delhi as 61% respondents were not aware about the frequency of meetings of ward committee/mohalla sabha and the last meeting of the ward committee/mohalla sabha.

The awareness level about ward committee/mohalla sabha among respondents has an impact on the membership of ward committee/mohalla sabha. A total of 61 per cent respondents in Delhi reported that they were not aware about the ward committee/mohalla sabha and therefore the respondents and other members of their family were not member of ward committee/mohalla sabha at the time of survey. However, in comparison to Delhi, the percent of the respondents who were member of the ward committee/mohalla sabha is much higher (28%). A total of 20% respondents of Bengaluru reported that other members of their family are also members of ward committees/mohalla sabhas.

Table 4.6: Functioning of ward committee/mohalla sabha and peoples' participation (in %)

	Bengaluru	Delhi
Ward Committee/ Mohalla Sabha in slum		
No	24.0	83.0
Yes	76.0	17.0
Total	100.0	100.0
Frequency of Meetings of Ward Committee/ Mohalla Sabha		
Weekly	16.0	0
Fortnightly	0	1.0
Monthly	59.0	12.0
Never	0	26.0
Not Aware	25.0	61.0
Total	100.0	100.0
Awareness about Last Meeting of Ward Committee/ Mohalla Sabha		
No	11.0	28.0
Yes	65.0	11.0
Not Aware	24.0	61.0
Total	100.0	100.0
Respondents' Membership to Ward Committee/ Mohalla Sabha		
No	48.0	32.0
Yes	28.0	7.0
Not Aware	24.0	61.0
Total	100.0	100.0
Membership of other family members to Ward Committee/ Mohalla Sabha		
No	56.0	32.0
Yes	20.0	7.0
Not Aware	24.0	61.0
Total	100.0	100.0
Attended Last Meeting of Ward Committee/ Mohalla Sabha		
No	68.0	96.0
Yes	32.0	4.0
Total	100.0	100.0

Source: Primary Survey, 2017.

A question related to the participation of the respondents who were members of ward committee/mohalla sabha was asked during field survey. The figures show that the participation of respondents of Bengaluru in the last meeting of ward committee/mohalla sabha was much higher as compared to Delhi. A very high percentage (96%) of respondents from Delhi did not participate/attend the last meeting of ward committee/mohalla sabha.

Political Participation

Participation in election and casting of vote shows the trust of citizen in democracy. The voting age in India is 18 years. The political participation of the respondents and their family members was assessed by asking whether the family members (aged 18 and above) cast their vote in last three elections and if they had cast what was their voting behaviour. The results show that in comparison to Delhi, the political participation of slum dwellers in Bengaluru was much higher as 81 per cent respondents reported that their family members participated in all three elections. However, 53 per cent respondents of Bengaluru reported that their family members participated only in one election and 36 per cent respondents reported that their family members participated in two elections. 10 per cent respondents in both cities reported that none of their family members participated in the last three elections.

Table 4.7: Political participation of slum dwellers in Bengaluru and Delhi (in %)

	Bengaluru	Delhi
Voted in last three elections		
Not voted	10.0	10.0
Voted only in one election	53.0	6.0
Voted in two elections	36.0	3.0
Voted in all three elections	1.0	81.0
Total	100.0	100.0
Voting Behaviour		
Family members vote in active and voluntary way	83.0	87.0
Local leadership engaged us to vote	16.0	3.0
Influenced by working of previous leadership	0.0	9.0
Others	1.0	1.0
Total	100.0	100.0

Source: Primary Survey, 2017.

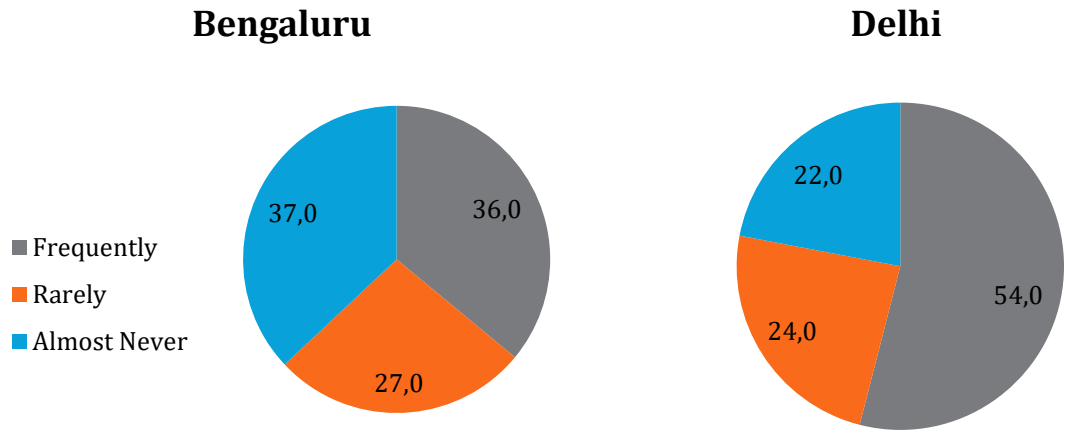
The voting behaviour shows that more than 80 per cent of the respondents and their family members (18 and above) in slums of Delhi and Bengaluru voted actively and voluntarily in the last three elections. The engagement of local leadership in casting vote was second most important reason which affected the voting behaviour of slum dwellers in Bengaluru. However, in Delhi influence of working of previous leadership was the second most important reason which affected the voting behaviour of slum dwellers.

Participation of women in public affairs of slums

From the perspective of women empowerment, women should actively engage themselves in community matters. This not only ensures democratic rights that constitution bestows to be safeguarded but also

harbours gender equity in planning and meticulous detailing in policy formulation which might be overlooked or generalised in the absence of women representatives.

Figure 4.3: Participation of women in public affairs (in %)



Source: Primary Survey, 2017.

The participation of women in public affairs is higher in Delhi as compared to Bengaluru. 54 per cent respondents in Delhi reported that women frequently participate in the public affairs. However, in Bengaluru only 36 per cent respondents reported that women frequently participate in the public affairs. The percentage of respondents who reported that women almost never participate in public affairs is 37 per cent in Bengaluru and 22 per cent in Delhi. A striking observation in this study is that a higher proportion of respondents in the relatively better off slum pockets of Havadigara in Bengaluru and Resettlement Colony in Delhi opine that women almost never participate in public matters unlike a much smaller proportion of respondents in Gangondanahalli, Bengaluru and in Lalbagh JJ cluster, Delhi. The inference that can be drawn from this observation is that in poorer slum localities that face greater deprivation, women are more proactive in putting their problems at public forums.

Community Participation

The results from the primary survey indicate that local leadership and community members have the final word in community issues both in Bengaluru and Delhi. The gender equality in community issues is more in Bengaluru as compared to Delhi as 78 per cent respondents from Bengaluru reported that men and women both equally play active roles in community issues. In Delhi, 42 per cent respondents reported that men play more active roles in community issues and 41 per cent respondents reported that men and women both equally play active roles in community issues. In comparison to Bengaluru, a higher percentage of respondents of Delhi (17%) reported that women play more active role in community issues.

Table 4.8: Community Participation of slum households (in %)

	Bengaluru	Delhi
Final word in Community Issues		
Local Leadership	42.0	36.0
Representative of leadership	0.0	9.0
Community members	47.0	41.0
Influential locals who are not in leadership	0.0	5.0
Others	0.0	8.0
No Comments	11.0	1.0
Total	100.0	100.0
Gender Equality in community issues		
Equal Participation	78.0	41.0
Men play more active roles	15.0	42.0
Women play more active roles	7.0	17.0
Total	100.0	100.0
Minorities Participation in Community Affairs		
No	7.0	35.0
Yes	93.0	65.0
Total	100.0	100.0

Source: Primary Survey, 2017.

The figures from above table show that the participation of minorities in community affairs is much higher in Bengaluru as compared to Delhi. A total of 93 per cent respondents of Bengaluru reported that minorities do participate in community affairs. However, in Delhi this percentage share is comparatively low, i.e. 65 per cent.

The importance given by respondents to the communication with fellow citizens and the methods through with they communicate is also examined during field survey. The results clearly show that slum dwellers gave importance to the communication with fellow residents as 83 per cent respondents from Bengaluru and 94 per cent respondents from Delhi reported that they give importance to the communication with fellow residents.

Table 4.9: Involvement of the households/respondents with community (in %)

	Bengaluru	Delhi
Importance of communication with fellow residents		
No	17.0	6.0
Yes	83.0	94.0
Total	100.0	100.0
Communication Method to Fellow Residents		
Chat when dropping by items	24.0	69.0
Chat when meeting in community public space	14.0	16.0

Telephone/SMS/Online	0.0	1.0
Meeting by NGO/SHG/Local Leadership	51.0	9.0
Other ways	1.0	5.0
All of the Above	2.0	0.0
No answer	8.0	0.0
Total	100.0	100.0
Willingness to Engage other Community		
No	29.0	22.0
Yes	71.0	78.0
Total	100.0	100.0
Trust in Local Leadership		
No	11.0	36.0
Yes	89.0	64.0
Total	100.0	100.0
Trust neighbours from other Religion		
No	4.0	24.0
Yes	96.0	76.0
Total	100.0	100.0

Source: Primary Survey, 2017

Meetings organized by NGOs/SHGs/Local leadership are the main communication method reported by respondents of Bengaluru where they interact with each other. The 'chat when dropping by any items' and 'chat when meeting in community public space' are the two other methods of communication through which slum dwellers of Bengaluru interact with other fellow residents. However, 'chat when dropping by any items' is the main method of communication to the respondents of Delhi to communicate with fellow residents.

The present study shows that there is trust among slum dwellers towards fellow residents from other regions, religions and social groups and furthermore, they trust the leadership of local leaders. A total of 71 per cent respondents from Bengaluru and 78 per cent respondents from Delhi reported that they are willing to engage with another community for the overall welfare of the slum. 96 per cent respondents from Bengaluru and 76 per cent from Delhi reported that they trust their neighbours from another religion. Similarly, 89 per cent respondents from Bengaluru and 64 per cent respondents from Delhi reported that they trust their local leaders.

4.6 Self-Help Groups and NGOs: Presence and Coverage

Self-help groups (SHGs) are associations of people with common interests who co-operate each other by pooling money and other resources. It provides help to the members at time of emergency/particular need. SHGs are non-institutional sources that assist small business ventures with soft and easy money loans which

are of importance especially to the capital scarce women entrepreneurs. A total of 74 per cent of slum dwellers from Lalbagh, Delhi and 58 per cent of slum dwellers of Bengaluru were aware about the presence of SHGs in slums. In case of Delhi, the percentage share was high because many SHGs operated by the World Vision NGO in which women were active members. A total of 58.2 per cent respondents from Bengaluru and 48.8 per cent respondents from Delhi reported that they are members of SHGs. In comparison to the resettlement colonies, the percentage share of the households who were members of SHGs was high in JJ-Clusters. This shows that a high percentage of poorer slum dwellers take membership in SHGs in comparison to others because of need of money for any emergency situation.

Table 4.10: Distributions of Slum Households and Marginalised Sub-groups by Participation in SHGs and NGOs (in %)

SHGs/NGOs	Bengaluru	Delhi
Presence of SHGs	58.0	74.0
Membership to SHGs	58.2	48.8
NGO Participation	64.0	63.0
Willingness to Participate regularly in meetings organized by NGO	81.0	81.0

Source: Primary Survey, 2017.

The prominent presence of World Vision in slums has resulted in participation of the slum dwellers in local governance. NGOs play an active role in mobilising and organising the slum population for a common cause which is holistic improvement in the lives of slum dwellers. The NGO often works as a mediator and presents the issues of slum dwellers with the local officials/authorities. It also provides formal/informal education to the children of slum dwellers and medical facility and assists the slum residents in collectively improving their quality of living. A total of 63 per cent of slum dwellers of Delhi participated in meetings organized by NGOs. Bengaluru also has a similar share of 64 per cent. The willingness of respondents to participate regularly in the meetings organized by NGOs indicates the positive role of NGOs for advocating the rights of slum dwellers to the city authorities.

4.7 Vulnerability Assessment

Slum settlements are vulnerable to flooding, earthquakes, spread of any communicable disease/health epidemics, fire etc. Earthquake tremors easily can flatten out slum settlements which generally use temporary and non-combative construction materials like mud, plastic, thatch etc. At times of disaster, closely spaced tenements with narrow alleys, choked approach lanes and dense habitation of population make rescue and evacuation operation a daunting task compared to the non-slum settlements of the city. Moreover, unhygienic and insanitary living conditions help the proliferation and the rapid spread of communicable diseases such as dengue, malaria, water-borne disease outbreaks like typhoid, hepatitis and diarrhea.

Table 4.11: Risks faced by households in Bengaluru and Delhi (in %)

Risks faced in last 5 Years	Bengaluru (%)	Delhi (%)
Flood	37	1
Fire	0	32
Lack of Drainage after heavy rain	46	79
Health Epidemics	16	94
Earthquake	14	36
Other Disasters	1	0

Source: Primary Survey, 2017.

Note- The addition of response related to risks faced in last 5 years is not 100% because the percentage is for each type risks only.

The slum respondents of Bengaluru reported that during the last five years, they have faced flood (37%), clogged drainage due to intense rainfall (46%) and health epidemics such as dengue, chikungunya etc. (16%) as main disaster. In Delhi, the incidence of health epidemic especially dengue (94%), sewerage clogging and consequent water logging (79%), earthquake (36%) and fire hazards (32%) were the main disasters in last five years. Massive outbreak of dengue has been a regular health epidemic in Delhi in the last decade. Though preparedness of health officials and public and private hospitals has improved but the health status of the slum dwellers has hardly improved. The respondents of Delhi reported that the fire gutting down slum shanties is very common in Delhi.

At slum level, the proper planning related to disaster management is lacking in most of the Indian cities and in the absence of proper planning, any natural or man-made disaster results in loss of human lives. The situation is similar in Delhi and Bengaluru. It was observed during the field survey that there was no community level preparedness to face natural and man-made disasters.

Table 4.12: Preparedness of the government departments to provide basic services during Disaster (in %)

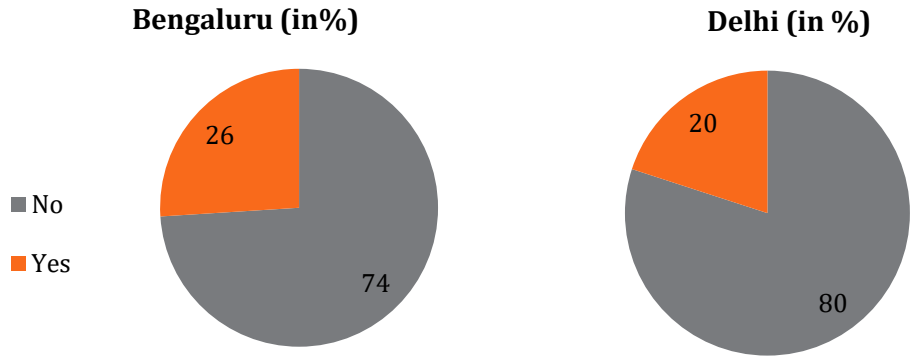
Preparedness of the Government departments to provide Basic Urban Services at the time of disasters	Bengaluru (%)	Delhi (%)
Not prepared at all	51	31
Poor preparation	23	45
No idea	20	15
Somewhat prepared	5	9
Satisfactorily prepared	1	0
Total	100	100

Source: Primary Survey, 2017.

The slum dwellers depend on government departments, NGOs and civil societies to avail basic urban services during disasters. In this context, the perception of respondents about preparedness of the government departments to provide basic urban services at the time of disasters was collected during field survey. Half of the respondents from Bengaluru believed that government departments are not prepared at all to provide basic services at the time of any disaster. The percentage share of the respondents with similar views was 31 % in Delhi. In comparison to Bengaluru, the percentage of respondents who believed that the government departments are poorly prepared to provide basic services at the time of disasters is higher in Delhi. The results clearly indicate that the respondents who believed in the preparedness of government departments to provide basic amenities/services at the time of occurrence of natural disasters are very low in both cities.

The participation of marginalized communities in the planning and development process is limited in India. Factors like illiteracy and low level of awareness are responsible for this. The knowledge of government programmes facilitates the marginalized communities to avail the benefits from these programmes. It was observed during field survey that a small share of respondents of Lalbagh (20%), Delhi were aware about Jan-Dhan Yojana, Ladli Scheme, Ujjawala Yojana and Kerosene Free Delhi scheme. In Bengaluru, the percentage of respondents who had knowledge about centrally sponsored/state sponsored welfare schemes was slightly higher (26%) as compared to Delhi but most of them were only aware about the schemes related to housing and sanitation.

Figure 4.3: Awareness about Government Plans/Programmes



The respondents of Delhi were of the view that in spite of a large number of migrants living in Lalbagh slum, there were no migrant specific schemes. The respondents from both cities (Delhi and Bengaluru) were of the opinion that most of the welfare schemes in slums are women, youth and children centric. The women respondents believed that NGOs and local leadership have made significant contribution toward their development.

4.8 Scale of deficits in access of the marginalized groups to urban services

Accessibility of basic amenities and services is one of the indicators which show the inclusion of marginalized groups of the society in development process. It is evident that people living in slums are generally deprived from proper access to basic civic amenities. The results from the present study show that access to safe drinking water is much better in slums of Bengaluru as compared to Delhi as 99 per cent households in Bengaluru use tap water as main source of drinking water. The sanitation condition is also good in Bengaluru as compared to Delhi. Only 20 per cent households were dependent on the public/community toilets. However, in Delhi a total of 82 per cent households were dependent on public/community toilets. The private companies are involved in for distributing electricity in slums and, therefore, all slum households of Bengaluru and Delhi in present study has access to electricity connections in their houses.

Table 4.13: Access to shelter and vital services by households in Bengaluru and Delhi (in %)

Access to shelter and vital services	Bengaluru		Delhi	
	Yes	No	Yes	No
Safe Drinking water	99	1	78	22
Community level Sanitation and Waste Disposal	80	20	18	82
Electricity	100	0	100	0
Food	81	19	95	5
Primary Health Care Facilities	100	0	60	40
Education Facilities	34	66	74	26

Source: Primary Survey, 2017.

Subsidized food through PDS was available for slum dwellers of Delhi and Bengaluru as 95 per cent households in Delhi and 81 per cent households in Bengaluru had ration cards at the time of the survey. A significant percentage of households reported that fair price shops are near (within 1 to 3 km.) to their house and they get ration regularly but they were not happy with the quality of ration provided through fair price shops.

The access to primary health-care facilities was better in Bengaluru as compared to Delhi as all sample households in Bengaluru slums reported that they had primary health care facilities near by their houses. However, in Delhi only 60 per cent households reported that they had primary health care facilities near by their houses.

In comparison to Bengaluru, the access to education facilities (primary and secondary government/private schools) was much better in Delhi as 74 per cent households reported that they had access to education facilities within the reach of their houses.

The following table shows that, the respondents in Delhi and Bengaluru received assistance from central government in the form of money (cash transfer to beneficiaries account as pension/scholarship etc.) and medical services. The state government provided food, electricity and medical services to the sample households of Delhi and Bengaluru. The slum households of Delhi and Bengaluru received basic urban services such as water and waste-disposal from urban local bodies (ULBs). Moreover, the households from Lalbagh slum, Delhi reported that the ULBs have also opened a shelter home in their slum. The children from the slum households of Delhi and Bengaluru were also going to schools run by ULBs.

Table 4.14: Types of Support and its Source in Bengaluru and Delhi

Types of Support	Sources of Support				
	Central Govt.	State Govt.	Local Govt.	Sub-District	NGO
Cash	√ ×				
Food (including subsidized food from PDS)		√ ×			
Water			√ ×		
Electricity		√ ×			
Waste Disposal			√ ×		
Restroom					
Medical Services	√ ×	√ ×			
Shelter Home			√		
Work Opportunities					√ ×
Skills Training					√ ×
Agricultural inputs					
Mental Health Services					
Clothing					
Schooling to Children			√ ×		√ ×

Note- √ - Delhi × Bengaluru

Along with the government, NGOs are also playing an important role for providing assistance to the slum households. The respondents from Delhi and Bengaluru reported that NGOs are helping them in providing work opportunities and skill training. They are also playing an important role by providing informal schooling to the children of slum dwellers.

There were several issues raised by respondents at the time of the survey related to services provided by government. There were high levels of inclusion errors in the list of beneficiaries. Late and poor delivery of services and no/poor implementation of different schemes promised by the officials were the other issues highlighted by slum dwellers.

4.9 The expected role of local government dealing with service delivery and access to social security programmes

The most vulnerable section of the urban society lives in slums. In case of disaster (natural or man-made) they need more help from government and therefore, they have high expectation from the government for provisioning of services and improving other infrastructure.

A question related to the expected role of local government dealing with different kind of services and their access to marginalized sections of the society was canvassed during field survey. The respondents of the

Bengaluru reported that they expect high/very high priority to the following services by their ULBs at the time of disaster:

- Door to door awareness campaign
- Support for elderly & disabled people
- Cleaning & maintenance of shelters, toilet complexes & drainage
- Support to community based preparedness for disasters
- Arranging local transport for moving to shelter

However, their expectation from government to prioritize the following services is very low (including some priority)

- Proper public announcement
- Helping to build community level shelters
- Mobilizing community member
- Proper public announcement

In comparison to Bengaluru, the slum households of Delhi had low level of expectation from the local government. For majority of services, the percentage share of the respondents who had given low priority to provisioning of the listed services was very high as compared to Bengaluru.

Table 4.15: Expectation of service provision by the local government at time of any disaster (in %)

Services	Low Priority	Some Priority	Priority	High Priority	Very High Priority	Total
Bengaluru						
Proper public announcement	8	31	39	11	11	100
Helping to build Community level shelters	9	32	22	24	13	100
Mobilizing community member	1	38	30	20	11	100
Door to door awareness campaign	1	15	7	45	32	100
Support for elderly & disabled people	0	6	36	40	18	100
Cleaning & maintenance of shelters, toilet complexes & drainage	9	12	34	30	15	100
Community based Preparedness for disasters	1	9	30	17	43	100
Developing more Infrastructure for resilience	31	20	6	18	25	100
Arranging local transport for moving to shelter at the time of disaster	10	21	17	47	5	100
Delhi						

Proper public announcement	29	10	8	43	10	100
Helping to build Community level shelters	41	15	4	32	8	100
Mobilizing community member	42	19	7	19	13	100
Door to door awareness campaign	42	6	3	36	13	100
Support for elderly & disabled people	31	17	16	19	17	100
Cleaning & maintenance of shelters, toilet complexes & drainage	19	21	14	24	22	100
Community based Preparedness for disasters	46	14	26	12	2	100
Developing more Infrastructure for resilience	23	14	16	30	17	100
Arranging local transport for moving to shelter at the time of disaster	36	12	21	29	2	100

Source: Primary Survey, 2017.

The respondents of the Delhi reported that they expect the local government to give high/very high priority to the following services:

- Proper public announcement
- Helping to build community level shelters
- Door to door awareness campaign
- Cleaning & maintenance of shelters, toilet complexes & drainage
- Developing more infrastructure for resilience

Their expectation from government to give low priority (including some priority) to the following services:

- Mobilizing community members
- Support for elderly & disabled people
- Community based preparedness for disasters
- Arranging local transport for moving to shelter

Various social protection programmes have been launched by the government to support the marginalized sections of the society which includes programmes related to livelihood, housing, credit/loan for starting new business, health care and children's education. The priority levels given for different social protection programmes by respondents were recorded during field survey. Respondents from Bengaluru had given highest priority to the health care programmes and credit/loan for starting new business.

Table 4.16: Expectation of respondents to the access to social protection programmes (in %)

Access	Low Priority	Some Priority	Priority	High Priority	Very High Priority	Total
Bengaluru						
Livelihood	0	8	49	26	17	100
Housing	0	33	39	21	7	100
Health Care	5	2	14	41	38	100
Credit/Loan from govt. for starting new business	30	3	13	46	8	100
Children's education	0	24	39	12	25	100
Delhi						
Livelihood	41	8	11	33	7	100
Housing	30	10	20	26	14	100
Health Care	16	18	27	28	11	100
Credit/Loan from govt. for starting new business	43	8	26	21	2	100
Children's education	19	11	26	34	10	100

Source: Primary Survey, 2017

It has been observed during field survey that in comparison to Bengaluru, the respondents of Delhi had low level of expectation from local government for provisioning of social protection programmes. The respondents from Lalbagh slums of Delhi had given highest priority to the programmes related to health care, livelihood and education for their children and desired to be included in the list of beneficiaries of social protection schemes.

4.10 Level of overall Satisfaction

4.10.1 Overall assessment of sense of safety/confidence

In this section, the level of confidence and sense of safety that the respondents feel about the service delivery, their surroundings and the institutional features of their local government/NGO/community is critically analysed using a five-point Likert scale. The selective aspects are picked up for people's feedback and criticism such as natural environment, current living place, drinking water, public safety, women and children safety, government policy, local government, community leadership and NGOs.

The assessment of sense of safety/confidence of respondents of Bengaluru shows that they had very high level of satisfaction for the work done by NGOs. However, their satisfaction level was very low/low for the government policies and towards local government. The results from the following table also show that the respondents had medium to high level of satisfaction with the natural environment of the slum, current living

place, drinking water avail by them, public safety, women and children safety and on the community leadership.

The responses from slum dwellers of Delhi are not as promising as Bengaluru. The respondents of Lalbagh, Delhi have very low/low level of satisfaction to most of the aspects for which level of satisfaction was assessed except NGOs for which they had medium/high level of satisfaction.

Table 4.17: Sense of Safety/confidence among sample households in Bengaluru and Delhi (in %)

Sense of Safety/Confidence	Very low	low	medium	High	Very High	Total
Bengaluru						
Natural Environment	1.0	31.0	37.0	31.0	.0	100.0
Current Living Place	2.0	11.0	62.0	25.0	.0	100.0
Drinking Water	2.0	11.0	42.0	43.0	2.0	100.0
Public Safety	1.0	15.0	55.0	26.0	3.0	100.0
Women and Children Safety	6.0	18.0	42.0	31.0	3.0	100.0
government Policy	10.0	37.0	34.0	19.0	.0	100.0
Local Government	21.0	30.0	30.0	18.0	1.0	100.0
Community Leadership	4.0	18.0	51.0	27.0	.0	100.0
NGO	.0	16.0	20.0	25.0	39.0	100.0
Delhi						
Natural Environment	32.0	29.0	21.0	16.0	2.0	100.0
Current Living Place	29.0	32.0	18.0	20.0	1.0	100.0
Drinking Water	45.0	33.0	14.0	8.0	.0	100.0
Public Safety	49.0	23.0	11.0	16.0	1.0	100.0
Women and Children Safety	48.0	19.0	13.0	18.0	2.0	100.0
government Policy	43.0	22.0	21.0	14.0	.0	100.0
Local Government	58.0	29.0	7.0	6.0	.0	100.0
Community Leadership	58.0	28.0	10.0	4.0	.0	100.0
NGO	23.0	13.0	18.0	36.0	10.0	100.0

Source: Primary Survey, 2017.

4.10.2 Overall satisfaction with organizational performance

The results from the following table show that the respondents of Delhi were more expressive to provide their levels of satisfaction towards the organizational performance of the different institutions as compared to Bengaluru. In Delhi, the majority of the respondents were not satisfied/somewhat satisfied with the organizational performance of central, state and municipal government. However, their satisfaction level for the organization performance of NGOs and Mohalla Sabha/ward committee was very high as most of them (50-65%) were satisfied/highly satisfied with the NGOs and Mohalla Sabha/ward committee. The main

reason for their high satisfaction with NGOs and Mohalla Sabha/ward committee is the better functioning of these orgnaisations/institutions because of which they were getting different types of helps/benefits.

One third of the respondents from Bengaluru responded that they are neither satisfied nor dissatisfied with the performance of central, State, local government, NGOs and mohalla sabha/ward committees. It was observed during field survey that most of them was afraid that if they express their opinion about the performance of the above agencies, they will be in trouble or their entitlements will be stopped by the respective agency.

Table 4.18: Level of satisfaction among respondents about the performance of government/NGOs/ Mohalla Sabha/Ward Committee (in %)

Organization	Levels of Satisfaction (in %)					
	Not satisfied at all	Somewhat Satisfied	Neither Satisfied nor dissatisfied	Satisfied	Highly Satisfied	Total
Bengaluru						
Central Government	30	40	30	0	0	100
State Government	33	28	38	1	0	100
Municipal Government	0	29	38	33	0	100
NGOs	4	15	30	19	32	100
Mohalla Sabha/Ward Committee	0	27	33	2	38	100
Delhi						
Central Government	24	13	31	26	6	100
State Government	40	28	21	9	2	100
Municipal Government	50	30	13	5	2	100
NGOs	15	13	19	41	12	100
Mohalla Sabha/Ward Committee	18	3	14	4	61	100

Source: Primary Survey, 2017.

The percentage distribution of the level of satisfaction shows that respondents from Bengaluru were not satisfied/somewhat satisfied with the central and state government. However, one third of the respondents were satisfied/highly satisfied with the organizational performance of the municipal government, NGOs and Mohalla sabha/ward committees.

4.10.3 Overall assessment of the institutional features of local government

The assessment of the institutional features of the local government has been attempted on the various parameters such as corruption, quality of service delivery, politicization of the service delivery, resource

mobilization and management capacity, equitability of resource distribution, capacity to plan, work efficiency, adequacy of manpower, transparency of activities, level of accountability, community participation, level of trust by community members, gender sensitivity, sensitivity towards marginalized groups and overall image of the local government.

Table 4.19: Level of satisfaction among respondents about the institutional features of local government (in %)

Institutional Features	Levels of Satisfaction (in %)					
	Very low	low	medium	High	Very High	Total
Bengaluru						
Corruption	14	44	20	21	1	100
Quality of Service Delivery	17	18	45	20	0	100
Politicization of Service Delivery	5	13	60	22	0	100
Resource Mobilization Capacity	3	41	53	3	0	100
Resource Management Capacity	4	47	47	2	0	100
Equitability of resource Distribution	0	35	62	3	0	100
Capacity to Plan	24	33	34	9	0	100
Work Efficiency	22	29	39	10	0	100
Adequacy of Man Power	2	44	41	13	0	100
Transparency of Activities	21	35	33	10	1	100
Level of accountability	5	26	65	3	1	100
Community Participation	3	28	39	20	10	100
Level of trust by Community Members	4	20	30	29	17	100
Gender Sensitivity	9	50	28	13	0	100
Response to special needs to Marginalized groups	8	19	46	27	0	100
Overall Image	8	17	51	4	20	100
Delhi						
Corruption	14	8	18	46	14	100
Quality of Service Delivery	24	48	26	0	2	100
Politicization of Service Delivery	27	25	13	33	2	100
Resource Mobilization Capacity	39	40	19	0	2	100
Resource Management Capacity	39	37	20	3	1	100
Equitability of resource Distribution	46	25	23	5	1	100
Capacity to Plan	49	30	17	4	0	100
Work Efficiency	56	32	7	5	0	100
Adequacy of Man Power	54	28	15	2	1	100
Transparency of Activities	52	31	16	1	0	100
Level of accountability	58	23	18	1	0	100
Community Participation	41	21	27	11	0	100
Level of trust by Community Members	40	18	25	16	1	100
Gender Sensitivity	39	32	24	5	0	100
Response to special needs to Marginalized groups	35	34	25	4	2	100
Overall Image	31	29	40	0	0	100

Source: Primary Survey, 2017.

In comparison to Delhi, the respondents of Bengaluru were more satisfied with the selected institutional features of the local government. The respondents from Bengaluru show that they had low to medium levels of satisfaction for most of the institutional features of the local government. The percentage share of the respondents who had high to very high levels of satisfaction is significant only for community participation, level of trust by community members and response of local officials towards special needs of marginalized groups. The assessment of the overall image of the local government among slum dwellers of Bengaluru clearly shows that respondents had medium level of satisfaction on local government.

Except corruption and politicization of service delivery for which respondents were highly satisfied with the local government, the level of satisfaction was very low/low to medium for all other institutional features of local government. It is because of this reason the overall image of the local government among slum dwellers of Lalbagh, Delhi was very low/low. A total of 60 per cent respondents reported that their levels of satisfaction with the overall image of the local government are very low/low.

4.11 Conclusion

The present chapter tries to examine the condition of basic urban services and urban governance with regard to marginalized sections of the population residing in selected slums of Delhi and Bengaluru.

Two different types of slums are covered in primary survey-1) Slums (locally known as JJ-Cluster in Delhi) and 2) Resettlement colonies. The living condition in resettlement colony was slightly better in comparison to slum both in Delhi and Bengaluru because of higher tenure security of the slum households living in resettlement colonies.

Majority of the respondents were spouse/wives of the head of the households as the interviews were conducted during daytime when most of the male members were away from home to their place of work. The slum households covered in present study from Bengaluru were mainly from general category followed by SCs and OBCs. However, in Delhi they were mainly OBCs followed by SCs. Majority of the slum households in Bengaluru were Hindus as compared to high share of Muslims in slum/resettlement colony of Bengaluru.

The household-size in Delhi and Bengaluru was very high. Half of the respondents in present study were married at the time of survey in both cities. The information related to the head of the households reveals

interesting facts which is common to most of the slums in India. The age-wise percentage distribution of the head of the households shows that most of the head of the households were in their forties or fifties at the time of survey. The share of the head of the households who were illiterate and educated up to primary level was high both in Bengaluru and Delhi. In comparison to Bengaluru, the education level of head of the households in Delhi was much better. Self-employment and working as casual labourer were the main employment status of the head of the households in both cities. Most of the self-employed head of households were working as street vendors, making incense sticks or driving auto-rickshaws. However, as casual labourers, majority of them worked as labourers in the construction sector, as porters and freight loaders. The migration status of the head of the households shows that in comparison to Bengaluru, the percentage share of the head of the households who were inter-state migrants was very high in Delhi. Majority of them migrated from rural areas of Uttar Pradesh and Bihar. However, in Bengaluru, most of the head of the households were intra-state migrants who migrated from rural areas of different districts of Karnataka.

The housing condition of the slum households in the resettlement colonies of the present study shows that most of the households owned their houses or got it on lease from the government both in Delhi and Bengaluru. The structure of the houses was mainly concrete (pucca) in both cities. In comparison to Delhi, a high percentage of households in Bengaluru had separate kitchen, bathroom and toilet facilities inside their premises. The households in Delhi and Bengaluru were using LPG as main cooking fuel mainly because of the benefits received from Kerosene free Delhi and Ujjawal Yojana, which provides LPG cylinders and stoves to the poor households free of cost. A high percentage of households in Delhi and Bengaluru own Aadhar cards, ration cards and saving bank account. The problem of leakages, inclusion errors and distribution of poor quality ration are some of the problems reported by respondents with regard to food distribution at subsidized rates through public distribution system. Since a majority of the households had Aadhar cards, linking it with public distribution system is likely to plug leakages in distribution of rations. The percentage share of the households with other documents such as caste certificate, pension documents, disability and health card is insignificant.

Television and Mobile Phone were the chief forms of communication and entertainment in slum/resettlement colonies of Delhi and Bengaluru. However, youth were more tech-savvy using internet and mobile phones regularly as compared to the elderly.

In comparison to Delhi, the functioning of Mohalla Sabha/Ward Committee was better in Bengaluru as a significant percentage of the respondents reported that committee meetings took place on monthly intervals

with regularity. In comparison to households from resettlement colonies, the community participation and active engagement was more in the slums/squatters which is a positive indicator for local democracy. It also shows that the households in poor condition have more faith in local institutions and they realize the importance of getting their voices heard through such avenues/platforms.

The participation of women in public affairs was more frequent in Delhi as compared to Bengaluru. The political participation of the respondents and their family members was also high in Delhi as compared to Bengaluru as the percentage share of the respondents (including family members above 18 years) who voted in all three elections held in the last five years was very high in Delhi. The voting behaviour of the respondents shows that respondents in Delhi and Bengaluru voted actively and voluntarily in all elections held in the last five years and there was no interference/influence/pressure from local leaders to vote for a particular party.

The results from the primary survey indicate that local leadership and community members have final words in community matters, and there is gender equality and parity with minority communities as they also participate and play an active role in community issues. It was asked to the respondents whether or not they give importance to the communication with fellow residents, and if they do, what are the main modes of communication. The respondents reported that they give importance to the communication with fellow residents and communicate/chat with each other at the time of dropping any items to the house of fellow resident, at the community places and in the meetings of NGOs/SHGs/local leaders. A majority of them trust their local leaders and neighbours from other religion and also showed willingness to engage the members of another community in the common issues of the slum.

The respondents from Delhi reported fire and health epidemics (Dengue and Chikungunya) as major natural hazards during the last five years. However, the respondents from Bengaluru reported flood, overflowing of drainage due to intense rainfall, and health epidemics (Dengue and Chikungunya) as major natural hazard. The slum dwellers from both Delhi and Bengaluru reported that they did not receive any help from government (central/state/local) during these calamities. A small percentage of respondents reported that they got help from local NGOs during these disasters. A very high percentage of households across sub-groups believe that the government is not prepared/poorly prepared to provide basic services at the times of disaster. The results also show that the knowledge of the government sponsored welfare schemes is very low among the respondents of both cities.

The expectations from the households on local governments were very high. The respondents of Bengaluru reported that local government should prioritize door to door awareness campaign; support for elderly and disabled people; cleaning and maintenance of shelter, toilet complexes, drainage; community based preparedness for disasters and arrangement of local transport for moving to shelter. In Delhi, proper public announcement; help to build community level shelter; door to door awareness campaign; cleaning and maintenance of shelter, toilet complexes and development of more infrastructures for resilience were the areas on which respondents wanted more engagement from the local government. In comparison to Delhi, the sense of safety/confidence of respondents were high in Bengaluru as their level of satisfaction for service delivery, their surroundings and the institutional features of their local government/NGOs and community was medium to high for most of the indicators. In contrast, the level of satisfaction of the respondents of Delhi was very low/low. A majority of the respondents in Delhi and Bengaluru were not satisfied/somewhat satisfied with the organizational performance of the Central and State government. However, in contrast to Delhi, the respondents of Bengaluru were satisfied with the organizational performance of local government and Mohalla Sabha/ward committee. The level of satisfaction with the organizational performance of NGOs was high both in Bengaluru and Delhi.

The level of satisfaction of the respondents on the different institutional features of the local government shows that respondents of Delhi had very low/low level of satisfaction for most of the institutional features of the local government. However, in Bengaluru respondents had low/medium level of satisfaction for most of the institutional features of local government. The level of satisfaction on the overall image of the local government indicates that in comparison to Delhi, the local government of Bengaluru is functioning better.

This chapter shows that much remains desired for uplifting the lives and living conditions of minorities living in slum areas of both cities. Although the people living in resettlement colonies is in slightly better situation as compared to slums, without proper implementation of social protection programmes, their social, economic and physical improvement is not possible. The local governments should make efforts to build trust with slum dwellers so that they can participate in the improvement of slums. A majority of the slum dwellers have trust in democracy since they are consistently participating in the electoral process and using their right to vote to choose the government of their own choice. However, the level of satisfaction of the respondents clearly indicates that low level of performance of the local governments in Delhi and Bengaluru with regard to provisioning and maintenance of basic amenities.

5. Good Practices - Towards fulfilment of SDG 11

5.1 Introduction

An integrated system of democratic urban governance is essential to effectively cope with urban challenges including social and political exclusion, especially to achieve the Sustainable Development Goal (SDG) 11 of the 2030 Agenda of Sustainable Development to make cities and towns inclusive, safe, resilient and sustainable. This chapter tries to showcase selected good practices on decentralized policy options, innovation to meet the needs of marginalized groups and contribute to the achievement of SDGs 11. The objective is to draw insights on underlying success factor. The good practices are categorized into four broad groups: Accessibility; Participation; Accountability and Transparency. While some initiatives qualify to fit in one of the above categories, most initiatives relate to more than one category.

5.2 Convergence towards SDGs

There have been various on-going efforts for the implementation of SDGs world over. It has been documented that both Vietnam and the Netherlands have implemented successful sustainable practices in agriculture, leading to food security, improved nutrition status and paved way towards ending hunger as envisaged in SDG 2. From being a malnourished hunger-stricken country, Vietnam has become the major rice exporter in Asia through the good practices involving sustainable farming and land management which has drastically improved the GDP and economic resilience of the country. Alongside food safety, the health and wellbeing of the people has also improved. The Netherlands has entered into a cooperative partnership with Vietnam to exchange innovations in horticulture, crop production, aquaculture and livestock breeding. The Ministry of Environment and Sustainable Development of Mauritius introduced the Environment Protection (PET bottle permit) Regulations in 2001. In line with these regulations, bottling companies encourage people to return the used polyethylene terephthalate (PET) bottles. The companies have set up a collecting system. The used pet bottles are washed, granulated, re-washed and dried in specially designed machines. They are then grounded and fed into other machines which melt them under sweltering heat and pressure. The PET waste is finally processed into pellets for export. Bangladesh has become an ODF country in 2016 as it has successfully undertaken the mission with help of NGO partnership and increasing public

awareness about health issues because of defecating in the open. The Community Led Total Sanitation (CLTS) approach adopted in Bangladesh has emerged as one of the most effective approaches in promoting sanitation. It started as a small experiment in a few remote villages in Bangladesh in 2000. The remarkable success of the approach has since spread to over 30 developing countries. CLTS has been recognized by the United Nations and other development agencies to significantly contribute in promoting sanitation. Singapore has adopted an integrated approach for water resource management, enforced by a national water policy and national water master plan. The implementation of the programe is carried out by a statutory board formed for all water related services named Public Utilities Board.

India is committed to implement the SDGs by 2030. Significant steps have been taken for increasing forest cover through social forestry techniques; harness the renewable energy from sun, wind, and tides. The Atal Mission for Rejuvenation and Urban Transformation (AMRUT) is also in conformation to SDG 11. India is actively involved in the preparation of technical guidelines for environmentally sound management of ship-breaking along with Norway and the Netherlands under the Basel Convention. The Hazardous Substances Management Division (HSMD) is the nodal point within the Ministry of Environment, Forests and Climate Change (MOEFCC) for the management of chemical emergencies and hazardous substances. The Environment Protection Act (EPA) 1986 is the umbrella Act that pertains to management of solid waste in the country. The National Environment Policy (NEP) 2006 of the Government of India emphasises the need for recovery and reuse of any material, thereby reducing the waste destined for final disposal. Notable among them are E-waste Management and Handling Rules 2011, Management and Handling of Municipal Solid Waste 2000, Management and handling of Bio-Medical Waste 2003 etc. The ecotourism sector has been evolved in India since 1998 and has been renewed with the implementation of National Tourism Policy, 2002. European Union (EU), OECD and World Tourist Organisation (WTO) experts have framed indicators for measuring sustainable tourism practices which India also has included in its tourism policy guidelines and made the hotels and tour operators comply with it.

In India National Institution for Transforming India (NITI) Ayog has been formed in 2015 as a successor to Planning Commission and has been entrusted with the task of coordinating with various ministries under the union government for monitoring the progress of the SDGs. It has mapped various schemes and programmes of all the relevant ministries against the goals and targets. Many of the states governments are also implementing various state level schemes aligned with one or more SDG.

5.3 Select Good Practices in India

5.3.1 School Mapping in Gujarat - Innovative use of GIS Technology in Access to Education

The state government of Gujarat aims to provide free, compulsory and quality education for children within the age group of 6-14 years. Universal enrolment and retention in schools is one of the State's priority. To achieve this, the state government of Gujarat has taken many initiatives in the field of education. One such initiative was GIS mapping of all the school and their integration with information of education department.

About the project

The GIS school mapping initiative was implemented under the project Sarva Shiksha Abhiyan (SSA). The initiative was jointly implemented in 2010 by SSA and Bhaskaracharya Institute for Space Application and Geoinformatics (BISAG)[21]. The project aims at identifying the un-served areas in terms of elementary education through scientific process of school mapping using Geo-Informatics System. This system integrates geo-spatial database with the database on schools available with the education department. It has mapped more than 40,943 school locations, Cluster Resource Center (CRC), Block Resource Center (BRC) and Cluster Boundary in GIS environment. The project received the National award for e-governance in 2014 under the category of Innovative use of GIS technology in e-governance.

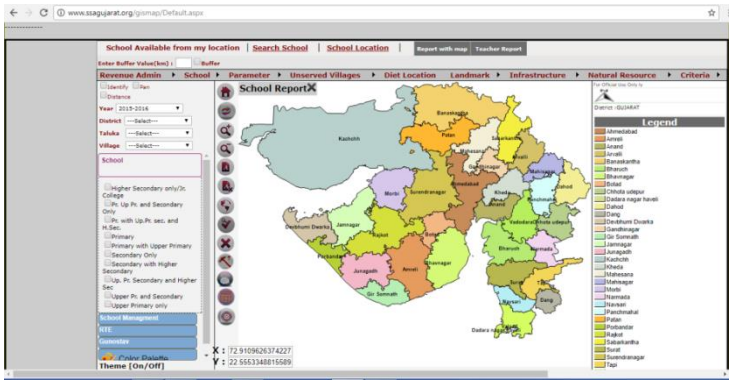
Need for the initiative

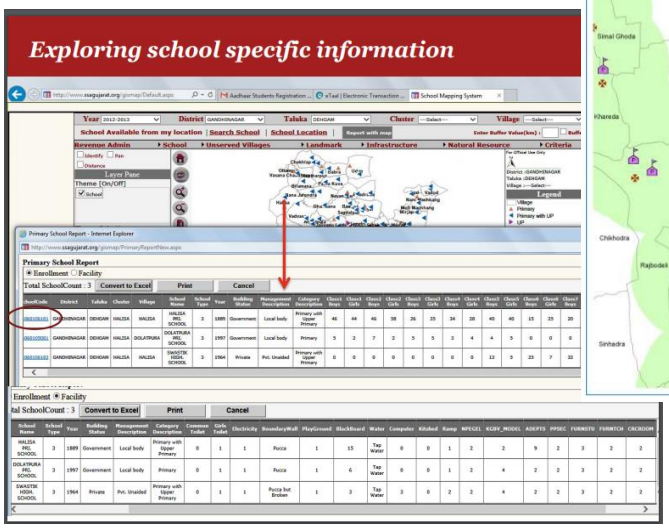
Before implementation of GIS school mapping initiative, the mapping of school was limited to block level only. The entire process was done manually and it had many limitations. The maps depicted only location of schools without any distance criteria mentioned. All the information and data was recorded in separate sheets. There was no way to get a real time understanding of ground level realities. It was not possible to do the actual analysis for future course of action with such limitation. Thus, any effort for expanding the infrastructure remained under the risk that the efforts were not focused on areas where the requirement was the highest.

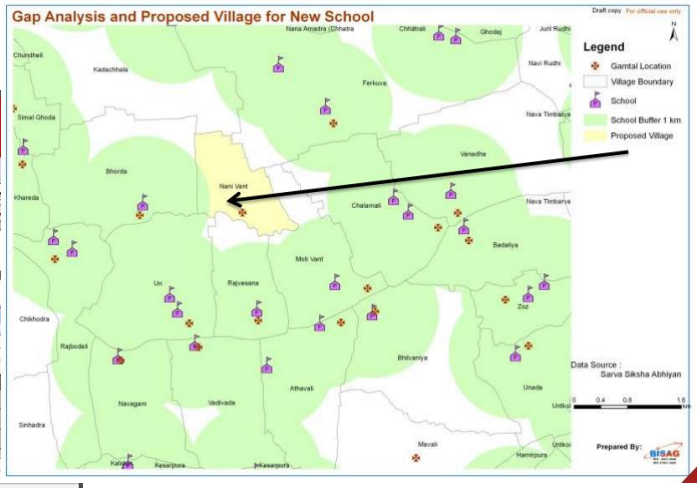
[21]BISAG is a State level nodal agency to facilitate the use of spatial and geo-spatial technologies for the planning and developmental activities pertaining to Agriculture, Land and Water Resource Management, Wasteland/Watershed Development, Forestry, Disaster Management, Infrastructure and Education.

Process Mapping

The project used GIS mapping, through Google Earth, to identify actual location of each school. The schools were then plotted using the codes of education department. All the CRC, BRC and cluster boundaries along with prominent landmarks were also marked. The entire dataset of department of education was integrated with Geo-Spatial Database.







All the 40,000 schools of the states (both public and private) were mapped including the infrastructure available and other information like student teachers' ratio etc. The officials at state, district and block level were trained to use and update the information. BISAG provides specialized services and solutions in implementing map-based Geospatial Information Systems such as GIS database design and development, map creation, updating, data migration/conversion and format translation, software development and customization, systems integration and technical consulting. Independent audit has been conducted on 5% of the sample data.

Impact and Replicability

GIS school mapping project supports the decision-making process by identifying the areas where improvement in educational infrastructure is required. It fulfills the SSA goal to achieve Right to Education (RTE) objectives by facilitating the state administration to spot un-served habitats and act accordingly. In the year 2013, a total of 29 new schools have been opened based on this system and around 400 un-served areas were identified for secondary schools.

It facilitated the identification of ideal locations for new schools based on the distance criteria mentioned in the Right to Education Act (primary school within 1 km, and upper-primary school within 3 kms of every residential location). It helped to do criteria based GIS analysis (category wise -primary, upper primary school; facility wise; management wise, educational parameters like students' teachers' ratio, enrollment, dropout). Further, infrastructure gap in each GIS mapped school can be checked for compliance to RTE norms.

It simplified the teacher deployment mechanism. A customized criterion based analysis can also be done by officials, parents and students. The system not only helps the children or parents to find out the best schools to study at, but also provides a comparative analysis between schools which helps them in decision making. The system is available at a public domain for the use of citizens, http://www.ssagujarat.org/gismap/Default.aspx It also has a feedback option form in which students and parents can give their opinion about access, quality and infrastructure of the school. The project is replicable.

5.3.2 Migration Card and Migration Monitoring Software: Tracking and educating children of migrant parents in Gujarat

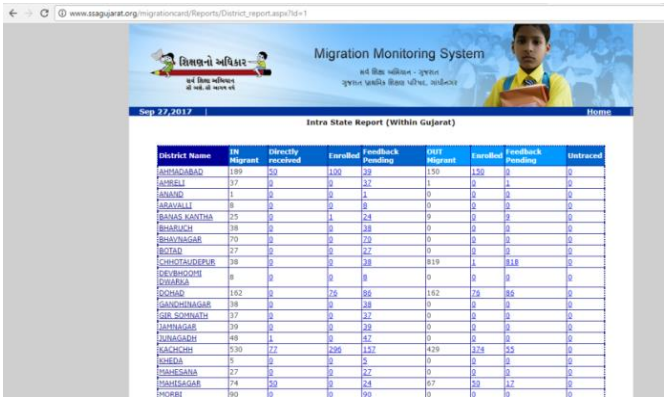
About the project

The Migration Card initiative was introduced in Gujarat to track students who were migrating along with their parents within the state or from other states for seasonal employment. The main objective was to avoid dropout of such children and ensure the continued education of children during the period of migration. The programme has helped to increase retention under elementary education of migrant children.

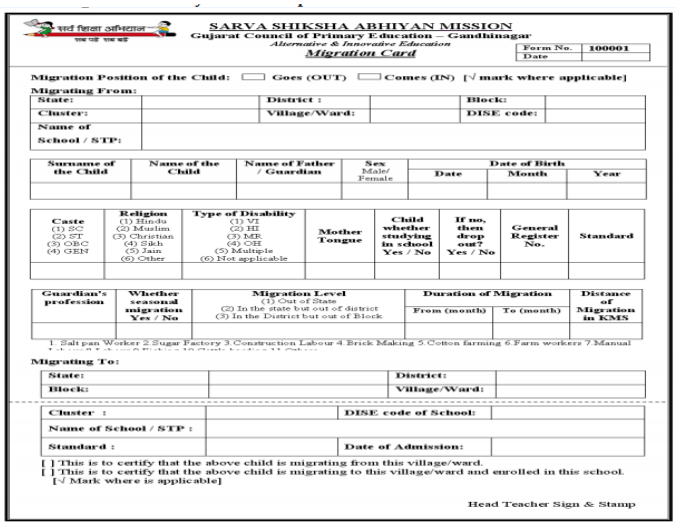
Need for the initiative

Migration for seasonal employment is one of the factors responsible for dropout rate of children from schools. Migration due to seasonal employment takes place mainly among the people working in brick kiln factories, construction industry, sugar factories, shipyards, agricultural labour and salt pan units. While the academic year is from July-April, migration for seasonal employment usually occurs in the months of October to May. Therefore, children of migrant workers (who seek employment opportunities away from their home town within the same state or in others) must drop out in the middle of the academic year. Later it becomes difficult for such children to rejoin school, hence they dropout from the school and quit education.

Process Mapping



To address the problem, Government of Gujarat under the *Sarva Shiksha Abhiyan* undertook a project to track and facilitate the education of migrant children. Under this programme, a migration card is given to parents who are migrating along with the progress report of their child which shows standard, subject and lessons learnt by the child and attendance in the current year. Based on the information in the migration card and the progress report, the child is enrolled in a suitable class by the school in the village/city where the child migrates to. The student would then continue his/hers schooling at the migrated place and would be permitted to give the examination in the school – either at the migrated place or at the original destination.



The details of migration card are also sent to respective Block Resource Centre (BRC) coordinator and district education offices for their records. In the initial years of the programme, the details of the students were entered manually into ward education registers and district education registers. However, the manual system faced issues such as lack of accuracy and specifications in records, improper maintenance of the card and loss of card during transit. Hence, in 2010, it was decided to migrate to an online platform – the Migration Monitoring Software (MMS). For smooth operation it was ensured that internet and computer facilities were provided up to Cluster Resource Centres (CRC) level.

The CRC coordinator makes an online entry of all the data from the cluster level upto the state level. When any migration takes place, the CRC coordinator of the sending cluster fills the 'OUT' form online. Both receiving and sending coordinators will be updated in real time on their homepage after logging in. At this stage, a reconciliation process will be carried out by all CRC coordinators. This is to track children who do not appear at the cluster that they intended to go to. The CRC who receives such a child will send an online

feedback recording the new entry and by doing so the CRC Coordinator who was expecting the child to join will also be automatically updated. In cases where the children remain untraced, the entry is recorded as such.

As a part of the programme, hostel facilities are provided to children of intra state migrating parents. The hostels are maintained, constructed and managed by the school management committees or NGOs under SSA programmme. In the case of inter-state migrant children, Tent Special Training Programmes (STPs) are set up at worksites as per Right to Education Act (RTE), 2009 which provides for alternative schooling to out-of-school children. Setting up temporary tent schools at the worksite has become a viable solution for many reasons. If the migrating students are admitted to regular schools, language proves to be a barrier. In Tent STPs, teachers/instructors who are relatively familiar with the language of the children are assigned to teach. Moreover, parents are not comfortable sending their children to distant places during their work hours. These students come to tent STPs daily from 11 am to 5 pm. They are grouped and seated based on their educational competency and not as per age classification.

Impact and Replicability

The project has been successful in arresting the high dropout rates of migrating children. It has played an important role in ensuring that the education of migrant children is not disturbed by the seasonal nature of employment of their parents. This initiative is very relevant for states that witness a high migration rate. It provides a viable option for sustaining education of migrant children.

5.3.3 Participatory Budgeting, Pune Municipal Corporation, Maharashtra

About the project

Participatory Budgeting (PB) is a democratic process of deliberation by citizens, civic officials and elected representatives on issues that need attention and collective decisions that would directly be included in the budget of the Urban Local Government (ULBs). This process helps citizens to voice their opinion and decide on how to allocate part of a municipal or public budget for betterment of their neighbourhoods. Participatory budgeting empowers the citizens to present their demands and priorities for improvement, and influence through discussions and negotiations the budget allocations made by their ULBs. Participatory budgeting was initiated in Pune in the year 2006 under the leadership of Dr. Nitin Kareer, the then commissioner of Pune Municipal Corporation (PMC). The Pune Municipal Corporation undertakes PB with the help of *Janwani*-CSO and Centre for Environment Education (CEE).

Need for the Initiative

The concept of Participatory Budgeting first originated some 25 years back but its appeal in India has been limited. Very few cities in India have experimented with participatory budgeting. In 2001, Bangalore became the first city in India to implement participatory budgeting due to efforts by a local NGO, Janaagraha. In 2006, Pune implemented Participatory Budgeting for the first time in the city and attracted a massive response from the citizens as well as the city-based NGOs. The 74th Constitutional Amendment and specifically the Model Nagar Raj Bill directs state governments and urban local bodies to constitute ward committees for citizen participation. Since these initiatives have not been implemented, there are very few channels for citizens to participate in local governance. The Pune Municipal Corporation undertakes PB since 2006. Prior to the initiation of participatory budgeting in Pune, there was no formally instituted method for citizens to directly make suggestions to the ULB for projects, developmental work or any other civic services enhancement in their neighborhood.

Process Mapping

An advertisement announces the commencement of participatory budgeting every year which includes the last date for suggestions, how to obtain and submit forms etc. This is an important aspect and all the subsequent outreach that is done by civil society organizations refer to this annual public announcement. The major role of facilitation of citizens' participation is done by civil society organizations.

Adequate information is made available to citizens at various stages of the participatory budgeting process, such as the information about the wards including maps, lists of on-going projects, proposed and completed projects. Some of this information is in the public domain, such as the previous year's budget and list of projects for each electoral ward, the start and end dates, the final list of projects accepted into the budget, development plan, master plan etc. In 2009, a web-based application was developed and hosted on the PMC website for online submission of participatory budgeting requests. The software was developed by KPIT Cummins, as a part of their corporate social responsibility initiative. The current version of the web application is at http://tinyurl.com/PMC2013PBOnline

Currently under participatory budgeting in Pune, each *Prabhag* (comprising of two electoral wards) is allocated a budget of Rs. 50 lakhs with the maximum limit of a single project not exceeding Rs. 5 lakhs. Each *Prabhag* can implement any number of projects but the total amount cannot exceed Rs. 50 lakhs and cost of each of the project cannot exceed Rs. 5 lakhs.

The process of participatory budgeting followed in Pune is as follows:


पुणे महानगरपालिका
शिवाजीनगर, पुणे ४११००५
नागरिकांकरिता जाहीर प्रकटन
पुणे महानगरपालिकेच्या सर्व प्रभाग समितीमध्ये सन २०१४-२०१५ चे अंदाजपत्रक तयार करताना नागरिकांनी सूचविलेली कामे घेणेबाबतचा निर्णय घेण्यात आला. त्याप्रमाणे नागरिकांकडून त्यांच्या प्रभागातील कामे सूचविण्याबाबत जाहीर प्रकटन करण्यात येते.
याबाबत विशिष्ट नमुन्यातील अर्ज प्रत्येक क्षेत्रीय कार्यालयाकडे कार्यालयीन दिवशी व वेळी दि. ६-८-२०१३ ते दि. १०-९-२०१३ पर्यंत विनामूल्य वाटपाकरिता उपलब्ध आहेत. त्याचप्रमाणे अर्ज महानगरपालिकेच्या संकेतस्थळावरही (www.punecorporation.org) उपलब्ध आहे. सदर अर्ज दि. १०-९-२०१३ रोजी सायंकाळी ५.३० वाजेपर्यंत स्वीकारण्यात येतील.
महापालिका आयुक्त
पुणे महानगरपालिका

Preparatory meeting at PMC office - The meeting is organised by PMC, which is attended by all the department head of the PMC including municipal commissioner, officials of *Janwani* and Centre for Environment Education. It marks the beginning of participatory budgeting every year in Pune. In this meeting, various decisions regarding the time frame of PB and other additional ideas for publicity, budget etc are discussed.

Publicity and inviting suggestions - The publicity is the most essential step. The first step towards publicity is a formal advertisement in all the local newspapers, banners and poster are also put up across the city. The PMC office along with *Janwani* and CEE organizes public meetings at ward level to provide information, clear any doubts, and provide additional help that citizens might need. Apart from this, the PMC also makes phone calls to citizens and contact other organisations such as *Mohalla* (Neighbourhood) committees, Waste-pickers Association, National Society for Clean Cities, Lions Clubs, Rotary Clubs and other for spreading information and organizing workshops for further facilitation to citizen.

Submission of suggestions - Citizens are expected to fill out the online budget suggestion form or download the form and submit the hard copy to the PMC office by the given deadline. Suggestions can be made regarding footpaths/cycle tracks, roads, street lights, traffic signals, bus stops, public parking, public toilets, solid waste management, water supply, drainage, parks, public buildings etc.

Classification, compilation and costing of work - After the closing date, all the suggestion forms are entered into a database for compilation. A rough costing of each suggestion is prepared, prioritized and shared with PMC. Based on that, the PMC finalize and announce the final budget.

Impact and Replicability

Having successfully being carried out for over 10 years, the example of participatory budgeting in Pune shows an evolving political will towards citizens' participation. Citizens have also become pro-active and aware about their rights for decision making. Citizens' participation has also increased over the years. While in 2012-13, Pune witnessed only 600 suggestions from citizens, the number increased to 3,300 in 2013-14 and 6,000 in 2014-15 (Keruwala, 2013). A survey done in 2010 shows that out of the total projects approved as part of participatory budgeting, 68.2% projects were completed, 18.18% projects were on going and 14% projects were not initiated (Menon, 2013). As the PB exercise is repeated over the years, it can be considered as an achievement for ULB and is replicable.

5.3.4 Sustainable Waste Management Practices: *Vrindavan Kuda Prabandhan Pariyojana*, Vrindavan, Uttar Pradesh

About the project

The Vrindavan Kuda Prabandhan Pariyojana (VKPP) is a community led waste management programe in the absence of a well-functioning, efficient municipal waste management system in the town. The VKPP has been successful in putting in place a waste management program in the town with the support of the community and by leveraging funding from international agencies, institutions, corporates and individuals.

Need for the initiative

Vrindavan, a town in Mathura district in Uttar Pradesh, is an important religious centre in India. During religious festivals like Holi, Rath Mela, Navratri and Diwali, the town sees an additional influx of 25,000 to 30,000 people per day. Despite being a town of religious significance, Vrindavan was in deplorable state with piles of garbage dumped along roadsides, drains and water bodies. The total amount of solid waste generated in Vrindavan from households, ashrams, temple complexes, institutions, etc. was approximately 40 metric ton per day. The quantum of waste generation escalates by 25 percent during the festival seasons. The Health and Sanitation Department of Urban Local Body (ULB) is responsible for the collection and disposal of solid waste. With limited staff and resources, the Vrindavan Municipality was unable to provide efficient solid waste management (SWM) services to all its citizens. The pilgrims created an addtional demand for

infrastructure and transit facilities such as public toilets, bathrooms and dormitories. The already stressed ULB found it challenging to cater to floating population in Vrindavan.

Process Mapping

To address the deteriorating condition of city, Friends of Vrindavan (FoV) a non-governmental and non-profit organization started the initiative of managing solid waste. FoV started collecting waste from temple and other religious places. A large proportion of the waste comprises of garlands, flowers, offerings and other bio-degradable waste. The waste collected from such establishments was used to produce manure by vermi-composting. The remaining waste, collected from other parts of the town, was disposed at a dumpsite near the main government hospital in the city.

Keeping in view the efforts by FoV to address garbage issues in Vrindavan, it was identified as the partner NGO to implement the Religious Eco cities programme in the Vrindavan funded by Central Pollution Control Board (CPCB) of India. This was the genesis of the formation '*Kuda Prabhandhan Pariyojna*' (VKPP) in Vrindavan.

VKPP was developed as a pilot model under the Religious Eco cities programme in the year 2005. The CPCB funded the program under which FoV introduced door-to-door collection of segregated waste in two wards of the city based on user charges. Waste pickers in the city were trained and employed by FOV as *safai mitras* in the door-to-door collection process. The households segregated wet and dry waste. The dry recyclable waste collected from households was sold by the *safai mitras* to scrap dealers for extra income and the wet/non-recyclable waste was deposited at the community bins. FoV also collected a huge amount of floral and other bio-degradable waste from local temples and shrines and established a vermi-composting unit to process this waste. A paper recycling unit was also established to recycle paper and cloth waste generated in schools, institutions and markets. As part of the program, FoV also constructed two garbage ramps to allow direct transfer of waste from rickshaws to tractor-trolleys.

VKPP was further supported by the Global Environment facility (GEF), UNDP's Small Grants Program (SGP) and GTZs ASEM program to help promote a sustainable model for street cleaning and waste management in Vrindavan. With the leveraging of financial resources, door-to-door collection was expanded to include three more wards in the city, four market places and six residential areas, along with several major temples and shrines. Waste was collected from colleges, universities, institutions, commercial complexes, temples and ashrams generally once a day and sometimes twice a day during peak festival seasons. Large community waste bins were also installed at several locations to offer a way of waste disposal to households not covered by door-to-door collection. The 3R-theory to Reduce, Reuse and Recycle the waste was widely propagated under the program. Vermi-composting units were established at five different locations in the city to process organic kitchen waste and floral waste.

The waste pickers or *safai mitras* employed in waste collection and processing were organized into a cooperative society (Vrindavan Bandhu Cooperative Society) to encourage training, capacity building, skill building activities and enable the waste pickers to access alternative livelihoods. The FoV worked with CEE to engage city officials, elected representatives, citizens, school students, NGOs, waste pickers as well as prominent institutions in the city to promote a community based approach to waste management. FoV also undertook campaigns targeted towards pilgrims and tourists to inform and involve them in the waste management initiatives.

The success of the VKPP allowed FoV to garner additional funding from industries, donor agencies and private corporations. Sri Ratan Tata Trust supported the establishment of vermi-composting units and a handmade paper industry, which employs trained waste pickers to create new products from recycled paper. Tata Motors Ltd. donated four Tata-Ace mini dumpers to transport the garbage from different locations of the town. Other philanthropic organizations such as Times of India, Hero Honda Group and the Yash Birla Group also supported the VKPP initiative through various stages.

Impact and Replicability

The SGP grant ended in 2009 but FoV continues to provide waste management services in the city with local community support and corporate grants. The door-to-door collection, started in two wards in 2005, now covers 6000 households and 250 establishments in the city. FoV started charging a user fee in the range of Rs. 20 to Rs. 500 per month from households, shops and commercial establishments for waste collection and processing to ensure sustainability. The user charges and donations received from shopkeepers, temples, households and commercial complexes are collected under the Vrindavan Cleaning Fund (VCF). Under the VCF, FoV also conducts regular cleanliness drives in the un-serviced areas of the town on request.

The project demonstrated that the people, NGOs, CBOs, and the ULB can work together in the process of planning and development to improve the quality of life of people. Considering the results at Vrindavan this participatory approach to planning and development seems to be replicable. It can be a model of working together to ensure sustainable development of cities.

5.3.5 Public Grievance Redressal System - 24-Hour Control Rooms, Hubli-Dharwad, Karnataka

About the project

Public Grievance and Redressal System was launched in Hubli-Dharwad with the aim to strengthen service delivery mechanisms at the ULB level through enhanced community participation in governance. Through this mechanism, citizens can register their grievances as well as track the progress of redressal (over the internet or through a phone call) using a complaint number generated by the "Helpline" at the time of registration of grievance. This initiative has helped to build government-citizen accountability measures as a means for ensuring effective service delivery. It also tracks the status of complaints till they are addressed and provides an insight into the nature and geographic/locational distribution of complaints.

Need for the initiative

Before the launch of the programme there was no system to record complaints logged by citizens, pertaining to health and civic amenities. Most of the time the officers concerned was not available on telephone and there was no system of maintaining the register to record the complaints. As a result, it used to take many days in attending the complaints.

Process Mapping

Hubli-Dharwad Municipal Corporation (HDMC) has started a 24-hours control room to attend the public grievances. Corporation attends to the public grievances such as road repairs, underground drainage cleaning, maintenance of street-lights, removal of garbage and carcass of stray dogs/pigs etc. The control room has been set up in the corporation premises with four persons in each shift working round the clock. It is headed by an officer who regularly monitors the nature of complaints and takes necessary steps to address them. The control room is equipped with a computer along with internet connection, walkie-talkie sets and telephones. All complaints received from the public of Hubli Dharwad twin cities are entered along with date and time. The officer concerned is immediately informed for further course of action. Once the complaint is attended, they need to inform the control room to enter it in the register or update online web portal. The Municipal Commissioner checks the status of received complaints daily. The Helpline staff listens to grievance of the people and asks for details such as complaint location, complainant name, telephone number, email address and gives the person a complaint number. The status of the complaint can be checked online and complaint

reports can also be viewed online. There is a time limit of 72 hours within which complaint is to be addressed. If a complaint is not addressed within this time, it is escalated to the next level in the hierarchy of staff, thereby allowing for a censure on the concerned staff. Furthermore, once the status is updated in the online system, the Helpline staff is required to verify with the complainant whether the complaint was redressed satisfactorily. It is only after obtaining the satisfaction of the citizen that the status of the complaint is posted as "closed" on-line. If not, the Helpline staff is required to post the unsatisfactory redressal complaint status. There are two methods to lodge complaint in HDMC: (i) Dial 0836-2213888 (ii) Online registration through http://www.mrc.gov.in/janahita/login

To motivate the ULB staff, incentives is given to those officers who attend the work in shortest period. The top three performers are recognized monthly, once in six months and yearly. This is also reflected in the annual performance report of the ULB staff, in turn, impacting promotions and career trajectories.

It was realized over a period that continuous monitoring is required for the function of the effective control room, for which the head of the department (HOD) of IT departments is held responsible. Every Wednesday there is a board meeting compromised of all the HoDs, elected representatives and commissioner.

Impact and Replicability

The control room receives around 40-50 complaints from Hubli City and 20-30 from Dharwad City every day. This has helped in creating an impression among the tax-payers that the Corporation is there to attend to their grievances.

Additionally, the online system generates a database of the problems faced by the city, their geographical location and the efficiency of the administrative machinery in timely redressal of complaints. This database is consolidated into monthly reports and gives the status on the number of complaints registered, complaints

addressed and those being processed. This database is accessible to the administrators in the ULB and all the Urban Development Departments at the state level. These reports aid the Municipal Commissioners and other officials to streamline the municipal functions through proper planning, which in turn bring about transparency of information and smoother delivery of municipal services.

The system is sustainable as it provides easy access to the corporation and the data maintenance happens by the click of a button. The "Helpline" is expanded and is currently operational in 213 urban local bodies in Karnataka under the Municipal Reforms Programme of the Government of Karnataka (GoK).

5.3.6 Kudumbashree - Women Empowerment and Poverty Eradication Program, Kerala

About the project

Kudumbashree is a poverty eradication and women empowerment programme. The name Kudumbashree in Malayalam language means 'prosperity of the family'. Kudumbashree is a community network that covers the entire state of Kerala. It consists of a three-tier structure with Neighbourhood Groups (NHGs) as primary level units, Area Development Societies (ADS) at the ward level, and Community Development Societies (CDS) at the local government level. It is one of the largest women's networks in the world. The Kudumbashree network by 15th March 2017 had 2,77,175 NHGs affiliated to 19,854 ADSs and 1073 CDSs with a total membership of 43,06,976 women. Kudumbashree membership is open to all adult women, but limited to one membership per family.

Kudumbashree has three strategic areas in which programmes are formulated and rolled out through the community network. These areas are economic empowerment, social empowerment, and women empowerment. Convergence has been one of the central themes within the Kudumbashree idea. Convergence means seamless working together of the Kudumbashree and the local bodies; it includes institutional and programmatic convergence as well as sharing of resources. Various development activities in the state of Kerala are being brought together through the group dynamics developed under the Kudumbashree programme. The convergence of resources has resulted in poverty reduction.

Need of the Initiative

Kudumbashree is a poverty eradication and women empowerment programme initiated by the State Poverty Eradication Mission (SPEM), Government of Kerala. It was set in the context of the People's Plan Movement which was a state strategy for mass mobilisation for bottom-up planning in the light of decentralisation of powers. From the perspective of a government programme, Kudumbashree was the extension of the community development experiments in Alappuzha and Malappuram cities in Kerala. The

concept of such NHGs has its roots in Kerala's development history. The very concept of forming groups around neighbourhoods had been ingrained in traditional forms of community organisation in the state.

Process Mapping

The Neighbourhood Groups (NHGs) are the primary units of the Kudumbashree community organisation. Ten to twenty women from a neighbourhood forms a NHG. All the poor families are to be members of the NHG formed in that neighbourhood. While membership is open to women of all families, the benefits under government programmes including financial assistance is meant only for poor families and families belonging to Scheduled Castes (SC) and Scheduled Tribes (ST).

Every NHG elects its executive committee. The NHGs performs all the functions of typical self-help groups (SHG) such as conducting regular meetings, running a thrift and credit programme, maintaining records and books of accounts. In addition, NHGs have development functions for which they work closely with the local governments.

Area Development Society (ADS) is the middle tier of the Kudumbashree community organisation. ADS is formed at the ward level of the local governments. In ULBs, ward councillors are patrons of the ADSs. In places where ward development committees exist, ADS work as its sub-committee. All the NHGs within the operational boundary of ADS automatically become members. An NHG can have membership in only one ADS. Functions of ADS include monitoring of NHGs and providing them with support on activities, including setting up and running micro enterprises. It works as the mid-tier of the community structure and play an important role in information dissemination. They also play a development role as directed by the state government as well as local governments. ADSs work closely with the local government at ward level.

Community Development Society (CDS) is the apex body of the three-tier Kudumbashree community organisation. There is atleast one CDS per local government. As the third tier of the community network, CDS has the responsibility to monitor the activities of the NHGs and ADSs affiliated to it. In addition, CDS works as a local government level entity of women and works closely with local governments in development programmes. The role of CDS has been institutionalised in the processes for plan formulation and implementation at the local governments. CDSs have a definite role in women empowerment, capacity building and awareness building.

Responsibility Mapping

CDS bye-laws prescribe the roles and responsibilities of the three tier Kudumbashree community organisation and specify their inter-linkages. The three tiers of the community organisation have distinctive yet complementary responsibilities in the implementation of various Kudumbashree programmes.

Programme/Scheme	**NHG**	**ADS**	**CDS**
Micro credit	Thrift management, internal lending, grading, bank linkage	Monitoring of thrift and credit, bank linkage	Monitoring, facilitating bank linkage, payment of matching grant to bank-linked NHGs, updating MIS
Micro Enterprises	Formation of activity groups for taking up enterprises, support to enterprises	Formation of activity groups spanning more than one NHG, support to enterprises	Formation of activity groups spanning more than one ADS, Financial assistance to micro enterprises, liaison with LSGI for support, monitoring of enterprises, formation and support of special enterprises, marketing support
Collective Farming	Formation of activity groups / Joint liability groups (JLG)	Formation of activity groups/ JLGs spanning more than one NHG	Financial assistance to groups, liaison with banks and Kudumbashree Mission, liaison with LSGI for support, monitoring of progress, marketing support
Ashraya	Identification of destitute families,	Verification of identified families	Project formulation, liaison with LSGI and Kudumbashree, ensuring

Programme/Scheme	NHG	ADS	CDS
	helping with delivery of service package	and recommendation to CDS; helping with delivery of service package	approval of project by LSGI after discussion in evaluation committee, implementing agency of the LSGI for Ashraya
Balasabha	Formation of Balasabha, organising programmes	Monitoring of Balasabha activities, organising ward level Bala samithy activities	Facilitating formation of Bala panchayats, monitoring of activities of Balasabha and Bala panchayats, channelising LSG and Kudumbashree funds for activities
BUDS School	Support to ADS/CDS	Support to CDS	Identification of children with special needs, liaison with LSG for funding and organisation of schools, monitoring of school functioning
SC and ST Special Projects	Formation of special NHGs of marginalised communities	Need identification for services	Nutritional programmes for special communities, health awareness programmes, liaison for obtaining ration cards

Thrift and Credit

Thrift and credit programme is the first level entry point for Kudumbashree. Poor women are organised into neighbourhood groups and the first activity initiated is the thrift programme. NHGs start lending to members using the group's savings. Subsequently, each NHG is graded and once it qualifies, they are eligible for bank linkage. Bank provides them loan for lending within the groups, Kudumbashree mission provides a token matching grant to the NHGs.

Objective of thrift and credit is to encourage poor to save some money from what they use for their regular expenses, and help them to avail small loans from their savings. Every member brings a pre-decided amount (this amount is decided by the group) to the weekly group meetings. The money collected is deposited in a bank in an account jointly operated by the president and secretary of the group. NHGs have own working fund also generated from interest on internal lending, penal interest, donations and grants.

All the funds are included in the bank accounts of the NHGs. Once a neighbourhood group completes six months of operations with regular meetings and savings, they can start internal lending.

Impact and Replicability

Under micro enterprise development, a series of training programmes were conducted and also specific modules for training potential micro entrepreneurs were developed. Kudumbshree undertakes activities in the areas of public health. It facilitates the convergence of various health programmes of the state government. NHGs have health volunteers who help in complete coverage of children immunization. Amrutham is an enterprise promoted by Kudumbshree to help improve the nutritional status of children between 6 months to 3 years. It supplies food supplement as a part of the take home ration through Anganvadis.

In order to realize its proclaimed objective for ensuring a minimum of primary education for all children, Kudumbshree carries out activities such as formation of Mother-Teacher Associations and promotion of remedial education for poor performers. It also organises vocational classes and career guidance programme. The Kudumbshree mission has organises the children of the poor families into Balasabhas as a part of its strategy of "catch them young". Balasabhas provide atmosphere for informal learning to the children of BPL families.

Kudumshree also caters to the housing need of the poor families in Kerala. It has been implementing Bhavanashree programme with the active support of nationalized, scheduled commercial and private sector banks in Kerala. It plays an active role in identification of applicants, screening of applications, disbursal of loan amount and monitoring of payments and construction of government sponsored housing programmes. Several Kudumbshree units are involved in Kerala Clean Mission programme under which waste material are collected from residences and commercial places for recycling. This public health improvement programme also provides them a regular monthly income.

Kudumshree functions as a nodal agency for several poverty eradication programmes of the federal, state and local governments. It plays a critical role in the implementation of various centrally sponsored poverty alleviation programmes.

5.3.7 Online Bill Generation and Collection Improvement through Process Re-engineering (Hyderabad Metropolitan Water Supply Board), Hyderabad

About the project

The Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB) is responsible for supplying portable water to Greater Hyderabad Municipal Corporation and its surrounding areas. It has a consumer base of more than 0.7 million, spread in the jurisdiction of 680 sq. km. HMWSSB, one of the progressive and best managed water supply boards in the country is striving to enhance service delivery, financial sustainability and consumer satisfaction by undertaking a number of innovative measures. HMWSSB introduced 'Online Mobile Bill generation and collection through process re-engineering' by implementing a scheme that would facilitate a fleet of meter reading staff to issue bills and collection of receipts at the consumer door steps. The system enabled efficient billing and collection of revenues, accountability of meter reading staff, real time data and provision of spot billing and collection facility for consumers.

Need of the Initiative

Before the system of online bill generation, HMWSSB had deployed meter readers who would visit door to door and take meter reading manually. The meter readings were entered into the computer. Later bills were generated at the head office and distributed through area in-charge. The entire process from meter reading to distribution of bills was done manually which was a time-consuming and non-transparent process with high cost involved. Also, there was no way to monitor the process and to check the discrepancies. This resulted in high rate of grievance among the consumers.

HMWSSB introduced spot billing system in the year 2000. The meter reading staff were given hand held devices. They used to go door to door with a hand-held device pre-loaded with data and entered the meter reading into the device. Data upload process was carried out separately with the meter reader staff carrying the hand-held devices to a central location. This was a time consuming and inefficient process. The meter readers remained idle during the upload process. Further collection of bill payments was through the E-Seva centres or HMWSSB cash counters which involved a unit transaction cost of Rs 5. Most importantly, billing and collection information were maintained separately with no facility for updating and reconciliation of records.

The need was felt to improve the performance of meter readers, enable real time data, reconciling both billing and collection information as well as to provide a collection facility to consumers at their door step. From

2009 onwards, a system was introduced involving around 630 meter reading staff issuing bills and collecting payments directly from the consumer and enabling real time update of the data in the central server.

Process Mapping

Each consumer is provided with a unique number called CID (Customer ID). The hand-held device now already possesses concerned consumers and system attributes, their payment history, latest relevant data, tariff rates and answers of different queries along with printer, online connectivity GSM/GPRS and credit/debit card reader. After comparing the previous and present meter reading, a bill is generated, printed and given to the consumer on the spot. In case of faulty meter, a minimum bill is recorded and the bill is distributed. Subsequent to the bill distribution, the bill collectors also collect the payment if any consumer intends to pay on the spot, for which the bill collector gives the payment receipt. Transactions are recorded online in the central server through GPRS. In case of GPRS failure, transactions are stored in the hand-held device and later when the signal strength is available it is synchronized in the central server. Payment is collected on spot through cash/credit/debit card. Entire transaction data is sent online to the server.

The system was introduced in a gradual and incremental manner and expanded to all jurisdictional divisions with a capital cost of only Rs 500,000. Each sub process from billing, data transfer to central repository, subsequent data transfer from repository to application and the reporting modules were independently developed and tested. Integration of sub-processes was tested rigorously. The initial model of hand held device constituted of a thermal printer. The output thermal print faded away within a couple of months resulting in negative feedback from the consumers. To overcome this problem, the supplying agency was requested to integrate an impact printer into the handheld device, which outputs a stable print.

Impact and Replicability

The initiative resulted in savings of Rs. 15 lakhs per month in terms of operations and management. Underutilized manpower, which was idle during the later fortnight of the month after the billing was done, was engaged in bill collections resulted in cost saving of around 2 lakhs per month by avoiding transaction cost of Rs.5/- towards each transaction to third-party collection agencies like e-Seva, AP Online etc. Consumer friendly services through payment and receipts at the door step resulted in 20% increase in demand collection.

This model has the potential to be replicated in major water supply boards and for property tax collection across the country, where the manual operation for billing and collection is still in operation.

5.4 Conclusion

The case studies bring out very clearly that effective collaboration and equitable alliance among the regional associations, international financial institutions, NGOs, democratic institutions, and citizens of the country are essential for the achievement of targets set under the SDGs.

To achieve the SDGs by 2030 there is a need for new and innovative solutions that challenge traditional business models and approaches. These solutions will need to be commercially and socially viable and at the same time environment friendly.

6. Conclusion

The globe is more urban now than rural. Urbanization, which is strongly correlated with economic development, is emerging as a strong transformative force reshaping the world's regions. It is impacting both urban and rural landscapes, giving rise to peri-urbanisation while bringing prosperity to many urban regions. Urbanization has also opened up new forms of deprivation, unsustainability, polarization and divergence in development and incomes between urban and rural areas and within urban areas resulting in exclusionary urbanisation and accentuation of disparities. These disparities are manifested both between rural and urban areas and within urban areas[22].

The urban population of Asia is estimated to continue to grow in the next few decades. India, which had been urbanizing very rapidly since the 50s, have registered a decline in urban growth rates since the 80s, when it reached the peak of 3.8 percent growth rate. Despite its contribution to economic development, urbanization in India has led to urban poverty and inequity, deteriorating quality of the urban environment, unplanned growth of peri-urban areas and deficiencies in access to basic urban services. Urban poverty is mired in crime and violence, congestion, exposure to pollution and other health issues and infectious diseases, and often a lack of familiar social and community networks.

This study on political and social inclusion and local democracy in the Indian context attempts to examine the relationships between local democracy and different forms of barriers to political and social inclusion of marginalized urban communities, particularly women, youth, migrants and ethnic minorities. The study is based on both macro and micro level analysis taking the slums of Delhi and Bengaluru as case studies.

The macro level study shows that 17.4 per cent of the urban population lived in slums in 2011 where housing conditions and infrastructure facilities were far from satisfactory. Nearly 2.9 per cent of the urban houses were in dilapidated condition (Census 2011). The urban housing shortage in the country was 18.78 million as per the estimates of the Technical Group on Urban Housing Shortage (2012–2017). Of this, 0.53 million households were homeless and mainly dominated by single male migrants to the cities. Also, 5.49 million urban households in India do not have access to safe drinking water,[23] 19 per cent households either have no toilet within their premises or defecate in the open, and 13 per cent households have no bathing facilities within the home. The condition is worse in the slums with regard to access to basic services. Moreover,

[22] Kundu, D."Emerging Perspectives on Urban-Rural Linkages in the context of Asian Urbanization", *UNCRD 2016*
[23] Water from unsafe sources includes uncovered wells, springs, rivers/canals, tanks/ponds/lakes.

access to basic amenities is not even across the states and urban centres – economically developed states and metropolitan cities have better infrastructural facilities as compared to less developed states and non-metropolitan cities. Disparities in access to basic amenities were also noted by caste and class affiliation of urban dwellers and across migrant and non-migrant households. Current evidence at the national level suggests a declining migration trend for rural people, who find it increasingly difficult to gain a foothold in cities. The growth of urbanisation under the process of globalisation makes cities less affordable for the poor in terms of living and access to basic amenities.

The access to basic infrastructure services in Delhi city and Bengaluru vis-a-vis Delhi state and urban Karnataka is uneven. The urban housing amenities are unequally accessed by different sub-sections of the population. The migrant households and the scheduled households; especially STs in Bengaluru and SCs and OBCs perform poorly in accessibility to specific amenities such as pucca and owned houses, tap water supply, underground drainage system and garbage disposal, and attached bathroom coupled with personal usage toilet facilities. The improvements in the availability and access to good quality amenities over the period of ten years in urban Indian households have been prominently marked by various indicators. Likewise, notwithstanding this betterment in upgradation of housing basic services, the disparity between the male and female headed urban households is still wide in 2012. Also, the poor households have low access to basic services.

The incidence of low coverage of services is higher in Karnataka and Bengaluru as compared to Delhi. It is evident from the analyses of education that Christians have high percentage share in graduation & above level of education while Muslims have lowest level of education in this category. With increasing income, the chance of getting better education is also increasing. In case of access to health services, the utilization of private hospitals is higher which indicates the poor conditions of public health infrastructure in India. A significantly higher percentage of poor are utilising public health services in urban India. With increasing income, even the poor people also prefers to avail services of private hospitals along with other higher income groups because of availability of better health care services in these hospitals as compared to public hospitals.

The study attempted to capture the political and social exclusion in slums through a micro level study in select slums in two cities (Delhi and Bangalore). In the two selected cities, an attempt has been made to examine the role of governance in provision of basic services and identify the gaps in the coverage of basic services with regard to their access to marginalized sections of the population residing in selected slums. In Delhi and Bangalore, two different types of slums are covered in the primary survey, viz, -1) slums (locally known as JJ-

Clusters in Delhi) and 2) resettlement colonies. The analysis shows that the living condition in resettlement colonies is slightly better in comparison to slums both in Delhi and Bangalore. This may be attributed to the tenure security of the slum households living in resettlement colonies as compared to households living in slums/JJ-Clusters. The power supply is better in Delhi as compared to Bangalore. The frequency of water supply is poor in Bangalore as compared to Delhi. However, the quality of water is poor in Delhi as compared to Bangalore. The number of toilet complexes and seats are not sufficient enough to cover the entire population in Delhi where unlike Bangalore, individual toilets are not common. These facilities are in very filthy and unhygienic condition. The garbage disposal mechanism in Bangalore is yet to be institutionalized as it is dumped at a community dumping spots nearby slums. The slum dwellers are prone to water and air borne diseases because of their poor working and living environment.

A significant percentage of households expressed their dissatisfaction with the quality of ration provided through public distribution system to the households living in slums and resettlement colonies of Bangalore and Delhi. Educational facilities especially government run primary, secondary, higher secondary schools and colleges are also in the close proximity (1-10 km) to the slums/resettlement colonies of Delhi and Bangalore. A very high percentage of households across sub-groups use LPG as cooking fuel. A significant percentage of households reported uses of alternative sources of sanitation among which public toilet is one option. Because of poor condition of public toilets, some of the households also go for open defecation. The results from primary survey show that a high percentage of households in Delhi and Bangalore possess ration card, voter id, electricity bill with residential address and Bank Account. However, the percentage share of the households with caste certificate, pension documents, disability and health card is insignificant. Television and mobile phone is the main mode of communication and entertainment in slum/resettlement colony of Delhi and Bangalore. The percentage of the households who never read newspaper is highest among Muslims and OBCs. It is because of the low level of literacy among these sub-groups. Youth are the more tech savvy and using internet and mobile phones regularly.

In comparison to Delhi, the functioning of Mohalla Sabha/Ward Committee is better in Bangalore as a significant percentage of respondents reported that committee meetings took place on every month with regularity. In comparison to households from resettlement colonies, community participation and active citizen engagement is more in slum dwellers which is a positive indicator for local democracy. The survey also shows that the households who are in poor condition have more confidence in local institutions and they realize the importance of getting their voices heard through such avenues/platforms. Women and youth respondents stand out as more dynamic communities in slums. In Delhi, the engagement of the poor with Mohalla Sabhas was minimal.

It has been observed during the field survey that in resettlement colonies the participation of women in public matters was less as compared to slums. The women from slum areas are proactive in putting their problems at public forum. The self-help groups are active both in Delhi and Bangalore. As captured in the primary survey, a high percentage of Muslims and women have knowledge about SHGs in slum/resettlement colony and majority of them are also part of self-help groups. NGOs are also operating in selected slums/resettlement colonies of Delhi and Bangalore providing different type of help. Youth and women are the main sub-groups who benefit from NGO interventions. The slum dwellers deeply value the Indian democracy and its ideals. Political participation at all levels, viz, local, state and central government was very high in both the cities.

The respondents from Delhi reported fire and health epidemic (Dengue and Chikungunya) as major natural hazard during the last five years. However, the respondents from Bangalore reported flood, overflowing of drainage due to intense rainfall and health epidemic as major natural hazard. The slum dwellers from both Delhi and Bangalore reported that they have not received any help from government (central/state/local) during these calamities. A small share of respondents reported that they got help from local NGOs during these disasters. A very high percentage of households across sub-groups believe that government is not prepared/poorly prepared to deliver the basic services in their locality. Most of the respondents in Bangalore were not aware about any government schemes/policy floated by the government for the social security of slum dwellers or migrants. However, in Delhi, respondents were aware about certain schemes aimed at economic and social empowerment.

The slum dwellers from Delhi and Bangalore also perceived that providing support to elderly and the disabled population, women and child safety, improving connectivity to slums and developing infrastructure and community based preparedness for disaster should be on high priority for the government. Several respondents have very low to medium level of trust for the measures taken by government related to women and child safety. The level of confidence in local government was very low among slum dwellers. In contrast, the level of confidence in NGOs was medium to very high. Except youth, the respondents from other sub-groups were not satisfied with the performance of the central and local governments. The respondents of Bangalore were highly satisfied with Mohalla Sabhas as compared to a high percentage of respondents in Delhi not aware about functioning of Mohalla Sabha in the selected area. The assessment level of slum residents was low on various parameters of local governance like quality of services, transparency in functioning; gender sensitivity and their response toward marginalized section. Also, the engagement of service providers was better in Delhi as compared to Bangalore.

6.1.1 Factors Influencing Access to Urban Services

The above analysis corroborates the fact that urbanisation, which has of late been exclusionary in nature, has not benefited all residents equally, leading to an "urban divide". While the rich live in well-serviced neighborhoods and well-built settlements, the poor are confined to inner-city and peri-urban informal settlements. The following section summarises the factors responsible for the inadequate and inequitable access to basic services.

6.1.2 Democratic Local Governance and NGO participation

India's political system allows for greater local level participation which is a positive factor influencing access. The participation of people in the local democratic process through ward committees/mohalla sabhas have resulted in greater accountability of the service providers and local governments. However, there are variations in the level of engagement of the local governments and service providers across states as urban development is a state subject.

6.1.3 Lack of Coordination Between Agencies

A typical slum household suffers from several deprivations including lack of access to improved water and sanitation, insecure land tenure, unreliable power supply and intermittent water availability, insufficient treatment of wastewater, poor drainage and flooding, and uncollected garbage. This lacunae in distribution has arisen due to lack of coordination between agencies coupled by inadequate investments in infrastructure.

6.1.4 Low Capacity and Resources of Local Governments

1990s saw an opening up of the country's economy, although ad-hoc measures of the liberalization were initiated in the mid-eighties. Following the balance of payment crisis, a programme of economic liberalization was launched in the country which propagated the idea of free-market with limited state intervention. The Eleventh Plan launched an inclusive agenda and emphasized the need to bring about major changes in urban governance in order to boost investment in infrastructure development in urban areas (Kundu and Samanta, 2011). Also, the Jawaharlal Nehru National Urban Renewable Mission (JNNURM) was launched in 2005, allocating substantial additional central assistance (ACA) to cities for infrastructure, housing and capacity building. Besides, developing infrastructural facilities across 65 Mission cities, JNNURM aimed at providing urban infrastructure and housing through its component of Urban Infrastructure and Development Schemes for Small and Medium Towns (UIDSSMT) and Integrated Housing and Slum Development Programme (IHSDP) in non-mission cities - covering all other towns under UIDSSMT subsuming the existing related programmes.

Most of the ULBs in India are weak both in terms of capacity to function as independent entities, raise resources and in financial autonomy. Their precarious state of finances as well as their complex institutional and fiscal framework poses a challenge. An important step was taken to empower them to function as the third tier of government by providing them democratic status through the 74th Constitutional Amendment Act (CAA) in 1992. Despite the empowerment and delegation of powers envisioned in the 74th CAA more than two decades ago, most ULBs in India are still not in a position to carry out their routine functions efficiently. The Financial Reforms Expansion (Debt) component of the USAID launched in the nineties also tried to improve local governance in the country by bringing about financial and administrative discipline among the ULBs. However, these piecemeal efforts failed to bring about the desired change in the urban governance structure.

The mission succeeded in getting the state and the city governments to commit themselves to structural reforms which the central government failed to achieve despite adopting several measures and incentive schemes through other programmes and legislations (Kundu et. al. 2007). It was also effective in renewing focus on the urban sector across the country. Yet, many states and cities lagged behind in programme utilization due to lack of enabling capacity and capacity to generate matching funds (Planning Commission, 2011) which explains the deficits.

6.1.5 Elite capture

There has been a sea change in urban governance in the country during the past few decades. The economic liberalisation initiated in the country followed by decentralisation measures adopted by all tiers of the government as an aftermath of the 74th Constitutional Amendment Act (CAA) has resulted in gradual withdrawal of the State and increasing private sector participation in capital investment and operation and maintenance of urban services. Also, the inability of the wards committees, institutionalised through the 74th CAA to usher in decentralised governance has led to the growth of middle class activism through the resident welfare associations (RWAs). The municipal responsibility of provision of services is being increasingly passed on to the RWAs. Their involvement has been broadly in areas of operation and management of civic services, capital investment in infrastructural projects, planning and participatory budgeting, and maintenance of neighbourhood security. Importantly, their functioning has been restricted largely in the better-off colonies. Correspondingly, the informal settlements, which house the urban poor, are unable to exercise their voice through the same which has resulted in accentuation of disparities. The responsibility of municipalities to provide crucial services is being increasingly passed on to the resident welfare associations. Similar tools of intervention are absent in the slums and low-income neighbourhoods and even the local ward committees fail

to represent their needs and aspirations. The very mechanism of the functioning of RWAs is likely to accentuate and institutionalise disparity within urban areas.

6.1.6 Poor Implementation and Targeting of Schemes

In order to bring about infrastructural development and address the issue of inclusive development, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched in 2005 as a reform-linked investment mission to ensure financially sustainable development of the cities through efficient governance, better infrastructure and improved service delivery. The Eleventh and Twelfth Plan documents envisaged the government strategy to "establish the macroeconomic preconditions for rapid growth and support key drivers of this growth". The Eleventh and Twelfth Plan document further added that the strategy must also include sector-specific policies to ensure that the structure of growth and the institutional environment in which it occurs, achieves "the objective of inclusiveness in all its many dimensions". The main thrust of this mission-mode programme was to ensure improvement in urban governance so that the ULBs become financially sound with enhanced credit rating and ability to access capital market for undertaking new projects.

Most of the ULBs do not have the mechanisms and the requisite skills to carry out project preparation. Capacity building of the ULB officials is perhaps the single most important activity required in the today's urban sector. Thus, most of the smaller ULBs could not avail the JNNURM grants as they were unable to prepare DPRs and generate matching resources. It is a fact that the JNNURM has provided for substantial central assistance to cities for infrastructure development, and has indeed been effective in renewing the country's focus on the urban sector. However, the Mission brought about a move towards polarised development with an inbuilt big-city bias.

The present government replaced the former Mission with AMRUT, increasing its coverage to all the 500 cities above 100,000 population. However, disbursements under this programme is also linked to reform measures undertaken by the city and much is left to be desired from the small cities which do not have the wherewithal to adhere to reforms and prepare requisite DPRs for their projects. These cities also suffer from weak municipal finances as the coverage of property tax, which is the most important source of revenue, is very low. The Fourteenth CFC data has also highlighted the decline in the share of own revenues of the local governments. Enforcement of local taxation is weak along with an absence of database on inventories in almost all local bodies. In addition to this, cities covered under the Smart Cities Mission are likely to become more vulnerable as their most important and lucrative revenue streams are to be tied to financing the projects

under the Mission[24]. Also, given the recent inclusion of the non-poor in the Housing for All Mission, the focus of the programme is likely to be diluted.

Several reforms have been introduced in recent years and many states are demonstrating innovations in moving towards effective delivery of programs. However, the overall returns of spending in terms of poverty reduction have not reached its potential. Poor administrative structures for delivery of services and lack of capacities of institution have hindered the effective implementation of programmes. Also, there is multiplicity of programmes and policies since they are administered by various ministries and departments all working in silos. The current Missions are all based on convergence of schemes. This notion should be taken to the grassroot level where the Missions are being implemented. This highlights the need of comprehensive urban and social policy at the national level. The programmes have limited outreach as implementing agencies faces the problem in identifying the right beneficiary. Most of the targeted schemes have not worked efficiently due to inclusion of non-beneficiaries. People working in the unorganised and informal sector are often excluded from such schemes due to income criteria. These people are very vulnerable as they face the risks associated with sickness, accident, unemployment, disability, maternity and old age but are not covered under any of the social security schemes. Many of the evaluation studies of the programmes have reported high leakages of resources especially in PDS scheme and mid-day meal programmes.

6.1.7 Future Perspective

An integrated system of democratic urban governance is essential to effectively cope with urban challenges including social and political exclusion, especially to achieve the SDG 11 of the 2030 Agenda of Sustainable Development to make cities and towns inclusive, safe, resilient and sustainable. Governance structures and national policies often pose a challenge to reform and innovation. Most urban centers in India are financially dependent on higher tiers of government which control the bulk of tax revenues and are often reluctant to share with urban authorities. These issues compound already typically strained budgets and service loads that cannot keep pace with increasing urban density. The management of urban services often suffers from lack of coordination, as functionally oriented central government departments compete with geographically truncated local/urban authorities.

Promoting political and social inclusion requires the full engagement of marginalized communities including women, youth, migrants and minorities in the structures and processes of local democracy. This can be accomplished through inclusive urban policies and programs that fill gaps between urban planning and

[24] New Urban Agenda in Asia-Pacific: Governance for Sustainable and Inclusive Cities, forthcoming 2018

realities. These policies must also accommodate marginalized groups in urban governance by promoting greater participation in urban decision-making and holistic management of city regions that is integrated across jurisdictions and sectors. It can also be facilitated by access to urban land and housing through revised land use regulations, coordination among government agencies controlling land, effective land density and mixed-use projects, and housing finance and land reforms.

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