INDIA'S
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UPDATE 2018



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INDIA'S SMART CITIES MISSION

SMART FOR WHOM? CITIES FOR WHOM?

UPDATE 2018



Preface

Most cities in India are characterized by stark dichotomies: social, spatial, and economic. The imagination of the cityscape, however, continues to shift towards a more exclusionary one, either oblivious to or exacerbating the multiple contradictions that have come to define our cities. Acts of commission and omission by state and non-state actors are contributing to growing segregation, ghettoization, and invisibilization and peripheralization of the poor. A rise in forced evictions, homelessness, inequality, and impoverishment are some of the consequences of this dominant urbanization paradigm, which accepts the 'inevitability of urbanization' as an indisputable reality without addressing its structural causes or impacts on the global ecosystem. State and policy interventions, instead, continue to be symptomatic rather than durable and holistic.

An initiative that seems to strengthen this exclusionary vision, with policy directives, is India's Smart Cities Mission. Initiated in June 2015, with the ostensible goal of creating 100 'smart cities' in the country, the Mission completes three years on 25 June 2018. Since its launch, it has been enveloped in hope and skepticism, uncertainty and optimism, with as much space devoted to deliberating its potential as its challenges.

On the second anniversary of the Mission, in June 2017, Housing and Land Rights Network, India (HLRN), undertook a comprehensive review of the first 60 selected Smart City Proposals with the purpose of understanding what the Mission is about and what it aims to deliver for the most marginalized among India's urban population. The study by HLRN noted the absence of a human rights approach and—despite the Mission's rhetoric of inclusion—a neglect of the urban poor and other marginalized constituencies in its proposals and practice. Our analysis had questioned whether the pursuit of a 'smart city' is the right strategic decision for India, given its low socio-economic indicators and large rural-urban divide.

A year later, with 99 cities in India set to become 'smart' and investments worth Rs 2.04 lakh crore (2,039 billion) being planned in 'smart city' projects, the question we seek to ask is the same, but also different. Has the Smart Cities Mission helped in reducing inequality and promoting inclusive development in the cities where it is being implemented? And a year later, do our conclusions derived in June 2017, still hold true or not?

With this objective in mind, HLRN used a human rights lens to analyse all 99 selected Smart City Proposals in order to assess their focus on marginalized groups, their vision for urban India, and their provisions for housing for low-income groups. Our study also examined media and government reports related to implementation of the Mission. This report presents the findings of our analysis as well as a set of recommendations for the government and other involved actors.

As the Mission is in an over-drive mode to achieve targets that have been inordinately delayed, it is important to reflect on its journey so far, with the aim of improving the course of its future trajectory.

While some 'smart city' projects could bring about positive achievements, the critical question is whether the gains are worth the costs – financial, ecological, and human, as well as the opportunity loss of not adopting an alternative approach.

With one in six urban Indians still living without adequate housing and access to essential services, and high rates of violence and crime being reported against women, children, minorities, and Dalits in urban areas, a 'smart city' cannot just be about installing seamless digital connectivity, or making physical infrastructure more efficient and reliable. It has to be as much about investing in social infrastructure, about making

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the city more 'liveable' for every resident – rich or poor, privileged or under-privileged. It is about secure housing; clean air and water; safe public and private spaces; and realizing the highest attainable standard of health. It is about inclusion; about every child being able to access quality education; and, the sense of safety that women, children, and minorities can rely on. It has to be about every resident—irrespective of income, religion, caste, gender, geographical location, political affiliation, and sexual orientation—having equal opportunities and being able to live with peace and security.

The Smart Cities Mission (which is essentially a 'smart enclaves' scheme) should reinvent itself as the *Sustainable Cities Mission*, a shift required to bring about a substantial and sustained improvement in the lives and livelihoods of not only the eight per cent of India's population covered by the Mission's proposed 'area-based development' – but for every inhabitant of this country.

Unless the Mission seeks to address structural inequalities and inadequacies in Indian cities, its piecemeal, project-based interventions will not work. It requires a fundamental re-envisioning exercise that places people, not technology and profit at the centre. A more concerted effort to include and focus on discriminated and excluded groups could help redeem the floundering Mission. Its lessons could help ensure the adoption and pursuit of a more balanced and equitable development paradigm while mitigating its contribution to the polarization and gentrification of urban spaces.

The prevalent sphere of discordant urban realities and myopic interventions intensifies the exigency for the incorporation of a human rights and social justice approach, which is firmly grounded in the principles of non-discrimination, gender equality, participation, transparency, accountability, environmental sustainability, and democracy.

Housing and Land Rights Network hopes that this report will help foster greater discussion on these important issues with the aim of promoting alternatives to restrictive and exclusionary ideologies of development. We call upon all involved actors to reflect on the proposed recommendations in order to support the creation of 'human rights habitats' in which the right of all inhabitants, in urban and rural areas, to live with equality and dignity is guaranteed.

Let us focus on making our cities pro-people first; 'smart cities' are not necessarily pro-people.

Shivani Chaudhry

Executive Director, Housing and Land Rights Network

New Delhi, June 2018

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List of Acronyms

ABD	Area-based Development
AI	Artificial Intelligence
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
BSUP	Basic Services for the Urban Poor
CBD	Central Business District
CCTV	Closed Circuit Television
CEO	Chief Executive Officer/s
EU	European Union
EWS	Economically Weaker Sections
FGD	Focus Group Discussion/s
FY	Financial Year
HRIDAY	National Heritage City Development and Augmentation Yojana
ICT	Information and Communication Technologies
IT	Information Technology
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
LARR	Land Acquisition, Rehabilitation and Resettlement (Act)
LIG	Low-income Groups
LGBTQI	Lesbian, Gay, Bisexual, Transgender, Queer, Intersex
MDG	Millennium Development Goals
MIG	Middle-income Groups
MoHUA	Ministry of Housing and Urban Affairs
MoU	Memorandum of Understanding
NDA	National Democratic Alliance
NGO	Non-government Organization
NDMC	New Delhi Municipal Council
NULM	National Urban Livelihoods Mission
PMAY	Pradhan Mantri Awas Yojana
PPP	Public Private Partnership
RAY	Rajiv Awas Yojana
RTI	Right to Information
SBM	Swachh Bharat Mission
SCM	Smart Cities Mission
SCP	Smart City Proposal
SDG	Sustainable Development Goal/s
SPV	Special Purpose Vehicle/s
SWOT	Strengths, Weaknesses, Opportunities, and Threats
ULB	Urban Local Body/Bodies
UK	United Kingdom
UN	United Nations
US	United States
USD	US Dollar
UT	Union Territory/Territories

Executive Summary

Background

India ranks 131 (out of 188 countries) on the Human Development Index and records the world's largest number of people, 642 million, living in multidimensional poverty (UNDP 2016). While the rate of urbanization is increasing, the country still has about 69 per cent of its population or over 800 million people living in rural areas. Urbanization processes, however, have not been entirely inclusive. This is reflected in the fact that about one in six urban dwellers lives in an inadequate settlement without basic services (Census 2011); nearly two-thirds of urban households do not have access to water within the house; and about 85 million urban Indians lack adequate sanitation facilities. About one per cent of the population in cities (3–4 million people) is estimated to be homeless, without any form of shelter.

India's Smart Cities Mission

Against this backdrop of urban inequality and inadequate living conditions, the Smart Cities Mission (SCM) was launched by the Government of India in June 2015 to create 100 'smart cities' in the country (initially by the year 2020 but now revised to 2023). As of June 2018, the Ministry of Housing and Urban Affairs (MoHUA) has chosen 99 cities to be developed as 'smart cities' in India, on the basis of the Smart City Proposals submitted by them under the competition framework of the India Smart Cities Challenge. New Town Kolkata has withdrawn from the Mission and the proposed hundredth city, Shillong, is yet to be confirmed as an official part of the Mission.

As the Mission completes three years on 25 June 2018, Housing and Land Rights Network, India (HLRN) has published this report to assess its progress and contributions to urban development in India as well as its impacts on the most marginalized among the urban population. The study undertaken by HLRN consists of an analysis of all 99 selected Smart City Proposals as well as an extensive review of media, government, and other reports about the Mission.

Major Findings of the HLRN Study

- 1. Only about 8 per cent of India's total population or 22 per cent of its urban population is likely to benefit from the Smart Cities Mission. The rationale of selecting only 100 of India's over 4,000 cities and towns and of focusing only on select areas within each city misses an opportunity to evolve an inclusionary approach to development. It could also tend to perpetuate biases and discrimination in national planning processes. Of the total proposed investment of Rs 2.04 lakh crore (2,039 billion) in 'smart cities,' 80 per cent will be spent on 'Area-based Development (ABD),' i.e. only on specific areas in each city, with only 20 per cent of funds being devoted to 'pan-city development.' Calculations by HLRN reveal that the city area covered by ABD is less than 5 per cent for 49 of the 86 cities for which information is available. Data from MoHUA reveals that only 99.5 million people (of India's 450 million people living in urban areas in 2018) will be covered by interventions of the Mission.
- 2. Adoption of a project-based approach rather than an integrated urban development paradigm. With the limited focus on pan-city initiatives, the Mission does not adopt a progressive vision of change for the entire 'smart city.' While the positive components of Smart City Proposals are largely within the ambit of innovative ideas for formulating technological and 'green' solutions, developing renewable energy, creating better infrastructure, and promoting improved transportation facilities, there is no consistency among the proposals or an explanation for the choice of projects.

- **3.** Failure to address rural-urban linkages on a continuum. While the Mission claims to be responding to the challenges of rapid urbanization in India, it has adopted a rather limited approach. It reinforces the erroneous policy assumption that '*urbanization is inevitable*,' thereby ignoring the need to take concerted measures to address distress or forced migration to urban areas by investing in the needs of rural people, responding to acute land and agrarian crises, and developing rural areas with adequate budgets and investment plans.
- 4. Absence of human rights-based standards and monitoring indicators. The lack of a city development model and adequate standards to guide project implementation, including for housing, water, sanitation, health, and environmental sustainability, raise questions about whether the Mission will really be able to deliver on its aims and ensure the fulfilment of rights and entitlements of all city residents. The SCM Guidelines do not include any human rights-based indicators to monitor implementation of the Mission or to ensure that projects will also benefit low-income and other disadvantaged groups.
- **5.** Absence of a strong gender equality and non-discrimination approach. There is a limited focus on and priority to marginalized groups including Scheduled Castes, Scheduled Tribes, and other minorities. In particular, the silence on caste-based discrimination is glaring. While issues related to women, children, persons with disabilities, and older persons find some mention in most Smart City Proposals, the Mission does not incorporate a consistent rights-based and substantive equality approach to address structural discrimination and violence against these groups in cities. This is all the more disconcerting given the disturbing indicators related to the socio-economic development of marginalized groups and communities in India.
- 6. Inadequate participation and information. Though almost every city has reported some form of engagement with residents in the development of Smart City Proposals, media reports and analyses by HLRN reveal that people's participation in the development of Smart City Proposals, especially from low-income communities, has not been adequate. There is also no means of ascertaining whether inputs collated during public consultations have been factored into the final proposals and selection of 'smart city' projects in each city.
- 7. Non-recognition of housing as a human right. While housing for economically weaker sections (EWS) and low-income groups (LIG) has been identified as an area of concern in almost every selected proposal, cities have approached the issue differently, labelling low-income settlements ('slums')* as 'threats' or 'weaknesses' to be addressed. Despite raising the issue of housing for EWS/LIG in their proposals, none of the cities have recognized housing as a human right or included standards of 'adequate housing,' especially those related to appropriate location, affordability, and tenure security. In the Smart City Proposals, as in state policy, interventions for the homeless continue to be restricted to the provision of shelters, which are only a temporary, emergency measure. They do not aim to address structural causes of homelessness or enable the homeless to move out of a situation of homelessness to that of secure, adequate, and permanent housing. The need to explore different options, along a housing continuum, has been demonstrated only in a few proposals.
- 8. Threat of forced evictions, land acquisition, and displacement. In 2017, HLRN documented forced evictions and demolitions of homes in 32 of the 99 'smart cities.' While some evictions were directly linked to 'smart city' projects, others were carried out for reasons ranging from 'city beautification' to 'slum clearance.' The goal of several cities to become 'slum-free' without including concomitant indicators—such as the number of houses demolished or the number of homeless persons recorded in the city every year—to assess realization of this target could promote evictions and the destruction of low-income settlements under the guise of creating 'cities without slums.' From the list of 99 'smart cities,' eight cities have proposed greenfield development, including the new city of Amaravati. This is giving rise to fears of increased land acquisition, particularly along economic and industrial corridors

^{*} Housing and Land Rights Network does not advocate the use of the word 'slum' preferring the term 'settlement' as a more inclusive alternative. The Government of India (including in all Smart City Proposals) uses the word 'slum' in official discourse to refer to the homes and settlements of low-income communities. Thus, the word 'slum' when being cited from official documents has been placed in single quotes throughout this report.

where several 'smart cities' are strategically located, which could result in the loss of farmland as well as the displacement of farmers and other rural communities.

- **9.** Likelihood of increased segregation and gentrification. The cost of developing 'smart enclaves,' while facilitating the likely expulsion of low-income groups to city peripheries under the guise of 'permanent housing,' will also have to be borne by the city residents living in these areas, not all of whom may be wealthy. Initiatives to increase user charges for essential services, including of water, have already been proposed in cities like Pune. With improved services and amenities in the 'smart city,' the costs of real estate—including commercial rental rates and housing prices in the area—are likely to increase, fuelling the threat of market-led evictions and gentrification of 'smart' neighbourhoods.
- **10. Dilution of democracy and a rising trend of the privatization of governance.** The SCM Guidelines require each 'smart city' to create an entity called the Special Purpose Vehicle to be established as a limited company incorporated under the Companies Act 2013, in which the state and urban local body have 50:50 equity shareholding. This measure has been criticized as a direct violation of The Constitution (Seventy-fourth Amendment) Act 1992, which divests power in local governments and urban local bodies. The competing governance mechanism created by the Special Purpose Vehicle, while resulting in overlapping powers, could substantively dilute local democracy.
- **11. Risks of digitalization and threats to privacy.** The tendency of new and emerging technologies to capture personally identifiable information and household-level data about citizens, gives rise to serious concerns about the smart city's propensity to violate people's privacy through misuse of big data. In addition to violations of the right to privacy, several other rights, including the right to access information and the right to security are threatened by increased surveillance and control of personal data.
- **12. Environmental concerns.** Though there is a stated focus on environmental sustainability within Smart City Proposals, the paradigm of development being espoused by the Mission could result in the growing ecological footprint of 'smart cities.' It could also pose threats of increased e-waste and loss of forest cover in the pursuit of greenfield development and city-based infrastructure projects.
- **13. Increased corporatization of cities.** It is estimated that the implementation of India's Smart Cities Mission would require investments worth 150 billion US dollars over the next few years, of which 120 billion dollars (80 per cent of total capital outlay) would be required from the private sector. The selected cities are, thus, raising funds through a variety of Public Private Partnership (PPP) models with large companies, including several big multinational players, likely to be the greatest beneficiaries. According to MoHUA, as of May 2018, PPP projects worth Rs 734 crore had been completed in 13 cities while projects worth Rs 7,753 crore were under the implementation/tendering stage in 52 cities. These trends highlight the subtle and irrevocable transition towards the corporatization of Indian cities, with grave potential implications for governance as well as the fundamental rights of residents.
- 14. High dependence on foreign investment. An ostensible goal of the Smart Cities Mission is to secure foreign investment in 'smart city' projects and development. Various foreign governments and international agencies have committed funding, either for general support to the Mission or for specific city-projects. Countries that have offered to invest in the Mission include Canada, China, France, Germany, Israel, Japan, the Netherlands, Singapore, South Korea, Spain, Sweden, Taiwan, the United Kingdom, and the United States of America. However, the actual amount of remittances and the conditionalities attached to these investments are not known. There is thus a concern about the level of control that local governments will have over decisions and outcomes related to 'smart city' projects.
- 15. Apparent lack of convergence with other schemes. In addition to the Smart Cities Mission, urban development in India is being governed by several other national schemes, each one with large financial allocations: Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Swachh Bharat Mission (SBM), the Pradhan Mantri Awas Yojana (PMAY) or Housing for All–2022 scheme, the National Urban Livelihoods Mission (NULM), and Heritage City Development and Augmentation Yojana (HRIDAY), among others. A review of these schemes reveals a multiplicity of targets and overlapping areas of

intervention, giving rise to questions of efficacy and impact. Ninety-two of the 99 selected 'smart cities' are also covered under AMRUT, bringing into question the rationale for selecting the same cities under two schemes. Since different schemes are led by different agencies and guided by different targets, budgets, and plans for implementation, delays or problems in the implementation of one scheme could directly impede progress of another. The question then is: What is the value added by the Smart Cities Mission, or is it just a duplication of efforts and an avoidable dilution of accountability?

- **16.** Slow rate of implementation and lack of a monitoring mechanism. The Parliamentary Standing Committee on Urban Development, in its report of March 2018, noted that of all urban schemes, spending for the Smart Cities Mission had been the lowest. An analysis of projects exclusive to the Mission reveals that, as of March 2018, projects worth Rs 4,583 crore (3 per cent) of the total cost of identified projects (Rs 139,038 crore), or 8 per cent of the total identified projects (3,008) under the Mission had been completed. Progress from different cities is also reported to be slow.
- 17. Positive developments have been reported in a few cities. These include restoration of heritage sites in Gwalior, solar energy achievements in Diu, child-friendly initiatives in Bhubaneswar, a waste management project in Jabalpur, and toilet construction in Kakinada. As of May 2018, MoHUA claims that 'smart solar projects' and 'smart water projects' had been completed in six cities. Surat has been rated the best in terms of completion of 'smart city' projects. However, in the absence of a comprehensive framework, it is difficult to ascertain the progress of the Mission, especially with regard to key indicators and outcomes.

Recommendations

The human rights analysis of the Smart Cities Mission—undertaken by HLRN—reveals the absence of a rights-based approach to the Mission as well as a neglect of the urban poor and marginalized. While it may be too late to backtrack on or reverse the process that the Mission has embarked on, it is not too late to change the direction of its trajectory by implementing measures to ensure a greater focus on human rights, equality, and social justice.

Housing and Land Rights Network would, therefore, like to propose the following recommendations to the government as well as other agencies and actors involved with the Smart Cities Mission.

- 1. The Smart Cities Mission needs a human rights-based implementation and monitoring framework to assess the achievement of targets and to ensure that its projects comply with national and international law and promote human rights and environmental sustainability.
- 2. The Mission must develop a special focus on the needs, concerns, and rights of marginalized individuals, groups, and communities.
- 3. Meaningful participation and engagement should be a priority in the selection and execution of 'smart city' projects in all SCM cities. The free, prior, and informed consent of all persons likely to be impacted by 'smart city' projects should be obtained prior to project selection and development.
- 4. All projects within the Mission must carry out a human rights-based impact assessment and an environmental impact assessment before they are sanctioned.
- 5. Strict measures must be put in place to ensure that implementation of 'smart city' projects does not result in the violation of any human rights, including forced evictions, forced relocation, and displacement.
- 6. The provision of adequate affordable housing in all Smart City Proposals must be strengthened while allying with the targets of PMAY/Housing for All–2022. Cities should define 'affordable housing' with clear income-based criteria. 'Rehabilitation' and 'slum-free city' projects should not be an excuse to destroy low-income settlements.

- 7. Balanced rural and urban development should be a priority with adequate funds being allocated to all cities and villages across India.
- 8. Efforts must to be made to protect the right to privacy, and to prevent surveillance and misuse of big data. India needs meaningful and appropriately-nuanced data legislation to check against the growing threats of digitalization.
- 9. The Special Purpose Vehicle tasked with implementing the Mission must work within the framework of democracy provided by the Constitution of India and must respect local institutions and governments.
- 10. The role of the corporate sector associated with 'smart city' projects, including multinational companies, should be regulated to ensure compliance with national and international laws. Privatization of essential services must be prevented.
- 11. Improved convergence of all government schemes along with better inter-ministerial coordination is a vital requirement. Common core human rights indicators should be developed to ensure harmonized monitoring of all schemes.
- 12. The Government of India should incorporate concrete human rights-based indicators within the Liveability Index being developed, so as to meaningfully assess the quality of life and standard of living in Indian cities, including 'smart cities.'
- 13. Implementation of the Smart Cities Mission should align with India's legal commitments under the Sustainable Development Agenda 2030, the Paris Agreement, and the New Urban Agenda. It should also aim to implement recommendations from India's third Universal Periodic Review, several of which related to sustainable development, housing, and green cities.
- 14. Progressive court judgments, including those upholding the rights to privacy and housing, should be complied with. Recommendations of UN treaty bodies and Special Procedures, especially the suggestions of the Special Rapporteur on adequate housing pertaining to the Smart Cities Mission, should also be implemented.
- 15. The Mission should focus on the realization of the 'right to the city' for all and incorporate this approach in its implementation.

Given the many concerns and challenges related to the Smart Cities Mission, HLRN hopes that all involved agencies—state and non-state—will consider implementing the recommendations presented above.

It is important for the Indian government, at both the central and state levels, to adopt a strong human rights approach in all policies and schemes, including the Smart Cities Mission. A focus on creating 'human rights habitats' instead of 'smart cities' would ensure that the poor and marginalized are not excluded, their democratic participation in governance is guaranteed, their fundamental rights are upheld, and that equitable living spaces are created for all. These measures will not only help India to meet its national and international legal and moral commitments, including the Sustainable Development Goals and Paris Agreement targets, but also help the nation achieve inclusive, equitable, sustainable, and balanced urbanrural development.

I. Background

According to the 'Human Development Report 2016,' India ranked 131 (out of 188 countries) on the Human Development Index and recorded the world's largest number of people, 642 million, living in multidimensional poverty (computed by assessing indicators related to health, education, and standard of living).¹ The Census of India 2011 (hereafter Census 2011) documented 377 million people living in urban areas; in 2018, this number rose to 449 million, accounting for 33.2 per cent of India's population.² While India's urban population is projected to increase to about 600 million by 2030, its growth has not been accompanied with commensurate improvements in housing, infrastructure, and service delivery. The structural causes of rapid urbanization continue to remain unaddressed, with the 'inevitability of urbanization' being considered an indisputable reality.

Official data highlights that India had a national urban housing shortage of 18.78 million houses in 2012; 96 per cent of which was for economically weaker sections (EWS) and low-income groups (LIG).³ Studies project that this could increase to 34 million units by the year 2022⁴ while families unable to afford a house could reach 38 million by 2030.⁵ In November 2017, the Ministry of Housing and Urban Affairs (MoHUA) claimed that the national urban housing shortage had fallen to 10 million units.⁶ While the methodology and basis for arriving at this figure has not been revealed, the reduced figure is questionable, especially as the increase in forced evictions across India is resulting in the destruction of housing stock and a rise in homelessness, particularly in the absence of adequate resettlement.

Migration from rural to urban areas, in part because of the lack of attention to adequate rural development, is also projected to continue. As per the Economic Survey of India 2017–18,⁷ the number of inter-state migrants was close to nine million annually between 2011 and 2016, whereas according to Census 2011, internal migrants in the country (both inter- and intra-state movement) account for over 139 million people per year. It is estimated that over 70 per cent of migrants are least likely to afford a house at market prices.⁸

Housing shortage, in terms of the gap between demand and supply, is also a consequence of unrestrained commercial development of housing for the rich/elite at the expense of investment in housing for EWS/ LIG. Despite the existence of national and state housing schemes, the housing and living conditions of the most marginalized in the country have not improved. The lack of state investment in, and the unavailability of, low-cost, affordable, social housing options, forces millions of urban residents, mostly workers in the unorganized sector, to live in extremely inadequate conditions – either on streets or in underserviced and low quality housing in settlements referred to as 'slums' in official discourse.⁹ The continued use of terms like 'slum' and 'encroacher' for the urban poor continues to dictate the framing of urban policy in a manner that not only discounts the significant contribution to the economy by members of urban households living in poverty, but also reveals a strong prejudice against them.

According to the Slum Census 2011, India recorded a 37.14 per cent decadal growth in the number of 'slum' households. Almost two-thirds of statutory towns in India have 'slums' and a total of 13.75 million households live in them. In 2013, official data revealed that the 'slum' population was 104 million.¹⁰ Living conditions in settlements of the urban poor are characterized by gross inadequacies, including precarious and unsafe housing, the absence of tenure security, and the lack of basic services such as water, electricity, sanitation, and access to crèches and adequate healthcare, resulting in the denial and violation of the human right to an adequate standard of living. Census 2011 data reveals that 36 per cent of households in these settlements do not have basic facilities of electricity, tap water, and sanitation within their premises¹¹ while close to 70 per cent lack clean, safe, and affordable energy for cooking.¹²

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Census 2011 recorded 1.77 million homeless persons in India; around a million in urban areas and 835,000 in rural areas.¹³ Independent experts, however, claim that the census enumeration was not accurate and that about one per cent of the urban population¹⁴ or about four million people are homeless in urban India.

Macro-economic policies and unrestrained speculation over housing and land have resulted in a paradox of shortage and surplus in housing units in India. Census 2011 recorded 11.1 million houses, or 12 per cent of the total urban housing stock in the country, as vacant,¹⁵ compared to 6.5 million vacant houses counted in Census 2001. This data was also corroborated by the Economic Survey 2017–18.¹⁶ Metropolitan cities record the highest number of unoccupied houses. Mumbai tops this list with 0.48 million vacant houses, followed by Delhi at 0.3 million, and Bengaluru at 0.3 million.¹⁷ The high percentage of vacant housing in India indicates that the housing market in the country is largely controlled by real estate investors for speculative gains, rather than by those with residential intent.

India is also home to the world's largest rural population, with over 800 million living in rural areas (Census 2011). According to the Socio-economic and Caste Census 2011, of a total of 243.9 million households, 179.1 million are rural. Of the rural households, 48.5 per cent (86.9 million households) are considered 'deprived' (recording at least one of seven parameters of 'deprivation'), 56.4 per cent (101.4 million households) are landless, and 30 per cent (53.7 million households) are landless labourers, deriving a major part of their income from manual labour.¹⁸ Though land ownership and distribution is highly inequitable, land reform is not a priority in any state of the country. The national rural housing shortage at the end of 2012 was 43.13 million, over 90 per cent of which was for 'below poverty line' families.¹⁹ More than 13 per cent (23.7 million) of rural households live in one room with *kutcha* (mud/temporary) walls and roof.²⁰

Housing and living conditions across India are thus fraught with several inadequacies, including in terms of spatial inequality and tenurial insecurity.

II. India's Smart Cities Mission: An Overview

Against a backdrop of urban inequality and inadequate living conditions in Indian cities, the Smart Cities Mission (SCM) was launched by the Government of India in June 2015 to create 100 'smart cities' in five years (by 2020). It is one of several urban schemes launched by India's current National Democratic Alliance (NDA) government at the centre, with the ostensible goal of improving the quality of life in India's cities. While a 'smart city' has not been clearly defined by the government in any official document, the Smart Cities Mission Statement and Guidelines (hereafter SCM Guidelines)²¹ indicate that a 'smart city' will include the following: adequate water supply; assured electricity; sanitation, including solid waste management; efficient urban mobility and public transport; affordable housing, especially for the poor; robust Information Technology connectivity and digitalization; good governance, especially citizen participation; sustainable environment; safety and security of citizens; and, health and education. While interpretation of the concept has been left to state governments and independent cities, the term is used loosely across a broad spectrum of actors, often with different layers of comprehension and thus, the lack of a well-defined framework for implementation.

1. Smart Cities Selection Process and Timeline

The Government of India developed a detailed process for the selection and completion of 'smart cities' based on a multi-stage competition format.

Between June and July 2015, all states and union territories (UT) within the country were required to submit nominations of cities for consideration in the 'India Smart Cities Challenge.' From these submissions, the Ministry of Urban Development (which was merged with the Ministry of Housing and Urban Poverty Alleviation to form the new Ministry of Housing and Urban Affairs (MoHUA) in 2017) shortlisted 100 cities in August 2015. The selection criteria gave equal weightage to the urban population of the state/UT and the number of statutory towns²² in the state.

	Name of State/Union Territory	Number of Cities Nominated (August 2015)	Cities Nominated	Number of Cities Selected (as of June 2018)	Names of Cities Selected
1.	Andaman and Nicobar Islands	1	Port Blair	1	Port Blair
2.	Andhra Pradesh	3	Visakhapatnam Kakinada Tirupati	4	Visakhapatnam Kakinada Tirupati Amaravati
3.	Arunachal Pradesh	1	Pasighat	2	Pasighat Itanagar
4.	Assam	1	Guwahati	1	Guwahati
5.	Bihar	3	Bihar Sharif Bhagalpur Muzaffarpur	4	Bihar Sharif Bhagalpur Muzaffarpur Patna

Table 1: Number of 'Smart Cities' Nominated by States for the Smart Cities Challenge Based on Urban Population and Number of Statutory Towns

3

	Name of State/Union Territory	Number of Cities Nominated (August 2015)	Cities Nominated	Number of Cities Selected (as of June 2018)	Names of Cities Selected
6.	Chandigarh	1	Chandigarh	1	Chandigarh
7.	Chhattisgarh	2	Bilaspur Raipur	3	Bilaspur Naya Raipur Raipur
8.	Dadra and Nagar Haveli	1	Silvassa	1	Silvassa
9.	Daman and Diu	1	Diu	1	Diu
10.	Delhi	1	New Delhi Municipal Council	1	New Delhi Municipal Council
11.	Goa	1	Panaji	1	Panaji
12.	Gujarat	6	Ahmedabad Dahod Gandhinagar Rajkot Surat Vadodara	6	Ahmedabad Dahod Gandhinagar Rajkot Surat Vadodara
13.	Haryana	2	Faridabad Karnal	2	Faridabad Karnal
14.	Himachal Pradesh	1	Dharamshala	2	Dharamshala Shimla
15.	Jammu and Kashmir	1	(Initially one city was proposed to be selected, but could not submit its proposal in the first round of the Smart Cities Challenge)	2	Jammu Srinagar
16.	Jharkhand	1	Ranchi	1	Ranchi
17.	Karnataka	6	Belagavi Davanagere Hubbali-Dharwad Mangaluru Shivamogga Tumakuru	7	Belagavi Bengaluru Davanagere Hubbali-Dharwad Mangaluru Shivamogga Tumakuru
18.	Kerala	1	Kochi	2	Kochi Thiruvananthapuram
19.	Lakshadweep	1	Kavaratti	1	Kavaratti
20.	Pradesh	7	Bhopal Gwalior Indore Jabalpur Sagar Satna Ujjain	7	Bhopal Gwalior Indore Jabalpur Sagar Satna Ujjain
21.	Maharashtra	10	Amravati Aurangabad Greater Mumbai Kalyan-Dombivali Nagpur Nashik Navi Mumbai Pune Solapur Thane	8	Aurangabad Kalyan-Dombivali Nagpur Nashik Pimpri Chinchwad Pune Solapur Thane (Navi Mumbai and Greater Mumbai opted out of the Mission)

	Name of State/Union Territory	Number of Cities Nominated (August 2015)	Cities Nominated	Number of Cities Selected (as of June 2018)	Names of Cities Selected
22.	Manipur	1	Imphal	1	Imphal
23.	Meghalaya	1	Shillong	1	Shillong
24.	Mizoram	1	Aizawl	1	Aizawl
25.	Nagaland	1	Kohima	1	Kohima
26.	Odisha	2	Bhubaneswar Rourkela	2	Bhubaneswar Rourkela
27.	Puducherry	1	Oulgaret	1	Oulgaret
28.	Punjab	3	Amritsar Jalandhar Ludhiana	3	Amritsar Jalandhar Ludhiana
29.	Rajasthan	4	Ajmer Jaipur Kota Udaipur	4	Ajmer Jaipur Kota Udaipur
30.	Sikkim	1	Namchi	1	Namchi
31.	Tamil Nadu	12	Chennai Coimbatore Dindigul Erode Madurai Salem Thanjavur Thoothukudi Tiruchirappalli Tirunelveli Tirunepur Vellore	11	Chennai Coimbatore Erode Madurai Salem Thanjavur Thoothukudi Tiruchirappalli Tirunelveli Tirunelveli Tiruppur Vellore
32.	Telangana	2	Warangal Karimnagar	2	Warangal Karimnagar
33.	Tripura	1	Agartala	1	Agartala
34.	Uttar Pradesh	12 (13)	Agra Aligarh Allahabad Bareilly Ghaziabad Jhansi Kanpur Lucknow Moradabad Rampur Saharanpur Varanasi	10	Agra Aligarh Allahabad Bareilly Jhansi Kanpur Lucknow Moradabad Saharanpur Varanasi
35.	Uttarakhand	1	Dehradun	1	Dehradun
36.	West Bengal	4	Bidhan Nagar Haldia Kolkata New Town Kolkata	1	West Bengal withdrew all its cities from the Mission. New Town Kolkata, however, is still on the list.
Total		100		99	

The SCM Guidelines, which provided direction for the development of Smart City Proposals, stated that each one should contain a proposal for an identified area with either a retrofitting or redevelopment or greenfield development feature, or a mix thereof, as well as a pan-city feature with 'smart solutions.' These include electronic service delivery, renewable sources of energy, integrated multi-modal transport, telemedicine, and tele-education.

5



Source: Smart Cities Mission Statement and Guidelines

In **January 2016**, the government announced 20 cities as 'winners' from the first phase of the Smart City Challenge. The selection process consisted of extensive reviews of city-level and proposal-level criteria of Smart City Proposals by three independent panels of experts. In **May 2016**, the government released the second list of an additional 13 cities, selected on a fast-track basis, to be included in the first phase of the Mission. These 33 cities from the two lists were to receive funding in order to be developed as 'model smart cities.' In August 2016, however, the West Bengal government withdrew its shortlisted city—New Town Kolkata—from the Mission and did not submit proposals in subsequent rounds of the Smart Cities Challenge for its other three cities that were being considered as 'smart cities.' Instead, the state government decided to implement its own scheme for city development.²³ The cities of Navi Mumbai and Greater Mumbai also chose to opt out of the Mission, on account of reservations of the state government to the SCM Guidelines and philosophy.²⁴

In **September 2016**, in the second round of the Smart Cities Challenge, the government announced the third list of 27 additional cities, bringing the number of selected Smart City Proposals to 60. In **June 2017**, in the third round of the Challenge, the fourth list of 'smart cities' released the names of the next 30 cities. Finally, in **January 2018**, MoHUA announced nine new smart cities as part of the fourth round of selection under the Smart Cities Challenge, bringing the total to 98 cities.²⁵

	SMART CITY	STATE/UNION TERRITORY	INCLUDED IN AMRUT					
ROUNE	ROUND 1 OF SELECTION (JANUARY 2016)							
1.	Ahmedabad	Gujarat	\checkmark					
2.	Belagavi	Karnataka	Х					
3.	Bhopal	Madhya Pradesh	\checkmark					
4.	Bhubaneswar	Odisha	\checkmark					
5.	Chennai	Tamil Nadu	\checkmark					
6.	Coimbatore	Tamil Nadu	\checkmark					
7.	Davanagere	Karnataka	\checkmark					
8.	Guwahati	Assam	\checkmark					
9.	Indore	Madhya Pradesh	\checkmark					
10.	Jabalpur	Madhya Pradesh	\checkmark					
11.	Jaipur	Rajasthan	\checkmark					
12.	Kakinada	Andhra Pradesh	\checkmark					
13.	Kochi	Kerala	\checkmark					
14.	Ludhiana	Punjab	\checkmark					

Table 2: Final List of Smart Cities

	SMART CITY	STATE/UNION TERRITORY	INCLUDED IN AMRUT
15.	New Delhi Municipal Council (NDMC)	New Delhi	\checkmark
16.	Pune	Maharashtra	\checkmark
17.	Solapur	Maharashtra	\checkmark
18.	Surat	Gujarat	\checkmark
19.	Udaipur	Rajasthan	\checkmark
20.	Visakhapatnam	Andhra Pradesh	Х
FAST-T	RACK ROUND (MAY 2016)		
21.	Agartala	Tripura	\checkmark
22.	Bhagalpur	Bihar	\checkmark
23.	Chandigarh	Chandigarh	\checkmark
24.	Dharamshala	Himachal Pradesh	Х
25.	Faridabad	Haryana	\checkmark
26.	Imphal	Manipur	\checkmark
27.	Lucknow	Uttar Pradesh	\checkmark
	New Town Kolkata	West Bengal	\checkmark
28.	Panaji	Goa	\checkmark
29.	Port Blair	Andaman and Nicobar Islands	\checkmark
30.	Raipur	Chhattisgarh	\checkmark
31.	Ranchi	Jharkhand	\checkmark
32.	Warangal	Telangana	\checkmark
ROUND	0 2 OF SELECTION (SEPTEMBER 2016)		
33.	Agra	Uttar Pradesh	\checkmark
34.	Ajmer	Rajasthan	\checkmark
35.	Amritsar	Punjab	\checkmark
36.	Aurangabad	Maharashtra	\checkmark
37.	Gwalior	Madhya Pradesh	\checkmark
38.	Hubli-Dharwad	Karnataka	\checkmark
39.	Jalandhar	Punjab	\checkmark
40.	Kalyan-Dombivili	Maharashtra	\checkmark
41.	Kanpur	Uttar Pradesh	\checkmark
42.	Kohima	Mizoram	\checkmark
43.	Kota	Rajasthan	\checkmark
44.	Madurai	Tamil Nadu	\checkmark
45.	Mangaluru	Karnataka	\checkmark
46.	Nagpur	Maharashtra	\checkmark
47.	Namchi	Sikkim	Х
48.	Nashik	Maharashtra	\checkmark
49.	Rourkela	Odisha	\checkmark
50.	Salem	Tamil Nadu	\checkmark

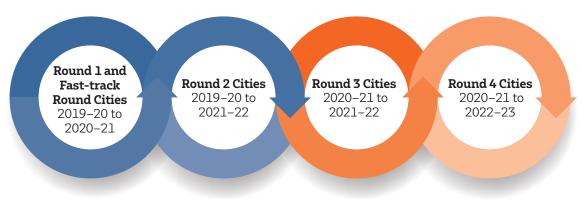
	SMART CITY	STATE/UNION TERRITORY	INCLUDED IN AMRUT
51.	Shimoga	Karnataka	\checkmark
52.	Thane	Maharashtra	\checkmark
53.	Thanjavur	Tamil Nadu	\checkmark
54.	Tirupati	Tamil Nadu	\checkmark
55.	Tumkur	Karnataka	\checkmark
56.	Ujjain	Madhya Pradesh	\checkmark
57.	Vadodara	Gujarat	\checkmark
58.	Vellore	Tamil Nadu	\checkmark
59.	Varanasi	Uttar Pradesh	\checkmark
ROUNE	3 OF SELECTION (JUNE 2017)		
60.	Aizawl	Mizoram	\checkmark
61.	Aligarh	Uttar Pradesh	\checkmark
62.	Allahabad	Uttar Pradesh	\checkmark
63.	Amaravati	Andhra Pradesh	\checkmark
64.	Bengaluru	Karnataka	\checkmark
65.	Bilaspur	Chhattisgarh	\checkmark
66.	Dahod	Gujarat	Х
67.	Dehradun	Uttarakhand	\checkmark
68.	Gandhinagar	Gujarat	\checkmark
69.	Gangtok	Sikkim	\checkmark
70.	Jammu	Jammu and Kashmir	\checkmark
71.	Jhansi	Uttar Pradesh	\checkmark
72.	Karimnagar	Telangana	\checkmark
73.	Karnal	Haryana	\checkmark
74.	Muzaffarpur	Bihar	\checkmark
75.	Naya Raipur	Chhattisgarh	\checkmark
76.	Pasighat	Arunachal Pradesh	Х
77.	Patna	Bihar	\checkmark
78.	Pimpri Chinchwad	Maharashtra	\checkmark
79.	Puducherry	Puducherry	\checkmark
80.	Rajkot	Gujarat	\checkmark
81.	Sagar	Madhya Pradesh	\checkmark
82.	Satna	Madhya Pradesh	\checkmark
83.	Shimla	Himachal Pradesh	\checkmark
84.	Srinagar	Jammu and Kashmir	\checkmark
85.	Thoothukudi	Tamil Nadu	\checkmark
86.	Tiruchirappalli	Tamil Nadu	\checkmark

	SMART CITY	STATE/UNION TERRITORY	INCLUDED IN AMRUT
87.	Tirunelveli	Tamil Nadu	\checkmark
88.	Tiruppur	Tamil Nadu	\checkmark
89.	Trivandrum	Kerala	\checkmark
ROUNE	0 4 OF SELECTION (JANUARY 2018)		
90.	Erode	Tamil Nadu	\checkmark
91.	Saharanpur	Uttar Pradesh	\checkmark
92.	Moradabad	Uttar Pradesh	\checkmark
93.	Bareilly	Uttar Pradesh	\checkmark
94.	Itanagar	Arunachal Pradesh	\checkmark
95.	Silvassa	Dadra and Nagar Haveli	\checkmark
96.	Diu	Daman and Diu	Х
97.	Kavaratti	Lakshadweep	\checkmark
98.	Bihar Sharif	Bihar	\checkmark

Source: Data from the official website of the Ministry of Housing and Urban Affairs

All government documents as well as replies to questions in Parliament claim that 99 cities are being developed as 'smart cities' in India. In reality, however, the current list consists of only 98 cities, as a replacement for New Town Kolkata has not been announced by the Ministry of Housing and Urban Affairs, and the proposed last city, Shillong, is yet to be confirmed as an official part of the Mission.

Chart 1: Timeline for Implementation of the Smart Cities Mission



Source: Data from the official website of the Ministry of Housing and Urban Affairs





Source: Selected Cities under the Smart Cities Mission, India, Maps of India

2. Financing of the Smart Cities Mission

At the launch of the Mission, the central government announced that it would provide Rs 48,000 crore²⁶ (Rs 480 billion) over five years, or an average of a billion rupees (Rs 100 crore) to each selected 'smart city' per year, with an equal amount, on a matching basis, to be contributed by the state government and urban local bodies (ULB) for the implementation of projects specified in the Smart City Proposal.²⁷

Budgetary allocations for the Mission over the five financial years are detailed in the table below.²⁸

Financial Year Allocation in the Union Budget (Rupees Crore) 2014–15 7,016 2015–16 2,020 2016–17 3,205 2017–18 4,000 2018–19 6,169

Table 3: Annual Budgetary Allocations for the Smart Cities Mission

Source: Twenty-second Report of the Standing Committee on Urban Development (March 2018)

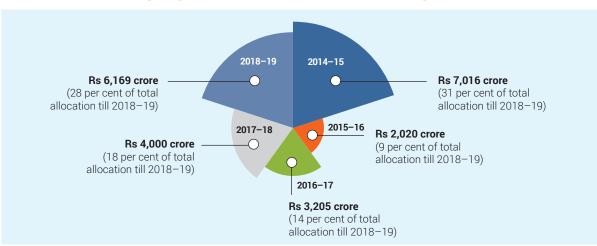


Chart 2: Annual Budgetary Allocation to the Smart Cities Mission by the Government of India

Source: Twenty-second Report of the Standing Committee on Urban Development (March 2018)

Each Smart City Proposal was required to include a 'Financial Plan' with extensive details of itemized costs, resource plans, revenue and payback mechanisms, plans for recovery of Operation and Maintenance costs, financial timelines, and plans for mitigating financial risk. The competence of this Financial Plan was supposed to be an important criterion in the selection of a potential 'smart city.'

The financial disbursement plan elaborated in the SCM Guidelines states that in the first year the central government would provide each selected 'smart city' with an amount of Rs 200 crore to build a higher initial corpus. Each potential 'smart city' was also provided an advance of Rs 2 crore for the preparation of its Smart City Proposal. This amount, along with administrative and office expenses of the Ministry of Housing and Urban Affairs, was to be deducted from the initial corpus amount. Each 'smart city' would thus receive Rs 194 crore in the first year of its development. After deductions of administrative expenses, cities are expected to receive Rs 98 crore from the central government annually for three years. By matching the

government's contribution, states can ensure that each city has access to Rs 976 crore to complete 'smart city' projects within four years.

The SCM Guidelines, however, state that the annual instalment of funds to each 'smart city' is subject to:

- Quarterly submission of a 'City Score Card' to the central government;
- Satisfactory physical and financial progress shown in implementation of the proposal, in the form of a Utilization Certificate and annual 'City Score Card';
- Achievement of milestones, as indicated in the timelines contained in the Smart City Proposal; and,
- Robustness of the functioning of the city's Special Purpose Vehicle (SPV), the entity constituted at the city level to implement the Mission's objectives.

States are also expected to seek funds for projects outlined in the Smart City Proposal from multiple sources, including:

- Resources from states/ULB through the collection of user fees, beneficiary charges, and impact fees; land monetization; debt; and, loans;
- Additional resources transferred as a result of acceptance of the recommendations of the Fourteenth Finance Commission;²⁹
- Innovative finance mechanisms, such as municipal bonds with credit rating of ULB, Pooled Finance Development Fund Scheme,³⁰ and Tax Increment Financing;³¹
- Leverage borrowing from financial institutions, including bilateral and multilateral institutions, both domestic and external;
- The National Investment and Infrastructure Fund;³²
- Other central government schemes; and,
- Public Private Partnerships (PPP).

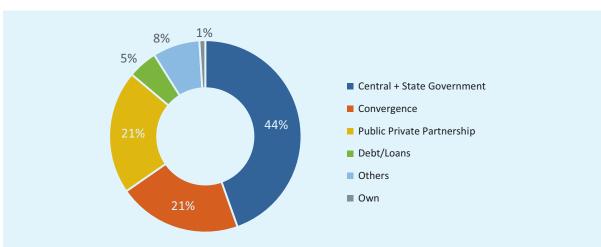


Chart 3: Financial Model for Smart Cities Mission

Source: Presentation by the Ministry of Housing and Urban Affairs to the Parliamentary Standing Committee on Urban Development on 26 April 2018

3. Convergence with Related Policies

The SCM Guidelines suggest complementarity with programmes and schemes initiated by central and state governments. The Guidelines specifically call for convergence of projects within the Smart City Proposal with other central government schemes, including:

- Atal Mission for Rejuvenation and Urban Transformation (AMRUT): An urban renewal programme, also launched in 2015, that aims at providing 500 cities in the country with upgradation and creation of physical infrastructure such as water supply, sewerage, drainage, transport, and green spaces. The government has allocated Rs 50,000 crore for AMRUT for five years.
- **Pradhan Mantri Awas Yojana (Housing for All–2022):** A national scheme that aims to provide housing for EWS and LIG, with a target of 10 million houses (revised in 2017 from the proposed target of 20 million houses in 2015) in urban areas and 30 million houses in rural areas by the year 2022.
- Swachh Bharat Mission/Abhiyan (Clean India Mission): A national scheme to address sanitation and cleanliness in India, including through the construction of toilets in order to make India 'open-defecation free' by 2019.
- National Heritage City Development and Augmentation Yojana (HRIDAY): A scheme aimed at inclusive urban planning and conservation of 'heritage cities.'
- **Digital India Programme:** A national scheme to provide increased digital access and internet connectivity to the citizens of India.

Proposals of all shortlisted 'smart cities' are required to contain a section called 'Convergence Agenda,' which should specify the schemes or programmes that the projects aim to access funding from, and the manner in which convergence is expected to be achieved.

4. Mechanism for Implementation of the Smart Cities Mission

The SCM Guidelines require each 'smart city' to create a new entity called the Special Purpose Vehicle (SPV) that will be established as "a limited company incorporated under the Companies Act 2013 at the city-level, in which the State/UT and the ULB will be the promoters having 50:50 equity shareholding. The private sector or financial institutions could be considered for taking equity stake in the SPV provided the shareholding pattern of 50:50 of the State/UT and the ULB is maintained, and the State/UT and the ULB together have majority shareholding and control of the SPV."³³

The Special Purpose Vehicle will be responsible for planning, appraising, approving, releasing of funds, managing, operating, monitoring, and evaluating development projects for the implementation of the Mission at the city level. It is to be headed by a Board of Directors and should consist of representatives of the central government, state government, and ULB of the city.³⁴ The Mission permits financial institutions and private sector firms to be considered for an equity stake in the Special Purpose Vehicle, as long as government bodies represented in it have a cumulative majority shareholding in it.

This implies that the effective implementation of the Mission is contingent on the development of the SPV and its smooth functioning. The website of the Ministry of Housing and Urban Affairs states that 92 out of the 99 selected cities have created Special Purpose Vehicles.³⁵

5. Mechanism for Monitoring the Smart Cities Mission

Monitoring of the Mission is supposed to take place at the national, state, and city levels. A national-level Apex Committee—consisting of representatives of related union ministries and parastatal organizations, principal secretaries of states, and chief executive officers (CEO) of Special Purpose Vehicles—will approve proposals for the Mission, monitor their progress, and release funds. Simultaneously, a National Mission

Directorate will develop implementation 'roadmaps,' coordinate with stakeholders, oversee capacity-building, and assist in handholding of Special Purpose Vehicles, Urban Local Bodies, and state governments.³⁶

At the state level, a High Powered Steering Committee—consisting of representatives of state government departments—will monitor the Mission, including reviewing Smart City Proposals.³⁷ At the city level, a Smart City Advisory Forum will be created to enable collaboration between various stakeholders. The Forum will include the city mayor, Members of Parliament, Members of the Legislative Assembly, the CEO of the SPV, members of non-government organizations (NGOs), technical experts, and local youth.³⁸

III. A Human Rights Analysis of the Selected Smart City Proposals

As of June 2018, the Ministry of Housing and Urban Affairs (MoHUA) has chosen 99 cities to be developed as 'smart cities' in India, on the basis of the Smart City Proposals submitted by them under the competition framework of the Smart Cities Challenge. Housing and Land Rights Network (HLRN) has used the human rights lens to assess provisions for marginalized groups, especially those related to housing, in all the Smart City Proposals. This chapter presents an overview of the analysis of the selected proposals.

1. Selected Smart Cities

In the five rounds of selection, including the fast-track round (between January 2016 and January 2018), 99 cities were chosen by a committee consisting of national and international experts as well as members from different organizations and institutions. Cities were scored on the basis of existing service levels, institutional capacities, and past track records. Of the 99 selected cities, 70 are classified as 'Class I' cities (with a population of over 100,000) by definition of the Census of India, nine cities have a population below 100,000, and 20 cities are 'million plus' urban agglomerations. Only nine cities have been selected from the seven north-eastern states of the country.

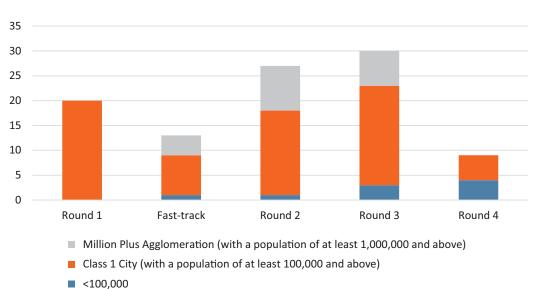


Chart 4: Classification of Selected Smart Cities Based on Population Size

These 'smart cities' are being developed to become centres of investment, and in the process, claim that they will upgrade the quality of infrastructure and services for residents.

	Round 1	Fast-track Round	Round 2	Round 3	Round 4	Total
Total Winning Proposals	20	13	27	30	9	99
Total Population Affected	37,308,257	9,456,915	25,506,844	23,683,030	3,531,794	99,486,840
Total Cost of Projects (in crore rupees)	48,064	29,795	53,903	57,393	12,824	201,979
Total Area-based Development (ABD) Cost (in crore rupees)	37,123	25,974	42,524	46,879	10,639	163,139
Total Pan-city Project Cost (in crore rupees)	10,941	3,821	11,379	10,515	2,185	38,841
Percentage of Total Funds for ABD	77.24%	87.18%	78.89%	81.68%	82.96%	81.59%
Percentage of Total Funds for Pan-city Projects	22.76%	12.82%	21.11%	18.32%	17.04%	18.41%

Table 4: Important Facts of the Smart Cities Mission as per Round of Selection

Source: SMARTNET, Ministry of Housing and Urban Affairs

2. Focus Areas of Smart City Proposals

Each Smart City Proposal consists of two components. In the first component of 'Area-based Development' (ABD), which comprises about 80 per cent of the 'smart city' focus and funding, selected cities have proposed projects related to redeveloping neighbourhoods, city centres or business districts; creating public spaces; and, retrofitting infrastructure, such as for sanitation and water supply. The second component of 'Pan-city Development' includes initiatives that are mostly limited to Information Technology (IT) projects, including 'smart solutions' for traffic management and closed-circuit television (CCTV)-surveillance.

An assessment of all Smart City Proposals reveals that the positive components are largely within the ambit of innovative ideas for formulating technological solutions, developing renewable energy, promoting environmental sustainability, and building 'resilience' of cities. Some of the major areas of focus of the selected 'smart cities' are outlined below.

Renewable Energy and 'Green' Solutions

One of the essential requirements of all Smart City Proposals is a strategy to ensure that 10 per cent of the city's electricity supply is guaranteed through solar energy. This is to maintain a focus on harnessing renewable energy in all shortlisted cities. To meet this stipulation, Bhubaneswar has proposed a 'Solar City Programme,' which is expected to generate 11 megawatts of energy supply, which will constitute 11 per cent of the city's energy consumption in 2020.³⁹ Under the goal of protecting and enhancing the environment, Diu proposes to expand the renewable energy base of the city by way of wind power and an expansion of the city's solar power unit.⁴⁰

A few cities have indicated prioritizing sustainable development, with a focus on disaster mitigation. For instance, Guwahati has proposed the retrofitting of a contiguous area of connected water bodies in the city, with the stated aim of mitigating floods in the city.⁴¹ Similarly, Bhubaneswar has committed to employ disaster risk reduction strategies through a 'Future Proofing Sub-Plan.'⁴² Salem has planned to create "zero-emission zones" to reduce its carbon footprint. Similarly, under the larger aim of rejuvenating urban systems to ensure safe and inclusive development and minimize vulnerability, Shimla, in its proposal, targets the provision of an active emergency management system, focused on prevention, preparedness, and recovery.⁴³

Development of 'Smart' Technology and Governance

Many cities are focusing on key technologies such as water automatic transfer machines (ATM); Light Emitting Diode (LED) lights to replace existing street lights; pelican crossings and three-dimensional zebra crossings; street furniture; Wi-Fi networks; CCTV cameras; environment sensors; rooftop solar panels; digital libraries; and mechanized waste management systems.

Naya Raipur, which is a greenfield development, aims to develop as a "world-class integrated city with a focus on safety, reliability, efficiency, sustainability, and connectivity of citizens, which shall leverage advancements in the Internet of Things, mobility, sensing, analytics, and cyber-security technologies." Bengaluru has proposed the idea of a 'common mobility card' that citizens can use for cashless travel across all public transport modes.

Cities such as Amaravati, Dehradun, Thiruvananthapuram, and Visakhapatnam have focused on promoting "good governance."

Transit Development and Sustainable Transport Options

Several shortlisted cities have focused on improving mobility and transit-oriented development. For example, Ludhiana's proposal has an emphasis on improving transportation facilities, including non-motorized transport. Streets in identified areas will be redesigned to be more pedestrian-friendly and dedicated bicycle tracks will be created. Auto-rickshaws are expected to be replaced by electric rickshaws.⁴⁴ Cities like Bhopal, Pune, Bhubaneswar, Bengaluru, and Chennai, have adopted a public bicycle sharing system, as a means to develop a sustainable urban transportation system for the city and also to reduce traffic congestion.⁴⁵ Shimla's proposal lays emphasis on revamping the entire road network of the city. The city will be given a new look through widening and strengthening of existing roads and retrofitting of circular roads and three transit corridors in the state capital.

In 2015, the erstwhile Ministry of Urban Development approved the Transit-Oriented Development Policy for Delhi, hoping to introduce high-density, compact, mixed land use in the city, with an increased Floor Area Ratio of 400 that would enable vertical construction.⁴⁶ However, instead of incorporating this policy in its Smart City Proposal, NDMC has chosen to focus on retrofitting the New Delhi City Centre, with a particular focus on developing 'Happiness Areas.' Incidentally, NDMC has an area density of 40 people per hectare, when guidelines for transit-oriented development require a density of 2,000 people per hectare.⁴⁷ In contrast, Indore intends to utilize transit-oriented development for the "rejuvenation of its urban form."

Economic Development and Tourism

Cities such as Bareilly and Moradabad have targeted improvements in their economies by reviving the manufacturing sector. The main strategic focus of Bareilly is to make the city a manufacturing hub for Zari handicraft and Manjha and Surma crafts, whereas Moradabad aims to become a business brand for brass and develop an artisans' manufacturing hub. Kakinada intends on transforming itself from "Pensioners' Paradise to Economic Destination." Cities such as Agra, Ajmer, Amritsar, Aurangabad, Diu, Gwalior, Kohima, Thanjavur, Tirupati, Ujjain, Varanasi, and Vellore want to develop "sustainable heritage culture and tourism," and promote their cities as tourist destinations. Tirupati, besides aiming to develop a "model pilgrimage city," lays its focus on promoting "one entrepreneur in every family" for fostering economic prosperity.

Jalandhar has its strategic focus on developing a "sports city" while Kota wants to create enabling facilities and support systems for resident students who study in various coaching centres in the city.

Improved Infrastructure and Housing

Several proposals discuss the development of core infrastructure and housing, and improving 'liveability.' Certain cities, including Bilaspur, Coimbatore, Erode, Gandhinagar, Imphal, Indore, Nagpur, Naya Raipur, and Patna lay emphasis on the development of social infrastructure for the urban poor leading to a higher quality of life for all citizens, and redeveloping 'slums' with revamped equitable services based on a participatory development model. The proposals of cities like Dehradun, Jhansi, Muzaffarpur, Puducherry, Rajkot, Raipur, Satna, Thiruvananthapuram, Tiruppur, Thootukudi, and Trichy have envisaged a "liveable, 'slum-free,' and inclusive" city. They have proposed 'slum redevelopment' and infrastructural improvements to raise the quality of life (see next section of this chapter for a detailed analysis of housing for marginalized groups in the Smart City Proposals).

Indore has laid focus on providing improved access to health by development of a 50-bed 'smart' health facility and 'smart education' by providing Wi-Fi connectivity, 'smart' classrooms, and facilities in all high schools. Naya Raipur has proposed the establishment of community schools – one primary, two secondary, and one school for persons with disabilities, whereas the proposal for Patna focuses on school and health infrastructure, especially targeting increased attendance of girls in schools.

Area-based Development and Pan-city Initiatives

Data from the Ministry of Housing and Urban Affairs reveals that Rs 2.04 lakh⁴⁸ crore (Rs 2,039 billion) is proposed to be spent on the Smart Cities Mission. Of the total proposed investment in 'smart cities,' 80 per cent will be spent on Area-based Development.⁴⁹ In Pune, ranked the second best 'smart city' contender, 76 per cent of the total funds will be channelized into development of a 3.6 square-kilometre area (which is approximately only 1 per cent of the total city area). Similarly in Bhubaneshwar, more than 90 per cent of funds will be diverted for developing less than 3 per cent of the total city area. These are areas in the city that consist of residential complexes for higher income groups, the ones who can afford to pay additional revenues to private players and the local government.

Of the total SCM funds, MoHUA claims that Rs 38,841 crore will be spent on pan-city projects, which account for about only 20 per cent of the total 'smart city' investment.⁵⁰ Pune mentions information and communications technology (ICT)-based "less is more" solutions as part of its pan-city initiatives. A total of 19 solutions based on three themes – 'smart' public transport, intelligent traffic systems, and equitable distribution of water through a host of ICT solutions will be implemented. Nagpur will invest in a customized ICT-based 'Smart Swachh City Solution' to streamline the city's garbage management, based on the vision of a 'clean' city. Nagpur has also invested in a 'Nagpur City Community Network' and a Unified Operations Command and Control Centre to operationalize ICT-based solutions. The success of these projects depends excessively on the private sector, especially with regard to pan-city projects. Investor companies, however, are creating technology that restrains municipalities/SPV to particular platforms and vendors. This has resulted in similar solutions being replicated for all targeted 'smart cities,' irrespective of the geographical, socio-economic, political, cultural, and other factors unique to each city.

Concerns of Marginalized Groups

An analysis of all Smart City Proposals reveals the lack of a concentrated focus on, or priority to, the concerns of marginalized and discriminated sections of society, including women, Scheduled Castes, Scheduled Tribes, and sexual and religious minorities.

While women are mentioned in almost all Smart City Proposals, most references are limited to check marks on women's safety and, in some proposals, to the provision of women's shelters and working women's hostels. The installation of CCTV cameras is also listed as a measure to promote women's safety in cities. Gandhinagar's proposal mentions 'women' only once, in the context of security, while Gangtok has no mention of 'women' in its entire Smart City Proposal. Other cities like Raipur, Karimnagar, Bengaluru, Bilaspur, and Allahabad have mentioned 'gender equality' as a key priority in their proposals, but projects are restricted to the provision of women's hostels, toilets, and skill development. Domestic workers are not mentioned in any of the 99 selected Smart City Proposals.

The provisions for children in the Smart City Proposals are mostly about their safety, including through improved surveillance. A few cities such as Bareilly, Bhagalpur, Chandigarh, Imphal, and Raipur have proposed the creation of outdoor spaces for children, including parks. But there is an absence of a focus on street children and children of low-income groups. Older persons/'senior citizens' are also mentioned in most proposals, largely within the purview of the creation of old age homes or improved security for them. For example, the proposals of Chandigarh, Jalandhar, Raipur, and Thiruvananthapuram, speak about security for older persons and making the city "barrier-free."

With the exception of Bhagalpur, Gwalior, and Ranchi, there is no mention of Scheduled Castes in any of the proposals, thereby ignoring not just their rights but also the pervasive discrimination that they face, at multiple levels, in urban areas. The absence of measures to address caste-based discrimination within the Smart Cities Mission is a glaring omission.

Some of the proposals— Kavaratti, Kohima, Bhagalpur, Gwalior, Ranchi, and Rourkela—mention Scheduled Tribes, while describing the city demographic, while others such as Dahod, Jabalpur, and Silvassa mention 'tribals' and list some projects to be undertaken for them. The Smart City Proposals of Dahod, Jabalpur, Kohima, Rourkela, and Silvassa mainly focus on providing livelihoods through tourism, promoting tribal identity and culture, building tribal museums and exhibitions, and showcasing tribal art and handicrafts. Under the goal of "developing an inclusive society," the proposals of Aizawl and Gangtok envisage the "cultural amalgamation and social inclusion of various tribes" but without providing any details of the same. Moreover, cultural amalgamation may not be a desirable process or outcome.

While migrant labour is discussed in several proposals, the approach envisaged by cities is not uniform. Jhansi, in its proposal, identifies the construction of shelters and community kitchens for migrant workers. Its proposal also recommends that any "encroachment" by the migrant population engaged in street vending may be removed by developing vending zones and gaining their "prior willingness" to shift to these zones, through incentives. Several cities like Erode, Kochi, Karimnagar, and Thiruvananthapuram propose constructing shelters for migrant workers. The Smart City Proposal of Vadodara refers to migrant workers as a 'threat' to the security of the city: "The emergence of the city as transport and tourism hub can also attract large number of migrant population which would include unskilled workers from outside the state. This floating and migrant population can pose serious threat to safety and security of the citizens, thereby increasing the challenge to the city police." Tumkur also lists an "increase in migrant population" that leads to "several squatter settlements" as a 'threat' under the city's analysis of Strengths, Weaknesses, Opportunities, and Threats (SWOT analysis).

The focus on homeless persons, who account for one per cent of the population in cities, is minimal in the Smart City Proposals. While several cities, including Ludhiana, Patna, Tiruppur, and Thootukudi, mention the homeless, proposed interventions for them are mostly restricted to the provision of shelters.

Most Smart City Proposals are silent on creating inclusive and safe spaces for persons belonging to the LGBTQI⁵¹ community. The only reference is to transgender persons and that too, only in the proposals of Bhopal, NDMC, Rourkela, Saharanpur, and Thiruvananthapuram.

While almost all the selected proposals have mentioned persons with disabilities/differently-abled/speciallyabled, the focus is limited to issues related to "universal access," creation of "barrier-free environments," and upgrading and improving existing infrastructure (*see Chapter IV for more information*).

3. Housing Provisions for Marginalized Groups in the Smart City Proposals

With the government's spotlight on 'housing for all' and the buzz on 'affordable housing' across the country, particularly within the real estate industry, HLRN believes it is important to examine what the Smart City Proposals offer in terms of housing for economically weaker sections (EWS) and low-income groups (LIG), and what their operational plans are in this regard. Given the requirement for convergence of all urban schemes, how do housing targets in the Pradhan Mantri Awas Yojana (PMAY) or Housing for All–2022 scheme relate to those in the Smart Cities Mission and how they will be achieved? Furthermore, are there any indicators to monitor this convergence? Are selected projects in tandem with the goals of 'smart cities'? Is funding for housing under the Smart Cities Mission only being accessed from PMAY, or are cities leveraging other financial mechanisms to construct EWS/LIG housing? These are some important questions that need to be addressed.

This section presents an overview and analysis of housing provisions for marginalized groups and communities, including EWS/LIG, in the 99 selected Smart City Proposals using the lens of the 'human right to adequate housing' as recognized and upheld by international law and policy. As a signatory to international human rights treaties that guarantee the human right to adequate housing, India is bound to meet its legal commitments to ensuring the respect, protection, and fulfilment of the right to housing for all.

The 'human right to adequate housing' is defined as, "the right of every woman, man, woman, youth and child to gain and sustain a safe and secure home and community in which to live in peace and dignity."⁵²

Housing in Cities' 'SWOT Analysis'

Housing for low-income groups has been identified as an area of concern in almost every shortlisted Smart City Proposal though different cities have addressed the issue through varying lenses and approaches (*see Annexure I for a detailed analysis of housing provisions in Smart City Proposals*). Certain cities, including Ahmedabad, Allahabad, Bengaluru, Dehradun, Indore, Muzaffarpur, Raipur, Panaji, Patna, Rajkot, Ranchi, Sagar, Tirunelveli, and Visakhapatnam have termed 'slums,' housing for EWS/LIG, and 'illegal' housing as 'threat' in their city's 'Strengths, Weaknesses, Opportunities, and Threats (SWOT)' analysis. A few other cities termed housing for marginalized groups a 'weakness' in their analysis. Bilaspur identified growing real estate development and availability of land for redevelopment in the city as an 'opportunity' and housing shortage for EWS and the middle class as a 'weakness' in its SWOT analysis. Amaravati's proposal identifies the challenges pertaining to cohesive social inclusion due to in-migration as a 'weakness' in its SWOT analysis. Bengaluru has identified unchecked urban sprawl as a 'weakness' and encroachment on water bodies and lakes as well as the growing population with no access to 'affordable' housing and basic amenities in the city as 'threats.' The cities of Chandigarh and Dharamshala termed their approach to housing provisioning as 'strengths.' While Chandigarh claims to have already handed over housing units to half the households it identified for rehabilitation, only 0.5 per cent of Dharamshala's population is claimed to be houseless.

Population Living in Inadequate Housing

Bhopal's proposal noted that 75 per cent of the city's population belongs to EWS/LIG while Warangal reported EWS/LIG as accounting for 42 per cent of its population. Ahmedabad, in its proposal, reported 13 per cent of all households in the city (as of 2011) living in substandard housing⁵³ while Karimnagar stated that 29 per cent of its population lives in substandard housing without basic facilities.

The proposal for Solapur recorded that in the decade between 2001 and 2011, the city's population living in 'slums'⁵⁴ increased from 25 per cent to 31 per cent, even while the city's natural growth rate was close to

only 9 per cent. The city also recorded an unprecedented 178 homeless residents in 2015. In cities such as Bhubaneswar, Indore, Kakinada, Solapur, and Visakhapatnam, more than one-third of the total population lives in low-income settlements. Though the city of Agartala mentioned that it does not have any 'notified slums,' a survey carried out by the Agartala Municipal Corporation in 2013 indicated that the city is home to 163 'slums' with a population of over 250,000 residents.⁵⁵ Imphal reported being a 'slum-free' city, which is in tandem with the findings of the Census of India 2011, which declared Manipur a 'slum-free' state. A few cities have cited 'slum population' data that is not consonant with data from the Government of India's Slum Census 2011, without disclosing sources of the divergent figures. Agartala, for instance, has claimed in its Smart City Proposal that 8 per cent of its population lives in low-income settlements, while Census 2011 data cites this as 11.5 per cent. Similarly, the proposal for Thanjavur claims that 9.6 per cent of the total city population lives in 'slums,' while Census 2011 data cites this as 19.6 per cent.

Previous Measures to Provide Housing for Marginalized Groups

Almost all Smart City Proposals have documented previous attempts to provide housing to EWS/LIG, including the number of houses constructed/being constructed. Most of the housing provided was either under former national schemes or under specific state programmes. For instance, several cities, including Aizawl, Agra, Ahmedabad, Amritsar, Aligarh, Belagavi, Bengaluru, Dehradun, Jammu, Kanpur, Kochi, Lucknow, Ludhiana, Madurai, Surat, and Visakhapatnam claim to have utilized funds under the Basic Services for Urban Poor (BSUP) component of the erstwhile Jawaharlal Nehru National Urban Renewal Mission (JNNURM) to construct housing for EWS/LIG. The proposals, however, do not provide details on the location or adequacy of the housing provided. In Surat, for example, a large number of tenements under BSUP were built in Kosad, located on the city outskirts. The forced relocation of residents from the city centre to Kosad resulted in the loss of livelihoods and education while the lack of access to adequate housing and basic services caused an overall deterioration of their standard of living.⁵⁶ The cities of Aizawl, Aligarh, Bengaluru, Bhubaneswar, Coimbatore, Davanagere, and Ludhiana had developed 'Slum-Free City Plans of Action' to access funds to construct housing under the now discontinued Rajiv Awas Yojana (RAY).

With regard to measures already undertaken for the homeless, Visakhapatnam reported having constructed shelters for homeless residents at five locations in the city while Faridabad constructed four homeless shelters and a working women's hostel. Thiruvananthapuram claims to have constructed over 20,048 EWS houses under the Kudumbashree Scheme of the Government of Kerala. Dahod Nagar Palika claims to have constructed 480 'affordable' houses under the Integrated Housing and Slum Development Programme (IHSDP) scheme for EWS housing, which will provide shelter to about 3,000 homeless people, whereas the proposal for Raipur mentions that a total of 15,614 dwelling units have been allotted under various schemes to the urban poor.

Housing and Land Rights Network, however, has not been able to verify the information on housing constructed in different cities or validate the data provided. While some housing targets claim to have been met by cities under previous (and now discontinued schemes), it is not clear when other targets will be achieved—before or after the 'smart city' development—or how these targets relate to identified convergence with PMAY.

While the Smart City Proposals document housing already provided for EWS/LIG, which in most cities is still grossly insufficient to meet the existing housing shortage, they are completely silent on the number of EWS/LIG homes demolished and families evicted under various schemes. In many cities, adding this data would reveal a much lower number or a negative balance in housing for EWS/LIG. The target of providing affordable housing within the stipulated timeframe would be difficult to achieve as promised in the selected city proposals, as more houses are being demolished in several cities, running counter to the goals envisaged under the Mission. For example, the proposal of Dharamshala provides for the construction of 212 houses for 'slum-dwellers' under the erstwhile JNNURM's Integrated Housing and Slum Development Programme,⁵⁷ while 300 houses were demolished in 2016 by the Municipal Corporation of Dharamshala.⁵⁸ In the proposal of New Delhi Municipal Council, it has been stated that 296 quarters were constructed for

sanitation workers during 2012–15, and the construction of 90 per cent of 240 houses for EWS, which began in 2013 at Bakkarwala, has been completed.⁵⁹ However, according to data on forced evictions compiled by HLRN, 7,068 houses were also demolished across Delhi between January 2015 and May 2018. In the case of Indore, the Smart City Proposal states that in the past three years, 15,250 houses have been made available for EWS/LIG. While the veracity of this statement is disputed by local organizations, data compiled by HLRN reveals that from January 2015 to May 2018, state authorities demolished at least 6,854 houses in Indore, including over 1,000 houses in 2017⁶⁰ and 110 houses in May 2018⁶¹ (see Chapter IV for more information on forced evictions in 'smart cities').

Planned Housing Interventions in the Smart City Proposals

Planned interventions related to housing in most of the Smart City Proposals are limited to issues related to 'slum' upgrading, redevelopment, and rehabilitation; providing 'affordable and inclusive housing;' creating 'slum-free' cities under the scheme of Housing for All–2022; ensuring at least 15 per cent reservation for EWS in the 'affordable housing' segment; and, constructing hostels for working women (*see Annexure I for details*). None of the proposals, however, provide a comprehensive definition of 'affordable housing' nor do they include concrete plans on how housing will be provided to the urban poor and the most marginalized individuals, groups, and communities. While some proposals (including Jammu, Karnal, Kohima, Muzaffarpur, Port Blari, Sagar, and Toothukudi) mention *in situ* (on site) upgrading of settlements, others talk of 'rehabilitation' and 'redevelopment,' which may involve coerced relocation, including to city peripheries.

The housing provided in such rehabilitation/relocation/redeveloping projects is often substandard and devoid of basic services. According to government data,⁶² about 23 per cent of the more than 1 million houses built for the urban poor since 2005 are lying vacant across India for a range of reasons.⁶³ As of February 2017, of the 800,000 government-constructed houses, 245,000 houses were lying vacant.⁶⁴ It is clear from the data that urban poor families are rejecting the housing built for them, as it is uninhabitable and generally located on city outskirts. Relocation to distant sites located on city margins results in loss of livelihoods, income, education, health, and security. The impacts on children and women are most severe. Furthermore, most of the state housing projects do not conform to international standards of adequacy.

Kakinada chose to retrofit its Central Business District over redeveloping a low-income settlement spread over 65 acres, as the residents were not in favour of relocating, and, as its proposal stated, could pose a "risk to the success of area-based proposals."

Smart City Proposals that mention 'redevelopment' of settlements include Agra, Ahmedabad, Amritsar, Aurangabad, Bengaluru, Bhopal, Bhubaneswar, Jalandhar, Jammu, Kota, Madurai, Muzaffarpur, Pasighat, Patna, Thane, Thiruvananthapuram, Tumkur, Ujjain, and Vadodara. While proposals like those of Pasighat and Tirunelvelli do not provide any details on redevelopment and upgrading plans, others such as Jalandhar, Kota, Port Blair, and Thane include specificities, including the names of targeted settlements. Thiruvananthapuram has mentioned "total inclusion" as a key priority and its proposal also mentions the upgradation of EWS housing into affordable housing stock. This will be converged with the state governments' Livelihood, Inclusion, Financial Empowerment (LIFE) scheme and/or PMAY. Karimnagar envisages the rehabilitation of 'slums' including 13,637 tenements to be provided under PMAY, but the nature of rehabilitation—whether it will be *in situ* or at an alternative location within or outside the city—is not mentioned.

Davanagere, reportedly, has a shortage of approximately 25,000 housing units. The Smart City Proposal identifies 27 settlements for redevelopment and for building permanent houses. However, there is no clarity on the source of funding or the executing body. Similarly, in Bengaluru, the settlement of Swathantra Palya has been selected for 'redevelopment' with an allocation of Rs 40.50 crore, but the funding source is not mentioned.⁶⁵

Agartala states that 8 per cent of its city's population resides in 'slums' but presents a plan to build only 445 dwelling units for EWS residents. Faridabad identified almost 220,000 'slum-dwellers' but until May 2016, had provided housing to only 2,900 families.⁶⁶ The city's proposal makes a passing mention of 'slum retrofitment' without provisions for the same, despite choosing a focus area in the core of the city.

Of the total Rs 1.31 lakh crore (Rs 1317.6 billion) sanctioned for the first selected 60 'smart cities,' only Rs 17,035 crore or 13 per cent of the total investment, was devoted to affordable housing projects.⁶⁷

Focus on 'Slum-free Cities'

The proposals of Agra, Ahmedabad, Aurangabad, Chandigarh, Coimbatore, Davanagere, Dehradun, Erode, Jhansi, Muzaffarpur, Namchi, Puducherry, Pune, Raipur, Rajkot, Salem, Satna, Thiruvananthapuram, Thoothukudi, Tirupati, Tiruppur, Trichy, Tumkur, Vadodara, and Warangal have stated the goal of making their cities 'slum-free.'

This focus on creating 'slum-free cities' in the Smart City Proposals is indicative of the trend, over the last 15 years, that has promoted evictions and demolitions of low-income settlements under the guise of creating 'cities without slums.' While the SCM Guidelines do not use the term 'slum-free,' the city proposals have tended to stress this goal as integral to their housing policies, also while claiming convergence with the Housing for All–2022 (PMAY) scheme. The PMAY Guidelines⁶⁸ support the 'slum-free city' rationale by stating that: "Cities which have already prepared Slum Free City Plan of Action (SFCPoA)⁶⁹ or any other housing plan with data on housing, should utilise the existing plan and data for preparing "Housing for All Plan of Action" (HFAPoA)."

The 'slum-free city' vision, however, has not always been interpreted in the socially progressive way in which it was intended. Many countries used this vision as a frame for eradicating slums through repressive programmes that undermine the rights of the poor to the city.⁷⁰ This agenda of promoting evictions was also adopted by many cities, ironically, to meet the Millennium Development Goal (MDG) 7 target of achieving "a significant improvement in the lives of at least 100 million slum dwellers by 2020." While countries claimed to have realized this target by 2010, the paradox lies in the fact that though the proportion of those living in 'slums' declined between 2000 and 2010, the absolute number of 'slum-dwellers' rose during that period from 776.7 million in 2000 (when the MDG were established) to 827.6 million in 2010.⁷¹ The MDG reporting and data collection mechanisms, however, failed to document the number of forced evictions and homeless persons in the same period.

Chandigarh, which aimed to become India's first 'slum-free' city by 2015, demolished nine labour colonies in the city from 2009 to 2015.⁷² While its 'slum-free city' target date undergoes periodic revisions, forced evictions of the urban poor have continued, with reports indicating that the city has not been successful in developing adequate alternative housing for its low-income residents.

Unless human rights indicators are incorporated to ensure the provision of adequate housing with security of tenure and improved living conditions, this goal could result in forced evictions, demolitions of homes, and forced relocation to city peripheries resulting in increased segregation and ghettoization of Indian cities (*see Chapter IV for more information*).

Provisions Related to Homelessness

The cities of Imphal, Gangtok, Kavaratti, Namchi, Naya Raipur, and Pasighat claim that they do not have any homeless residents. Proposals that have listed specific provisions—mostly the construction of shelters—for the homeless include Bhagalpur, Bhubaneswar, Bihar Sharif, Bilaspur, Dahod, Dehradun, Dharamshala, Jaipur, Jhansi, Kochi, Lucknow, Ludhiana, Madurai, Muzaffarpur, Patna, Raipur, Salem, Thoothukudi, Tiruppur, and Udaipur. Most of the proposals, including of Naya Raipur, Rajkot, Patna, Muzzafarpur, Bengaluru, Sagar,

Shimla, Dehradun, Tiruppur, Bilaspur, Thoothukudi, Jhansi, and Aizawl, claim that homeless shelters will be constructed under the auspices of the scheme of Shelters for the Urban Homeless of the National Urban Livelihoods Mission (SUH-NULM), under which each state government is allocated funds for the construction of homeless shelters.

National Urban Livelihoods Mission – Scheme of Shelters for the Urban Homeless

This central government scheme includes allocation of funds to all state governments across India to, among other provisions, construct and maintain shelters for the homeless. Spending, however, has been low, with claims of diversion of funds in some states. In September 2017, of the total central funding of Rs 1,029 crore for SUH-NULM, Rs 412 crore had not been spent by states.⁷³ The Supreme Court of India has also raised questions regarding the low utilization and diversion of funds allocated for building homeless shelters under NULM.⁷⁴ The Supreme Court-appointed Justice Gambhir Committee,⁷⁵ while highlighting the abysmal living conditions of homeless people in different states, also observed that state governments were not adequately using NULM funds for the homeless. As of January 2018, under NULM, the central government had sanctioned 1,330 homeless shelters in 25 states, of which 789 were operational in 25 states while the remaining were under construction or refurbishment.⁷⁶

In the Smart City Proposals, as in state policy, interventions for the homeless continue to be restricted to the provision of shelters, which are only a temporary, emergency measure. They do not aim to address structural causes of homelessness or enable the homeless to move out of a situation of homelessness to that of secure, adequate, and permanent housing. The need to explore different options, along a housing continuum, has been demonstrated only in a few city proposals. For instance, Port Blair has proposed hostels to separately accommodate 100 working women and 50 working men, in an attempt to provide secure housing for working people from other islands. Other cities like Agra, Gwalior, Patna, and Saharanpur have proposed creating short-stay homes for the vulnerable and marginalized, including orphans, older persons, unemployed persons, persons with disabilities, and other deprived groups.

New Delhi Municipal Council has chosen international benchmarks to justify its decisions pertaining to the urban poor within the project area. It has adopted Dubai's standard of five homeless persons for every 100,000 people in the NDMC area, by 2025. However, its proposal does not specify how people will be brought out of homelessness and provided housing; neither does it discuss the fate of its homeless population while the 'smart city' develops. Instead, it proposes to create a 'World Class Urban Area' with 'Happiness Areas.' In doing so, it has initiated a process of evicting street vendors from the proposal area, costing hundreds of urban poor residents their livelihood.⁷⁷

Despite raising the issue of housing for EWS/LIG in their proposals, none of the cities have recognized housing as a human right or included standards to ensure its adequacy. Furthermore, no Smart City Proposal has mentioned measures to address the housing needs of specific marginalized groups including street children, persons with disabilities, marginalized women, Scheduled Castes, Scheduled Tribes, and religious and sexual minorities who face widespread discrimination in accessing housing in urban areas.

As most of the housing projects listed under the Smart Cities Mission are also included under PMAY, it is not clear what the added value of the Mission is. These housing projects may have been completed irrespective of the existence of the Smart Cities Mission. Also, there is no information available on funding convergence of PMAY and SCM, raising questions again about the utility of the Mission, including for housing.

IV. Human Rights Concerns Related to the Smart Cities Mission

Most reports on 'smart city' development focus on its slow pace, under-utilization of funds, selection process, and status of implementation. Housing and Land Rights Network, however, is more concerned with how the Smart Cities Mission and its related processes have affected the human rights of the most marginalized in urban India. Based on a human rights analysis of the Mission, including its Guidelines, structures, processes, and the 99 selected Smart City Proposals, this chapter presents some of the significant human rights concerns and challenges.

1. Failure to Adopt an Inclusionary and Sustainable Approach to Development

While the Mission claims to revolutionize urban development in India, the premise of developing as 'smart cities' only 100 of India's over 4,000 cities and towns appears to be discriminatory and exclusionary. Since the problems of inadequate housing, absence of basic services, acute water crises, poor health and nutritional levels, unemployment, and stark levels of inequality are ubiquitous across India, a more holistic approach aimed at country-wide development would have been more equitable. Merely selecting some cities at the expense of others, and some areas within cities at the loss of others, does not sound like smart planning or an exercise aimed at nation-building. Such a policy also excludes rural areas, thereby intensifying the justification for urbanization and worsening the rural-urban divide. A more inclusionary approach could have aimed at investing in core social services and infrastructure in all cities and villages across India, rather than developing a competition aimed at serving 100 cities with the most popular proposals.⁷⁸

Competitive Format and the Lack of Comprehensive Criteria for Selection

Under the competition format—Smart Cities Challenge—for selecting 'smart cities,' the best city proposals were selected, not necessarily the most deserving or needy cities. This creates false priorities while omitting people's genuine concerns and issues related to sustainable urban development and poverty eradication. The competition format also resulted in Smart City Proposals being developed by private consulting firms, many of them large multinational companies, which charge high consulting fees but are not necessarily the best suited to develop a holistic and need-based proposal or vision of development for the city's residents. These consulting firms include, *inter alia*, KPMG, McKinsey, Infosys, Deloitte, and Jones Lang LaSalle Property Consultants.⁷⁹

While the Government of India announced a list of 'smart cities' based on the population of each state/ Union Territory in August 2015 (*see Table 1 in this report*), the criteria adopted and the basis for selection of the 99 current cities is not clear. The selection process has not been transparent, and for some cities, could have been driven by political considerations rather than socio-economic indicators and residents' concerns. For instance, it is not clear why NDMC—the wealthiest municipality in the country—was chosen to be developed as a 'smart city,' instead of other locations—even within the city of Delhi—that require more urgent attention, including delivery of essential services such as electricity, water, sanitation, and adequate housing.

In March 2018, a question was also raised in the Indian Parliament (Rajya Sabha) on, "Whether it is a fact that almost 80 per cent cities having all modern facilities are proposed to be developed as smart cities." The Minister of Housing and Urban Affairs had responded by saying, "The selection process of Smart Cities is based on the idea of Competitive and Co-operative Federalism and follows a challenge process to select cities in two stages. In the first stage, cities have been shortlisted by the States themselves through intrastate competition for participation in Stage 2, i.e. All India Competition. The criteria for selection are given in the Smart City Proposal format available on the Mission's website (www.smartcities.gov.in)."⁸⁰

The intra-state competitive grading system that determines which cities are chosen to be developed as 'smart cities' is often contentious and arbitrary, as shown in two prominent judicial cases, *Ashok Kumar Mohapatra* v. *Union of India*⁸¹ and *Sanjay Chauhan* v. *Union of India*.⁸² Both these cases demonstrate the concerns regarding the fairness and non-arbitrariness of the 'smart city' selection process, which diverts government funds for the development of some cities over others.

In Ashok Kumar Mohapatra v. Union of India, the petitioner approached the High Court of Orissa to invalidate the selection of Rourkela as a 'smart city' from Odisha. The petitioner challenged the scoring system and pointed out many irregularities that resulted in the awarding of more points to Rourkela over Cuttack. Even though the Supreme Court rejected these claims and dismissed the petition, the case highlights public anxiety over apparent favouritism in the selection of cities and neglect of cities that were not chosen.

In *Sanjay Chauhan v. Union of India*, the High Court of Himachal Pradesh set aside the entire selection process for 'smart cities' in Himachal Pradesh. The petitioner, the Mayor of Shimla, claimed "ulterior motives and political considerations" in the selection of Dharamshala over Shimla as a 'smart city' and presented irregularities in the grading process. The Court held that the selection process was "arbitrary, unreasonable, capricious and irrational" and ordered the authorities to redo the selection process. The apparent bad faith with which the selection proceedings had been conducted, led the Court to remark that, "Alas! The decision to exclude Shimla city and include, Dharamshala town, in the list of potential Smart Cities, has not been taken 'smartly."

Lost Opportunity to Address Challenges and Develop More Counter Magnet Cities

Considering that quite a few of the shortlisted cities are established economic centres, the list of cities chosen in the challenge could come across as a lost opportunity, as more disadvantaged cities could have availed funding under the Mission to become 'counter magnet' cities. 'Counter magnets' are defined as cities that are developed to reduce the mass migration of people to the few large metropolitan areas in the country. Such cities are developed as alternative centres of growth with opportunities for employment and income generation. While a few selected 'smart cities' like Gwalior, Jaipur, Kota, and Kanpur are being developed as 'counter magnets' to Delhi; Warangal as a counter-magnet to Hyderabad; and, Thane and Pune as 'counter magnets' to Mumbai, this is not an apparent priority among the selected Smart City Proposals. A more concentrated plan of developing 'counter magnets' within the Mission, after analysing the challenges and demands of metropolitan areas and their surroundings, may have been a more sustainable urban development model for India to pursue.

While the selection of smaller towns such as Pasighat, Diu, and Namchi, with populations less than 100,000 is welcomed, the lack of an integrated approach to the overall selection process is still apparent within the Mission.

"Some cities with high poverty rates and few resources would have no competitive advantage, and there are fears that the scheme would broaden the gap between wealthier cities and cities with the most need for housing and infrastructure. Concern was also expressed that modernizing only parts of cities, or that a particular focus on technological responses, would result in the construction of unaffordable housing or infrastructure that is not targeted at the poorest."

Paragraph 33, Report of the Special Rapporteur on Adequate Housing: Mission to India⁸³

Restrictive Development Paradigm

The concern with the restrictive paradigm of development being promoted by the Smart Cities Mission is not only that just 100 cities in the country are being developed as 'smart cities,' but that only a small percentage of each city's area in these selected cities is included under the Mission's component of Areabased Development (ABD). According to latest data of the Ministry of Housing and Urban Affairs, a total of Rs **203,979** crore⁸⁴ (Rs 2.04 lakh crore or Rs 2,039 billion) is being invested in 'smart city' projects. The official break-up of funding available for Rs 2.01 lakh crore indicates that 80 per cent (Rs 1.63 lakh crore) has been allocated for ABD, while only 20 per cent or Rs 38,841 crore will be spent on pan-city initiatives.⁸⁵

Calculations by HLRN reveal that the city area impacted by ABD is less than 5 per cent for 49 of the 86 cities for which information is available (*see Annexure I for details*). In Ludhiana, only 0.3 per cent of the city's total area is covered under the Mission, while in Ahmedabad it is 0.8 per cent. The area being developed as a 'smart city' in NDMC, while accounting for 0.5 per cent of the total NDMC area, is only 0.0015 per cent of the total area of the National Capital Territory of Delhi. The highest area under ABD development has been recorded for Kavaratti (Lakshadweep) – 61 per cent.

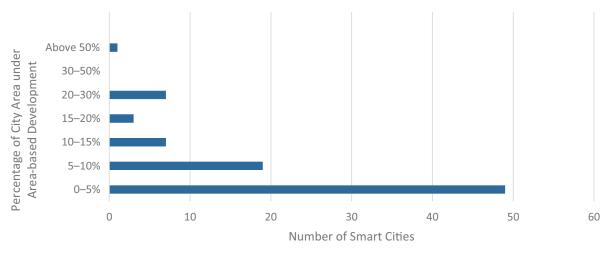


Chart 5: Percentage of Total City Area covered by Area-based Development of Smart Cities

Source: Chart created by HLRN based on information from the Ministry of Housing and Urban Affairs for 86 'smart cities'

In terms of population affected by the Smart Cities Mission in the selected cities, data from the Ministry of Housing and Urban Affairs presented in the Rajya Sabha (Indian Parliament) in July 2017⁸⁶ highlights that in the majority of cities, the population to be affected by 'smart city' development is below 30 per cent, with 17 per cent of cities recording a population of less than 5 per cent that would benefit from the Mission. In Pune, only 0.8 per cent of the population will be impacted; in Nashik, 1 per cent; in Ahmedabad, 1.5 per cent; in Bhopal, 1.7 per cent; in Lucknow, 2.5 per cent; in Nagpur, 2.6 per cent and, in Chennai, 3.4 per cent. In towns with lower populations, the beneficiary population is higher – 77 per cent in Port Blair and 66 per cent in Vellore. The data, thus, reveals that **Rs 203,979 crore is being spent on only 99.5 million population**.⁸⁸

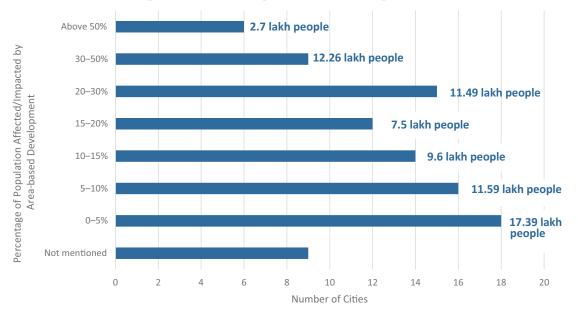


Chart 6: Population Affected by Area-based Development of 'Smart Cities'

Source: Chart created by HLRN based on information on 90 Smart City Proposals presented by the Ministry of Housing and Urban Affairs in the Rajya Sabha on 27 July 2017

In response to a question raised in the Lok Sabha in March 2018⁸⁹ on "The total land earmarked for the development of smart cities along with the amount spent till date and the progress made in this regard," the Minister of Housing and Urban Affairs said, "The whole city has been earmarked for development. The cities will start with the area-based development of 1,21,971 acres and gradually extend to full city." Another question in the Rajya Sabha asked, "Whether, under the Smart Cities Mission, 80 per cent of the total funds would go into less than 3 per cent, 246 square kilometres of the total 9,065 square kilometres area of the Mission cities." The reply of the Ministry of Housing and Urban Affairs was: "The Smart Cities Mission has adopted a three-pronged strategy focusing on creating city-wide core infrastructure through convergence, applying Smart Solutions across such core services to improve service delivery, and developing area-level models for improving aspects such as street design, walkability, public spaces, heritage conservation, preservation of ecological assets etc. Thus, a substantial proportion of the investments planned will provide city-wide benefits... Besides, the area taken up for development in each city varies with the size of the city, population and geographical spread. In many cities, proportion of population in the area covered under Area Based Development (ABD), is much higher compared to the proportion of area under ABD."

Continued Neglect of Rural-urban Linkages

By failing to address rural-urban linkages, the Mission grossly overlooks serious issues related to forced migration from rural to urban areas. It also reinforces the erroneous policy assumption that '*urbanization is inevitable*' without taking concerted measures to reduce forced population transfer to urban areas by investing in the needs of rural people, responding to acute land and agrarian crises, and developing rural areas with adequate budgets and investment plans.

The National Rurban Mission (with a budgetary allocation of Rs 1,200 crore in 2018–19), has been initiated with the aim of developing 300 rural "growth clusters" consisting of 15–20 villages with a total population of 3–4 million in all states and union territories to accelerate overall development by provisioning of economic activities, developing skills and local entrepreneurship, and provision of infrastructure amenities.⁹⁰ Though the Rurban Mission enlists 14 'desirable components' under the themes of livelihoods, services, and infrastructure, it is silent on the kind of institutional architecture that will be required to promote inclusive development in the selected clusters. Furthermore, the mere provision of infrastructure in selected areas

without factoring in the role of historical trajectories of socio-economic marginalization and socio-cognitive barriers will not lead to expected outcomes of 'rurban' centres becoming economic hubs with improved employment opportunities.⁹¹

While some states such as Haryana and Rajasthan have separately launched initiatives to develop 'smart villages,' there does not seem to be much attention devoted to attracting investment for them or to promoting development based on the requirements of rural areas. The scheme also does not aim to understand or address the inter-related social, economic, and political factors facilitating rural exclusion. Moreover, the 'smart village' concept is premised on the same philosophy as the 'smart city' model – that of creating select pockets of high infrastructure development and on urbanizing rural areas, which is not necessarily the most ecologically sustainable or economically viable model for India.

Rural India is faced with multiple crises, including unemployment, disasters, a severe agrarian crisis, landgrabbing, the loss of agricultural land, displacement, landlessness, homelessness, and food insecurity, which have direct impacts on migration and the rate of urbanization in the country. Unless these issues are holistically addressed with urban and rural viewed as two ends of the same spectrum, large-scale investments on one end of the spectrum, while ignoring the other end, are not likely to achieve desired results. Instead, they could exacerbate the rural-urban divide even further. There are enough lessons of failed urbanization from across India that caution against replicability, especially in rural settings that have unique needs and structures.

As has been emphasized, "Smart cities do not exist in a vacuum; they depend on smart territories that recognize the complementary assets of urban and rural areas, ensure integration between them, and advance effective rural-urban partnerships to ensure positive socio-economic outcomes throughout the rural-urban continuum."⁹²

A more balanced urban-rural development approach, which integrates rural and urban linkages, including through existing government schemes, would have led to greater equity and social justice while ensuring that investment in rural areas is also prioritized to address rural poverty and distress migration to urban areas. This would also be more in line with the Sustainable Development Agenda 2030⁹³ as well as the New Urban Agenda 2016,⁹⁴ which aim to promote "integrated territorial development" and "leave no one behind" and which India has committed to implement domestically (*see Annexure IV for a list of Sustainable Development Goals, targets, and indicators relevant for India's Smart Cities Mission*).

Sustainable Development Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable				
Target 11.a:	Indicator 11.a.1:			
Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by size of city			

2. Absence of a Human Rights Approach to Planning and Implementation

An assessment by HLRN of the Smart Cities Mission and its implementation in different cities reveals the absence of a human rights approach in all components of the Mission – its vision, guidelines, city proposals, and implementation and monitoring mechanisms. This is also reflected in the failure to incorporate human rights principles such as the indivisibility of human rights, gender equality, non-discrimination, accountability, participation, non-retrogression, and progressive realization of human rights in all Mission-related documents, Smart City Proposals, and 'smart city' project plans.

Lack of Standards to Guide Project Selection and Development

The absence of human rights standards to guide city development and project implementation, including for housing, water, sanitation, health, and environmental sustainability, raise questions about whether the Mission will be able to deliver on its aims and ensure the fulfillment of rights and entitlements of all city residents. As the Habitat III Issue Paper on Smart Cities highlighted, "To be inclusive, smart city approaches need to be anchored in the Human Rights-based Approach to Development Cooperation (HRBA)."⁹⁵

A report by the Centre for Study of Science, Technology and Policy, Karnataka identifies the absence of a common conceptual model for 'smart cities' as a major loophole in the Mission and further states that in the present city development model, cities are not treated as 'systems of systems' and that the standardization model for 'smart cities' is partially evolved.⁹⁶

India's NITI Aayog (National Institute for Transforming India) had also commented on the absence of standards in the Smart Cities Mission and had recommended that standards for design and implementation of housing and transportation should be put in place, as early as possible, and should be updated to be relevant with the latest available technologies.⁹⁷

Since the SCM Guidelines do not prioritize the protection of human rights, especially of the most marginalized city residents, the choice of projects is left to the discretion of individual cities. As most 'smart cities' are being developed to be investor-friendly economic hubs with advanced technology, issues of the urban poor and marginalized groups are unlikely to be adequately addressed. Special Purpose Vehicles are required to develop a dedicated revenue stream and evolve their own creditworthiness to access additional financial resources; it is thus possible that they could select projects that are more attractive to private investors (such as Public Private Partnership (PPP) projects) rather than social schemes aimed at promoting integrated mixed-income development and reducing inequality. Project timelines also indicate that implementation of various aspects of projects contained in Smart City Proposals will take place simultaneously. In such a scenario, human rights and social welfare projects such as housing, basic services, and healthcare for low-income groups could be neglected.

Absence of Human Rights-based Indicators for Assessment and Monitoring

The SCM Guidelines also do not include human rights-based indicators to monitor implementation of the Mission or to ensure that projects will benefit low-income and other disadvantaged groups. While the Ministry of Housing and Urban Affairs has announced the development of a 'Liveability Index' for Indian cities, it is not clear whether this would incorporate any human rights indicators or how it will be used to monitor progress in 'smart cities,' vis-à-vis the 'non-smart' cities. Its link with the Sustainable Development Goals (SDG), which India is committed to achieve by 2013, is also not clear.

Prior to the announcement of the 'Liveability Index,' the Bureau of Indian Standards had decided to create standards that could define what services and infrastructure a city should provide to be called a 'smart city' in the Indian context. This method of setting up benchmark standards for 'smart cities' was, however, not accepted by MoHUA, which chose instead to define a 'smart city' merely as one that was selected by the government. Subsequently, the Ministry announced the 'Liveability Index' in 2017, which will assess relative improvements in service delivery, and only 'rank' the cities that have been already earmarked as 'smart' by the government's selection.⁹⁸

'Smart Cities' and the Liveability Index

In January 2018, the Ministry of Housing and Urban Affairs announced the preparation of a Liveability Index for 116 cities in India.⁹⁹ These cities will cover a total population of 134 million and include those selected as 'smart cities,' state capitals, and cities with a population of over 1 million.¹⁰⁰ The Index aims to assess the 'liveability' of cities and the quality of life of people in these cities.¹⁰¹ Following an international bidding process funded under the World Bank's Capacity-building for Urban Development Project, the Ministry has selected IPSOS Research Private Limited, in alliance with Athena Infonomics India Private Limited and Economist Group Limited, for the purpose of this exercise.

Various features of Smart City Proposals will provide the source of 'liveability standards,' which are categorized into 15 groups: Governance; identity and culture; education; health; safety and security; economy and employment; housing and inclusiveness; public open space; mixed land use and compactness; power supply; transportation and mobility; assured water supply; waste water management; solid waste management; and, reduced population. These categories have 79 indicators comprising 57 core and 22 supporting indicators. The categories are further clubbed within the four so-called 'comprehensive cities development pillars' – institutional, social, economic, and physical.

3. Inadequate Participation and Information

The SCM Guidelines state that: "The Proposal development will lead to creation of a smart citizenry. The proposal will be citizen-driven from the beginning, achieved through citizen consultations, including active participation of groups of people, such as Residents Welfare Associations, Tax Payers Associations, Senior Citizens and Slum Dwellers Associations. During consultations, issues, needs and priorities of citizens and groups of people will be identified and citizen-driven solutions generated."¹⁰²

Though almost every city has reported some form of engaging residents in the development of Smart City Proposals, there is no way to verify this information or to assess whether the issues and concerns raised by people during these consultations were actually incorporated into the proposals (*see Annexure II for details on the nature of participation documented by cities in the development of Smart City Proposals*).

Media reports and analyses by HLRN also reveal that people's participation in the development of Smart City Proposals, especially from low-income communities, has not been adequate. While all the shortlisted cities claim to have conducted consultations with residents, many cities largely utilized online web portals, social media, and mobile text messaging services to gauge citizens' priorities. Members of marginalized groups who do not have access to such technology were, therefore, omitted from these processes. Their participation consisted, if at all, of select focus group discussions (FGD) in some areas. The participation mechanisms deployed in many cities also failed to acknowledge the challenge presented by the 'digital divide;' that is, the social and economic inequalities which come about as a result of who has access to communication technology and how they use it. The 'digital divide' is also a gendered divide, a result of social conditioning, patriarchal practices, and discrimination against girls and women, which prevents them from accessing equal opportunities, including to technology.

While extensive consultations claim to have been held in some cities, in other cities, people's engagement has been limited or non-existent. The rights to participation and information of residents of the identified 'smart cities' have thus not been fully recognized and upheld.

In Ahmedabad and Bhubaneswar, persons with disabilities, older persons, residents of settlements, and NGOs engaged with representatives of the city's ULB through stakeholder consultations. The cities of Ahmedabad, Panaji, and Solapur reported carrying out targeted consultations with residents of settlements that were part of the proposal area. In Dharamshala, Faridabad, and NDMC, street plays were reported as a means of engagement with residents of low-income settlements. While this is contested by residents in the NDMC area, street plays offer limited scope for feedback and audience participation.

A survey by HLRN of 24 low-income settlements in the NDMC area revealed that the residents were not consulted in the development of the Smart City Proposal by either NDMC or KPMG – the consulting firm responsible for preparing the Proposal.

"Some groups argued that the consultations to select the first 33 city proposals had been largely limited to people with access to the Internet, thus leaving out the poorer segments of the population, and that, by not requiring smart city plans to address the root causes of poverty and discrimination, the initiative was unlikely to create more inclusive and human rights-based urbanization."

Paragraph 34, Report of the Special Rapporteur on Adequate Housing: Mission to India¹⁰³

The selected city centre in Bengaluru for Area-based Development was mentioned as an area that "belongs to and is used by everyone, and the process of formulation of the Smart City Proposal included evaluation and documentation of the city, consultation with elected representatives, urban planners and sector experts, citizen participation through online/offline channels and consultation with vendors and suppliers for smart components and innovations." The cities of Patna, Jhansi, Muzzafarpur, and Thoothukudi, reported carrying out targeted consultations with residents of settlements that were part of the proposal area.

Aligarh used what it calls a "cascading model" to cover 'slums,' resident welfare associations, and other institutions by creating ward-level committees. In Amaravati, a joint workshop was conducted with a realty forum and land-holding farmers. In Bihar Sharif, FGDs were conducted with various stakeholders including 'slum' groups; also 'slum'-level programmes were conducted for including aspirations of people living in these settlements. Karnal reported carrying out a 'Jansampark Abhiyan' for citizen consultations, including with 'slum' populations and street vendors, among others. Jhansi, Pimpri Chinchwad, and Silvassa reported conducting FGDs with marginalized groups.

In instances where a city's proposal mentions redevelopment/upgrading of an informal settlement, the details of citizen participation do not indicate that any steps were taken to engage with the communities likely to be affected. When asked what they knew about the 'smart city' plan for their city, residents from five different settlements in Bhubaneswar—where 50 per cent of the population affected by ABD, reportedly, lives in low-income settlements-claimed that they had not been consulted about the proposal or asked for their inputs. They were also not aware about what 'smart city' development meant for the city or for them.¹⁰⁴ The proposals of Panaji and Solapur specifically list the names of settlements where consultations were held, while others make more general statements reporting the participation of 'slum-dwellers.' Rourkela mentions that 'slum' residents from more than 35 'slums' in the city were consulted; Muzaffarpur reports that a special focus was on including 'slum-dwellers' in the Smart City Proposal formulation, with about 1,500 people in 'slum' areas participating in 20 programmes; Visakhapatnam mentions discussions with 800 'slum'-level federations; and Warangal states that 13 meetings were organized to understand the aspirations of women and 'slum' residents. Thiruvananthapuram claims to have held 35 meetings with citizen groups. It is, however, not known to what extent the suggestions and concerns raised by people during the consultations have been incorporated into the final proposals, including in the city's goals, visions, and priorities for identifying projects.

Local organizations in Chennai report that consultation with urban deprived communities has been minimal and their views and opinions have not been addressed or incorporated in the city's Smart City Proposal.¹⁰⁵ While the Detailed Project Report of Hubali-Dharwad mentions public consultation and information sharing through its official website, residents report that the website was not working when they tried to access it during the consultation period.¹⁰⁶

Of the 99 selected Smart City Proposals, 28 cities have not mentioned if any steps were taken to engage with marginalized sections and low-income groups in the preparation of their proposals. These cities are Aizawl, Allahabad, Bareilly, Belagavi, Coimbatore, Gangtok, Guwahati, Hubali-Dharwad, Jaipur, Jammu,

Kohima, Lucknow, Madurai, Nagpur, Namchi, Naya Raipur, Pasighat, Pune, Raipur, Saharanpur, Salem, Shimla, Surat, Tirupati, Tumkur, Vadodara, Varanasi, and Vellore.

The means adopted for citizen participation in Smart City Proposals, with excessive reliance on technologybased tools, could further marginalize and result in the exclusion of vulnerable groups who were not involved in the process. Those excluded from participation mechanisms could also be excluded from any potential benefits of 'smart city' projects, as it is likely that these were developed without their inputs. This could have serious implications for the nature of implementation of the Mission. If participation is not inclusionary and adequate, outcomes in terms of indicators related to adequate housing, reduction in homelessness, improved access to basic services, and better representation of citizens in local governance bodies, could be compromised. It could also affect issues of social integration and economic development in a city, as decisions related to spatial planning and land use often promote segregation when low-income groups are not involved in planning and decision-making processes.

In subsequent processes, after the selection of the 'smart city' too, participation of city residents, especially local communities, has been limited. This includes processes related to the selection of the Special Purpose Vehicle and other bodies created to implement the Mission at multiple levels are not adequately representative. Representation of civil society is limited to the Smart City Advisory Forum at the city level, where only NGOs and 'local youth' have been indicated as potential members. The Special Purpose Vehicle does not include provisions for civil society or local community representation; nor do the national and state level committees. As a result, there is no mechanism in place to ensure that people's concerns are heard and incorporated into the various stages of implementation of the Mission, or that the government will work towards the inclusion and welfare of disadvantaged groups.

What is required, therefore, is developing effective means of engagement by ensuring that people have adequate knowledge and prior understanding of tools before they are deployed. The SCM Guidelines talk of "smart citizenry" which is only possible when everyone's right to information, participation, and free, prior, and informed consent is guaranteed. Processes ensuring equitable participation and conducive spaces for engagement would result in equitable access, use, and claims over cities and urban spaces, and thereby, the promotion of social justice.

4. Lack of a Gender Equality and Non-discrimination Approach

A significant finding based on HLRN's detailed analysis of all 99 selected Smart City Proposals is the lack of a gender equality and non-discrimination approach in the Smart Cities Mission. This is all the more startling given the alarming indicators related to the socio-economic development of women, children, Scheduled Castes, Scheduled Tribes, older persons, minorities, persons with disabilities, and other marginalized groups and communities in India.

Women

According to the 'Human Development Report 2016,' India ranks 125 out of 188 countries on the 'gender inequality index.'¹⁰⁷ In 2016, approximately 41,761 incidents of crime against women were reported in the metropolitan cities, of which 25 per cent were cases of "assault to outrage modesty," 22.2 per cent were instances of kidnapping and abduction, and 11.8 per cent were related to rape.¹⁰⁸ Despite the serious concerns of violence against women in urban India and the grave inequality faced by women in cities, the Smart Cities Mission has adopted a largely gender-neutral approach. Most references to women's issues are limited to women's safety through increased surveillance and the installation of CCTV cameras, and the creation of women's shelters and working women's hostels. There are, however, no concrete plans to engender cities or to create safe public spaces and public transport options for women or to address concerns of marginalized women such as homeless women, migrant women, domestic workers, women of low-income groups, and single women. The proposals also do not emphasize the prevention and elimination of violence against women through human rights-based solutions.

While speaking about the development of 'smart cities,' none of the proposals address the significant issue of the gendered digital divide in India. It is reported that only 29 per cent of India's internet users are women. There also exists a gender gap in mobile phone ownership. While 43 per cent of Indian men own a cell phone, women lag behind with only 28 per cent ownership. It is estimated that the chances of women benefitting from opportunities accrued by the information society will be one-third less than for men.¹⁰⁹ The need for addressing women's concerns with regard to these indicators is also important.

Lok Sabha, Question No. 1075, 8 February 2017 and Response by Minister of Housing and Urban Affairs

Question: Whether the Government has taken into consideration people with special needs, the aged citizens, and such special classes of citizens, to ensure accessibility in the smart cities and if so, the details thereof.

Answer: The Smart Cities Mission aims at accelerating economic growth and improving the quality of life of people. Among others, the core infrastructures elements in Smart Cities also includes affordable housing especially for poor, and safety and security of citizens, particularly women, children and elderly provision of accessibility infrastructure has also been made in the Smart City Proposal prepared by Smart Cities.

Scheduled Castes/Dalits

As stated earlier, there is no acknowledgement in the Smart City Proposals of the caste-based divide and pervasive discrimination against Dalits in Indian cities, who comprise 12.35 per cent of the urban population in India¹¹⁰ and constitute 20.4 per cent of the 'slum' population in urban areas.¹¹¹ The lack of sensitivity towards caste-based issues and the invisibilization and denial of the caste divide in cities is also apparent in the absence of any provisions to reduce discrimination and improve living conditions of Scheduled Castes in urban areas. Consequently, this has resulted in the failure to develop specific projects focusing on the needs and concerns of Scheduled Castes/Dalits in all of the proposed 'smart cities.'

A question was raised in Parliament on whether adequate waste management and sanitation mechanisms had been incorporated in the Smart Cities Mission to ensure the prevention of manual scavenging. Though the SCM Guidelines or Smart City Proposals do not discuss this serious issue, the Ministry of Housing and Urban Affairs affirmed that no 'smart city' projects would violate the Manual Scavenging Act.¹¹²

Scheduled Tribes

A few cities have listed projects that cover tribal populations, however, the specific concerns of Scheduled Tribes, including the need for special protections for them, have not been addressed adequately in the Mission. Scheduled Tribes continue to suffer disproportionately from the impacts of 'development' in India and record low socio-economic indicators related to ownership of property, access to drinking water, livelihood opportunities, and financial inclusion.¹¹³ Moreover, tribal people suffer predominantly from poverty-induced migration, also known as forced migration leading to occupational change and influx to cities.¹¹⁴

Children

While children are mentioned in almost all Smart City Proposals, a rights-based approach to their issues is lacking in the Mission. Most projects for children revolve around their safety, largely through improved surveillance, and the creation of parks. According to the National Crime Records Bureau, in 2015–16, there was a 4.7 per cent increase in crimes against children in the metropolitan cities, with 67.7 per cent of total reported incidents related to kidnapping and abduction, and 24.2 per cent under the Protection of Children from Sexual Offences Act. Yet, the Mission is silent on the rampant sexual abuse, trafficking, and violence against children as well as on issues of child labour, street children, and juvenile justice. While a few 'smart

cities' have proposed the creation of safe spaces for children and improved facilities in schools through 'smart education' initiatives, the vision of a child-friendly city does not seem to be at the heart of any Smart City Proposal. A few cities, such as Bhubaneswar, with the active involvement of local communities and organizations have developed some child-friendly initiatives.

Persons with Disabilities

The late Javed Abidi, former Global Chair of Disabled People's International, had pointed out that the Smart Cities Mission had failed to integrate "disability as a key issue," and the first 20 shortlisted cities "completely neglected the role of digital inclusion for PWDs (persons with disabilities)."¹¹⁵ Though this changed with almost all proposals selected in subsequent rounds mentioning provisions for persons with disabilities, they mostly revolve around issues related to "universal access," creation of "barrier-free environments," and upgrading and improving existing infrastructure. This does not, however, incorporate a rights-based approach to addressing concerns of persons with disabilities. Given that around 8–10 per cent of India's population lives with disabilities, their issues need to be integrated into the development of all cities, towns, and villages in the country. All 'smart cities' should also indicate how they are implementing the United Nations (UN) Convention on the Rights of Persons with Disabilities as well as the Rights of Persons with Disabilities Act 2016, which mandate adherence to standards of accessibility. The development agenda under the Smart Cities Mission should be disability-sensitive, as disability is not an isolated issue.¹¹⁶

In response to a question raised in the Rajya Sabha in February 2018 on provisions for persons with disabilities in the Smart Cities Mission, the Minister of Housing and Urban Affairs affirmed that it was "imperative that all projects taken up under the Area-based Development and pan-city smart solutions should be disabled-friendly"¹¹⁷ (see Annexure III for details).

Certain positive developments have been documented in Bhubaneswar, Chennai, Indore, Kochi, and Visakhapatnam with regard to the promotion of "universal accessibility through the creation of a "barrier-free built environment." Bhubaneswar is developing a sensory park for children with special needs over an area of 0.4 acres.¹¹⁸ Similar parks are also being developed in Chennai, Kochi, and Visakhapatnam.

Minorities

The prevalent discrimination against other excluded groups such as religious minorities and the LGBTQI community, including with regard to the barriers they face in accessing housing, employment, and basic services in Indian cities, has been ignored in the Mission.

When marginalized individuals, groups, and communities are not at the centre of any scheme, it is unlikely that it will address their concerns and achieve inclusion and an improved quality of life, as claimed in the Smart Cities Missions' objectives.

5. Forced Evictions, Forced Land Acquisition, and Displacement

Despite recognizing that a large percentage of the city population lives in underserviced and inadequate settlements, none of the shortlisted cities have adopted a human rights approach to housing or included safeguards to ensure that the right to housing will not be violated during the implementation of 'smart city' projects, including for 'slum redevelopment/upgrading' projects.

Rise in Forced Evictions, including in Smart Cities

Incidents of forced eviction in the guise of 'smart city' project implementation, including for the facilitation of services, or beautification of areas, or acquisition of land for greenfield development, have been witnessed in several cities. Since the announcement of the Mission, vulnerable socio-economic groups including

residents of low-income settlements, migrant workers, and street vendors and hawkers in several cities have either been evicted from their homes or face threats of being evicted or forcefully relocated by local authorities.

The drive for 'smart cities' has led to evictions in cities including Bhubaneswar, Delhi, Dehradun, Dharamshala, Indore, Kochi, Thanjavur, Vadodara, and Visakhapatnam, generally without the provision of adequate compensation or alternative accommodation. While some evictions are directly linked to 'smart city' projects, in other selected 'smart cities,' forced evictions and demolitions of homes have been carried out for multiple reasons, ranging from 'city beautification' to road expansion.¹¹⁹

Table 5: Reported Incidents of Forced Eviction in Proposed 'Smart Cities' in 2017

	City	Approximate Number of Houses Demolished
1.	Ajmer (Rajasthan)	3
2.	Amritsar (Punjab)	25
3.	Bareilly (Uttar Pradesh)	6
4.	Bhopal (Madhya Pradesh)	69
5.	Bhubaneswar (Odisha)	148
6.	Chandigarh	157
7.	Chennai (Tamil Nadu)	3,390
8.	Coimbatore (Tamil Nadu)	630
9.	Dehradun (Uttarakhand)	870
10.	Guwahati (Assam)	1,460
11.	Hubli-Dharwad (Karnataka)	40
12.	Indore (Madhya Pradesh)	1,219 (January 2015 to May 2018: 6,854)
13.	Jabalpur (Madhya Pradesh)	31
14.	Jaipur (Rajasthan)	2,158
15.	Jalandhar (Punjab)	300
16.	Jammu (Jammu and Kashmir)	257
17.	Madurai (Tamil Nadu)	75
18.	Nagpur Maharashtra)	454
19.	Nashik (Maharashtra)	500
20.	New Delhi Municipal Council (New Delhi)	2,943* (January 2015 to May 2018: 7,068)
21.	New Town Kolkata (West Bengal)	573**
22.	Panaji (Goa)	54
23.	Patna (Bihar)	40
24.	Pune (Maharashtra)	439
25.	Raipur (Chhattisgarh)	115
26.	Ranchi (Jharkhand)	113
27.	Salem (Tamil Nadu)	12

* Data for the entire city of Delhi

** Data for the entire city of Kolkata (New Town Kolkata, however, is no longer a part of the Mission)

	City	Approximate Number of Houses Demolished
28.	Srinagar (Jammu and Kashmir)	20
29.	Surat (Gujarat)	780
30.	Vadodara (Gujarat)	5,030
31.	Visakhapatnam (Andhra Pradesh)	6
32.	Warangal (Telangana)	100

Source of Information: Data compiled by Housing and Land Rights Network India

Six homes were demolished in April 2017 in Vadodara for the development of a 'Smart City Square'¹²⁰ while in Visakhapatnam, authorities destroyed six homes in the name of 'green belt clearance' and a 'smart city project.'¹²¹

Reportedly, implementation of the Smart City Proposal in Bhubaneswar is expected to result in the eviction of 10,000 families or about 50,000 people from 24 settlements.¹²² Half the population under the Bhubaneswar 'smart city' ABD consists of people living in low-income settlements. The state government, however, claims that families will be 'resettled' in four sites at Saheed Nagar, Shanti Nagar, Kharavela Nagar, and Bapuji Nagar.¹²³ The transit accommodation provided to affected families in Niladri Vihar, Gadkana, Patia, and Ragunathapur, however, is around 15-20 kilometres from their original sites of residence. Relocation, thus, has resulted in the loss of livelihoods, especially for women, and has adversely affected children's education, as they have to commute over 15 kilometres to reach their schools. The quality of housing provided is also inadequate, with transit houses measuring a meagre 10 feet by 12 feet, which is insufficient space for a family to live in. As in other cities of India like Delhi or Mumbai, size of the family is not taken into consideration while providing alternative housing; a family of 10 members receives the same flat as a family of five. Though the Government of Odisha claims that all those surveyed for the erstwhile Rajiv Awas Yojana (RAY) will receive alternative housing, the RAY survey was conducted in 2012-2013, while the Smart Cities Mission was announced in 2015. This has excluded many families from receiving housing, including transit accommodation. Furthermore, many families living in the city for long periods of time are also considered 'ineligible' if they are unable to furbish all the requisite documents.

Also, in Bhubaneswar, a 'smart housing project' on Janpath that aims to provide quality accommodation to 'slum-dwellers' requires six acres of land, of which four acres, reportedly, will be acquired by the Bhubaneswar Development Authority by evicting residents from nearby settlements. The city has selected four 'affordable housing' projects under PMAY and SCM to be executed in the PPP mode. Residents, however, are protesting against the project, alleging that identification of beneficiaries was not properly done.¹²⁴ Recently, in a positive move, the Government of Odisha passed the Land Rights to Slum-dwellers Act 2017, which offers hope to many city residents. However, the treatment of 'non-tenable' slums under this law is not clear, and should not result in forced relocation – either for the 'smart city' development or otherwise.

Nashik reported conducting a series of "anti-encroachment drives" over 15–20 square kilometres of the city, including of hawkers from Nehru Garden that is being renovated under the Smart Cities Mission.¹²⁵ In Thanjavur, local government officials demolished 130 houses in June 2018, as part of the 'smart city' project. The houses, reportedly, were constructed more than 60 years ago around the moat in the area of Keezh Alangam. Renovation of the moat is a part of the 'smart city' project, for which residents were evicted. While state officials claim that the affected residents have been allotted apartments at Pillaiyarpatti, several residents opposed the move stating that Pillaiyarpatti was far from the city.¹²⁶

In the past two years (2016–2018), Indore has witnessed a spate of evictions for 'smart city' projects. In early 2016, 200 homes in Biyabani and 150 in Loharpatti, most of them 100–150 year-old houses, were demolished in the old area of the city. According to media and civil society reports, state authorities demolished 145 houses in the areas of Rajmohalla and Bada Ganpati;¹²⁷ over 50 houses near Airport

Road;¹²⁸ 100 houses in Kanadiya Road, 150 houses in Ganeshganj, and 50 houses in Bada Ganapati.¹²⁹ The demolition drives also resulted in the destruction of shops and other home-based livelihoods. Reportedly, no compensation or alternative housing was provided to the evicted families.¹³⁰ Between December 2016 and February 2017, local authorities reportedly demolished about 700 homes that did not have toilets,¹³¹ in an attempt to prove that the city had met 'open-defecation free' targets of India's Swachh Bharat Mission (Clean India Mission), which is being implemented in convergence with the Smart Cities Mission. In the most recent eviction in Indore on 23 May 2018, over 110 houses were demolished in Bhuri Tekhri in the name of an *in situ* 'slum redevelopment' project under PMAY, which is also being implemented in convergence with the Smart Cities Mission.¹³² More than 70 roads in Indore are set to be widened for SCM projects; this, reportedly, would threaten about 10,000 families with forced eviction.¹³³

Under the goal of becoming a 'slum-free' city, the Smart City Proposal of Dehradun specifies targeting the "problem of the recent outgrowth of 'slums' and unplanned areas." In May 2017, the Dehradun Municipal Corporation identified 374 people as "encroachers" along a six-kilometre stretch from the Inter-state Bus Terminus to the Clock Tower. Several residents were evicted to develop a 'model' road in order to streamline traffic movement in congested parts of the city and also to free up "encroached" pavements for pedestrians.

In July 2016, the Municipal Corporation of Dharamshala evicted 300 families or about 1,500 migrant workers from a settlement in Charan Khad where they had resided for 30–35 years, on the premise that the settlement posed a "health hazard."¹³⁴ Incidentally, Dharamshala had previously intended to construct "earthquake-resistant, fireproof and insulated dwelling units for slum-dwellers with innovative pre-fabricated technology." In its Smart City Proposal, the city intends to primarily utilize beneficiary contributions to provide housing to the urban poor residing within its proposal area. The forced eviction, however, contradicts the city's housing goals.

Another identified 'smart city,' Bhopal, has seen protests by local residents who face the threat of eviction and subsequent homelessness after the Bhopal Municipal Corporation started marking houses for demolition.¹³⁵ The same might happen to accommodate road-widening projects within Bhopal's 'smart city' plans. Residents of 500 government quarters in TT Nagar and Tulsi Nagar face the threat of eviction and have been protesting against the 'smart city' project.¹³⁶

Residents of Prizerpeta in Kakinada could witness eviction from their homes, as their settlement falls within the Central Business District area that the municipal corporation plans to retrofit. They have lived at the site for almost 90 years and are registered voters from their residential addresses.¹³⁷

The issue of the threat of forced evictions in 'smart cities' was also raised in the India mission report of the Special Rapporteur on adequate housing, who stated that: "Substantive resources would thus be spent on assisting only a small proportion of the population, while residents of informal settlements would be evicted from their homes to make way for new developments."¹³⁸

The New Delhi Municipal Council, using the benchmark of Helsinki, targets zero per cent of its population living in 'slums' by 2025. Its proposal aims to 'redevelop' and relocate identified *jhuggi jhopdi* clusters (low-income settlements) to EWS dwelling units in Bakkarwala, a site that is at least 29 kilometres from their current places of residence. The project area of NDMC consists of 26 settlements housing more than 6,700 families, who could be evicted and forcefully relocated to Bakkarwala and other resettlement sites located on city outskirts. A visit to Bakkarwala by HLRN in May 2018 revealed that the construction of 264 flats had already been completed. Most low-income residents of the NDMC area, however, do not have information regarding relocation.

Continued Non-Acceptance of 'Housing as a Human Right'

The failure to recognize housing as a human right and the absence of a 'human right to adequate housing' framework in Smart City Proposals is likely to promote the trend to forcefully shift low-income settlements

to city peripheries under the guise of providing permanent housing. However, even where such 'slum redevelopment' programmes are being planned, the affected population has first to meet several criteria to prove 'eligibility,' including through the provision of documents and compliance with 'cut-off dates' to qualify for alternative housing. The ones who do not meet these criteria and cannot afford to pay required amounts are not provided alternative housing or other benefits and thereby rendered homeless. The ones that manage to qualify for 'eligibility' are generally resettled in large sites located on city peripheries. There is enough documented evidence to illustrate that this nature of relocation to inadequate sites located on city margins, results in loss of livelihoods, health, education, and security of the affected families while increasing their impoverishment and marginalization.¹³⁹ Women and children suffer disproportionately from such processes of de-housing, displacement, and failed resettlement.

It is thus apparent that the goal of creating 'slum-free cities' often results in the perpetuation of evictions and demolitions of settlements under the guise of creating 'cities without slums.' Such targets need not necessarily result in positive outcomes or the improvement of living conditions. Ironically, they may perpetuate the rise of homelessness instead. Also, the absence of a clear definition of 'affordable housing' in state policy in India makes the achievement of housing targets for EWS/LIG more difficult, as several schemes claiming to provide 'affordable housing' in reality cater to middle and upper-middle income groups. The focus, therefore, should be on ensuring that all inadequately-housed persons, including the homeless, are able to secure affordable, permanent housing that meets UN standards of 'adequacy'¹⁴⁰ and protection against evictions¹⁴¹ such that they are able to live with dignity, instead of a limited and potentially regressive target of creating a 'slum-free city' by demolishing 'slums' and forcing the poor out of cities. The state should adopt human rights indicators, such as the number of people who have moved to adequate housing that fulfills criteria of habitability, affordability, adequate location, cultural adequacy, provision of basic services, accessibility, and security of tenure. An indicator to measure the fulfillment of housing targets must also include the number of homeless persons in a city, recorded over a period of time. However, arresting the homeless and detaining them in 'beggars' homes' or other remand institutions would portray a false picture; the criteria for documenting the homeless population, thus, also has to be based on human rights methodologies.

Forced Takeover of Land and Displacement

The SCM Guidelines mention that further development in urban areas should be achieved through the promotion of mixed land use and increased density in area-based developments, promoting land-pooling for greenfield developments in vacant areas, and land monetization. This is likely to increase the need for land acquisition on city peripheries and along major transport and industrial corridors. Land has long been contentiously and intricately tied up with processes of dispossession and elite accumulation, state-citizen power relations, and rural livelihoods and capacities in India.¹⁴²

Reports indicate that reforms made under the 'smart cities' agenda could facilitate the private takeover of public space and common lands. While small and medium-sized towns are undergoing exponential growth, there has also been "manipulation of territory along their edges."¹⁴³ From the list of 99 cities, eight cities have proposed greenfield development: Amaravati, Aurangabad, Nashik, Naya Raipur, New Town Kolkata, Rajkot, Ranchi, and Satna. The government is also focusing on large-scale industrialization as a part of the Mission, which primarily involves greenfield development of satellite cities on the outskirts of existing cities and along proposed industrial corridors. Based on the negative experience of farmers in 'smart cities' like Dholera¹⁴⁴ and Gujarat International Finance Tec-City (GIFT),¹⁴⁵ there is a growing fear that increased land acquisition, including along economic and industrial corridors where several 'smart cities' are strategically located, is likely to lead to the loss of farmland as well as the displacement of farmers and other rural communities.

Spread over 920 square kilometres—one and a half times the size of Mumbai—the Dholera Special Investment Region (DSIR), an industrial greenfield city, is the largest of the eight 'smart cities' being developed under the USD 100 billion (around Rs 6.80 lakh crore) Delhi-Mumbai Industrial Corridor project.¹⁴⁶

Though not officially a part of the Smart Cities Mission, the development of DSIR will affect 22 villages with a population of 39,300 people, prompting a sustained struggle of affected farmers. Dholera is being implemented under the Gujarat Special Investment Region Act 2009 that enables land-pooling, thereby circumventing the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (LARR) Act 2013, which among other provisions, requires a social impact assessment and consent of land-owners for acquisition.¹⁴⁷

The model of land-pooling used in Dholera is being popularized in several other cities, including the Bidadi Smart City project in Karnataka, which requires land from 10 villages. Though the Bangalore Metropolitan Region Development Authority (BMRDA) claims that land acquisition will be optional for farmers in Bidadi, a BMRDA official is reported to have stated that the land-pooling scheme "will benefit the government too, as it needn't worry about monetary compensation which often costs a bomb."¹⁴⁸

While land-pooling schemes claim to focus on 'voluntary' handover of land in return for a share of the development, the experience of Amaravati in Andhra Pradesh proves that it is not necessarily a 'win-win' situation.¹⁴⁹

Land-pooling for the Development of Amaravati

Amaravati is supposed to be India's first planned greenfield capital city being developed with the land-pooling model.¹⁵⁰ Under this model, land-owners are required to voluntarily give land to the state, without any assurance of immediate cash compensation. The state has acquired more than 30,000 acres of agricultural land from 90,000 people, most of whom are marginal farmers, lease-holders, agricultural workers, and fish-workers. The state, reportedly, will hand over a portion of the developed land, with infrastructure, to land-owners in proportion to their contribution. Half the land procured will be used for common assets while the other half will be shared equally between land-owners and the government. However, those who are landless and have been displaced because of acquisition of their land by the state government will receive a pension of Rs 2,500 per month.¹⁵¹ The worst-affected are agricultural labourers, fish-workers, and other daily wage workers. As a result of loss of land, it is reported that agricultural activity in the affected villages has stopped. Agricultural labourers, mostly Dalits, reportedly, have to travel distances of over 50 kilometres to find work. This has increased unemployment and impoverishment in the area.

Many farmers in Amaravati reported the use of police force, which has impeded their free movement in the area. In several cases, allegedly, farmers' lands were burnt and fear was used to coerce them to give up their land.¹⁵² The Government of Andhra Pradesh had notified 29 villages for developing Amaravati through the land-pooling mechanism. However, the villages of Penumaka and Undavalli have been resisting moves to acquire their fertile and multi-cropped lands since 2014.¹⁵³ The government has now resorted to land acquisition under the LARR Act 2013, to acquire 680 acres of land in Penumaka village, the notification for which was issued on 13 April 2017.¹⁵⁴

In September 2017, the World Bank Inspection Panel¹⁵⁵ investigated the Amaravati land-pooling project. The findings revealed that though the state government claimed that farmers had given up their lands voluntarily, there were allegations of intimidation and forceful land-pooling in the implementation of the scheme. The Panel also recorded concerns over the possibility of floods on Kondaveeti Vagu River, as the farmlands adjacent to the river are wetlands; concerns over food security, resulting from the large-scale conversion of agricultural land into urban land; and, the plight of landless agricultural wage labourers who are no longer able to farm in the Amaravati region.¹⁵⁶

In Puducherry, unused land (303 hectares) originally acquired from Sedarapet and Karasur villages for a Special Economic Zone is being allocated for the greenfield development component of the 'smart city' project.¹⁵⁷

The scheme of land-pooling may save cities from paying market compensation to land-owners but generally results in the omission of agricultural and other labourers from development benefits, resulting in the loss of livelihoods, income, housing, and security.

The Maharashtra government's plan to build the Nagpur-Mumbai Samruddhi corridor with 24 'smart cities' along it, is witnessing opposition from farmers to land acquisition. Of the 24 proposed 'navnagars' ('smart cities') along the 710-kilometre corridor, reportedly, farmers have provided consent for only six. The corridor, which requires over 9,155 hectares of land, will affect 2,301 residential and commercial structures, and displace more than 20,000 families.¹⁵⁸ Farmers in Chhattisgarh also have been protesting the land acquisition process for the construction of the greenfield 'smart city' of Naya Raipur. In May 2018, they launched a foot march to register their disapproval and also filed a case in the Bilaspur High Court. Over 22,000 hectares of land, reportedly, have been acquired in Kayabandha but the farmers have not benefited under the LARR Act 2013, so far.¹⁵⁹ Naya Raipur, reportedly, has the largest land bank in the country of 237 square kilometres (23,700 hectares).¹⁶⁰

Since neither the SCM Guidelines nor the Smart City Proposals discuss issues of land or land rights, or the need for human rights-based impact assessments, including environmental impact assessments, for 'smart city' projects, there is a concern that these projects could result in displacement and loss of livelihoods, forests, biodiversity, and agricultural land, with grave implications for food security and economic security of farmers, forest-dwellers, and other rural workers.

6. Gentrification, Segregation, and Increased Inequality

The nature of development proposed by the 'smart city' model, is characterized by the creation of enclaves of high investment, information and communications technologies, and 'smart' services, including free Wi-Fi, improved traffic control, intelligent sensors, and better utilities. India's selected 'smart cities' have chosen to implement a retrofit and redevelopment model with a focus on attracting investment to cities. The cost of developing these 'smart enclaves,' while facilitating the expulsion of low-income groups to city peripheries under the guise of 'permanent housing,' will have to be borne by the residents who continue to live in these areas, not all of whom are wealthy.

"People must be prepared to pay higher taxes or user charges for smart cities. This burden will have to be borne by the people for availing "modern infrastructure in the existing ones."

- Vice President of India, Mr Venkaiah Naidu, September 2017

One of the ways for investors to recover the money they invest in 'smart cities' is by charging inhabitants user fees for essential services. This is supported by the SCM Guidelines, which mention that where services can be measured and beneficiaries identified, city residents could be charged user fees to avail improved quality of services, including water. The increased quantum of charges for basic rights like water and sanitation will increase the financial burden on the urban poor, who spend a much higher proportion of their income on, and already have to pay higher rates for accessing essential services in a city. One of the reasons behind New Town Kolkata opting out of the Mission, allegedly, was the state government's objection to the imposition of water tax in 'smart cities.' Pune Smart City Development Corporation Limited (PSCDCL) is planning to introduce 'user charges' in areas of Anudh, Baner and Balewadi. According to the Pune Smart City CEO, "The government is spending more than Rs 1,000 crore for better infrastructure and facilities in these areas. Since the area residents are getting better infrastructure, they won't mind paying user charges."¹⁶¹ The Pune Municipal Corporation, reportedly, charged Rs 3.36 crore from a housing society as water tax even though the residents claim to have spent Rs 4.75 crore on private water tankers. Interestingly, PSCDCL won an award for water supply at the Smart Cities India awards 2018.¹⁶²

In Udaipur, where only 5 per cent of the city area and 20 per cent of the population is likely to benefit from the 'smart city' development, residents have protested against the planned five-fold increase in charges for water and electricity.¹⁶³ In Eluru, Andhra Pradesh, the corporation reportedly fixed rates to collect garbage from houses above 50 square yards in the city, a move that was resisted by local parties and residents.¹⁶⁴

In December 2017, in response to a question raised in the Rajya Sabha on whether the government is planning to impose higher taxes or user charges for smart cities and what its plans were to ensure that smart cities are made affordable for all, the Minister of Housing and Urban Affairs said, "User Charges, municipal taxes, municipal levies etc. are state subjects. It is for the state governments and Urban Local Body to take appropriate decisions in this regard."¹⁶⁵

Increase in Housing Costs and Gentrification of Neighbourhoods

With improved services and amenities in the 'smart city,' the cost of real estate, including commercial rental rates and housing prices in the area, is likely to increase. With migration to these cities, the demand for affordable housing also increases. However, the construction cost of these 'affordable houses' is estimated to be Rs 15–30 lakh, with an average cost of about Rs 18 lakh per house, according to the Confederation of Real Estate Developers Association of India (CREDAI).¹⁶⁶ The irony is that this may not be 'affordable' for almost 90 per cent of Indians.

In addition to state-sponsored evictions, there is a growing likelihood that market-driven evictions could be witnessed in some of these 'smart city' enclaves in India, as a result of unaffordable housing and the inability of low-income groups to pay rising housing costs.

The experience of the United States has shown that concentrated prosperity of workers in the digital economy results in rising rents and an increased demand for housing that places disadvantaged citizens at risk. Affluent coastal cities such as Seattle, in King County, Washington have recorded growing homelessness, as a direct result of the increased cost of housing. In King County, homelessness has risen in line with the fair-market rent. But as rents rose, the stock of affordable units fell by 13 per cent a year between 2014 and 2016. In 2017, 22,000 households approached the county's homeless services, but only about 8,000 affordable units were available. The homeless population had to compete with higher-income individuals for these units.¹⁶⁷

An increased population in urban centres often also implies a greater dependence on vehicles. The resulting congestion, in part fuelled by increased vehicle ownership and a surge in e-commerce deliveries, is burdening cities with worse traffic and higher costs. These "externalities" in the form of congestion, represent as much as 2 to 4 per cent of a city's Gross Domestic Product (GDP).¹⁶⁸

The threat of increased segregation and gentrification of neighbourhoods is becoming an issue of greater concern, one that is changing the urban geography of India at an alarming rate with irreversible consequences for social inclusion and justice. More often than not, the "losers" are those whose interests are not protected by 'smart city' policies.¹⁶⁹ This tends to magnify an already-existing intra-city divide and further marginalizes low-income groups, farmers, informal workers, and indigenous communities.

7. Dilution of Democracy and the Privatization of Governance

Implementation of the Smart Cities Mission at the city level is mandated through the Special Purpose Vehicle (SPV), an entity to be established as a limited company and incorporated under the Companies Act 2013. The SCM Guidelines require that each SPV has state/UT and Urban Local Bodies with 50:50 equity shareholding, while permitting the private sector and financial institutions to be considered for equity stake provided the "shareholding pattern of 50:50 of the state/UT and the ULB is maintained, and the State/UT and the ULB together have majority shareholding and control of the SPV." ¹⁷⁰

Smart Cities Mission Guidelines: Delegation of Powers to the Special Purpose Vehicle

- 4.1 One of the primary reasons for the creation of an SPV for the Smart City Mission is to ensure operational independence and autonomy in decision-making and mission implementation. The Smart Cities Mission encourages the State Government and the ULB to adopt the following best practices to create empowered SPVs to the extent and as provided under the municipal act.
- 4.1.1 Delegating the rights and obligations of the municipal council with respect to the smart city project to the SPV.
- 4.1.2 Delegating the decision-making powers available to the ULB under the municipal act/ Government rules to the Chief Executive Officer of the SPV.
- 4.1.3 Delegating the approval or decision-making powers available to the Urban Development Department/Local Self Government department/Municipal Administration department to the Board of Directors of the SPV in which the State and ULB are represented.
- 4.1.4 Delegating the matters that require the approval of the State Government to the State Level High Powered Steering Committee (HPSC) for Smart Cities.¹⁷¹

Competing and Overlapping Governance Mechanisms

The Constitution (Seventy-fourth Amendment) Act 1992 empowers elected local governments, municipal bodies, and neighbourhood committees (including *mohalla sabhas*) to provide the governance architecture for the city. By creating competing and overlapping mechanisms for local governance through the structure and powers accorded to the Special Purpose Vehicle, the Smart Cities Mission violates the provisions of the Indian constitution and also threatens local democracy. The Special Purpose Vehicle could disregard the role of ULB and local governments, or bypass or challenge them in its operations. While the SCM Guidelines justify the establishment of the Special Purpose Vehicle as a means to ensure objective decision-making independent of local municipal bodies that are subject to local politics, such a move is considered unconstitutional. In response to a question asked in Parliament, the Minister of Housing and Urban Affairs had also reiterated that the Special Purpose Vehicle will have to comply with all the regulatory/monitoring mechanisms set out in the Companies Act.

According to media reports, Urban Local Bodies of Greater Mumbai, Kochi, Nashik,¹⁷² Navi Mumbai, and Pune indicated that the essence of local self-governance will be defeated with the focus on private sectordriven Special Purpose Vehicles. This was one of the reasons for Navi Mumbai and Greater Mumbai withdrawing from the smart cities competition. Urban Local Bodies, reportedly, are disturbed by the idea of an SPV bypassing the elected municipal council, as proposed in the SCM Guidelines.¹⁷³ New Town Kolkata Development Authority opted out of the Smart Cities Mission on several grounds, one of which, reportedly, was concerns related to the operation of Special Purpose Vehicles.

In Tamil Nadu, the Tamil Nadu Urban Finance and Infrastructure Development Corporation Limited. (TUFIDCO), a parastatal agency incorporated under the Companies Act 2013, has been appointed as the 'State Mission Directorate for the Smart Cities Mission.' Its main objective is to provide financial assistance and guidance to local bodies, boards, and authorities for their development schemes. However, according to local organizations, TUFIDCO has been circumventing democratic processes in the ULB. The overlap of roles with the ULB further results in confusion and delays, thereby hindering the implementation of the Constitution (Seventy-fourth Amendment) Act 1992.¹⁷⁴ The Special Purpose Vehicle created to implement the Mission in Chennai is the Chennai Smart City Limited. Its Board of Directors comprises 11 officials of the Government of Tamil Nadu and five non-official members, including the CEO, of which only two are independent directors.

Furthermore, problems with Special Purpose Vehicles are leading to delays in project development and commencement in some cities. In Belagavi, for instance, proposal submission to the government for development of 'smart city' projects was considerably delayed owing to the alleged lack of interest among officials of the SPV – Smart City Public Limited.¹⁷⁵ The SCM Guidelines stipulate that each SPV is to be headed by a full-time Chief Executive Officer. In Chennai and Kochi, delayed appointments of the CEO

allegedly impeded the implementation of 'smart city' projects.¹⁷⁶ The efficient functioning of many Special Purpose Vehicles is also affected by the fact that these Officers are either transferred frequently or hold multiple positions. For example, the CEO of the Bhubaneswar SPV is also the managing director of the Odisha Mining Development Corporation and director of the state's Sports and Youth Services Department, indicating a potential conflict of interest as well. Frequent transfers and short terms of Chief Executive Officers have been cited as reasons for tardy implementation of projects. In the 'smart city' of Pune, four Chief Executive Officers have been appointed so far.¹⁷⁷

"No conflict of interest (between the SPV and the municipal corporation concerned) has to take place. That is why I'm not happy with the additional chief secretary and additional urban affairs secretary or the additional commissioner of the municipal corporation doubling up as the SPV manager. When a project starts, there is no problem because it can sometimes be an advantage with the same person handling both. But once it takes off, there should not be any conflict. We will crack the whip on that."

– Minister for Housing and Urban Affairs, June 2018¹⁷⁸

Principles of accountability of Special Purpose Vehicles have not been specified, leaving the private body with overarching powers. The SCM Guidelines also do not provide clarity on the issue of governance after the development of the 'smart city' is complete. They do not outline the intention or method of dissolution of the SPV once the project is over, nor do they specify if the city's local bodies are supposed to oversee future governance. Also, there is lack of clarity on the financial structure of the SPV and how the private sector can contribute effectively. Issues related to the functioning of the SPV were also raised by the Special Rapporteur on adequate housing. Her India mission report says, "...some local authorities suggested that the guidelines for the scheme reduce their decision-making powers, including by creating a body to establish and implement the scheme."¹⁷⁹

The role of corporate sector entities in managing cities further highlights the trend of the *privatization of governance*, which is a very serious concern, as it threatens the functioning of democracy in India.

As Special Purpose Vehicles need to develop their own revenue streams and enhance their creditworthiness to access additional financial resources, they could focus on projects that have a better market feasibility. When the government passes on its responsibility for infrastructure and basic service provision to the private sector, it is likely that the concerns of the urban poor, migrants, and the marginalized will not be addressed adequately.¹⁸⁰

This model is resulting in the transition from welfare-based reforms to market-centric reforms in urban governance. While the state government claims that such bodies and the overlaps in functions are sometimes necessary to improve the quality of services and to minimize delays in implementation, the essence of local democracy and the participation of citizens in decision-making processes are greatly undermined.

"In truth, competing visions of the smart city are proxies for competing visions of society, and in particular about who holds power in society. In the end, the smart city will destroy democracy."

- The Guardian, 2014¹⁸¹

There is no provision within the Mission for a grievance redress mechanism; neither is the right to remedy of city residents protected. Unless corrective measures are immediately incorporated to adequately address the serious concerns mentioned above, the short-term gains of the Smart Cities Mission could become a grave liability in the not-too-distant future. There are enough examples to show that the dilution of democracy can never be justified.

8. Risks of Digitalization and Threats to Privacy

Overreliance on Technology

All Smart City Proposals place great focus on the promotion of technology as a key parameter to the development of 'smart cities' and technological solutions as the apparent panacea to urban problems. Technology spending for the global 'smart city' market is expected to reach USD 27.5 billion by 2023, according to market research company Navigant Research.¹⁸² While the use of technology to conserve resources, increase efficiency, and promote renewable sources of energy is beneficial, technological innovations and infrastructure development alone are not sufficient to solve the complex structural issues that plague India's cities. There is a need also to assess the requirement for, and limitations of, such technology-based 'smart solutions' as well as the capacity of Indian cities to support them. For instance, when electricity supply in many cities is limited, erratic, or insufficient, the focus should first be on prioritizing access to essential services for all residents.

Increased Surveillance and Other Risks of Big Data

The tendency of new and emerging technologies to capture personally identifiable information and household-level data about citizens, gives rise to serious concerns about how a 'smart city' could violate people's privacy and result in misuse of big data. While cities build technology infrastructure to collect and collate large amounts of data, ostensibly for 'public good' reasons, the collectors and managers of that data, do not always respect its sanctity and privacy. Also, most of the private sector organizations that collect and store citizens' data are still not legally bound to protect their rights.

Several Indian 'smart cities,' including Ahmedabad, Bhopal, Nagpur, and Pune,¹⁸³ have established Integrated Command, Control, and Communication Centres. These are recognized as a crucial step in realizing the 'smart city' vision. However, as they promote the collection and centralization of citizen's data, often without prior informed consent, they could potentially give rise to several problems. Without encryption and transparency regarding how people's data is secured and without the establishment of adequate cyber security measures, these centres that contain sensitive data and control over utilities and emergency services, if hacked, could result in grave misuse, disruption, and damage.¹⁸⁴ The creation of consolidated electronic databases of information could give rise to privacy and security concerns, including identity theft, and increased surveillance by the state and other agencies.

A June 2018 report by India's NITI Aayog extols the advantages of Artificial Intelligence (AI) for 'smart cities' by claiming that, "Due to the large amount of data they can create, smart cities are especially amenable to application of AI, which can make sense of the data being generated, and transform it into predictive intelligence – thus transitioning from a smart city to an 'intelligent city'." However, it also warns against the risks of such AI by stating, "The wide range of connected devices also gives rise to increased risks in cyber security, with harmful actors such as hackers now capable of affecting city scale infrastructure."¹⁸⁵

The shift towards the use of AI and algorithms in the governance of cities is also leading to an increased potential for surveillance over residents. "Consequently, citizens and spaces have become knowable and governable in new ways, characterized by the monitoring and regulation by dense assemblages of dataenabled infrastructures and technologies on behalf of a small number of entities. The age of big data means a deluge of continuous (real-time), varied, exhaustive, fine-grained and often indexical, relational, flexible and extensional data. Such data extraction raises concerns over the demise of privacy."¹⁸⁶

This is evident in the specific emphasis on increased surveillance, under the guise of promoting safety, in almost all Smart City Proposals and the extensive installation of CCTV cameras across cities. However, without complementary measures to reduce violence and crime against women, children, and other marginalized groups, Indian cities could compound an already critical situation while failing to guarantee the safety and security of their residents.

As cities rely more on data to drive their decision-making, technocratic governance could begin to replace traditional political processes that were more deliberative and citizen-centered.¹⁸⁷ Such policies could also discriminate against certain groups of people or communities, based on data gathered about their profiles, resulting in the denial of services and public benefits, or charging certain groups more for the same services. "There is also the concern that, in a PPP city, data finds itself in private control."¹⁸⁸

In addition to violations of the right to privacy, several other rights, including the right to access information and the right to security are threatened by increased surveillance and control of personal data. "Such 'dataveillance' raises concerns around access and use of data due to the increase in 'digital footprints' (data they themselves leave behind) and 'data shadows' (information about them generated by others)."¹⁸⁹

Judgment of the Supreme Court of India on the Right to Privacy

In the landmark judgment of Justice K.S. Puttaswamy v. Union of India (2017),¹⁹⁰ a nine-judge constitutional bench of the Supreme Court of India affirmed that the right to privacy is an intrinsic part of the right to life and personal liberty under Article 21 of the Constitution of India. The judgment locates the right to privacy as an expression of individual autonomy, dignity, and identity. In his lead opinion, Justice Chandrachud, held that: *"Privacy with its attendant values assures dignity to the individual and it is only when life can be enjoyed with dignity can liberty be of true substance. Privacy ensures the fulfilment of dignity and is a core value which the protection of life and liberty is intended to achieve."*

The judgment affects many aspects of urban state policy such as state surveillance, data collection and protection, rights of gender and sexual minorities, and the right of choice, among others. The judgment recognizes the potential invasion of privacy by the state, through surveillance and profiling, due to the growth and development of technology. The judgment emphasizes the need to balance the interests of the individual in maintaining the right to privacy with the interest of the state in maintaining law and order. More importantly, the Court underlined the importance of privacy even in the public sphere: "... it is important to underscore that privacy is not lost or surrendered merely because the individual is in a public place. Privacy attaches to the person since it is an essential facet of the dignity of the human being."

An overreliance on 'smart systems' to run critical infrastructure or centralized electronic grids, could result in serious problems, including safety, when such systems crash. For instance, 'smart traffic' algorithms, if hacked or misused, could disrupt vehicular traffic and heighten the risk of road accidents.

As digitalization increases and digital systems play a greater role in people's lives, there is also a greater risk of the exacerbation of inequality. It is, therefore, essential that governments ensure that the poor are not deprived of access to and use of services, just because they are not digitally as connected as the affluent. "While offline populations can benefit from applications running in the background of daily life, such as intelligent signals that help with traffic flows, they will not have access to the full range of 'smart city' programmes."¹⁹¹ Concerted efforts need to be made to ensure that technology closes, not widens, the digital divide and can be used effectively to make cities more inclusive for the poor, vulnerable, and marginalized.

Data Protection Laws in India

Data protection is one of the important aspects of the right to privacy and ensures that individuals have a degree of control over their personal information and its communication to others. The data protection regime in India is governed by several piecemeal statutes, rules, and guidelines, in the absence of a standalone legislation. The Information Technology Act 2000 ('IT Act') is the predominant law that provides general rules for data protection in India. Section 43A of the Act provides for compensation in cases where a body corporate possessing, dealing or handling any sensitive personal data fails to protect the same.¹⁹² The Information Technology (Reasonable Security Practices and Sensitive Personal Data or Information) Rules 2011, formulated under Section 43A of the IT Act, mandate that the collection of information must be done lawfully and in connection with the function of the organization; require every organization to have a detailed privacy policy; set time limits for the period for which the information can be retained; and, allow individuals to correct their information and to determine whether to disclose the information, among other provisions.¹⁹³ However, these rules are only applicable to corporate bodies, leaving the government and its agencies out of its purview. It is unclear if these rules would apply to the Special Purpose Vehicle, which is a limited company incorporated under the Companies Act 2013, but with a shareholding of the government and urban local bodies.

The Committee of Experts on a Data Protection Framework for India, chaired by Justice B.N. Srikrishna, examined the challenges and the inadequacy of the current data protection regime in India, and outlined the key principles, which prospective data protection legislation in India must incorporate.¹⁹⁴ An adequate legal framework for data protection, which addresses these issues and provides adequate safeguards against misuse of personal data, is crucial before implementing measures for digital governance in 'smart cities.'

9. Environmental Concerns

One of the focus areas of the Smart Cities Mission is on developing 'smart' and 'green' solutions aimed at promoting renewable energy, reducing waste, increasing efficient use of resources, and contributing to climate change mitigation. While these are notable objectives, the paradigm of development being espoused by the Mission could result in the growing ecological footprint of 'smart cities.'

The definition of 'urban sustainability' being promoted by the 'smart city' model overlooks key facets of a city's ecological footprint, including food systems, resource consumption, production-related greenhouse gas emissions, air quality, and the 'urban heat island' effect. It also ignores the ability of non-state actors to contribute meaningfully to the design and implementation of urban policies and programmes.¹⁹⁵

The establishment of digital systems, including the massive infrastructure required to support them, could have deleterious environmental impacts. Another issue of concern is that of increased e-waste/ technological waste that has damaging impacts on the environment because of its high levels of toxicity and non-biodegradable nature.

A study by the University of Lincoln, UK, has warned against the detrimental environmental impact of India's Smart Cities Mission. In particular it says, "The pursuit of cities to become 'smart,' 'world-class,' 'liveable,' 'green' or 'eco' has been promoted alongside increased population densities and urban compaction. This planning goal will reach a point where resources are inadequate for the fully functioning metabolism of a city. Simultaneously, it will also increase the output of waste in the form of drainage, solid waste, and greenhouse gases."¹⁹⁶

The development of greenfield cities could have potentially high environmental costs, including the loss of forest cover, agricultural land, and impacts on water bodies, including ground water generation. Reports of trees being felled for 'smart city' projects have been reported in several cities. The Surat Municipal Corporation has cut as many as 225 trees, most of which are over 10 years old, to build a new road in Limbayat area under the 'smart city' project. Locals of the Nilgiri area in Limbayat have been protesting against the felling of eucalyptus trees that gave the area its name and identity for over a decade.¹⁹⁷ The Chandigarh administration plans to cut down 71 trees for two projects – the construction of an underpass and the development of an urban park¹⁹⁸ while the Vadodara Municipal Corporation has plans to cut old

plantations of banyan trees for road-expansion projects.¹⁹⁹ The Maharashtra State Road Development Corporation has planned to cut over 100,000 trees for the 258-kilometre stretch of the Mumbai-Nagpur Expressway project that envisages special nodes or 'smart cities every 30–40 kilometres along the 701 kilometre-long expressway.²⁰⁰

The requirement in the SCM Guidelines for at least 10 per cent of the 'smart city's' energy to come from solar energy is a positive one, as is the call for sustainable solutions in urban areas. However, much more needs to be done for India—the fourth-largest carbon emitter in the world (following the US, China, and the EU)²⁰¹—to transition to a low-carbon and sustainable economy.

In March 2018, a question in the Lok Sabha had asked the government about steps being taken to ensure that construction activities in 'smart cities' do not violate environmental norms and India's commitment to climate agreements and the Sustainable Development Goals 2030 (*see Annexure III for details*).²⁰²

10. Corporatization of Cities and High Dependence on Foreign Investment

The international consulting firm Deloitte has estimated that the implementation of India's Smart Cities Mission would require investments worth 150 billion US dollars over the next few years, of which 120 billion dollars (80 per cent of total capital outlay) would be required from the private sector.²⁰³ The central government has asked states to generate half the funding for 'smart cities' from Public Private Partnerships (PPP). The selected cities are, thus, raising funds through a variety of PPP models. Cities like Rajkot, reportedly, are spending the largest part of their 'smart city' funds as PPP.

The PPP model, however, does not necessarily work for the interest of low-income and marginalized groups. The rationale of Public Private Partnerships stems from the public sector's inefficiency and the lack of sufficient resources. Such a PPP model contains a built-in mechanism to move towards privatization, even in essential service delivery for the poor at the grassroots. The now discontinued JNNURM also partially relied on private investments to meet project costs. However, of 2,900 projects, only 50 were modeled as PPP, with private sector investment covering only 0.2 per cent of the total project cost.²⁰⁴

Since dependence on the private sector for the success of the Mission is high, it is apparent that the private sector is also likely to be the greatest beneficiary of the Smart Cities Mission.

In June 2015, *The Economic Times*, based on inputs of expert analysts, projected the stocks of the following fourteen companies to rise with implementation of the Smart Cities Mission: National Building Construction Corporation, Schneider Electric Infrastructure, Sterlite Technologies, Kalpataru Power Transmission, KEC International, VA Tech Wabag, ABB, Smartlink Network System, Dredging Corporation of India, UltraTech Cement, Larsen & Toubro, IDFC, ICICI Bank, and Maruti Suzuki.²⁰⁵

According to an April 2017 report, listed companies that could benefit from projects under the Smart Cities Mission include Godrej Properties in the housing sector, Siemens and Honeywell Automation in the energy sector, Atlas Cycles and Tube Investments in the area of transport, Thermax and VA Tech Wabag in the field of water and waste management, and NIIT Technologies in providing solutions related to information and communication technology.²⁰⁶

Some estimates suggest that along with other collateral investment needs, 'smart cities' are set to create business opportunities across different industries with a total market value of USD 1.56 trillion by 2020.²⁰⁷ Technologies such as smart-metering, wireless sensor networks, open platforms, high-speed broadband, and cloud computing are key building blocks of the digital component of the 'smart city' infrastructure.

Swedish telecom firm Ericsson, along with Bharti Infratel, has won a contract from Bhopal Smart City Development Corporation Limited to build smart poles for Wi-Fi access, entailing an investment of Rs 690

crore.²⁰⁸ Schneider Electric India and Infrastructure Leasing and Financial Services Limited have won a contract to develop the greenfield project of Naya Raipur 'smart city'²⁰⁹ while Japanese firm Panasonic has expressed an interest in projects in Guwahati and Jabalpur.²¹⁰ The Varanasi Municipal Corporation has appointed a consortium of three firms as project management consultants: Rudrabhishek Enterprises Private Limited, Grant Thornton, and ABN consulting.²¹¹

Other companies that have signed up for 'smart city' projects or expressed interest in investing in the shortlisted cities include, *inter alia*, Accenture, AT&T, Carl Data Solutions Inc., China Mobile, Deutsche Telekom, Hitachi Insight Group, Huawei, IBM, Nokia, Tech Mahindra, Mobikwik, Oracle Open World India, Scania, Siemens, Toshiba, Microsoft, Vodafone, Verizon Communications, World Trade Center Association, and the Australia Smart City Consortium.

Large global technology firms, including Cisco, IBM, and Bosch, have demonstrated interest in setting up 'smart city centres' or integrated command and control system in 'smart cities.' Siemens is working to set up such a centre in Bhopal; Bosch, Cisco, Efkon, and Rolta are participating in the development of a 'smart' centre in Varanasi, Honeywell will be assisting Bhubaneshwar; and, Schneider, Cisco, and Hewlett Packard are likely to assist with the creation of such a centre in Naya Raipur.²¹² Madhya Pradesh's Integrated Control and Command Centre for all seven smart cities of the state, is a cloud-based Universal Internet of Things platform developed by Hewlett Packard Enterprise.²¹³ Spanish Internet of Things specialist company, Libelium, also has plans to invest in India's 'smart cities.'²¹⁴ The French firm, Systra, has proposed three transport corridors connecting Chandigarh, Panchkula, and Mohali in its detailed study for a "mobility plan" under the Chandigarh 'smart cities' has been developed by NEC Corporation and NEC Technologies India.²¹⁶ Singaporean company, Ascendas-Singbridge, has committed to undertake greenfield development of the 684-hectare 'Start-up Area' in Amaravati, which includes infrastructure development for business, commercial, and residential activities, to be completed in phases over 15 to 20 years.²¹⁷

Nokia, reportedly, is working with telecom operators in India on various elements in the Internet of Things domain for 'smart cities' including smart applications. It has plans to set up a "smart pole solution" that will host small cell for connectivity, CCTV cameras, and other sensors, besides a billboard for marketing and advertisement purposes.²¹⁸ Google has partnered with Railtel to provide free Wi-Fi at 400 railway stations across India, and has announced plans to work on 'smart city' projects.²¹⁹

The multinational company, Cisco, reportedly, has already benefited from the Smart Cities Mission. Its profit from India operations for the fiscal year that ended in 2016 increased fourfold, allegedly, as a result of 'smart city' projects, with its revenue increasing 41 per cent year over year to over USD 1 billion.²²⁰

Panchshil Realty and Developers, with other global private players, has entered into an agreement to form a joint entity to identify and develop real estate projects in line with the government's 'smart city' initiative. It will be known as 'smart city consortium' and the first such project to be developed in Pune's Kharadi area will have a proposed investment of USD 500 million (Rs 3,200 crore).²²¹ Wipro Lighting is reported to be providing Internet of Lightning Solutions for infrastructure in 'smart cities.'

The Smart Cities Mission has also prompted the development of new laws that promote corporate sector interests in India's urbanization. These include laws sanctioning foreign direct investment in construction and real estate, and the speeding up of environmental clearances for major projects, often at the cost of grossly overlooking the affected parties' right to lives and livelihoods.²²²

These trends highlight the subtle and irrevocable transition towards the *corporatization of Indian cities*, with grave potential implications for local and national governance as well as the fundamental rights of residents.

High Dependence on Foreign Investment

A major goal of the Smart Cities Mission is to secure foreign investment in 'smart city' projects and development. Various foreign governments and international agencies have been approached and have committed funding, either for general support to the Mission or for specific city-projects. Countries that have offered to invest in India's Smart Cities Mission include Canada, China, France, Germany, Israel, Japan, South Korea, the Netherlands, Singapore, Spain, Sweden, Taiwan, the United Kingdom (UK), and the United States of America (USA). Negotiations are underway to acquire loans worth 500 million pounds and 1 billion pounds each from the World Bank and the Asian Development Bank (ADB).²²³ The Asian Development Bank has assured assistance to Bhubaneswar and Visakhapatnam to fund 'smart city' projects worth Rs 210 crore, and to provide Capacity Development Technical Assistance, respectively. Mangaluru will also receive Rs 400 crore in funding from ADB for the commissioning of drainage and water supply projects.²²⁴ The World Bank has promised monetary assistance of Rs 200 crore to Jaipur Smart Mission Limited (JSML)²²⁵ for the construction of parking and ducting projects, given that sufficient bank guarantees can be provided.

France has committed to support the development of the three 'smart cities' of Chandigarh, Nagpur, and Puducherry. The French development bank AFD is willing to fund 10 million euros (around Rs 800 crore) for the Mission.²²⁶ A French firm, Egis International, has been selected as the project management consultant to assist Chandigarh in its 'smart city' development process.²²⁷

Question No. 2845, 13 March 2018, Lok Sabha, Parliament of India

Question: d) Whether it is true that the government has made agreement with foreign countries to seek financial assistance for implementation of the smart cities mission programme;

(e) If so, whether any foreign countries has come forward to invest in the smart cities mission; and

(f) If so, the funds received from foreign countries for the development of smart cities in the country?

Answer: (d) to (f) At the national level, MoUs/agreement for technical assistance have been executed with DFID, United Kingdom and GIZ, Germany separately. At the state level, MoUs/agreement for technical assistance has been executed between United States trade and development agency (USTDA) and State Governments of Andhra Pradesh, Uttar Pradesh, and Rajasthan, and AFD (French Development Agency) and UTs of Chandigarh, Puducherry and state Government of Maharashtra. A credit facility agreement has recently been executed with AFD for funding of the Smart City Projects through a challenge process.

The United States (US) government through the US Trade and Development Agency has signed a Memorandum of Understanding (MoU) to develop Ajmer, Allahabad, and Visakhapatnam as 'smart cities,' by funding advisory and research services, as well as conceptualizing the Master Plan of the Visakhapatnam Smart City Project.

The European Union (EU) is expected to play a big role in the development of the Mission. In April 2017, the EU-funded International Urban Cooperation programme was officially launched in India. The programme is expected to work with SCM and AMRUT. The European Investment Bank has provided loans and credit lines for more than 1.5 billion euros to support energy and climate-related projects in India.²²⁸

The German government-owned development bank, KfW, has also agreed to invest up to Rs 380 crore in Bhubaneswar, Coimbatore, and Kochi to conduct research and administer the execution of the three 'smart city' projects. German companies have shown an interest in contributing to the development of residential housing, efficient water supply, waste water management, and renewable energy, as part of the Smart Cities Mission. On the basis of a memorandum of understanding signed in April 2015, an Indo-German working group for sustainable urban development was established. On 31 May 2016, a special conference titled '100 Smart Cities in India' took place in Berlin as part of the Indo-German Collaboration on Smart Cities and Urbanisation.²²⁹ Germany also signed an MoU with India for 1 billion euros for 'smart city' projects, and

renewable and solar energy projects.²³⁰ In addition, the German bank KfW has also committed about 700 million euros to funding sustainable urban development India. Under the bilateral cooperation framework, India is supposed to receive 1 billion euros as a soft loan from Germany for developing 'green energy corridors.'²³¹ According to an agreement between the Nagpur Municipal Corporation and the International Urban Cooperation programme of the European Union, the German city of Karlsruhe will assist the 'smart city' of Nagpur in promoting sustainable development.²³²

Sweden and India have entered into a Joint Innovation Partnership with a focus on e-mobility and 'smart cities.' Jaipur has appointed the Spanish firm Epista as a project consultant, wherein Epista will assist JSML in choosing suitable agencies after the arrival of financial bids to fund projects.

Another venture called the Smart City 4.0 initiative in India aims to create fundable start-ups and accelerate technologies that will work towards developing 'smart cities.' This will be undertaken by the United States India Strategic Partnership Forum in collaboration with the University of California, Berkeley.

The British government has decided to support the cities of Pune, Indore, and Amaravati. In April 2018, India signed several MoU with the UK, including for sustainable urban development and to build on existing cooperation on the Smart Cities Mission.²³³ Pune's Special Purpose Vehicle—the Pune Smart City Development Corporation Limited (PSCDCL)—has elected European Business and Technology Centre (EBTC) as the Knowledge and Technical Cooperation Partner, in which capacity EBTC will also be introducing more European funding agencies to PSCDCL.

Japan has articulated its interest in assisting Chennai, Ahmedabad, and Varanasi. South Korea has pledged to give USD 10 billion for cooperation in infrastructure, consisting of an Economic Development Cooperation Fund of USD 1 billion, and export credits of USD 9 billion for priority sectors, including 'smart cities.'²³⁴ The Korea Land and Housing Corporation, a South Korean government undertaking, has committed to invest in the construction of the Kalyan-Dombivali Smart City in Maharashtra.²³⁵ Singapore has partnered with the Maharashtra government to work on the master plan and airport for Pune as well as undertake urban infrastructure developments in the Pune Metropolitan.²³⁶

While large amounts of money have been pledged for the development of 'smart cities' in India, the status of disbursement of funds or the conditionalities attached to these remittances are not known. An excessive dependence on foreign investment may not be the most appropriate way to approach critical aspects of national development, especially when political factors can disrupt these processes easily.

Foreign investment brings with it new technologies and systems, but measures must be taken to ensure that these are aligned with India's specific needs and local circumstances. Operations of international actors also must comply with international guidelines and standards as well as with India's national laws. While international investment, as a result of its job-creating potential and contribution to technology upgradation, is promoted, the state must incorporate built-in safeguards to ensure it cannot and does not abrogate or dilute its responsibility in protecting human rights and fulfilling its welfare function assigned by the Constitution of India.

The private sector need not necessarily meet state demands for successful implementation of national programmes and the realization of national targets. For instance, latest reports indicate that the private sector has not met the central government's expectations in terms of providing 'affordable housing' or contributing to the achievement of PMAY targets. Despite tax incentives in the 2017–18 budget to the real estate sector for investing in affordable housing, the focus of the industry has largely been on housing for middle-income groups, which is being touted as 'affordable housing' projects.

Private sector involvement in cities, especially for the delivery of essential services, threatens to raise their utility cost, with the greatest burden being felt on low-income groups. When profit not service is the motive

for intervention, equality in access is likely to be undermined with the potential to exacerbate the social and economic divide in cities.

11. Overlap, Confusion, and the Apparent Lack of Convergence

In addition to the Smart Cities Mission, urban development in India is being governed by several other national schemes, each one with large financial allocations. These include the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Swachh Bharat Mission (SBM), the Pradhan Mantri Awas Yojana (PMAY) or Housing for All–2022 scheme, the National Urban Livelihoods Mission (NULM), and Heritage City Development and Augmentation Yojana (HRIDAY), among others. A careful review of these schemes reveals a multiplicity of targets and overlapping areas of intervention, giving rise to questions of efficacy and impact.

An analysis of the cities included in the Smart Cities Mission, reveals that 92 of the 99 selected 'smart cities' are also covered under AMRUT, bringing into question the entire need for the Smart Cities Mission. The only seven 'smart cities' not covered under AMRUT are Belagavi, Dahod, Dharamshala, Diu, Namchi, Pasighat, and Visakhapatnam. This raises serious concerns regarding the criteria for selection of the 99 'smart cities.' If 92 of the 99 selected cities were identified for development under AMRUT, why were they also selected to be developed as 'smart cities?' Why were different cities that are not receiving attention under any of the central government schemes chosen? Furthermore, Ajmer, Amaravati, Amritsar, Varanasi, and Warangal are covered under all three schemes – SCM, AMRUT, and HRIDAY. How does the government justify financing the same city under two or more schemes with similar goals and intentions?

The details of how AMRUT funds are being converged or used for 'smart city' projects in the 92 cities that are covered by AMRUT and the Smart Cities Mission also have not been provided. In this regard, HLRN filed a Right to Information (RTI application) with the Ministry of Housing and Urban Affairs, on 22 December 2017, seeking information on the convergence of AMRUT funds with the Smart Cities Mission, as well as the monitoring or appraisal mechanism to assess cities' progress in terms of implementation of AMRUT. The response received did not provide information as per the questions asked. The HLRN application had been forwarded to the Smart City division, which responded by merely describing the Special Purpose Vehicle that has been created to monitor and execute the Smart Cities Mission. No information, however, was provided on convergence of the schemes or on mechanisms to monitor AMRUT. Since the response was not satisfactory, HLRN filed a first appeal before the Appellate Authority hoping to receive information on convergence of funds. On the contrary, an order was passed by the Appellate Authority stating that the requisite information of Officer. The Appellate Authority did not find any deficiency in the response and hence dismissed the appeal.

Another national scheme that has overlaps with the Smart Cities Mission is the Housing for All–2022 scheme or PMAY. As mentioned earlier in this report, most of the housing projects listed under SCM are PMAY projects. But the convergence of funding for their implementation is not clearly mentioned. If all or even most of the housing schemes listed under the Smart Cities Mission are PMAY schemes, leveraging funds from PMAY, then why are they separately identified as 'affordable housing' components of the Smart Cities Mission? Moreover, the slow pace of implementation of PMAY in urban areas brings into question whether the additional plans of 'smart cities' related to meeting housing targets could be met and, furthermore, how they would relate to PMAY implementation in the various cities. For instance, June 2018 data from MoHUA reveals that over 4.75 million houses had been sanctioned under PMAY in urban areas, of which only 2.39 million or about 50 per cent of the sanctioned houses) were complete, of which only 409,620 (around eight per cent of approved houses) had been occupied.²³⁷

The Smart Cities Mission also speaks of convergence with the Swachh Bharat Mission for meeting sanitation targets and with PMAY to meeting 'housing for all by 2022' targets. However, the experience

from the 'smart city' of Indore reveals glaring contradictions between targets of the three schemes, with no mechanism for monitoring realization through comprehensive indicators. Indore has witnessed a spate of evictions between 2016 and 2018, including, allegedly to meet 'open-defecation free' targets under SBM and to implement 'smart city' projects. Local organizations report the destruction of over 1,440 homes on the grounds of not having toilets, as of December 2017.²³⁸ The demolition of homes to meet SBM targets and to implement 'smart city' projects violates PMAY, at the same time also defeating the goals of improving the quality of life in all 'smart cities.' Indore is a classic case of the myopic vision of the state and the overarching emphasis of schemes on targets, which translate into self-defeating tangential actions.

"We have instructions from the higher ups. The houses which do not have toilets are being demolished."

- Official of the Indore Municipal Corporation on demolition of homes in the city for SBM

The manner in which the Special Purpose Vehicles of 'smart cities' interact with the implementing agencies responsible for AMRUT, SBM, PMAY, and HRIDAY is also not known.

The Smart Cities Mission also claims convergence with the Digital India Programme, Skill India Mission, and National Urban Livelihoods Mission. However, details on convergence of funds are not easily available; neither is information on the added advantage of having multiple missions/schemes with different budgetary allocations. Since different schemes are led by different agencies and guided by different targets, budgets, and plans of implementation, delays or problems in the implementation of one scheme could directly impede progress of another. The question then is: What is the value added by the Smart Cities Mission, or is it just a duplication of efforts and an avoidable dilution of accountability?

V. Status of Implementation of the Smart Cities Mission

The Smart Cities Mission was launched on 25 June 2015, with a target to develop 100 'smart cities' in India in five years. However, given that only 3.41 per cent of projects, reportedly, were completed,²³⁹ and that several cities were selected recently (nine cities were selected in January 2018), the Ministry of Housing and Urban Affairs has rescheduled the Mission's completion timeline for cities selected in different rounds. According to the Ministry, the revised timeline for completion of work in 'smart cities' is as follows:

- Round 1 cities: 2019–20 to 2020–21;
- Round 2 cities: 2019–20 to 2021–22;
- Round 3 cities: 2020-21 to 2021-22; and,
- Round 4 cities: 2020-21 to 2022-23.240

1. Analysis of the Mission Budget

The Parliamentary Standing Committee on Urban Development, in its report tabled in the Lok Sabha on 17 March 2018,²⁴¹ noted that of all urban schemes of the central government, spending for the Smart Cities Mission had been the lowest.

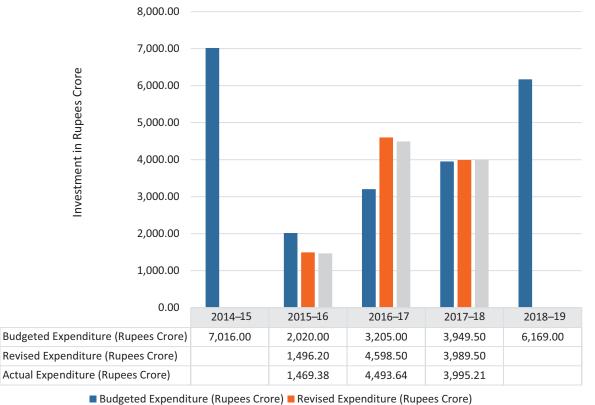
An analysis by HLRN of the annual budgetary allocations of the Ministry of Housing and Urban Affairs for the Smart Cities Mission between Financial Year (FY) 2014–15 and FY 2018–19 is presented below.

Financial Year	Budgeted Amount (Rupees Crore)	Percentage Change over Previous Year's Allocation	Revised Expenditure (Rupees Crore)	Actuals (Rupees Crore)	Percentage of Funds Utilized of the Total Allocation
2014-15	7,016.00	-	-	-	
2015-16	2,020.00	71% decrease	1,496.20	1,469.38	73%
2016-17	3,205.00	59% increase	4,598.50	4,493.64	140% (overspending)
2017-18	3,949.50	23% increase	3,989.50	3,995.21	~ 101%
2018-19	6,169.00	56% increase	_	_	-

Table 6: Analysis of Annual Budgetary Allocations for the Smart Cities Mission²⁴²

The total allocated expenditure in the Union Budget for 2018–19 is Rs 6,169 crore (Rs 61.69 billion), an increase of 56 per cent over FY 2017–18. In FY 2015–16, the annual budgetary allocation for the Mission was reduced by 71 per cent, as only Rs 924 crore had been used from the budget of FY 2014–15.²⁴³ Of an amount of Rs 2,020 crore allocated to the Mission for FY 2016–17, Rs 1,469.38 crore was utilized (73 per cent of the allocated funds) at the end of the financial year. This includes expenditure on completed projects, funds allotted to projects under different stages of implementation (including projects in the tendering stage, projects with work orders issued, and projects in the process of preparation of Detailed Project Reports), as well as funds disbursed for administrative, maintenance, and other related expenses.

Chart 7: Annual Budgetary Allocation Trend for the Smart Cities Mission (Status as of 9 February 2018)



Actual Expenditure (Rupees Crore)

Status of Project Completion and Funds Spent

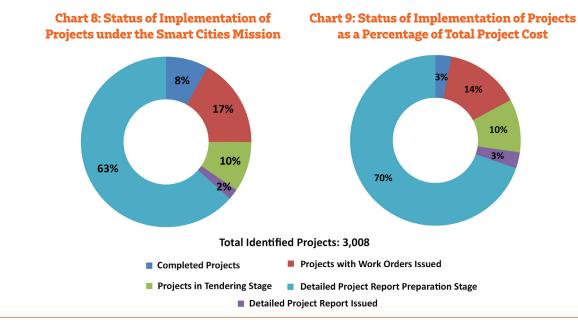
The March 2018 report of the Parliamentary Standing Committee on Urban Development claimed that only 1.83 per cent (Rs 182.62 crore) of Rs 9,943 crore released for the Smart Cities Mission had been utilized. The Ministry of Housing and Urban Affairs, however, contested the accuracy of these figures. In an official press release, dated 17 May 2018, the Ministry declared that of the total 'smart city' projects worth Rs 203,979 crore, 1,333 projects worth Rs 50,626 crore (*including those being implemented in convergence with other urban schemes*) had been completed, or were being implemented, or were in the 'tendering stage.'

A deeper analysis of projects exclusive to the Smart Cities Mission reveals that as of March 2018, projects worth Rs 4,583 crore (3 per cent) of the total cost of identified projects of Rs 139,038 crore were complete. This further indicates that only 8 per cent of the 3,008 total identified projects under the Mission had been completed.²⁴⁴ Many projects were still in the preparatory phase of implementation, with cities still developing detailed project reports (DPR) and inviting tenders. In March 2018, of the identified projects, 1,908 projects (over 69 per cent) were in the stage of preparation of DPR.²⁴⁵

	Number of Projects	Percentage of Total Projects	Cost Involved (Rupees Crore)	Percentage of the Total Cost Involved
Completed Projects	243	8%	4,583	3%
Work Issued	510	17%	19,982	14%
Projects in Tendering Stage	287	10%	14,296	10%

Table 7: Status of Implementation of the Smart Cities Mission (as of March 2018)²⁴⁶

	Number of	Percentage of Total Projects	Cost Involved (Rupees Crore)	Percentage of the Total Cost Involved
	Projects	Total Projects	(hupees crore)	Total Cost Involved
Detailed Project Report Issued	60	2%	3,659	3%
Detailed Project Report Preparation Stage	1,908	63%	96,518	69%
		100%		100%
Total Identified Projects	3,008			
Total Cost Involved (Rupees Crore)	139,038 (Of this amount, the Government of India had released Rs 9,943 crore , as of March 2018)			



Source: Chart prepared by HLRN, based on official MoHUA data of 14 March 2018

The Ministry of Housing and Urban Affairs has stated that, so far, 92 of the selected cities have incorporated Special Purpose Vehicles,²⁴⁷ and nine cities—Ahmedabad, Bhopal, Kakinada, Nagpur, Pune, Rajkot, Surat, Vadodara, and Visakhapatnam—have set up Integrated City Command and Control Centres.²⁴⁸ The March 2018 Parliamentary Standing Committee report, however, raises issues of the slow rate of project implementation and the shortage of town planners in several Urban Local Bodies.

2. Progress of Development of 'Smart Cities'

Despite the passage of three years, reports reveal that the Smart Cities Mission is progressing at a slow pace. In response to a question raised in Parliament on the status of implementation, the Minister of Housing and Urban Affairs had stated that, "The progress depends on the date of the selection of the smart city. After selection it takes around 18 months in setting up special purpose vehicle, procuring project management consultant firm, hiring human resources, and then call for tenders"²⁴⁹ (see Annexure III for a list of selected questions on the Smart Cities Mission raised in the Lok Sabha and Rajya Sabha of the Parliament of India).

Reportedly, only a few cities are faring well with regard to the implementation of SCM projects. Bhubaneswar has been awarded the best 'smart city' plan by the American Planning Association,²⁵⁰ and has been placed in the list of top 20 global 'smart cities' by Juniper Research, a British market research agency.²⁵¹ News reports indicate that Bhubaneswar will see completion of a few of its 'smart city' projects, including a bicycle-sharing system and pedestrian paths in 2018.²⁵² Surat, with 14 completed projects, has been ranked

the highest in terms of projects implemented and completed under the Smart Cities Mission.²⁵³ Pune has been ranked second, followed by Visakhapatnam, Udaipur, Bhubaneswar, Ahmedabad, Bhopal, Coimbatore, Jaipur, and Indore.²⁵⁴

Of the total 964 projects (worth Rs 46,800 crore) announced in the "lighthouse" list (20 cities shortlisted in the first round), only 83 projects, or 8.6 per cent of the total, had been completed by January 2018.²⁵⁵ And of the total 2,864 projects identified in the first 90 'smart cities,' 148 projects (about 5 per cent of the total identified projects) amounting to Rs 1,872 crore had been completed, while 72 per cent of the projects were under the preparation stage, as of January 2018.²⁵⁶

In Chennai, which was selected in the first round, implementation of SCM projects is reportedly slow. The city has faced various challenges, including insufficient funding, delays with creating the Special Purpose Vehicle, and lack of interest among different stakeholders. The state government, however, says that projects in all the 11 selected cities would be completed by the 2020 deadline.²⁵⁷ In Belagavi, also selected in the first round, out of 11 sanctioned projects, as of January 2018, work had not commenced on six projects, work was in progress for four, and one project was at the tendering stage.²⁵⁸

Kochi has not completed any 'smart city' projects but has plans to complete them by 2020.²⁵⁹ The delay in project implementation has been attributed to non-availability of project consultants and other formalities.²⁶⁰ Ludhiana also has not witnessed any progress due to limited funding.²⁶¹ The city had not seen completion of a single 'smart city' project as of 20 April 2018.²⁶² In Guwahati too, progress on development of 'smart city' projects is reported to be tardy.²⁶³ In Shivamogga, selected in the second round, reportedly not even 15 per cent of projects had been implemented as of May 2018.²⁶⁴ As of November 2017, while Jaipur had completed 14 projects.²⁶⁵

According to MoHUA, as of May 2018, Public Private Partnership projects worth Rs 734 crore had been completed in 13 cities while projects worth Rs 7,753 crore were under the implementation/tendering stage in 52 cities.²⁶⁶ The government believes that the involvement of private players will help in establishing creative clusters/creative districts through consultancy and effective planning.²⁶⁷

The Smart Cities Mission, however, lacks a mechanism to monitor implementation; it is thus difficult to ascertain the status of progress holistically, especially with regard to key indicators and outcomes.

3. Challenges Reported in 'Smart City' Implementation

Several of the 99 selected 'smart cities' are witnessing challenges related to implementation of projects and goals identified in Smart City Proposals as well as some resistance from residents.

Davanagere (Karnataka) is home to 1,027 small and medium-sized enterprises, such as bamboo, textiles, and puffed rice. Its Smart City Proposal discussed improving these enterprises, with a special focus on revitalizing the 'mandakki bhatti' (puffed rice industry).²⁶⁸ However, local groups fear that the redevelopment model that has been adopted with the involvement of private players could be a move to grab land occupied by the traditional household-based production centres, with years of history and market linkages with surrounding villages.²⁶⁹ Moreover, though Karnataka's puffed rice manufacturing units were promised over Rs 300 crore as part of the Smart Cities Mission, they have only been granted Rs 18 crore.²⁷⁰

On the project execution front, various flaws have been highlighted by ministers and citizens' groups in Pune.²⁷¹ For example, the 'smart street' project in the Aundh-Baner-Balewadi zone had issues related to traffic lights and pedestrian crossings, which required immediate fixing.²⁷² In Jaipur, issues of substandard construction and corruption have been reported in the implementation of 'smart city' projects.²⁷³

Another challenge faced by some 'smart cities' is the provision of adequate water. The proposed 'smart city' of Shimla witnessed an acute water crisis in May–June 2018, which resulted in a series of protests by

residents.²⁷⁴ In the absence of adequate facilities to guarantee drainage of water, streets and settlements in low-lying areas—which are mostly inhabited by low-income groups and marginalized sections—get inundated. Cities such as Delhi, Bengaluru, and Bhubaneswar report severe waterlogging every year.

Other factors inhibiting the inclusive development of proposed 'smart' cities include institutional challenges, market and business-related challenges, and sector-specific challenges. According to the World Economic Forum's India Survey on Smart Cities, "State and city governments are the least prepared to handle the type of urban transformation outlined in the programmes announced by the Government of India. The lack of preparedness is due to leadership with limited powers in urban local bodies, an inadequate revenue base, and poor collaboration among planning and administrative bodies within cities, archaic processes and insufficient capacity."²⁷⁵

4. Positive Developments in Some 'Smart Cities'

While there is much criticism on various dimensions of the Smart Cities Missions, a few noteworthy projects and initiatives have been identified and undertaken. In Gwalior, several historical and heritage sites are being restored and redeveloped at the cost of Rs 2,500 crore.²⁷⁶ The redevelopment is part of the Gwalior Smart City Development Corporation's initiative to develop the city's infrastructure and make it environment-friendly. In Diu, the development of a 9 megawatt solar park, installation of solar panels on rooftops of 79 government buildings, and subsidies for installing rooftop solar panels on houses, have resulted in the city becoming the first 'smart city' to operate on 100 per cent renewable energy during the daytime.²⁷⁷ The Ministry of Housing and Urban Affairs claims that, as of May 2018, 'smart solar projects' and 'smart water projects' had been completed in six cities.²⁷⁸

The Agra Municipal Corporation has planned to beautify 62 parks in the city, at a cost of Rs 11.5 crore and plant 5000 trees of various species, under the Mission.²⁷⁹ Jaipur Smart City Limited has planned to develop a night bazaar, operating between 9 p.m. and midnight, with 700 vendors to revitalize urban public spaces and generate economic activity.²⁸⁰

Jabalpur Smart City Limited has built and is operating a waste-to-energy plant for the disposal of municipal solid waste—for the 79 wards of Jabalpur Municipal Corporation—through a garbage collection and management system to ensure optimal collection, transportation, and processing/disposal of waste. The model is based on the collection and transportation of municipal solid waste using ICT components and integrating them into one system. Door-to-door collection has resulted in the efficient collection of waste, reduced littering, and an improvement in the overall environmental situation in the city.²⁸¹

With an aim to provide adequate sanitation facilities to the urban poor of the city, Kakinada Municipal Corporation has constructed 508 individual toilets in 'slum' areas in the city. As a result, water-borne diseases in the area have reduced, benefitting women the most, as they do not need to practice open defecation. The project has contributed to Kakinada being judged as the cleanest city in the 2–10 lakh population category in south India under the 'Swachh Survekshan Awards 2017.'²⁸²

Children's Initiative in Bhubaneswar

The 'Child-Friendly Smart Cities' project, launched in Bhubaneswar by the National Institute of Urban Affairs in partnership with the Bernard van Leer Foundation aims to address the needs of children in a comprehensive manner through the lens of urban planning and design. The initiative focuses on the areas of public health, safety and security, transportation/mobility, and living conditions and specifically targets sustainable development in settlements in the city, to convert them into child-friendly neighbourhoods.

Some states, including Andhra Pradesh, Bihar, Goa, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand, West Bengal, Chandigarh, Daman and Diu, Delhi, and Puducherry have made necessary provisions in their building bylaws to make installation of rooftop rainwater harvesting systems mandatory.²⁸³ Some of the other reported successful projects include Bhubaneswar's urban knowledge centre and child-friendly city initiative, and NDMC's mini-sewerage plants.

The Smart Cities Mission requires improved mechanisms for project selection and delivery as well as an overall monitoring and implementation framework, in order to assess progress and realization of targets and goals. In the absence of a comprehensive assessment mechanism, it is difficult to understand what the Mission is achieving and how.

VI.Recommendations and Conclusion

The human rights analysis of the Smart Cities Mission—undertaken by Housing and Land Rights Network reveals the glaring absence of a rights-based approach to the Mission as well as a neglect of the urban poor and marginalized. While it may be too late to backtrack on or reverse the process that the Mission has embarked on, it is not too late to change the direction of its trajectory by implementing measures to ensure a greater focus on human rights, equality, and social justice.

Housing and Land Rights Network would, therefore, like to propose the following recommendations to the government as well as other agencies and actors involved with the Smart Cities Mission.

- 1. The Smart Cities Mission needs a **human rights-based implementation and monitoring framework** to assess the achievement of targets and to ensure that its projects comply with national and international law and promote human rights and environmental sustainability. In the absence of any monitoring mechanism, the Mission cannot assess its own progress or be evaluated. The Mission also requires a set of guidelines to direct project selection and ensure adequate project execution, with the aim of creating inclusive cities. Fundamental principles such as the indivisibility of human rights, gender equality, non-discrimination, accountability, participation, non-retrogression, progressive realization, environmental sustainability, and recognition of the 'social function of land' should be included in these Mission guidelines.
- 2. The Government of India should incorporate concrete **human rights-based indicators** within the Liveability Index being developed, so as to meaningfully assess the quality of life and standard of living in Indian cities, including 'smart cities.' This Index should factor targets and indicators related to the relevant **Sustainable Development Goals**²⁸⁴ (*see Annexure IV*) in order to also ensure India's commitment to meeting its international legal obligations. The indicators related to poverty, inequality, health, gender equality, human settlements, land, water, and climate change should be integrated into the framework for implementation and monitoring of the Smart Cities Mission. The final Index should be developed in consultation with experts, civil society organizations, social movements, and people's representatives to ensure that it is comprehensive and holistic while incorporating a strong human rights and environmental sustainability approach.
- Implementation of the Smart Cities Mission should align with India's legal commitments under the Paris Agreement and its Intended Nationally Determined Contribution towards climate change mitigation and adaptation. India should also integrate its commitments under the New Urban Agenda (2016)²⁸⁵ within the Smart Cities Mission implementation framework, as it includes important measures to promote inclusive and sustainable development.

New Urban Agenda (2016)

26. We commit ourselves to urban and rural development that is people-centred, protects the planet, and is age-and gender-responsive and to the realization of all human rights and fundamental freedoms, facilitating living together, ending all forms of discrimination and violence, and empowering all individuals and communities while enabling their full and meaningful participation. We further commit ourselves to promoting culture and respect for diversity and equality as key elements in the humanization of our cities and human settlements.

4. The recommendations made to India during its third Universal Periodic Review (UPR) at the UN Human Rights Council in May 2017 should be implemented across the country, including in 'smart cities.' As these include several recommendations related to housing and sustainable urban development,²⁸⁶ they should also be incorporated in the monitoring and implementation framework of the Smart Cities Mission.

Relevant Recommendations from India's Third UPR (May 2017)²⁸⁷

- 161.85 Consolidate the progress made towards reaching the Sustainable Development Goals, and in the improvement of human development indicators.
- 161.86 Continue efforts in the implementation of sustainable development strategies for the year 2030.
- 161.91 Continue its efforts in relation to its environmental policies.
- 161.92 Provide access to clean and modern energy to all its people and develop climate-friendly green cities.
- 161.155 Implement a human-rights based, holistic approach to ensure access to adequate housing as well as to adequate water and sanitation, also for marginalized groups, including Dalits/ scheduled castes, homeless, landless, scheduled tribes, religious and ethnic minorities, persons with disabilities, and women.
- 161.156 Expand the "Housing for all" scheme to realise the right to adequate housing for vulnerable people and eliminate homelessness by 2030.
- 161.157 Continue the Housing for All policy led by the government to eradicate by 2030 the problem of homelessness, in conformity with Goal 11 of the 2030 Agenda.
- 161.166 Continue efforts to reduce poverty, improve the well-being of the people, protect and enforce the rights of vulnerable groups of the population.
- 161.168 Continue its fight against poverty, lack of adequate food, safe water and sanitation, while paying special attention to the need to introduce a child rights-based approach in all policies.
- 161.173 Continue promoting sustainable economic and social development and raising the living standard of its people so as to lay down a firm basis for the enjoyment of human rights by its people.
- 5. The Mission must develop a **special focus on the needs, concerns, and rights of marginalized individuals, groups, and communities**, including *inter alia*, economically weaker sections/low-income groups, children, women, Scheduled Castes, Scheduled Tribes, homeless and landless persons, migrants, domestic workers, internally displaced persons, older persons, religious and sexual minorities, and persons with disabilities. Measures to address discrimination and marginalization need to be incorporated into every 'smart city' project. The Mission guidelines should insist on the adoption of a non-negotiable and consistent non-discrimination approach for all cities and all 'smart city' implementing agencies.
- 6. Meaningful participation and engagement should be a priority in the selection and execution of 'smart city' projects in all SCM cities. People's participation cannot be viewed as a mere technical requirement. It must be adequate, meaningful, and transparent, and must be actively sought from all those whose lives may be impacted by projects directly or indirectly. Participation must not be limited to electronic means, as it excludes a large population. Multiple means of consultation and participation must be developed, including for non-literate groups, in local languages and by using culturally acceptable means.
- 7. It should be mandatory for all projects within the Smart Cities Mission to carry out a **human rightsbased impact assessment** and an **environmental impact assessment** before they are sanctioned.

Mechanisms should be created to ensure that the free, prior, and informed consent of all affected persons is taken before any project is implemented in their areas.

- 8. Strict measures must be put in place to ensure that implementation of 'smart city' projects **does not result in the violation of any human rights**, or in the worsening of anyone's standard of living, or in forced evictions, demolitions of homes, or forced relocation. State and non-state actors responsible for carrying out human rights violations should be investigated and tried according to due process of the law.
- 9. Greenfield urban development must not be at the cost of rural development and takeover of rural land, especially agricultural land. **Under no circumstances must land be forcefully acquired** and result in involuntary displacement.
- 10. The focus on the **provision of adequate affordable housing** in all Smart City Proposals must be strengthened while allying with the targets of PMAY/Housing for All-2022. Cities should define 'affordable housing' with **clear income-based criteria** to ensure that it is within the financial means of low-income populations. *In situ* (on site) upgrading, not relocation to city peripheries should be prioritized in 'smart city' projects. All housing and settlement-related plans should be developed in close consultation with, and after the free, prior, and informed consent of all affected residents, and should also conform to UN standards of housing adequacy,²⁸⁸ including the provision of security of tenure. Social housing, including social rental housing, should be prioritized in all cities. Housing projects in 'smart cities' must not, under any circumstances, promote gentrification and segregation. 'Rehabilitation' and 'slum-free city' projects should not be used as an excuse to destroy low-income settlements. Furthermore, efforts must be taken to ensure some form of control over rental and housing prices for low-income groups, as a means to protect them against market-led evictions.
- 11. Implementation of 'smart city' projects must **conform to existing city master plans** (where they exist). In cities that do not have master plans, participatory processes should be initiated to develop comprehensive master plans that reflect peoples' visions and needs.
- 12. The Mission framework for monitoring and implementation should place a special **focus on integrating international standards and guidelines** related to housing, sustainable development, environmental protection, disasters, and displacement. These include, *inter alia*, General Comments 4 (on adequate housing)²⁸⁹ and 7 (on forced evictions)²⁹⁰ of the UN Committee on Economic, Social and Cultural Rights, the Basic Principles and Guidelines on Development-based Evictions and Displacement,²⁹¹ the Guiding Principles on Security of Tenure for the Urban Poor,²⁹² the Inter-Agency Standing Committee's Operational Guidelines on the Protection of Persons in Situations of Natural Disasters,²⁹³ and the Sendai Framework for Disaster Risk Reduction (2015–2030).²⁹⁴
- 13. Adequate investment must be made in all cities and villages across India to **promote balanced rural and urban development.** This could be done through the Rurban Mission, by first supporting a consultative process to identify the development requirements of rural populations and then investing adequately in rural areas and people. Human rights-based land and agrarian reform should also be incorporated as goals in the implementation of the Mission.
- 14. **Technological and infrastructure development must be based on comprehensive need assessments**, clear guidelines, and human rights standards to promote inclusive city development that benefits all sections of the population. Such processes require concomitant interventions related to human rights education, service delivery, and participation based on transparency. Efforts must be undertaken to bridge the digital divide in the country. The Smart Cities Mission should work with the Digital India scheme to ensure not just convergence but the adoption of an inclusionary approach that focuses on the needs and concerns of the most marginalized in society.
- 15. Efforts must to be taken to **protect the right to privacy, and to prevent surveillance and misuse of data**. India needs meaningful and appropriately-nuanced data legislation to check against the growing threats of digitalization. The government also needs to increase efforts to create awareness about the risks involved and provide assurance about the responsible use of data. Principles of transparency, adequate information, and prior consent need to be respected and upheld.

- 16. The **Special Purpose Vehicle** tasked with implementing the Mission **must work within the framework of democracy** provided by the Constitution of India and must respect local institutions and governments. Its selection process and constitution must be transparent and should include parameters for providing accountability. It should also include participation of civil society organizations, independent experts, and the urban poor.
- 17. The role of the corporate sector associated with 'smart city' projects, including multinational companies, should be regulated to ensure compliance with the Constitution of India as well as with national and international laws, policies, and human rights and environmental standards. Privatization of essential services must be prevented. Foreign governments and bilateral and multilateral agencies interested in investing in the Mission should ensure that their funds are not used to support projects that increase poverty, social inequality, homelessness, and marginalization. The funding should come with adequate conditionalities aimed at promoting human rights, inclusive development, affordable and adequate housing, and environmental sustainability, with the goal of creating more equitable cities that benefit the entire population, especially low-income and vulnerable groups. Several international financial institutions and development banks, such as the European Investment Bank and Germany's KfW Development Bank, have project guidelines to ensure that people's human rights are not violated, including their right to adequate housing, which guarantees protection against forced evictions.²⁹⁵ Such funding bodies should ensure that these standards are rigorously implemented.
- 18. The Smart Cities Mission should work closely with PMAY, AMRUT, HRIDAY, Swachh Bharat Mission, NULM, and all other related government schemes to ensure coordination and to prevent contradictory efforts, duplication, and wastage of resources. Improved inter-ministerial coordination is required. Common core human rights indicators could be developed—across all schemes—to ensure harmonized monitoring, positive convergence, and compliance with India's national and international legal obligations. Information should also be made available on fund convergence between all schemes, especially where projects and targets overlap.
- 19. India should also work to implement recommendations of UN treaty bodies and Special Procedures as well as progressive court judgments upholding human rights, including the rights to housing and privacy. The concerns and recommendations related to the Smart Cities Mission raised by the Special Rapporteur on adequate housing should be addressed, in particular the need to: "Allocate resources for the Smart Cities Mission in order to provide housing in those cities where there are the greatest housing needs and where the most marginalized and excluded would most benefit."²⁹⁶
- 20. The Mission should focus on the realization of the '**right to the city**' for all and incorporate this approach in its implementation. The right to the city is defined as "the equitable usufruct of cities within the principles of sustainability, democracy, equity, and social justice. It is the collective right of the inhabitants of cities, in particular of the vulnerable and marginalized groups, that confers upon them legitimacy of action and organization, based on their uses and customs, with the objective to achieve full exercise of the right to free self-determination and an adequate standard of living."²⁹⁷

Given the many concerns and challenges related to the Smart Cities Mission, HLRN hopes that all involved agencies—state and non-state—will consider implementing the recommendations presented above.

Despite the Smart Cities Mission's rhetoric of "a focus on sustainable and inclusive development" and despite the existence of a few 'smart city' projects that aim to address concerns of vulnerable groups, the findings of this study by HLRN reveal the absence of a human rights-based approach and a concerted focus on marginalized groups within the Mission. The lack of an integrated and consistent methodology—guided by human rights principles—for project selection and execution could lead to further violations of the human rights to adequate housing, water, sanitation, food, work/livelihood, land, health, education, information, participation, and security of the person and home. Without adequate safeguards and corrective measures, cities could become more discriminatory and ghettoized spaces, devoid of equal opportunities and protections for all.

Housing and Land Rights Network believes that it is important for the Indian government, at both the central and state levels, to adopt a strong human rights approach in all policies and schemes, including the Smart Cities Mission. These measures will not only help India to meet its national and international legal and moral commitments, including the Sustainable Development Goals and Paris Agreement targets, but also ensure that the nation achieves inclusive, equitable, sustainable, and balanced urban-rural development.

A focus on creating 'human rights habitats' instead of 'smart cities' would ensure that the poor and marginalized are not excluded, their democratic participation in governance is guaranteed, their fundamental rights are upheld, and that equitable living spaces are created for all. Ultimately, any state intervention should work to uphold the right to live with dignity of all residents, as also guaranteed by the Constitution of India and international law. The Mission requires greater citizen participation, better institutional mechanisms for improved urban governance, and increased transparency and accountability. The need is to make cities pro-people first. Making them 'smart' could be the subsequent step.



ANNEXURE I: Analysis of Housing and Other Provisions for Marginalized Groups in the Selected Smart City Proposals

	Proposed Smart City	Proposed Area to be Developed in Acres	Percentage of Total City Area Covered (by Area- based Development) ¹	Percentage of City Population Affected by Area-based Development ²	Percentage of Population Living in 'Slums'/Settlements	Mention of Housing in City's SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis	Planned Interventions for Housing for Marginalized Groups, including the Homeless	Other Significant Provisions for Marginalized Groups
CITI	ES SELECTED IN	ROUND ONE (JANUA	RY 2016)					
1.	Ahmedabad (Gujarat)	590 acres Description of Area-based Development (ABD) in the proposal: Development of the Wadaj region near Gandhi Ashram, including redevelopment of 75 acres of Wadaj 'slum.'	0.5%	1.5%	According to the Smart City Proposal (hereafter 'proposal'), 'slum households' numbered almost 163,000 in 2011. The Census of India 2011 (hereafter 'Census 2011') recorded 4.49% of the population as living in 'slums.'	Mentions 'slums' as a 'threat.'	In situ redevelopment of 'slums' – expected to affect almost 13% of the population. More than 40,000 housing units will be delivered by 2017–18 under various schemes. 'Slum' redevelopment will include residential development – housing for almost 8,000 'slum-dwellers.' Eligible 'slum- dwellers' families will be provided houses of 25 square metres to 43 square metres carpet area with basic civic amenities free of cost.	Allocation of hawking zones. Provision of infrastructure to promote universal accessibility, especially for persons with disabilities.
2.	Belagavi (Karnataka)	Not mentioned.	Not mentioned.	17.1%	Not mentioned in the proposal. 10.72% (Census 2011)	Not mentioned.	Provisioning adequate housing stock to EWS and 'slum-dwellers' through integrated vertical development on reserved land of 30 acres, by 2018.	Not mentioned.
3.	Bhopal (Madhya Pradesh)	Not mentioned.	Not mentioned.	1.7%	Seventy-five per cent of the population belongs to LIG/EWS. 35% (Proposal) 26.68% (Census 2011)	Not mentioned.	Improving liveability and sustainability in the city by increased availability of affordable housing and diversity of housing in the city. Sanitation initiatives will improve 'slum' conditions and localities through technology.	Creation of barrier-free built environment.

1 Calculated by Housing and Land Rights Network.

2 Information provided in the reply to Question No. 1311 in the Rajya Sabha, Parliament of India, by the Minister of Housing and Urban Affairs on 27 July 2017. The document provided by the government contains information only for the first 90 cities selected; it does not have data on the population affected in the last nine cities announced in January 2018.

	Proposed Smart City	Proposed Area to be Developed in Acres	Percentage of Total City Area Covered (by Area- based Development)	Percentage of City Population Affected by Area-based Development	Percentage of Population Living in 'Slums'/Settlements	Mention of Housing in City's SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis	Planned Interventions for Housing for Marginalized Groups, including the Homeless	Other Significant Provisions for Marginalized Groups
4.	Bhubaneswar (Odisha)	985 acres Description: Area around the main railway station in the heart of the city to be developed as the Bhubaneswar Town Centre District.	3%	4.7%	Thirty-six per cent (355,000 people) of the city's population is presently living in 'slums.' 18.52% (Census 2011)	Shortage of affordable housing options which has resulted in an increase in informal settlements in Bhubaneswar is mentioned as a 'weakness.'	 Ensuring neighbourhoods have diverse housing choices to meet the needs of all income groups. Redevelop informal settlements with provision for basic services. Some key components include: Construction of 6,000 houses under Mission Abaas, 'slum' redevelopment, affordable housing project near transit camp accommodation, rental housing for construction workers, and shelters for homeless. Construction of two working women's hostels and two shelters for the homeless under project Kutumb. 	Development of Project Samman (infrastructure and research initiative to improve sanitation in urban settlements), with a focus on women. Mainstreaming of infrastructure for persons with disabilities. Provision of subsidized cooked meals (Aahar Scheme) and purified water through water Automated Transfer Machine (ATMs). Establishment of 40 Early Childhood Care Centres (E3C) as model <i>anganwadi</i> centres (crèches) for encouraging balanced early childhood development.
5.	Chennai (Tamil Nadu)	1,717 acres Description: Area called T-Nagar, located in the heart of the city.	4%	3.4%	Chennai is officially stated to have 1,240 'slums.' 28.89% (Census 2011)	Not mentioned.	Providing 100% sewage facilities to all 'slums.' The Tamil Nadu Housing Board has planned projects for 18,796 units, the Tamil Nadu Slum Clearance Board for 81,581 units, and 249,971 units have been planned under PMAY. No specific housing-related projects mentioned.	Not mentioned.
6.	Coimbatore (Tamil Nadu)	4,200 acres Description: Retrofit development of Central Coimbatore.	6.8%	21.4%	Not mentioned in the proposal. 12.29% (Census 2011)	Not mentioned.	Inclusiveness, housing for all, and social infrastructure for an estimated 4,500 low-income households along the lakes. Rehabilitate all 'slum' households to make the city 'slum-free' before 2023.	Not mentioned.

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7.	Davanagere (Karnataka)	Not mentioned.	Not mentioned.	26.6%	15% (Proposal) 13.79% (Census 2011)	Mentions 'slums' as a 'weakness.'	Affordable housing for all with proportionate infrastructure. Implementation of housing schemes sanctioned under the erstwhile RAY scheme and plans to create a 'slum- free' city by providing houses for all under PMAY. The Davanagere Municipal Corporation has planned to construct 2,120 dwelling units for Below Poverty Line (BPL) households in the identified 'slums' sanctioned under the erstwhile RAY scheme.	Skill-development under the National Urban Livelihood Mission (NULM) and Pradhan Mantri Kaushal Vikas Yojana (PMKVY) for gainful self-employment and skilled wage employment opportunities for urban poor households.
8.	Guwahati (Assam)	696 acres Description: Retrofitting of a contiguous area along connected water bodies of the city.	1%	6.8%	Not mentioned in the proposal. 2.69% (Census 2011)	Not mentioned.	The Guwahati Master Plan 2025 has proposed the construction of 259,000 houses.	Better service delivery, contributing to social inclusion and respect for all.
9.	Indore (Madhya Pradesh)	742 acres Description: Retrofit development of Rajwada, which is the core area of the city.	1%	6.1%	39% (Proposal) 29.60% (Census 2011)	Mentions poor spatial planning as a 'weakness.' Mentions 'slums' as a 'threat.'	Financial resources convergence up to an extent of Rs 100,000 per 'slum' beneficiary for 5,514 households in 27 'slums.'	Promotion of universal accessibility, especially for persons with disabilities. Community use of schools after hours under Mukhya Mantri Yuva Swarojgaar Yojna (MMYSY).
10.	Jabalpur (Madhya Pradesh)	743 acres Retrofit and redevelopment model that targets interlinking existing urban spaces with the Central Business District (CBD).	2%	3.9%	Not mentioned in the proposal. 44.71% (Census 2011)	Uncontrolled growth of "squatter settlements," especially around existing water bodies is mentioned as a 'threat.'	Financial resources convergence up to an extent of Rs 100,000 per 'slum' beneficiary for 2,392 households in 12 'slums.' Development of 25,000 affordable housing units to rehabilitate people living in 'slums' and 'squatters' around water bodies.	Provision of dedicated vending spaces for hawkers and other unorganized sector workers.

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11.	Jaipur (Rajasthan)	600 acres Description: Retrofit development of compact area of the walled city.	0.5%	5.6%	Not mentioned in the proposal. 10.62% (Census 2011)	Not mentioned.	Providing affordable houses and redevelopment of 'slums' in the city area; building new shelters for the homeless; and, providing adequate 'smart' public toilets and household coverage with improved hygiene conditions.	Promotion of handicraft and textile workers, and development of night markets and vending zones.
12.	Kakinada (Andhra Pradesh)	3,814 acres Description: Retrofitting in the north- central part and redevelopment in the south-eastern part of the city, consisting of seven zones.	27%	35.4%	Not mentioned in the proposal. 29.16% (Census 2011)	Inadequate infrastructure, poor connectivity, congestion, and lack of affordable housing listed as a 'weakness.'	Affordable housing will be provided to EWS and Below Poverty Line (BPL) families. The Housing Department, Government of Andhra Pradesh has been accorded 4,062 houses under PMAY by the Government of India.	Not mentioned.
13.	Kochi (Kerala)	1,729 acres Description: A holistic replicable retrofit transformation of Fort Kochi- Mattancherry- Central City linked by waterway.	7%	16.6%	Not mentioned in the proposal. 0.82% (Census 2011)	Not mentioned.	Housing facilities for all the 4,000 impoverished households along with provision of infrastructure services. Construction of homeless shelters. Upgradation and construction of 755 dwelling units in Thuruthy and Kalvathy under RAY.	Provision of barrier-free infrastructure (ramps, Braille-equipped signs), construction of shelters and community kitchens focusing on needs of vulnerable sections, including persons with disabilities and migrant labour. Financial assistance, skill- training, and community contracting for improving livelihood opportunities, especially for women.
14.	Ludhiana (Punjab)	90 acres	0.3%	2.2%	25% (Proposal) 15.08% (Census 2011)	Mentions 'slums' as a 'weakness.'	Not clearly mentioned in proposal overview, but proposal components mention shelters for the homeless.	Promotion of accessibility for persons with disabilities. Designation of hawker zones, as a part of street vending plan.

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15.	New Delhi Municipal Council (NDMC) (Delhi)	550 acres Description: Areas consisting of Connaught Place and contiguous surrounding areas of the New Delhi City Centre.	5% of NDMC area but only 0.0015% of the National Capital Territory (NCT) area.	18.7%	Not mentioned in the proposal. 7.76% (Census 2011)	The proposal mentions 'squatters' as a 'weakness.'	No mention of housing. NDMC aims to have 'zero per cent' of its population living in 'slums' by 2025 and five homeless persons per 100,000 population by 2025. The annexure to the proposal mentions that redevelopment of identified informal settlements is envisaged through the construction of EWS units at Bakkarwala <i>(implies relocation outside the NDMC constituency).</i>	Equal access to transport facilities and services within NDMC for persons with disabilities, and increased safety for vulnerable groups, including women and children. Education of children and youth of 'informal' settlements through skill transfer and mentorship by senior citizens (and convergence with NULM).
16.	Pune (Maharashtra)	900 acres Description: Retrofit development of the Aundh- Balewadi area.	1%	0.8%	28% (Proposal) 22.10% (Census 2011)	Mentions 'slums' as an 'area of improvement.'	The vision statement has mentioned making Pune 'slum-free' by 2025 by constructing 20,000 affordable houses every year, for the next 10 years. Under PMAY, 486 'slums' will be redeveloped.	Socio-economic transformation of 'slums' by focusing on sanitation, healthcare, education, and skill-building.
17.	Solapur (Maharashtra)	1,040 acres	2%	15.7%	31% as of 2011 (Proposal) 18.43% (Census 2011)	Mentions 'slums' as a 'weakness.'	Not mentioned.	Creation of a 'barrier- free' built environment and promoting universal accessibility.
18.	Surat (Gujarat)	2,167 acres Description: Retrofit development of the textile market area.	3%	10%	Not mentioned in the proposal. 10.46% (Census 2011)	Not mentioned.	Construction of 1,050 EWS and 1,950 LIG houses.	Building a 'barrier-free' built environment and promoting universal accessibility.
19.	Udaipur (Rajasthan)	790 acres	6%	20%	Not mentioned in the proposal. 14.36% (Census 2011)	Not mentioned.	Development of homeless shelters.	Provision of skill- development and livelihood opportunities, micro-credit, and smart clinics.

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20.	Visakhapat- nam (Andhra Pradesh)	9,134 acres Description: Three areas around RK Beach up to Waltair Main Road (1,650 acres), areas around Rushikonda Beach (5,402 acres) up to National Highway (NH) 5, areas around Kailashgiri Hills (2,082 acres) up to NH5.	7%	4.6%	Not mentioned in the proposal. 44.61% (Census 2011)	The proposal mentions 'slums' as a 'threat.'	Providing 1,130 affordable housing units. Plans to build upon its skill development programme for 'slum- dwellers.'	Provision of universal accessibility, with a focus on persons with disabilities.
CITIE	S SELECTED IN F	AST-TRACK ROUND	(MAY 2016)					
21.	Agartala (Tripura)	2,800 acres of the central business district (CBD).	12%	46.2%	8% (Proposal) 11.5% (Census 2011)	Mentions 'slums' as a 'weakness.'	Rehabilitation of existing 'slums.' The proposal is for 1,270 houses on 5 acres of land. Construction of 445 EWS houses in convergence with PMAY. Mixed high-rise development with universal accessible features for	Not mentioned.
							persons with disabilities at Akhaura Gol Chhakkar area.	
22.	Bhagalpur (Bihar)	613 acres	8%	24%	The number of urban homeless was 7,412 in 2015. The city has 165 'slums' and 13,733 'slum residents.'	Mentions housing reform as an 'opportunity.'	<i>In situ</i> upgradation of 2,500 'slum- dwellers' with individual toilets and water connection; 100 new houses for relocated 'slum-dwellers;' 10 upgraded homeless shelters and two new shelters, with one women's shelter.	Provision of better infrastructure for street vendors and hawkers, and development of informal sector vendor system. Formation of self-help groups (SHGs) and skill- training for economic development under NULM. Construction of 'urban haat' (market) with training facilities for silk weavers.

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23.	Chandigarh	1,265 acres	4%	4.7%	Not mentioned in the proposal. 9.8% (Census 2011)	In the proposal, "achieved milestones in social inclusion of weaker sections" has been mentioned as 'strengths.'	Affordable housing will be developed via PPP approach in Sector 43. Chandigarh plans to be 'slum-free' by 2017. 8,000 new houses for EWS are under construction.	Not mentioned.
24.	Dharamshala (Himachal Pradesh)	775 acres	12%	50.5% 27,053 persons (Proposal)	Less than 0.5% of the city population is in the 'houseless' category.	Mentions adequate housing as a 'strength.'	 Plan for the construction of 212 earthquake-resistant, fireproof, and insulated dwelling units under IHSDP for 'slum-dwellers' with innovative pre-fabricated technology. Provision of affordable housing. Ensuring housing for all income groups by 2025, and provision of adequate and accessible community facilities. 	Improving accessibility of infrastructure and community facilities, especially for marginalized groups.
25.	Faridabad (Haryana)	1,265 acres	3%	2.7%	The Municipal Corporation of Faridabad identified 219,264 'slum- dwellers' in 2011. 15.21% (Census 2011)	Not mentioned.	No mentioned.	Barrier free area-based development. Setting up of crafts <i>haat</i> (market) for 2,400 street vendors.
26.	Imphal (Manipur)	541 acres	Not available	28.2%	The proposal states that there are no landless and homeless people in the city. The city has no 'notified' or 'non- notified' 'slums.'	Mentions the housing situation as a 'strength.'	No mentioned.	Inclusive and skill-based education for employment. Provision of primary health centres and mobile dispensaries. Involvement of women in home-based food processing industry and food packaging, to promote their financial independence.

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27.	Lucknow (Uttar Pradesh)	813 acres	1%	2.5%	Not mentioned.	Not mentioned.	Construction of homeless shelters.	Focus on heritage- based tourism to create employment opportunities, especially for the poor.
28.	New Town Kolkata (West Bengal)		Withdre	ew from the Sma	rt Cities Mission in Augu	ıst 2016 (but is still on tl	he official list of the Government of Indi	a)
29.	Panaji (Goa)	494 acres	4%	35.3%	According to the proposal, the housing condition of 1.6% of units in the city can be classified as 'dilapidated.'	The proposal mentions urban sprawl as a 'weakness' and a 'threat.'	Service improvement for the urban poor in Mala Heritage zone.	Establishment of micro- enterprise incubation centres and skill- development centres, prioritizing entrepreneurs from EWS/LIG backgrounds. Bed and breakfast rental opportunities for the urban poor.
30.	Port Blair (Andaman and Nicobar Islands)	Not mentioned.	Not mentioned.	77%	The proposal claims that there are a few pockets of 'slums' in the city with secure land tenure. 13.12% (Census 2011)	Not mentioned.	To promote inclusive development by bringing 'slum-dwellers' into the city mainstream, by 'slum' development and provision of basic physical and social infrastructure. Social development is planned through 'slum' redevelopment, urban <i>chowpals</i> , and hostels for working men and women. The 'slum' in Haddo Market area of Ward 2 has 80 <i>kutcha</i> (temporary) houses with secure tenure. <i>In situ</i> redevelopment of these 80 units will be undertaken along with provision of basic amenities. Working people's hostels of 650 square metres for accommodating 100 working women and 325 square metres for 50 working men to be constructed.	Facilities for persons with disabilities in all redevelopment projects.

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31.	Raipur (Chhattisgarh)	777 acres	2%	5.9%	Raipur consists of 330 'slums' out of which 180 are already notified and occupy a total area of 10.9% of the city. 37% (Proposal) 39.58% (Census 2011)	Increasing 'slum' population and scattered developments along the main arterial roads (NH30 and NH53) have been identified as a 'weakness.'	Under the goal to build a cohesive and inclusive city, the proposal targets providing housing for all through state and central schemes. Under the theme " <i>MORE GHAR</i> " the proposal aims to provide housing for all through beneficiary-led, credit-linked, and affordable housing options. Eight 'slum' redevelopment projects to be mixed-use projects. Construction of 2,967 EWS housing units and upgradation of living standards under PMAY. Building two homeless shelters and one women's hostel.	Implementation of accessible infrastructure across all public places for persons with disabilities, children, and older persons. Provision of subsidized medicines under the Jan Aushadhi project that would also setup 15 e-medicine centres for public health improvement. Facilities for vendors under the Vendor Policy and Scheme.
32.	Ranchi (Jharkhand)	341 acres Description: Greenfield development, within the municipal core of Ranchi Municipal Corporation.	1%	5.0%	The urban poor in Ranchi constitute about 30% of the population. There are 95 'slum' pockets in the city. 7.72% (Proposal) 6.92% (Census 2011)	The proposal mentions inadequate affordable housing in the city as a 'threat.'	EWS project. Ten acres have been reserved for affordable housing in the Knowledge Smart City to provide 860 EWS units.	Creation of "opportunities for tribals."

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33.	Warangal (Telangana)	1,583 acres Description: Retrofit and redevelopment of the city centre.	2%	4.8% Nearly 39,187 residents (Proposal)	A total of 183 'slums,' 92 are 'notified' (168,000 people) and the remaining are 'non-notified' (150,000 people). 42% (Proposal) 34.99% (Census 2011)	The proposal mentions informal settlements as a 'weakness.'	Making the city 'slum-free' with 100% basic urban services. 'Slum' areas retrofitting, including 100% basic infrastructure, 1,595 <i>kutcha</i> (temporary) to <i>pucca</i> (permanent) houses and construction of 1,000 individual and 50 public toilets. Providing 2 BHK (bedroom, hall, and kitchen) houses to those living in sub-standard conditions. Convert 'slums' to liveable neighbourhoods by providing core urban services to all 'slum' households.	Not mentioned.
CITIE	ES SELECTED IN F	ROUND 2 (SEPTEMB	ER 2016)					
34.	Agra (Uttar Pradesh)	2,250 acres Description: Retrofit and redevelopment of areas including Taj Mahal, and forming the Taj Improvement District.	8%	9.2%	Not mentioned in the proposal. 33.65% (Census 2011)	"Poor quality of life and living conditions as a detriment to tourism" has been mentioned under 'threats' for Agra.	<i>In situ</i> 'slum' rehabilitation, EWS housing, and provision of homeless shelters and refuge homes for women, children, and senior citizens. <i>In situ</i> upgradation of 50 houses and construction of 254 affordable houses in convergence with PMAY. Benefit to 3,345 households in informal and 'slum' layouts.	Development of 'heritage walk circuits' and employment of 'citizens from 'backward sections' to promote 'pro-poor tourism.'
35.	Ajmer (Rajasthan)	1,526 acres Description: Areas between the Anasagar Lakefront and the Ajmer Railway Station.	11%	16.9%	Not mentioned in the proposal. 20.41% (Census 2011)	'Housing for All' and other schemes have been mentioned as 'strengths.'	Not mentioned.	Not mentioned.

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36.	Amritsar (Punjab)	950 acres	2%	31.9%	Not mentioned in the proposal. 28.41% (Census 2011)	Not mentioned.	Provision of "inclusive affordable housing in the growth corridors of Amritsar." Details not mentioned.	Provisions for persons with disabilities in public toilets. Dedicated hawker zones in the Crafts Bazaar.
37.	Aurangabad (Maharashtra)	575 acres Description: Greenfield development.	2%	2.4%	Not mentioned in the proposal. 18.81% (Census 2011)	The demand-supply gap in affordable formal housing has been mentioned as a 'weakness.' Absence of public agency-driven affordable housing leading to a supply- demand gap has been mentioned as a 'threat.'	Provision of affordable or social housing. Planned new area as self-contained mixed-use development with at least 15% provision for affordable housing. Redevelopment of 25% of 'slums.' Construction of about 3,500 houses under affordable housing with about 1,440 houses under EWS category. In addition another 3,500–4,000 houses (EWS/LIG) are anticipated.	Technologically-driven initiatives to ensure safety of senior citizens/older persons, women, and children.
38	Gwalior (Madhya Pradesh)	803 acres	2%	8.9%	Not mentioned in the proposal. 28.97% (Census 2011)	'Threats' include an increase in unauthorized constructions and 'encroachments.'	Satisfy the diverse housing demand by supplying 25,000 affordable and sustainable housing units by the year 2020 to meet Housing for All. Construction of two shelters for the homeless.	Creation of an 'inclusive social ecosystem' – three residential care homes for orphans, older persons, and persons with disabilities; and, two hostels for working women.

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39.	Hubali- Dharwad (Karnataka)	992 acres Description: Areas encompassing the city centre and growth corridor of Hubli.	2%	12.4%	Not mentioned in the proposal. 19.57% (Census 2011)	Not mentioned.	Affordable housing for all with a focus on the urban poor. Ramalingeshwar Nagar 'slum' revival will upgrade 1,122 dwelling units on an area of 30 acres. About 80,000 houses will be built in the region in a decade-and-a-half, and the city will have 450,000 houses by the end of 2041. 'Slum' development under various schemes, 17 housing and infrastructure projects will be implemented in 5–8 years. Proposed PMAY scheme for three 'slums' (8,000 households); RAY (2,128 dwelling units in six 'slums').	Allocation of formalized vendor zones. Street Vendor Improvement Project under components of NULM and PMKVY.
40.	Jalandhar (Punjab)	1,010 acres	4%	6.7%	Not mentioned in the proposal. 16.70% (Census 2011)	Not mentioned.	'Slum' redevelopment of Mithu Basti (767 households) as a Public-Private Partnership (PPP) project under the Housing for All scheme. The goal is to have a "(socially) sustainable city" with provision of affordable and quality housing in the city.	Multi-skill Development Centre with hostel facility.
41.	Kalyan- Dombivli (Maharashtra)	2,904 acres	18%	14.4%	12% (Proposal) 7.87% (Census 2011)	Not mentioned.	Creation of an affordable housing hub in Mumbai Metropolitan Region with adequate supply of LIG and EWS housing. No details provided.	Not mentioned.
42.	Kanpur (Uttar Pradesh)	1,475 acres	2%	4.3%	Not mentioned in the proposal. 15.35% (Census 2011)	Not mentioned.	Not mentioned.	Creation of 2,500 direct/ indirect jobs.

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43.	Kohima (Nagaland)	285 acres	Information not available.	27%	Not mentioned.	Not mentioned.	<i>In situ</i> 'slum' upgradation and development of new affordable housing for the urban poor.	Not mentioned.
44.	Kota (Rajasthan)	1,459 acres Description: Retrofit transformation.	1%	11.5%	Not mentioned in proposal. 31.88% (Census 2011)	Not mentioned.	Proposed rehabilitation/ redevelopment of Ghodewala Baba 'slum' with 1,500 population on about 17 acres of land. Improvement of urban forms in other six 'slums' (population 24,000).	Street Vendor Improvement Project under NULM.
45.	Madurai (Tamil Nadu)	1,305 acres Description: Redevelopment of the Meenakshi Temple Precinct.	4%	25.6%	Less than 30% (Proposal) 27.33% (Census 2011)	Mentions 'encroachment' in public spaces as a 'threat.'	Relocation of 'slums' in Gandhi Nagar and Madhichayam (Wards 35 and 36), benefitting 568 families. Provision of safe environment for the homeless, aged, and orphans. Providing two shelters for the homeless. Provide affordable housing to all 'slum-dwellers' and EWS.	Promotion of equal accessibility for all by designing a 'barrier-free' environment. Creation of street vendor zones/hawker zones.
46.	Mangalore (Karnataka)	1,628 acres	4%	22.9%	Not mentioned in the proposal. 1.55% (Census 2011)	Not mentioned.	Ensuring at least 15% of new housing will be affordable. Upgradation of 250 impoverished households within the 11 wards, along with provision of infrastructure services; aims to promote housing communities from mixed socio- economic groups; and, prevent social segregation and dislocation of citizens. Upgradation of four 'slum' areas: Hoigebazar, Kanduka, Bavanthi Street, and Aerekerebail.	Creation of mixed socio- economic communities with affordable housing and barrier-free access.

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47.	Nagpur (Maharashtra)	951 acres Description: Retrofitting in the eastern periphery of the city.	2%	2.6% 65,000 inhabitants (Proposal)	36% (Proposal) 35.73% (Census 2011)	It mentions 'slums' as a 'threat.'	Project Home Sweet Home will introduce 4,000 affordable housing units over the next 10 years by leveraging Housing For All and other housing programmes.4,000 affordable and EWS housing units will be based on green building principles.	Not mentioned.
48.	Namchi (Sikkim)	300 acres	17%	73.8% 9,000 residents and a floating population of 6,000 (Proposal)	There are no homeless people in the city but four notified 'slums.'	Not mentioned.	Redevelopment of Agam Gram area into a compact mixed-use development for affordable housing.	Focus on the creation of an inclusive city, to help citizens who are affected by the poor water situation, especially women and the poor. Promotion of local entrepreneurs, SHGs, micro- units under the Pradhan Mantri Mudra Yojana. Implementation of NULM.
49.	Nashik (Maharashtra)	598 acres Description: Retrofit and redevelopment of 'Old Nashik' area.	1%	5.2% More than 54,911 persons (Proposal)	Not mentioned in the proposal. 12.77% (Census 2011)		Project Nivaas - Housing for All ('slum' rehabilitation)—273 'slum' households to be rehabilitated on 2 acres of land. Ensuring supply of affordable housing stock to prevent incidence of 'slums.' Construction of 88,905 tenements as affordable housing stock.	Provision of training and self-employment opportunities to 200 individual beneficiaries and 20 group beneficiaries every year under NULM.
50.	Rourkela (Odisha)	1,241 acres Description: Retrofit and redevelopment along Birsa Chowk to Panposh Chowk.	Information not available.	22.3%	36% (Proposal) 35.77% (Census 2011)	Inadequate affordable housing has been mentioned as a 'weakness' in the proposal; and growth of 'slums' and disparity in service delivery are 'threats.'	In situ redevelopment of 8,000 dwelling units with access to all basic services. The goals include integrated and harmonized informal settlements – reduction in 'slum' population. Housing for people from all economic strata.	Improved access to facilities for older persons, persons with disabilities, women, and children. Establishment of a skill- development centre for the tribal population under NULM and Skill India Mission.

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51.	Salem (Tamil Nadu)	610 acres Description: Retrofit the core area of the city, into a commercial business centre.	3%	8.6%	Not mentioned in the proposal. 21.82% (Census 2011)	The proposal mentions 'slums' as a 'weakness', and an increase in 'slum population' due to haphazard growth as a 'threat.'	Provision of shelters for the urban homeless.	Application of international standards of accessibility for all sidewalks, crossings, parks, public spaces, and amenities, especially for persons with disabilities. Skill-development scheme for the urban workforce for gainful self-employment, especially small-scale handloom weavers under Skill India Mission.
52.	Shivamogga (Karnataka)	 1,500 acres Description: The area has two distinct divisions as per land use – 1) CBD (1225 acres); 2) Scarcely developed land stretch along both sides of River Tunga (275 acres). 	9%	25.7% 83,000 people (Proposal)	According to the proposal, the city has 47 'slums.' 20% (Proposals) 19.82% (Census 2011)	The proposal mentions informal settlements as a 'weakness' and mentions increase in urban sprawl as a 'threat.'	Retrofitting of existing 'slums' in Central Business District area and relocation and rehabilitation of 'slums' along water bodies to ensure 100% housing for all. Provision of better housing and basic services to 'slums' for 1,350 households under PMAY. "Face-lifting 'slum' pockets" (10) by developing good housing units with amenities.	Not mentioned.
53.	Thane (Maharashtra)	Thane City Centre – the area around Thane Railway Station. Area not mentioned.	Not mentioned.	56.5%	Over 50% of the population lives in 'slums' and dilapidated buildings. 17.75% (Census 2011)	The proposal mentions unsafe housing conditions as a 'weakness' and dilapidated settlements and infrastructure gaps as 'threats.'	Inclusive housing by redeveloping unsafe housing; 70-acre redevelopment of Kisan Nagar. Rehabilitation of the population currently living in clusters of dilapidated structures.	Improvement of access to work and other facilities for persons with disabilities and EWS.

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54.	Thanjavur (Tamil Nadu)	645 acres Description: Old core area of the city surrounded by a moat on three sides and the railway track on its southern side.	7%	16%	9.6% (Proposal) 19.51% (Census 2011)	The proposal lists the low 'houseless population' – 0.6/1000 persons (Census 2011) as a 'strength.' It specifies the need for affordable housing stock as a 'weakness.'	Rehabilitation of low-income households, 'slum- dwellers' and artisans with poor living conditions. Adequate housing stock for all income groups, all amenities, and social infrastructure.	Improvement of safety of the 'vulnerable population,' including older persons, women, and children through improved and augmented coverage of CCTV surveillance at public spaces.
55.	Tirupati (Andhra Pradesh)	746 acres Description: Retrofitting in the heart of the city, also CBD.	11%	39%	According to the proposal, 26,270 'slum' households live in 69 'slum' pockets. 30% (Census 2011)	The proposal mentions informal settlements as a 'weakness' and providing affordable housing and implementing the 'slum' redevelopment programme as 'opportunities.'	Providing housing for all through affordable housing units. Project 'NIVAS' focuses on the redevelopment of 5.36 acres of the Tirupati Municipal Corporation colony for rehabilitating 436 families, through the provision of affordable housing units under PMAY.	Creation of a 'barrier-free' built environment, promoting universal accessibility.
56.	Tumkur (Karnataka)	1,354.97 acres Description: Retrofitting of the CBD area and Amanikere Lake.	9%	14.2%	There are four 'slum' pockets with 353 households and 3,802 EWS houses within the ABD area. 17.35% (Census 2011)	The proposal mentions increase in informality as a 'threat.'	 Two new 'slum' rehabilitation projects. Retrofitting and redevelopment of affordable housing: Of the 4 'slum' pockets (2 identified and 2 nomadic) in the area, 3 pockets (118 households) are relocated under RAY and proposed <i>in situ</i> development of the other pockets (207 households) as affordable housing units. Upgradation of 3,802 EWS housing units into self-sufficient homes with all utility services. 	Not mentioned.

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57.	Ujjain (Madhya Pradesh)	1,023 acres	4%	17%	32.1% (Proposal) 23.32% (Census 2011)	The proposal mentions informal settlements as a 'weakness.'	Creation and supply of 2,000 affordable housing units per year for LIG and EWS. 33.3% units in redevelopment area to be affordable housing. Additionally 6,114 housing units for 'slum- dwellers'/mill-workers, 10 homeless shelter facilities providing affordable staying options for the poor, and five working women's hostels in the knowledge and economic hub, to provide affordable rental residential facilities to the women's workforce. Housing for All by 2022 to ensure the provision of housing and basic services for all 'slum-dwellers.'	Guarantee of universal accessibility to all public open spaces, including roads, streets, and pathways, with a special focus on persons with disabilities.
58.	Vadodara (Gujarat)	1,698 acres	Information not available.	6.2% 1,666,703 residents (Proposal)	Not mentioned in the proposal. 4.84% (Census 2011)	The proposal mentions unmet need of urban housing as a 'weakness.'	Creation of a 'slum-free area' by removing slums and constructing new buildings. Improvement of existing schemes for housing the urban poor, redevelopment, and reformation of informal settlements by providing basic services.	New buildings will be developed with common reading room in the building to empower education to 'slum' children.
59.	Varanasi (Uttar Pradesh)	1,389 acres Description: Retrofit of 1,389 acres of the old city area along River Ganga.	7%	33.4%	Not mentioned in the proposal. 25.20% (Census 2011)	Not mentioned.	The proposal aims at ensuring housing for all.	Not mentioned.
60.	Vellore (Tamil Nadu)	1,588 acres	7%	63.2%	Not mentioned in the proposal. 23.14% (Census 2011)	Not mentioned.	Not mentioned.	Not mentioned.

CITI	Proposed Smart City	Proposed Area to be Developed in Acres ROUND 3 (JUNE 201	Percentage of Total City Area Covered (by Area- based Development)	Percentage of City Population Affected by Area-based Development	Percentage of Population Living in 'Slums'/Settlements	Mention of Housing in City's SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis	Planned Interventions for Housing for Marginalized Groups, including the Homeless	Other Significant Provisions for Marginalized Groups
61.	Aizawl (Mizoram)	746 acres	2%	17.1%	Not mentioned in the proposal. 26.77% (Census 2011)	The absence of defined 'slums' is listed as a 'strength.' Lack of availability of sizeable land parcels due to existence of steep slopes is listed as a 'weakness.'	Providing affordable housing for residents, including EWS. Construction of 769 houses for EWS under PMAY.	Construction of multi-utilities facilitation centres under NULM.
62.	Aligarh (Uttar Pradesh)	1,120 acres Description: Retrofitting of the city core area of Achal Tal-Jama Masjid, the district court area, centre point, and the industrial area.	11%	14%	Not mentioned in the proposal. 29.60% (Census 2011)	Not mentioned.	Provision of affordable housing and improved living conditions in eight 'slums' which consist of 2,600 households – under PMAY.	Senior Citizen Direct Contact Programme.
63.	Allahabad (Uttar Pradesh)	1,907 acres	9%	3%	Not mentioned in the proposal. 7.85% (Census 2011)	Housing schemes resulting in uncontrolled urban sprawl and an imbalanced property market and ad-hoc changes in land use with limited land consolidation identified as a 'threat.' Also, minimal focus on affordable housing is perceived as a 'threat.'	Provision of affordable housing for all, with special consideration for the poor and the marginalized. Construction of two housing schemes for the urban poor, comprising 600 and 500 dwelling units with PMAY funds.	Opportunities for livelihoods for marginalized sections. Mobile vendors to be allotted dedicated spaces on sidewalks.

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64.	Amaravati (Andhra Pradesh)	650 acres Description: Greenfield development.	1%	16.5%	Not applicable (construction of a new city).	More than 95% of residential plots and 55% of general commercial plots will vest with the land- owners. The proposal mentions this as an 'opportunity.'	Provision of over 20% affordable housing and high living standards. No details provided.	Provisions for persons with disabilities in public toilets. Dedicated hawker zones in the Crafts Bazaar.
65.	Bengaluru (Karnataka)	5,380 acres Description: Implementation of seven projects consisting of CBD and adjoining neighbourhoods.	3%	5.5%	382,000 households in the city live in 597 'slums.' 18% (Proposal) 8.39% (Census 2011)	The rising population without access to affordable housing and basic amenities across the city is mentioned as a 'threat.'	Increasing affordable housing stock through 'slum redevelopment'. Redevelopment of one 'slum' with 689 dwelling units in Gandhinagar (Swathanthra Palya).	Strengthening labour- intensive markets, such as garments and manufacturing, with over 800 factories across the city employing more than 300,000 men and women.
66.	Bilaspur (Chhattisgarh)	1,041 acres Description: Retrofit and redevelopment model in CBD.	9%	25.4%	36.89% 'slum' households (Proposal) 35.23% (Census 2011)	The proposal identifies housing shortage for the lower to middle income group segments as a 'weakness.' Booming real estate development and availability of significant land for redevelopment in the city are identified as an 'opportunity.'	Redevelopment of 'slums' with revamped equitable services based on participatory development model under the goals of building an inclusive community. Under integrated redevelopment, six 'slum' redevelopment projects to be converted to mixed-use projects. Housing stock of 10,000 units will be created under PMAY. Construction of two homeless shelters and one women's hostel under NULM.	Promotion of universal accessibility.

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67.	Dahod (Gujarat)	860 acres	Not mentioned.	34% (and a floating population of above 25,000 persons)	Not mentioned in the proposal. 11.74% (Census 2011)	Rise in land prices in the city is a concern.	 'Slum' rehabilitation and construction of housing for EWS to make the area 'slum-free.' Development of 'slum' areas of Talav Bhilwad and housing for 'slum- dwellers.' Dahod Nagar Palika is constructing 480 'affordable' houses under the Integrated Housing and Slum Development Programme (IHSDP) for EWS housing, which will provide shelter to about 3,000 homeless people. 	Emphasis on skill- development by generating employment, with a focus on empowering women and tribal groups to achieve economic self-sustenance.
68.	Dehradun (Uttarakhand)	875 acres Description: Retrofit and redevelopment in CBD.	Not mentioned.	10.4%	26% (Proposal) 27.58% (Census 2011)	Unplanned development along primary radial transit routes has been mentioned as a 'threat.'	Addressing the problem of recent outgrowth of 'slums' and unplanned areas. 2,000 houses are proposed to be constructed under PMAY by the year 2022. Also, shelters for the urban homeless will be constructed under NULM.	Not mentioned.
69.	Gandhinagar (Gujarat)	1,335 acres	Not mentioned.	16.6%	Not mentioned in the proposal. 23.14% (Census 2011)	Not mentioned.	Not mentioned.	Not mentioned.
70.	Gangtok (Sikkim)	366 acres Description: Retrofitting of the commercial hub and tourist attraction point called Mahatma Gandhi Marg.	Not mentioned.	29%	The proposal mentions that there are about 12 notified slums, but no homeless people in the city. 21.55% (Census 2011)	The dynamic organic growth of the city is mentioned as a 'threat' to the development of the city.	Not mentioned.	Skill-development and provision of employment opportunities. Supporting street vendors under NULM.

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71.	Jammu (Jammu and Kashmir)	845 acres	2%	9.9%	Not mentioned in the proposal. 1.15% (Census 2011)	Not mentioned	Making core services like housing available to all. To saturate the housing demand, 35,873 houses have been proposed under <i>in situ</i> 'slum' redevelopment, 5,740 under the Credit-linked Subsidy Scheme (CLSS), 7,100 under Affordable Housing in Partnership (AHP), and 2,000 under Beneficiary- led Construction (BLC) verticals of PMAY.	Focus on improving accessibility for persons with disabilities.
72.	Jhansi (Madhya Pradesh)	1,527 acres	4%	21.4%	Not mentioned in the proposal. 19.68% (Census 2011)	Not mentioned.	Developing basic and smart infrastructure services in 'slum' areas, organizing 'squatter' settlements, and constructing homeless shelters, and community kitchens for migrant homeless. Construction of dwelling units in 7 'slums' achieving 100% housing coverage, development of cost efficient housing to 750 households and upgradation of basic services. Construction of three homeless shelters. Provision of low-cost, energy- efficient housing for approximately 7,000 households by 2018.	Construction of vocational training and counselling units.

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73.	Karimnagar (Telangana)	2,390 acres	19%	22.5%	The city has a large percentage of population living in around 58 'slums.' 29% (Proposal) 32.06% (Census 2011)	Informal settlements are mentioned as a 'weakness.'	Creating a 'slum-free' city by 2023 by rehabilitation of all 'slum-dwellers' and an enforcement to prevent/ remove encroachments. 2 Bedroom-Hall-Kitchen (BHK) housing programme initiated by Government of Telangana under which each household is entitled to Rs 550,000 monetary support. The Telangana State Housing Corporation Limited is constructing or has obtained sanctions for about 2,800 tenements under various schemes. Rehabilitation of 'slums' encompassing 13,637 tenements.	Emphasis on social improvement, such as modernizing affordable public healthcare and ensuring gender equity. Skill-training and community-contracting for improving livelihoods of women under NULM.
74.	Karnal (Haryana)	720 acres	10%	9.7%	Not mentioned in the proposal. 15.82% (Census 2011)	Not mentioned.	A total of 16,432 'slum' residents will be rehabilitated under PMAY. Provision of housing for all by 2022 to ensure provision of housing and basic services for all 'slum' dwellers. Under Project AASHIANA, the task of resettling 264 'slum' families from Model Town to Sector 14 is under progress.	Not mentioned.
75.	Muzaffarpur (Bihar)	990 acres	13%	12.7%	Not mentioned in the proposal. 23.14% (Census 2011)	The proposal mentions 'slums' and 'encroachments' as 'threats.'	Housing for all by 2019 through PMAY. 'Slum' relocation and rehabilitation, <i>in situ</i> upgradation of housing and shelters for the urban homeless. Redevelopment and <i>in situ</i> upgradation of 'slums' and provision of affordable housing for low and middle-income groups.	Establishment of a skill- training centre under NULM. Formation of SHGs.

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76.	Naya Raipur (Chhattisgarh)	1,300 acres Description: Greenfield development.	7%	10%	Not applicable (construction of a new city).	Planned capital city is mentioned as a 'strength.'	Aims to provide affordable housing of 320 units (8 buildings of 4 floors each) in an area of 5 acres for village dwellers (Village Kotarabhata and Kayabandha).	Convergence with <i>Hunar Se</i> <i>Rozgar Tak</i> scheme for skill- development. Support to urban street vendors under NULM.
77.	Pasighat (Arunachal Pradesh)	961 acres Description: Retrofit and redevelopment in the heart of Pasighat to develop it into a mixed use zone.	Information not available.	63.1%	Mentions no homeless people in the city but some 'squatter areas' like lower Banskota. 9.58% (Census 2011)	The proposal mentions abundant developable land availability for city expansion as a 'strength.'	Under PMAY, 'slum' redevelopment and affordable housing projects proposed by the Department of Urban Development and Housing.	Not mentioned.
78.	Patna (Bihar)	817.35 acres Description: Retrofitting cum redevelopment strategic model in the CBD.	3%	2.3%	Non-notified 'slum' population, consisting of 81,450 persons as per City Development Plan Patna, 2011. 4.57% (Census 2011)	The proposal mentions unauthorized settlements as a 'weakness.' Unlocking land potential through 'slum' redevelopment is listed as an 'opportunity.'	Inclusive and affordable housing for all under PMAY through projects like 'slum-free' ABD. 2,825 dwelling units to be provided through PMAY. Construction of eight homeless shelters to accommodate 50 persons each under NULM for providing better civic amenities. Improvement of homeless shelters and short-stay homes.	Distribution of leftover food from hotels and restaurants in the ABD area to orphanages/homes and homeless shelters to promote zero wastage and mitigation of hunger.
79.	Pimpri Chinchwad (Maharashtra)	1,370 acres	3%	5.7% 100,000 persons (Proposal)	Not mentioned in the proposal. 7.47% (Census 2011)	Availability of 22 square kilometres of land for city's expansion is seen as an 'opportunity.'	Not mentioned.	Development and regulation of hawkers' zones to safeguard the interests of 'informal sector' workers and provide them social security under NULM.

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80.	Puducherry	1,468 acres Description: Retrofitting and redevelopment model consisting of the city boulevard and surrounding area.	30%	12%	Not mentioned in the proposal. 17.43% (Census 2011)	The proposal mentions flooding, and restricted Floor Space Index (FSI) as a 'weakness.'	Under PMAY, 1,750 housing units are proposed. Making Puducherry a 'slum-free' city by increasing the housing stock through efficient use of land. Promoting compact redevelopments, providing adequate housing for all income groups, reducing travel cost, distance, time, and ensuring diverse and inclusive settlements.	Not mentioned.
81.	Rajkot (Gujarat)	Exact area not mentioned.	Not mentioned.	10.4%	Not mentioned in the proposal. 14.31% (Census 2011)	Rise of 'slums' in the western region of the city are mentioned as a 'threat' in the proposal.	The proposal states that the ultimate goal of this quest is to make Rajkot a 'slum-free' city by 2022 by constructing 20,000 houses every year. PPP housing model under PMAY for rehabilitation of seven 'slums.' 16.67% affordable housing units will be constructed with exclusive 1,500 dwelling units for EWS and 3,500 units for LIG, including provision of ground floor units for differently- abled and families with senior citizens only. For 1,500 EWS affordable housing units, 50% of the project will be carried out under PMAY or Mukhya Mantri Gruh Yojana (MMGY).	Creation of an enabling environment for all citizens including the "differently- abled, senior citizens, unemployed, and deprived sections of the society." Skill-development of youth and women through NULM.

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82.	Sagar (Madhya Pradesh)	908 acres Description: Retrofit and redevelopment of area centered around Lakha Banjara Lake in the heart of the city.	11%	23.5%	Not mentioned in the proposal. 3.89% (Census 2011)	The proposal mentions the congested city core called 'Katra' as a 'weakness'; presence of vacant land lots is an 'opportunity'; and, squatter settlements as a major 'threat.'	In situ redevelopment of 630 households in six 'slums.' Project Graham (catering to shelter needs) including 630 affordable EWS housing for 'slum-dwellers,' 270 rental housing units, 225 affordable housing units, 995 other category housing units, five working women hostels (300 capacity), three dormitories, three homeless shelters, and an integrated housing cluster at New Colony with 230 housing units for government employees and 70,272 square metres mixed- use Transit-oriented Development (TOD) development with 669 other category housing units.	Not mentioned.
83.	Satna (Madhya Pradesh)	662 acres Description: Greenfield development on a contiguous parcel of land in the suburbs.	8.52%	19.7%	23.14% (Census 2011)	The proposal mentions that the shortage of housing stock is a 'weakness.'	Affordable housing supply for all 'slum-dwellers' by creation of 20,000 affordable housing units (AHUs) for LIG/EWS by 2022 and ensuring the construction of 1,500 AHUs per annum for EWS/LIG to keep pace with demand for new affordable housing.	Not mentioned.
84.	Shimla (Himachal Pradesh)	292 acres	3%	10.1%	Not mentioned in the proposal. 1.95% (Census 2011)	Land availability constraint is mentioned as a 'threat.'	Provision of affordable housing in order to extend and rejuvenate urban systems to ensure safe and exclusive development.	Development of vending zones for 300 vendors in the redevelopment area. Creation of 15 safe shelters for situations of disaster.
85.	Srinagar (Jammu and Kashmir)	1,180 acres Description: Retrofit and redevelopment of the old city of Srinagar.	1.9%	10.1%	Not mentioned in the proposal. 28.44% (Census 2011)	City faces serious threats due to unauthorized urbanization into the flood absorption basins.	In order to saturate the housing demand in the city, 58,060 houses will be constructed.	Promotion of social inclusion across age, socio-economic groups, gender, ethnic groups, and persons with disabilities by making the city accessible by application of universal design in city infrastructure.

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86.	Thoothukudi (Tamil Nadu)	2,650.33 acres Description: Retrofit of the core area of the city.	3%	31.7%	18.54% (Proposal) 16.43% (Census 2011)	The proposal mentions that urban poverty alleviation including Housing for All, as an 'opportunity' to ensure social inclusion.	Provision of 100% housing for all income groups and affordable housing to those 'slum' households who are living in <i>kutcha</i> (temporary) and semi- <i>pucca</i> (semi-permanent) houses. <i>In situ</i> 'slum' upgradation and provision of homeless shelters.	Establishment of social and community-development facilities, including skill- development centres and e-service centres.
87.	Tiruchirappalli (Tamil Nadu)	1,749 acres	5%	18.8%	Not mentioned in the proposal. 26.97% (Census 2011)	The lack of land availability within the corporation area is listed as a 'weakness.'	Creation of "place for all" that would incorporate all citizens from different walks of life like "slums, physically disabled, and elderly."	Promotion of universal accessibility through redesigned street patterns.
88.	Tirunelveli (Tamil Nadu)	906 acres	3%	9.6%	14.4% (Proposal) 14.40% (Census 2011)	The proposal mentions haphazard urban growth as a 'threat.'	Redevelopment of informal settlements along with provision of basic services to create an 'equitable city.'	Promotion of universal accessibility through redesigned street patterns.
89.	Tiruppur (Tamil Nadu)	2799.61 acres	41%	23.5%	16.17% (Census 2011)	Not mentioned.	Making Tiruppur a 'liveable' and 'slum-free' city by 2025. Providing affordable housing to those 'slum' households who are living in <i>kutcha</i> and semi- <i>pucca</i> houses/sub-standard conditions. 250 dwelling units are proposed for 'slum-dwellers' and the urban homeless.	Establishment of social and community development facilities, including skill- development centres, e-service centres, upgradation of infrastructure facilities in selected schools and colleges, and e-counselling centres. Construction of skill-training centres under NULM.

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90.	Trivandrum (Kerala)	1403.33 acres	4%	5.6%	There are two 'slum' pockets with 957 and 142 households within the ABD area. Percentage of population living in 'slums' not mentioned in the proposal. 0.42% (Census 2011)	Not mentioned.	Redevelopment of 'slums' and upgradation of EWS housing into affordable housing stock will be converged with the Livelihood, Inclusion, Financial Empowerment (LIFE)scheme and/or PMAY.	Not mentioned.
CITIE	S SELECTED IN F	ROUND 4 (JANUARY	2018)					
91.	Bareilly (Uttar Pradesh)	1,270 acres Description: Redevelopment and retrofitting model envisaged, works on the principle of integration of work place and market.	2%	Information not available.	Not mentioned in the proposal. 15.93% (Census 2011)	Not mentioned.	Not mentioned.	Not mentioned.
92.	Bihar Sharif (Bihar)	1,250 acres	22%	Information not available. (85,000 persons, including 7,600 living in 'slums')	9% (Proposal) 7.16% (Census 2011) From 2001–11, 14% of the total population lived below the poverty line.	Increase in poverty and growth of 'slums'; haphazard and sparse development on city periphery, with inadequate road network, physical infrastructure and social facilities; and, inadequate facilities for the homeless are mentioned as 'weaknesses' in the proposal.	Under PMAY, the <i>in situ</i> development of 'slums' and the development of EWS housing near the railway station and Panchane Nadi. Construction of six homeless shelters to accommodate 50 persons each and upgradation of existing shelters.	Establishment of skill- development centres, an agro-product research institute, and SHGs facilitate skill-development.

	Proposed Smart City	Proposed Area to be Developed in Acres	Percentage of Total City Area Covered (by Area- based Development)	Percentage of City Population Affected by Area-based Development	Percentage of Population Living in 'Slums'/Settlements	Mention of Housing in City's SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis	Planned Interventions for Housing for Marginalized Groups, including the Homeless	Other Significant Provisions for Marginalized Groups
93.	Diu (Daman and Diu)	930 acres Description: ABD comprises three distinct zones. These are – the entire walled city (tourism focus), the southern part of Ghoghla (citizen focus), and the wetland and bird sanctuary at Fudam (environment focus).	32%	Information not available. 18,225 persons (Proposal)	Not mentioned in the proposal.	Not mentioned.	Construction of 260 affordable housing units under PMAY or Housing for All scheme.	Not mentioned.
94.	Erode (Tamil Nadu)	2,251 acres Description: Comprehensive and replicable retrofit development of southern Erode, along the Perumpallam Canal.	8%	Information not available.	There are 133 'slums' in the city comprising 18,944 households; 87 are notified 'slums.' 17.55% (Census 2011)	Haphazard development has been highlighted as a 'threat.'	Implementing Slum-free City Action Plan proposals. Providing affordable housing and social infrastructure for the 1,200 low-income households. Rehabilitation of 3,000 households currently living in 'slums.'	Universal affordable provision of public civic services.
95.	ltanagar (Arunachal Pradesh)	270 acres	Information not available.	Information not available.	Information not available.	Haphazard ribbon development and encroachments have been mentioned as a 'weakness.'	Provision of 200 affordable housing dwelling units in Sectors D and E, in convergence with smart city funds.	Not mentioned.
96.	Kavaratti (Lakshadweep)	550 acres	61%	Information not available.	Claims to have no 'slum' or shelter-less resident.	Lack/absence of building rules leading to unplanned development which can cause major environmental damage in the region has been highlighted as a 'threat.'	Not mentioned.	Not mentioned.

	Proposed Smart City	Proposed Area to be Developed in Acres	Percentage of Total City Area Covered (by Area- based Development)	Percentage of City Population Affected by Area-based Development	Percentage of Population Living in 'Slums'/Settlements	Mention of Housing in City's SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis	Planned Interventions for Housing for Marginalized Groups, including the Homeless	Other Significant Provisions for Marginalized Groups
97.	Moradabad (Uttar Pradesh)	1,628 acres Description: Retrofit is proposed in areas of the old city, and institutional, industrial, and commercial areas.	7%	Information not available.	Not mentioned in the proposal. 13.48% (Census 2011)	Not mentioned.	Not mentioned.	Not mentioned.
98.	Saharanpur (Uttar Pradesh)	1,260 acres	11% (The proposal aims to improve the quality of life of 705,478 residents of the city)	Information not available.	Not mentioned in the proposal. 9.54% (Census 2011)	Provision of affordable housing, night shelters, old age homes, skill development programmes and wellness centres are seen as 'opportunities' to promote liveability and bring in social inclusiveness in the city.	Under the goal of Sahart Robust Infrastructure, the proposal envisages the provision of affordable housing and services for the urban poor (two homeless shelters and one old age home).	Skill upgradation and training. Construction of public and community toilets under Swachh Bharat Mission (SBM).
99.	Silvassa (Dadra and Nagar Haveli)	2,200 acres	50%	63% (according to the proposal)	Not mentioned in the proposal.	Lack of urban affordable housing for industrial workers has been identified as a 'weakness.'	Constructing 803 AHUs under PMAY. Upgradation of 957 <i>chawl</i> units (in G+3 buildings). Construction of labour hostels and working women's hostel under the Scheme for Promotion of Affordable Rental Smart Housing (SPARSH). Introduction of conclusive land titles through the 'e-dharti project.'	Promotion and protection of tribal heritage under the Vanbandhu Kalyan Yojana to create livelihood opportunities for local tribals.

ANNEXURE II: People's Participation Recorded in the Smart City Proposals

	Proposed Smart City	Level of Citizen Engagement in Developing Smart City Proposals, Particularly of Marginalized Groups ¹				
CITI	CITIES SELECTED IN ROUND ONE (JANUARY 2016)					
1.	Ahmedabad (Gujarat)	Citizen groups: differently-abled citizens, senior citizens, 'slum' residents – Gulbai Tekra.				
		NGOs: SAATH, and 'slum' representatives.				
		Means of citizen engagement adopted: Public meetings/discussion with citizen groups, and Focus Group Discussions (FGDs) were held with various citizen groups and associations.				
2.	Belagavi (Karnataka)	No specific engagement reported with marginalized groups and residents of low-income settlements.				
3.	Bhopal (Madhya Pradesh)	Aleans adopted for citizen engagement include the following: Stakeholders included transgenders and persons with physical disabilities. Wi-Fi enabled tableau travelled to the 'slums' to take cognizance of their needs. Professional media agency-led public consultation. Face-to-face interactions through interviews or FGDs. Digital channels were leveraged with Bhopal Municipal Corporation portal and SMS messages. Publicity was done through local newspapers and mobile vans.				
4.	Bhubaneswar (Odisha)	 'Citizen's Connect Initiative' was built on internationally accepted International Association for Public Participation (IAP2) framework for citizen engagement: Inform, Consult, Involve, Collaborate, and Empower. Seven key strategies to operationalize this framework in Bhubaneswar's context to get best results were: Offline: To ensure inclusivity, special focus was given on face-to-face interactions with diverse groups: children, youth, women, city-makers ('slum-dwellers' and street vendors), persons with disabilities and senior citizens. Online: Dedicated platform was created to ensure a better connect to the city's effort for preparing a citizen-driven proposal. Outreach: Cascading model to cover RWAs, bastis, institutions was developed in the form of resource persons and extension teams. Crowd-sourcing: To increase participation in envisioning, ideation, and problem-solving. Volunteer programme. Social media outreach: Facebook with 80 times more accounts in Bhubaneswar vis-à-vis Twitter as main platform. Visibility: To ensure visibility, public personalities joined as campaign ambassadors. 				
5.	Chennai (Tamil Nadu)	Means of outreach: Radio, mass SMS, mass e-mail, print media, social media, corporation website. Suggestion from each citizen was reportedly recorded and analysed. Key participants of the engagement programmes include: Citizens of Chennai, urban planners, press, Institute for Transportation and Development Policy, Chennai City Connect and other NGOs, senior citizens, children, and women.				
6.	Coimbatore (Tamil Nadu)	No specific engagement reported with marginalized groups and residents of low-income settlements.				
7.	Davanagere (Karnataka)	Involvement of citizens residing across 41 wards of the City Corporation, including 'slum-dwellers,' street hawkers, and shopkeepers.				
8.	Guwahati (Assam)	No specific engagement reported with marginalized groups and residents of low-income settlements.				

1. Text in this table is copied from the Smart City Proposals.

	Proposed Smart City	Level of Citizen Engagement in Developing Smart City Proposals, Particularly of Marginalized Groups			
9.	Indore (Madhya Pradesh)	The citizen engagement strategy focused on drawing attention of sector-specific groups by face-to-face consultations with various professionals, industrialists/businessmen, elected representatives, educationists, info-tech fraternity, sports fraternity, nature enthusiasts, legal fraternity, housing societies, homemakers, and 'slum-dwellers.'			
10.	Jabalpur (Madhya Pradesh)	The consultation covered diverse sections of society including students (41 per cent), women (7 per cent), senior citizens (5 per cent), persons with disabilities, children, 'slum-dwellers,' civic workers (18 per cent) spread across various demographic and geographical sections of the city.			
11.	Jaipur (Rajasthan)	No specific engagement reported with marginalized groups and residents of low-income settlements.			
12.	Kakinada (Andhra Pradesh)	Engagement involved various sections of the population including children, women, older persons, persons with disabilities (particularly visually-impaired people), and below poverty line (BPL)/EWS sections.			
		The Municipal Corporation with stakeholders through direct interactions and FGDs. Nine per cent of stakeholders indicated affordable housing as a focus area, while six per cent focused on 'slum' development.			
13.	Kochi (Kerala)	Engagement with special groups: SHGs, EWS (6 meetings, almost 200 people), Kudumbashree Network, women and child rehabilitation centre, old age home, physically challenged, migrant labourers, and tribal hamlet meetings.			
14.	Ludhiana (Punjab)	Door-to-door surveys in wards and 'slums.'			
15.	New Delhi Municipal Council (NDMC) (Delhi)	Stakeholders included EWS/'slum-dwellers.'			
		Means of citizen engagement adopted: Face-to-face unstructured consultations and street plays.			
16.	Pune (Maharashtra)	lo specific engagement reported with marginalized groups and residents of low-income settlements.			
17.	Solapur (Maharashtra)	GDs with residents of Shashtri Nagar and Gandhinagar 'slums.'			
18.	Surat (Gujarat)	No specific engagement reported with marginalized groups and residents of low-income settlements.			
19.	Udaipur (Rajasthan)	FGDs were held with 'slum-dwellers.'			
20.	Visakhapatnam (Andhra Pradesh)	Focus group workshops conducted to engage diverse stakeholders, including: 800 'slum'-level federations; fisher groups; and, NGOs.			
CITIE	ES SELECTED IN FAST-TRACK R	OUND (MAY 2016)			
21.	Agartala (Tripura)	Meeting with Non-government Organizations (NGOs).			
		Decision to incorporate citizen inputs regarding housing for EWS.			
22.	Bhagalpur (Bihar)	agalpur (Bihar) Special focus on including urban 'slums' in the formulation of the Smart City Proposal. Around 2,100 people participated in 15 'slum'-level programmes. FGDs and stakeholder consultations involved various social groups, including: 'slum-dwellers' associations (Samuhik Vikas Samiti, other SHGs; Silk Weavers' Association; and, informal sector (Street Vendors' Association, Auto/Rickshaw Unions).			
23.	Chandigarh	Strategy used for engagement included street plays to engage stakeholders.			
		MyGovtalk was attended by 920 participants, including representatives from 'slum' associations, RWAs, Senior Citizen Associations, women, students, councilors, and Members of Parliament.			
24.	Dharamshala (Himachal Pradesh)	Street plays.			
25.	Faridabad (Haryana)	Street plays.			

	Proposed Smart City	Level of Citizen Engagement in Developing Smart City Proposals, Particularly of Marginalized Groups				
26.	Imphal (Manipur)	Consultation with senior citizens, local clubs, NGOs, women's SHGs, and societies, and street vendor organizations.				
27.	Lucknow (Uttar Pradesh)	Not mentioned.				
28.	New Town Kolkata (West Bengal)	Withdrew from the Smart Cities Mission in August 2016 (but is still on the Government of India's official list)				
29.	Panaji (Goa)	Extensive consultations, meetings with socially backward sections in Muslim wada 'slum,' St. Inez Tamba Colony, St. Inez 'slum' Ward 13, Altinho 'slum,' Wadeshwar Temple 'slum,' Batlem, Chincholim, and Datta Mandir.				
30.	Port Blair (Andaman and Nicobar Islands)	The citizen engagement exercise reached out to men and women, adults and children, all religious groups, private and government sector employees, self- employed, students, economically well-off and disadvantaged, common people, key persons in the administration, and elected representatives.				
31.	Raipur (Chhattisgarh)	No specific engagement reported with marginalized groups and residents of low-income settlements.				
32.	Ranchi (Jharkhand)	Besides interacting with common citizens, deliberations and discussions were held with more than 10 schools, NGOs, 'slum-dwellers,' elected representatives, traders' association, builders' association, architects' association, bar association, Public Sector Units, coaching institutes, hostellers, industries, higher education institutes and other government departments.				
33.	Warangal (Telangana)	Face-to-face meetings: 13 meetings organized to understand the aspirations of women and 'slum' residents.				
CITIE	ES SELECTED IN ROUND 2 (SEP	D IN ROUND 2 (SEPTEMBER 2016)				
34.	Agra (Uttar Pradesh)	'Aakansha' – an NGO spearheaded the vote-gathering drives in several parts of the city.				
35.	Ajmer (Rajasthan)	Extensive citizen engagement process, which involved face-to-face meetings with councilors, officials from Ajmer Municipal Corporation and other parastatal organizations, NGOs, Resident Welfare Associations (RWAs), engagement of social media, internet, and involvement of schools.				
36.	Amritsar (Punjab)	Consultations were held with the following stakeholders: differently-abled citizens, 'slum' residents: Hindustan Basti; and, NGOs.				
37.	Aurangabad (Maharashtra)	Surveys through questionnaires covering residents from across the city including 'slum-dwellers,' gunthewari (unauthorized colony)-dwellers.				
38.	Gwalior (Madhya Pradesh)	Profession-wise coverage shows the participation of 12 per cent people from low-income groups like auto-drivers, maids, vendors etc. Special consultations were done with children (plantation drive) and differently-abled persons. Mohalla sabhas (neighbourhood meetings) were also held.				
39.	Hubali-Dharwad (Karnataka)	No specific engagement reported with marginalized groups and residents of low-income settlements.				
40.	Jalandhar (Punjab)	Senior citizens/specially-abled were consulted by establishing 50 kiosks in public gardens/spaces.				
41.	Kalyan-Dombivli	Eleven per cent of all responses from households surveyed were from EWS from 14 'slum' pockets.				
	(Maharashtra)	FGDs with women SHGs, residents associations, senior citizens, physically challenged persons etc. ensured citizens from all walks of life are able to convey their aspirations and priorities.				
		In shaping the vision and goals, Kanpur Municipal Corporation ensured that each and every section of the population including children both male and female, women, elderly, differently-abled and BPL/EWS sections have been covered.				
		City-makers ('slum-dwellers' and street vendors), persons with disabilities, and senior citizens were also involved.				
43.	Kohima (Nagaland)	No specific engagement reported with marginalized groups and residents of low-income settlements.				
44.	Kota (Rajasthan) Citizens from various public groups (differently-abled citizens, senior citizens, 'slum' residents, daily labourers, women's self-help groups, Humraah, etc.) were included in the consultations.					

	Proposed Smart City	Level of Citizen Engagement in Developing Smart City Proposals, Particularly of Marginalized Groups			
45.	Madurai (Tamil Nadu)	Not mentioned.			
46.	Mangalore (Karnataka)	Direct contact: Face-to-face interactions with diverse groups including children, youth, women, city-makers, vulnerable groups, differently-abled, those with long-term illness, and senior citizens.			
47.	Nagpur (Maharashtra)	lot mentioned.			
48.	Namchi (Sikkim)	Not mentioned.			
49.	Nashik (Maharashtra)	FGDs and direct connect to ensure inclusivity. Special focus was given to one-to-one interactions with diverse groups including 'slum-dwellers,' hawkers, rag-pickers, sanitation, and <i>aanganwadi</i> workers, among others.			
50.	Rourkela (Odisha)	Consultations across all sections of society. Key stakeholders include differently-abled citizens, senior citizens, and 'slum' residents from more than 35 'slums' in the city.			
		NGO/Community-based Organizations: Red Cross-Rourkela, tribal associations and 'slum' representatives.			
51.	Salem (Tamil Nadu)	No specific engagement reported with marginalized groups and residents of low-income settlements.			
52.	Shivamogga (Karnataka)	Engagement with more than 80,000 'slum-dwellers.'			
		Communicative medium of street plays was adopted to convey the objectives and benefits of smart city to 'slum-dwellers.'			
53.	Thane (Maharashtra)	edicated FGDs with representatives of 'slum-dwellers.'			
54.	Thanjavur (Tamil Nadu)	ace-to-face consultations with artisans, 'slum-dwellers,' and various professionals, among other stakeholders.			
55.	Tirupati (Andhra Pradesh)	No specific engagement reported with marginalized groups and residents of low-income settlements.			
56.	Tumkur (Karnataka)	Not mentioned.			
57.	Ujjain (Madhya Pradesh)	Mobile van in 'slum' areas, and other parts, and nukkad natak (street plays), among others, were deployed for citizen engagement.			
58.	Vadodara (Gujarat)	Not mentioned.			
59.	Varanasi (Uttar Pradesh)	Not mentioned.			
60.	Vellore (Tamil Nadu)	Not mentioned.			
CITIE	ES SELECTED IN ROUND 3 (JUN	E 2017)			
61.	Aizawl (Mizoram)	No specific engagement reported with marginalized groups and residents of low-income settlements.			
62.	2. Aligarh (Uttar Pradesh) Interaction with 'slum' area workers, NGOs, and elected representative, among others.				
	Offline means of engagement include face-to-face interactions with different groups, including 'city-makers' ('slum-dwellers' and street vendors citizens, persons with disabilities, youth and children.				
		Cascading model was developed to cover 'slums,' RWAs, and institutions by forming committees at the ward level.			
63.	Allahabad (Uttar Pradesh)	No specific engagement reported with marginalized groups and residents of low-income settlements.			
64.	Amaravati (Andhra Pradesh)	Over 10 consultations with women participants.			
		Joint workshop with real estate forum and land-holding farmers.			

	Proposed Smart City	Level of Citizen Engagement in Developing Smart City Proposals, Particularly of Marginalized Groups			
65.	Bengaluru (Karnataka)	Workshops conducted with RWAs and the urban poor, among others, as offline means to obtain inputs for the Smart City Proposal.			
66.	Bilaspur (Chhattisgarh)	The proposal says vulnerable groups were identified and approached.			
67.	Dahod (Gujarat)	Over 80 per cent of total respondents consulted include persons with disabilities, tribal families, floating population, 'slum' residents, and citizens at public places.			
		Two workshops were conducted with over 200 less-literate people, and discussions with Blind People's Association (who filled over 300 forms).			
68.	Dehradun (Uttarakhand)	Engagement with NGOs, civil society members and RWAs, among other stakeholders. 'Slums' with low-income residents, students, "handicapped" etc., were covered in the offline mode of engagement.			
69.	Gandhinagar (Gujarat)	Discussions with stakeholders include public and private organizations, colleges, schools, NGOs, among others.			
70.	Gangtok (Sikkim)	No specific engagement reported with marginalized groups and residents of low-income settlements.			
71.	Jammu (Jammu and Kashmir)	No specific engagement reported with marginalized groups and residents of low-income settlements.			
72.	Jhansi (Madhya Pradesh)	'Slum-dwellers,' housing societies, homemakers and educationists, among others, were targeted to elicit responses.			
		'Manthan', a dedicated room was set up for receiving inputs from all and analysing them.			
		FGDs with SHGs representing 'slums' involving 200 participants.			
73.	Karimnagar (Telangana)	Engagement with 'slum-dwellers,' NGOs, street vendors, youth, women's groups (SHGs, Mahila Mandals), persons with disabilities, among other stakeholders.			
74.	Karnal (Haryana)	The Municipal Corporation of Karnal conducted a campaign, 'Jansampark Abhiyan,' for citizen consultation. To ensure inclusivity in citizen consultation campaign, engagement with industry associations, NGOs, RWAs, 'slum-dwellers,' street vendors, labourers, 'slum' populations, and taxi drivers was carried out.			
75.	Muzaffarpur (Bihar)	Engagement with students, 'slum-dwellers,' professionals, persons with disabilities, senior citizens ward councilors, community-based organizations, NGOs, social/environmental activists, associations, among other stakeholders.			
		Special focus on including 'slum-dwellers' in Smart City Proposal formulation. About 1,500 people in 'slum' areas took part in 20 programmes.			
76.	Naya Raipur (Chhattisgarh)	No specific engagement reported with marginalized groups and residents of low-income settlements.			
77.	Pasighat (Arunachal Pradesh)	No specific engagement reported with marginalized groups and residents of low-income settlements.			
78.	Patna (Bihar)	Public forum engagement involved 'slum-dwellers'/street vendors, persons with disabilities, and senior citizens.			
		Special team covered 'slums,' street vendors, and engagement with children, women, persons with disabilities, and senior citizens.			
79.	Pimpri Chinchwad (Maharashtra)	FGDs with different stakeholders including senior citizens, 'slum-dwellers,' RWAs, NGOs, etc.			
80.	Puducherry	Citizen inputs include low-income settlements.			
81.	Rajkot (Gujarat)	FGDs with elected representatives, industry associations, sakhi mandals, urban planners, NGOs, specially-abled citizens, among others.			
82.	Sagar (Madhya Pradesh)	Engagement with slum representatives, NGOs, women, vendors, autowalas, maids, among other stakeholders.			

	Proposed Smart City	Level of Citizen Engagement in Developing Smart City Proposals, Particularly of Marginalized Groups			
83.	Satna (Madhya Pradesh)	Engagement with all sections of society including NGOs, 'slum-dwellers,' citizen groups, urban youth, women groups. Sixty-two per cent of participants involved women, children, youth, and 'slum-dwellers.'			
84.	Shimla (Himachal Pradesh)	lo specific engagement reported with marginalized groups and residents of low-income settlements.			
85.	Srinagar (Jammu and Kashmir)	Interest groups including government officials, industrialists, youth, students, 'slum-dwellers,' women, among others, were interviewed separately. Voluntary organizations and NGOs were roped in for awareness of smart city campaign as an offline means of engagement.			
86.	Thoothukudi (Tamil Nadu)	Engagement with public representatives, 'slum' groups, SHGs, women-headed households, children and youth, among other stakeholders.			
		In six workshops, 500 people participated including NGOs, persons with disabilities, and SHGs.			
87.	Tiruchirappalli (Tamil Nadu)	NGOs, women's associations, schools for visually challenged and institutes for persons with disabilities, were among stakeholders involved in understanding city's issues and shaping its vision.			
88.	Tirunelveli (Tamil Nadu)	Special focus was laid on capturing sentiments of low-income groups. In the incorporation of citizen inputs in the vision document, among others, special focus was given on improving hygiene levels and public health among low-income groups and 'slums.'			
89.	Tiruppur (Tamil Nadu)	Engagement with stakeholders involving NGOs, SHGs, groups at 'slum' level, local associations, persons with disabilities, and vulnerable groups.			
90.	Trivandrum (Kerala)	ndrum (Kerala) Over 35 meetings with citizen groups, experts, NGOs, industry associations, vulnerable groups, etc; 583 people were consulted in stakeholders' meetings.			
CITIE	CITIES SELECTED IN ROUND 4 (JANUARY 2018)				
91.	Bareilly (Uttar Pradesh) No specific engagement reported with marginalized groups and residents of low-income settlements.				
92.	Bihar Sharif (Bihar)	Special focus on including urban 'slums' in the formulation of the Smart City Proposal. Around 2,100 people participated in 15 'slum'-level programmes. FGDs and stakeholder consultations involved various social groups, including: 'slum-dwellers' associations (Samuhik Vikas Samiti, other SHGs; Silk Weavers' Association; and, informal sector (Street Vendors' Association, Auto/Rickshaw Unions).			
93.	Diu (Daman and Diu)	Stakeholders consulted through FGDs include fishermen, NGOs, citizens, rickshaw drivers, etc.			
94.	Erode (Tamil Nadu)	Meetings with RWAs, NGOs, and focused groups etc.			
95.	Itanagar (Arunachal Pradesh)	Discussion with representatives of 'slums-dwellers,' NGOs, and youth groups etc.			
	Offline means of engagement include 15 workshops in two rounds with 762 participants including NGOs, 'slum-dwellers,' religious groups, youth groups, etc.				
96.	Kavaratti (Lakshadweep)	Engagement with different stakeholders, including farmers, unemployed youth, NGO, fishermen, auto-drivers, etc.			
97.	Moradabad (Uttar Pradesh) People participated in shaping visions and goals included 'slum' representatives, citizen groups, NGOs, youth, and children etc.				
98.	Saharanpur (Uttar Pradesh)	No specific engagement reported with marginalized groups and residents of low-income settlements.			
99.	Silvassa (Dadra and Nagar Haveli)	FGDs with industries associations, tribals, and labour groups etc.			

ANNEXURE III

Questions Raised in the Indian Parliament on the Smart Cities Mission and Answers Provided by the Ministry of Housing and Urban Affairs (Government of India)

A. SELECTED QUESTIONS RAISED IN THE LOK SABHA: 2017–2018¹

	Question Number and Date	Subject	Question	Answer Provided by the Ministry of Housing and Urban Affairs
1	Question No. 3940 20 March 2018	Smart Cities Mission	 (a) Whether the government proposes to increase the allocation for the smart cities mission by 54.22 per cent in the budget for 2018-19 and if so, the details thereof; (b) Whether a boom in the construction sector in the country is expected in the coming years and if so, the details thereof; and, (c) The steps being taken by the government to ensure that construction activities do not violate environmental norms as well as India's commitment to climate agreements and achievement of sustainable development goals-2030? 	 (a) During the financial year 2018-19, under Smart Cities Missions, 6,000 crore has been allocated as be which is 50.39% increase in the budget against be of Rs. 3,989.50 crore allocated in financial year 2017-18. (b) The ministry of housing and urban affairs is implementing the Pradhan Mantri Awas Yojana (Urban) [PMAY(U)] to achieve the government's vision of "housing for all by 2022". The total urban housing demand estimated so far by the states/UTS is approximately 12 million. Projects are sanctioned based on project proposals submitted by the state governments. So far, a total 40,64,899 houses have been sanctioned. In order to achieve the target of "housing for all by 2022", the Ministry Of Housing And Urban Affairs has requested all States/UTS, to saturate their demand of houses under the PMAY(U) by the year 2018-19 so that construction of all houses may progressively be completed by 2022. Additionally, in order to achieve the target of "housing for all by 2022". The Volume actions have been taken by ministry of housing and urban affairs: Carpet area of houses eligible for interest subsidy under credit-linked subsidy scheme for middle income group has been increased. Various fiscal incentives have been made under section 80-IBA of the income tax act, which lead 100% deduction of profits and gains for affordable housing projects. Coverage under PMAY (urban) has been increased to include areas falling within notified planning/ development area. A National Urban Housing Etund for Rs. 60,000 crore has been set up in ministry of housing and urban affairs for raising Extra Budgetary Resources (EBR) in phases over four years for the rapid implementation of (PMAY) (U). (c) Ministry of Environment, Forest and Climate Change (MOEF&CC) accords prior environmental clearance for projects or activities listed in the schedule to the Environment Impact Assessment (EIA) notification. 2006 (and its amendments) after having followed the prescribed proces

1 This document has not been edited; it presents the text provided by the Government of India.

	Question Number and Date	Subject	Question	Answer Provided by the Ministry of Housing and Urban Affairs
2.	Question No. 2845 13 March 2018	Implementation of Smart Cities Mission	 (a) The present status of implementation of smart cities mission (SCM) in the country; (b) The details and number of cities identified under the SCM, state-wise; (c) The total land earmarked for the development of smart cities along with the amount spent till date and the progress made in this regard; (d) Whether it is true that the government has made agreement with foreign countries to seek financial assistance for implementation of the smart cities mission programme; (e) If so, whether any foreign countries has come forward to invest in the smart cities mission; and (f) If so, the funds received from foreign countries for the development of smart cities in the country? 	 (a) & (b) Under smart cities mission, ninety-nine cities have been selected. The state wise list of ninety nine cities is enclosed at annexure-i. (c) The whole city has been earmarked for development. The cities will start with the area based development of 1,21,971 acres and gradually extend to full city. The progress depends on the date of the selection of the smart city. After selection it takes around 18 months in setting up special purpose vehicle (SPV), procuring project management consultant (PMC) firm, hiring human resources and then call for tenders. For cities selected in round 1 (January 2016), where 18 months have lapsed, about 51% of the projects have either been tendered or under implementation. In round 2 & 3, nearly all the cities have set up SPVs. The cities have identified 3012 projects worth Rs 1,38,984 crore for implementation. Out of which, 753 projects worth Rs 24,511.49 crore have been completed or under implementation; tendering has started for 287 projects worth Rs. 14,296 crore. (d) to (f) At the national level, MOUS/ agreement for technical assistance have been executed with DFID, United Kingdom and GIZ, Germany separately. At the state level, MOUS/ agreement for technical assistance has been executed between United States trade and development agency (USTDA) & State Governments of Andhra Pradesh, Uttar Pradesh and Rajasthan and AFD (French Development Agency) & UTS Of Chandigarh, Puducherry and state Government of Maharashtra. A credit facility agreement has recently been executed with AFD for funding of the Smart City Projects through a challenge process.
3.	Question No. 2836 13 March 2018	Inclusion of cities under Smart Cities Mission	 (a) Whether the ministry has included 30 more cities under the Smart Cities Mission and if so, the details thereof; (b) The details of fund allocated for the development of the newly added 30 smart cities in the upcoming fiscal; (c) The time by which the 30 new cities are likely to be developed as smart cities. 	 (a) & (b) Under the Smart Cities Mission, 30 more cities have been selected in June 2017 in round 3. The list of these cities is enclosed at Annexure-1. The central government provides financial support of Rs 500 crore to each selected smart city under Smart Cities Mission. An equal amount, on a matching basis, has to be provided by the State/Urban Local Body (ULB). (c) The target date of completion is given by the cities in their smart city proposals (SCPs), which are available on the mission's website (www.smartcities.gov.in)

	Question Number and Date	Subject	Question	Answer Provided by the Ministry of Housing and Urban Affairs	
4.	Question No. 1923 27 July 2017	Sports infrastructure in smart cities	 (a) Whether the government has made adequate allocation of funds to provide state-of-the-art sports arenas and recreation facilities for the youth in the smart city projects across the country; (b) If so, the details thereof; (c) Whether the experts of foreign companies will be invited for collaboration with Indian companies for construction of such facilities in the smart cities; and (d) If so, the details thereof? 	 (a) to (d) 'Sports' is a state subject. State has primary responsibility for promotion and development of sports in respective state including sports infrastructure viz. sports arenas, recreational facilities, etc However, the Ministry of Youth Affairs and Sports and the Sports Authority of India supplement the efforts of the state governments under their schemes aiming at broad-basing of sports and promotion, development and excellence in sports. As per the Mission guidelines for smart cities, one of the essential features for comprehensive development in smart cities is preserving and developing open spaces – parks, playgrounds and recreational spaces in order to enhance the quality of life of citizens, reduce the urban heat effects in areas and generally promote eco-balance. Funding and other operational aspects for development of smart cities will be regulated in accordance with the mission guidelines for smart cities. Further, a scheme called "Khelo India – national programme for development of sports" is being implemented by this ministry as a central sector scheme from the financial year 2016-17. This scheme, inter-alia, provides for creation of sports infrastructure facilities, namely, synthetic athletic track, synthetic hockey field, synthetic turf football ground, multipurpose hall, swimming pool, etc all over the country. Release of grant under this scheme is demand-driven and made against proposals received from States/UTs and other eligible entities, as given below: School, colleges and universities under central/state governments; and Sports control boards. 	
5.	Question No. 5242 5 April 2017	Smart Cities	 (a) The details of proposals/projects received by the government from various states under the smart cities scheme during the last three years and the current year, state and projectwise; (b) The number, out of them, cleared; (c) The number of proposals still pending, project and state-wise and the reasons for such pendency along with the time by which these pending proposals are likely to be cleared; (d) Whether the government has achieved the targets set under smart cities scheme and if so, the details thereof; and (e) If not, the reasons therefore and the action taken/being taken by the government in this regard? 	 (a) The selection process of smart cities is based on the idea of competitive and co-operative federalism and follows a challenge process to select cities in two stages. In stage I, all states/UTS shortlisted potential smart cities as per the allocation criteria given in the smart cities mission statement and guidelines. On this basis 98 potential smart cities were announced in August, 2015 to participate in stage II. Further, on the basis of requests received from states, 12 new potential smart cities have also been included to participate in all India competition (stage II) of the smart city challenge process. The lists are enclosed at Annexure-I and II. 97 potential smart cities in round I, 23 potential smart cities in fast track round and 63 potential smart cities in round II participated in the selection process. The details are enclosed at Annexure - III, IV & V. (b) So far, 60 cities (20 cities in round I in January, 2016, 13 cities in fast track round in May, 2016 and 27 cities in round II in September, 2016) have been selected. The lists of these cities are enclosed at Annexure - VI, VII &VIII. (c) The remaining cities will have to participate in round III with their upgraded smart city proposals. The smart city proposals for round III of the challenge have to be submitted by the cities by 31st March 2017. Thereafter, the selection of the smart cities will be announced based on evaluation of the proposals (d) Government has achieved the target as set out in the cabinet note of Smart Cities Mission. In the first year of implementation, i.e. 2015-16, 20 smart cities were selected and in the second year of implementation, i.e. 2016-17, 40 smart cities have been selected 	

	Question Number and Date	Subject	Question	Answer Provided by the Ministry of Housing and Urban Affairs
6.	Question No. 5190 5 April 2017	MOUs for smart cities	 (a) Whether the government has entered/ signed memorandum of understanding (MOU) with the state governments under smart city mission and if so, the details thereof; (b) Whether all the shortlisted cities/ states have signed the MOU and if so, the details thereof; (c) Whether there is no clear cut mechanism or regular resource transfers to urban centres in the country and if so, the details thereof; (d) The manner in which the government proposes to implement smart city mission in the absence of clear-cut mechanism; and (e) The details of the steps being taken by the government in this regard? 	 (a) No, madam. (b) Does not arise. (c) There are mechanisms for regular resources transfer to various urban local bodies in the country from central as well as state funds. This is mainly in the form of (i) grants-in-aid from state/central governments through various programmes / schemes, (ii) devolution from respective state government as well as from government of India as per recommendations of respective state finance commission or central finance commission. The resources tied up with various programmes / schemes of central government / state government and devolution from 14th central finance commission are transferred to cities through prescribed mechanism. Guidelines issued by ministry of finance regarding the grants under 14th finance commission are at Annexure – I. The quantum of grants for urban local bodies as per recommendations of 14th finance commission are at Annexure – II. (d) & (e) The smart city mission is being operated as a centrally sponsored scheme and the central government will be giving financial support to the mission to extent of Rs 48,000 crore over 5 years, i.e. on an average Rs 100 crore per city per year. An equal amount, on a matching basis, will be contributed by the State/Urban Local Body (ULB). The implementation of the Smart Cities Mission is being done by a city level Special Purpose Vehicle (SPV), a limited company incorporated under the Companies' Act, 2013 in which the State/UT and the Urban Local Body (ULB) will be the promoters having 50:50 equity shareholdings. The SPV will have to comply with all the regulatory/monitoring mechanisms set out in the companies act.
7.	Question No. 396 29 March 2017	Smart Cities Mission	 a) Whether the government proposes to issue next list of smart cities under the smart city mission and if so, the details thereof, state-wise and the time by which all the remaining cities are likely to be covered; b) Whether the implementation of the mission is going at snail's pace; c) If so, the details thereof and the reasons therefore along with the steps taken/ being taken to increase the pace; d) Whether some of the states have failed to contribute the matching shares of funds; and, e) If so, the names of such state governments and the reaction of the union government thereto? 	 (a) The smart city proposals for round 3 of the challenge have to be submitted by the cities by 31st March 2017. Thereafter, the assessment may take 2-3 months. The selection of the smart cities will be on scores obtained in the assessment. (b) No, sir. (c) Does not arise. (d) & (e) Out of 40 smart cities to which Gol grant has been released by this ministry, 18 states (32 cities) have either not released any amount of their share or released a portion there of. The 18 states are-Andaman & Nicobar Islands, Andhra Pradesh, Assam, Bihar, Chandigarh, Chhattisgarh, Delhi, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Kerala, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Telangana and Tripura using the newly designed Public Financial Management System (PFMS) tool, this Ministry regularly monitors and pursues the release of state share to smart cities.

	Question Number and Date	Subject	Question	Ans	Answer Provided by the Ministry of Housing and Urban Affairs			
8.	Question No. 1339 9 February 2017	1339 Projects in	established/proposes to establish Smart Grid projects in various cities	Ň	(a) & (b) Yes, madam, 'National Smart Grid Mission' (NSGM) has been launched by government of India in March, 2015. So far, smart grid projects for 4 cities have been sanctioned under NSGM as per details given below:			
			under national smart grid mission and if so, the details thereof;		State/City		Estimated project cost (Rs in crores)	
			(b) Whether any cities have been selected for the purpose and if so, the details		1 Amravati, Maharashtra		90.05	
			thereof, state-wise;		2 Congress Nagar (Nagpu	r), Maharashtra	139.15	
			(c) Whether the government has put in any mechanism for planning and		3 Chandigarh		28.58	
			monitoring of Smart Grid Mission		4 Kanpur, Uttar Pradesh		319.57	
			being implemented in the country and if so, the details thereof; and.(d) Whether the Smart Grid Projects	i	nplemented in the country. Th	e NSGM technical co	plan and monitor the Smart Grid projects being pmmittee and empowered committee review the projects are also conducted in the MoP.	
			would reduce power bills and if so, the details thereof?	f so, the (d) Smart Grids primarily aim to improve reliability of the electricity networks, and ma to renewable energy inputs through distributed generation. Further, increased eff grid and smart meters would empower the consumers to manage their electricity better manner, which may lead to reduction of power bills.				
9.	Question No. 1143 8 February 2017	Smart Cities Mission	 (a) The details of cities selected so far under Smart Cities Mission, statewise; (b) Whether the government has reviewed the implementation of mission and if so, the details thereof along with the progress made so far in this regard; (c) Whether all the selected cities prepared master plan and if so, the details thereof, city-wise; (d) The details of funds allocated, released and actual expenditure along with the works conducted/being conducted under the mission, city and year-wise; (e) Whether the government has reported the financial viability of mission and if so the details thereof; (f) Whether the government proposes to increase the cities under mission and if so, the details of the cities identified, state-wise and criteria for identification; and 	(a) 52 27 (b) 11 16 17 17 22 (c) T 55 55 (d) 8 26 27 27 27 27 27 27 27 27 27 27 27 27 27	etter manner, which may lead o far, 60 cities (20 cities in rou 7 cities in round 2 in Septembo- hission. The lists of these cities nplementation of the smart cities nplementation of the mission. roject Management Consultar mart city projects. he smart cities selected in rou ut of this, 23 projects have bee 736.9 crore) has started and r he Smart Cities Mission Guidel trategic action plans for area of plutions to the physical, econo- elected smart cities are availal (e) The mission is being opera roposes to give financial supp- n an average Rs 100 crore per pontributed by the State / Urbar	to reduction of power and 1 in January 201 er 2016) have been s is are enclosed at Anri ty mission is being re- es, 47 cities have inco Out of 20 smart cities of the PMCs) for design and 1 have identified the en completed (amou emaining projects are lines envisage prepara levelopments and cities of the mission wo to as a Centrally Sport to the mission to city per year. An equin 1 Local Body (ULB). and 2016-17 total Rs	6, 13 cities in fast track round in May 2016 and selected for development as smart cities under the nexure-I, II & III. eviewed on regular basis at the state and central corporated city level Special Purpose Vehicles for es selected in round 1, 16 cities have appointed hing, developing, managing and implementing the 642 projects amounting to Rs 38,020.74 crore. nting to Rs 304.97 crore), work in 65 projects (Rs re at various stages of implementation. ration of smart city proposals consisting of ty-wide (pan-city) initiative that applies smart tutional infrastructure. The smart city proposals of ebsite (www.smartcities.gov.in) ponsored Scheme (CSS) and the central government the extent of Rs 48,000 crore over five years i.e. ual amount, on a matching basis, will have to be	

	Question Number and Date	Subject	Question	Answer Provided by the Ministry of Housing and Urban Affairs
			(g) The time by which the work is likely to be completed under the mission particularly for the first 20 smart cities?	 The smart cities selected in round 1 have identified 642 projects amounting to Rs 38,020.74 crore. Out of this, 23 projects (amounting to Rs 304.97 crore) have been completed, works in 65 projects (Rs 2,736.9 crore) has started and remaining projects are at various stages of implementation. (f) The mission will cover 100 cities as proposed in the smart cities mission statement & guidelines. (g) In terms of smart cities Mission Statement & Guidelines, the duration of the smart cities mission is five years i.e. from financial year 2015-16 to financial year 2019-20. The details of projects with their timelines for the selected 20 cities are given in their smart city proposals (SCPs) which are available on the mission's website (www.smartcities.gov.in).
10.	Question No. 1075 8 February 2017	Promotion of social inclusion in Smart Cities	 (a) Whether the Government has taken any steps to promote social inclusion in the Smart Cities Mission and if so, the details thereof; (b) Whether the Government has taken into consideration people with special needs, the aged citizens and such special classes of citizens etc., to ensure accessibility in the smart cities and if so, the details thereof; and (c) Whether the Government proposes to encourage participatory innovation in the designated smart cities to enable participation of the citizens in solving their local problems and if so, the details thereof? 	 (a) & (c) Smart Cities Mission does not follow a 'one-size-fits all' approach. Each city has to formulate its own concept, vision, mission and plan for a Smart City. To promote social inclusion, co-creation in every step (ideas, strategies, innovative and frugal solutions) through an extensive consultative process with all stakeholders is mandated in the Smart Cities Mission Guidelines. The process of co-creation seen during preparation of Smart City Proposal is being continued by Smart Cities during implementation. (b) The Smart Cities Mission aims at accelerating economic growth and improving the quality of life of people. Among others, the core infrastructures elements in Smart Cities also includes affordable housing especially for poor and safety & security of citizens, particularly women, children and elderly provision of accessibility infrastructure has also been made in the Smart City Proposal prepared by Smart Cities.

B. SELECTED QUESTIONS RAISED IN THE RAJYA SABHA: 2017–2018

	Question Num- ber and Date	Subject	Question	Answer Provided by Ministry of Housing and Urban Affairs
1.	Question No. 4371 5 April 2018	Making smart cities disabled- friendly	 (a) Whether the smart cities are going to be disabled friendly and whether the infrastructure, including core and IT enabled functions, provide accessibility and digital inclusion for persons with disabilities; (b) If so, the details thereof and if not, the reasons therefore; and (c) What steps have been taken, so far, to promote the accessibility of persons with disabilities in the Smart Cities Mission in the country? 	(a) to (c) Several cities have included projects relating to accessible infrastructure for different- ly-abled in their Smart City Proposals (SCPs). All the SCPs are available on website of the Smart Cities Mission (www.smartcities.gov.in).
2.	Question No. 3085 22 March 2018	Development of Greenfield Smart Cities	 (a) The number of Greenfield Smart Cities constructed, proposed or under construction in the country along with their locations; (b) Whether Ranchi and New Raipur are proposed to be the first Greenfield Smart Cities in their States; (c) Where the work has started earlier out of these two cities; (d) Whether no new work would be undertaken in old city and new city would be developed in civic areas only; and, (e) The details of policy of Government in this regard? 	 (a) Ninety-nine cities have been selected for development as Smart Cities under Smart Cities Mission. Of which, eight cities namely New Town Kolkata, Ranchi, Aurangabad, Nashik, Rajkot, Naya Raipur, Amaravati and Satna have proposed Greenfield model of development or combination with retrofit and redevelopment model. (b) & (c) From Jharkhand, Ranchi has been selected and has proposed Greenfield model of development in its Smart City Proposal. From Chhattisgarh, three cities namely Raipur, Naya Raipur and Bilaspur have been selected for development as Smart Cities. Naya Raipur has proposed Greenfield model of development in its Smart City Proposal. From Chhattisgarh, three cities. Naya Raipur has proposed Greenfield model of development in its Smart City Proposal. In the Smart City Proposals of these cities projects to be taken up in future were proposed according to Smart Cities Mission Guidelines. (d) & (e) The Smart Cities Mission Guidelines mandate that cities are divided into Areas and developed One-by-One in order to cover the entire city over a period of time. The details of projects are given in the Smart City Proposals which are available on Mission's website (www.smartcities.gov.in).
3.	Question No. 3075 22 March 2018	Waste management under Smart Cities Mission	 (a) Whether the proposals under the Smart Cities Mission have incorporated waste management mechanisms for proper sanitation; and (b) Whether these designs ensure that they prevent manual scavenging and Government would not approve any proposals that are in contravention of the Manual Scavenging Act? 	 (a) Smart Cities Mission was launched with the objective to promote cities that provide core infrastructure including sanitation and solid waste management and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions. (b) Yes Sir, Government do not approve any proposal for construction of latrines which are in contravention of Manual Scavenging Act.

	Question Num- ber and Date	Subject	Question	Answer Provided by Ministry of Housing and Urban Affairs
4.	Question No. 2299 15 March 2018	Evaluation of proj- ects under Smart Cities Mission	 (a) The details of works undertaken in 100 smart cities projects in the country; (b) Whether any test audit of the projects has been done to evaluate the projects and if so, the details thereof; (c) If not, by when the review of these projects would be taken up for mid-course correction and better implementation; and (d) The details of amount spent, so far, on these projects and expected to be spent in future? 	 (a) Under Smart Cities Mission, Ninety-nine cities have been selected. These cities have identified 3,012 projects worth Rs. 1,38,984 crores for implementation. Out of which, 753 projects worth Rs. 24,511.49 crores have been completed or under implementation; tendering has started for 287 projects worth Rs. 14,296 crores. (b) & (c) The implementation of Smart Cities Mission is being done by a city level Special Purpose vehicle (SPV) incorporated under Companies Act, 2013. The SPV will have to comply with all the regulatory/monitoring mechanisms set out in the Company Law. Regular monitoring by Ministry of Housing and Urban Affairs is being done through Video Conference, webinar and meetings at State level along with handholding support to speed up preparation of Detailed Project Reports (DPRs), call tenders and start implementation on ground. Moreover, Monitoring Mechanism is in place to review the progress of implementation of Smart City Mission projects. At the National level, the implementation of Smart Cities Mission is being monitored by an Apex Committee headed by Secretary, Ministry of Housing and Urban Affairs. At State level, State level High Powered Steering Committee (HPSC) chaired by the Chief Secretary has been established. There is a provision under Smart Cities Mission Guidelines to establish a Smart City Advisory Forum at the city level to advise and enable collaboration among various stakeholders and it will include the District Collector, MP, MLA, Mayor, CEO of SPV, local youths, technical experts etc. (d) Under Smart Cities Mission, the Central and State / Urban Local Body share is Rs. 500 crore each per city. An amount of Rs. 9,939.20 crores has so far been released by Government of India to States for Smart Cities. The cities have identified 3,012 projects worth Rs. 1,38,984 crores for implementation. Out of which, 753 projects worth Rs. 24,511.49 crores have been completed or under implementation; tendering has started for 287 projects worth Rs. 14,296 c
5.	Question No. 2296 15 March 2018	Funds under Smart Cities Mission	(a) Whether it is a fact that the funds released by Government for the development of smart cities under Smart Cities Mission is lying idle with the State Governments.	(a) Out of 27 States (60 Smart Cities) to which the Government of India grant has been released by Ministry of Housing and Urban Affairs, 19 States (49 cities) have transferred Government of India grant fully or partially to Special Purpose Vehicles (SPVs).
6.	Question No. 2292 15 March 2018	Work under Smart Cities Mission	(a) Whether it is a fact that work is yet to start in 40 cities that were selected in September, 2016 under the Smart Cities Mission; and(b) If so, the details thereof and the reasons therefore?	 (a) & (b) The progress of the project implementation depends on the date of the selection of the Smart City. After selection, it takes around 18 months in setting up Special Purpose Vehicle (SPV), procuring Project Management Consultant (PMC) firm, hiring Human Resources, preparing Detailed Project Reports (DPRs) and then call for tenders. In September 2016, 27 cities were selected for development as Smart Cities in Round 2 of Smart Cities Mission. The implementation of the Smart Cities Mission is being done by a city level Special Purpose Vehicle (SPV). The SPVs have been incorporated by all of these cities. As reported by 27 cities selected in September 2016, 1214 projects worth Rs. 52,531 crores have been identified for implementation. Out of which, 213 projects worth Rs. 6,650.81 crores have been completed or under implementation; tendering has started for 101 projects worth Rs. 3,682.60 crores.

	Question Num- ber and Date	Subject	Question	Answer Provided by Ministry of Housing and Urban Affairs
7.	Question No. 2288 15 March 2018	Completed projects of Smart Cities Mission	 (a) Whether in 2.5 years of announcement of Smart Cities Mission only 5 per cent of projects have been finished; (b) If so, the number of cities to be taken under the projects in the country and were targeted to be completed before the financial year 2019-20; (c) Whether Government has not been able to provide promised funds since 2015-16 till date; (d) If so, the details of budget sanctioned and disbursed since then; and (e) The details of Government's plans and funds to complete the mission within the stipulated time-frame of five years? 	 (a) The progress depends on the date of the selection of the Smart City. After selection, it takes around 18 months in setting up Special Purpose Vehicle (SPV), procuring Project Management Consultant (PMC) firm, hiring Human Resources, preparing Detailed Project Reports (DPRs) and then call for tenders. For Cities selected in Round 1 (January 2016), where 18 months have lapsed, about 51% of the projects have either been tendered or under implementation. In Round 2, nearly all the cities have set up Special Purpose Vehicles (SPVs) and Project Management Consultants (PMCs). Round 3 and Round 4 cities have recently been selected and are in the process of establishing SPVs and procuring PMCs. The progress is as planned. As reported by cities, 3012 projects worth Rs. 1,38,984 crores have been identified for implementation. Out of which, 753 projects worth Rs. 24,511.49 crores have been completed or under implementation; tendering has started for 287 projects worth Rs. 14,296 crores. (b) So far, ninety-nine Smart Cities have been selected for development as Smart Cities. The target date of completion is given by the cities in their Smart City Proposals (SCPs), which are available on the Mission's website (www.smartcities.gov.in). (c) & (d) Under Smart Cities Mission, the Central and State / Urban Local Body share is Rs 500 crore each per city. An amount of Rs. 9,939.20 crores has so far been released by Government of India to States for Smart Cities. (e) The duration of the Smart Cities Mission is five years i.e. from Financial Year 2015-16 to Financial Year 2019-20. The Mission may be continued thereafter in the light of an evaluation to be done by this Ministry and incorporating the learnings into the Mission. The target date of completion is given by the cities in their Smart City Proposals (SCPs), which are available on the Mission's website (www.smartcities.gov.in).
8.	Question No. 2270 15 March 2018	Smart cities in North-eastern States	 (a) Whether it is a fact that almost 80 per cent cities having all modern facilities are proposed to be developed as smart cities; (b) the number of smart cities proposed to be developed and upgraded in the North-Eastern States; and (c) The present status of smart cities of North-Eastern Region and the amount spent on development of smart cities till date? 	 (a) The selection process of Smart Cities is based on the idea of Competitive and Co-operative Federalism and follows a challenge process to select cities in two stages. In the first stage, cities have been shortlisted by the States themselves through intra state competition for participation in Stage 2 i.e. All India Competition. The criteria for selection are given in the Smart City Proposal format and is available on Mission's website (www.smartcities.gov.in). (b) Under the Smart Cities Mission (SCM), nine cities from the North-Eastern Region have been selected in four Rounds. Guwahati in Assam was selected in Round 1 in January 2016; Agartala in Tripura and Imphal in Manipur were selected in fast track round in May 2016; Kohima in Nagaland and Namchi in Sikkim were selected in the Round 2 in September 2016; Aizawl in Mizoram, Gangtok in Sikkim, and Pasighat in Arunachal Pradesh were selected in Round 4 in January 2018. (c) Guwahati, Agartala, Imphal, Kohima, Namchi, Pasighat and Gangtok have incorporated Special Purpose Vehicles (SPVs) for implementation of Mission at city level. The remaining cities are in the process of incorporation of SPVs. Project Management Consultants (PMCs) have been engaged in Guwahati, Namchi and Agartala for projectivization of projects. Since the launch of the Mission and till date, Rs. 731 crores has been released by Government of India to State Governments for Smart Cities.

	Question Num- ber and Date	Subject	Question	Answer Provided by Ministry of Housing and Urban Affairs
9.	Question No. 1475 8 March 2018	Achievement of Smart Cities Mission	 (a) Whether, as per the ambitious Smart Cities Mission statement and guidelines, the duration of the entire Mission would be five years i.e. 2015-16 to 2019-20; (b) Whether only 5.2 per cent of the total identified projects under the Mission has been completed in a matter of 2 years utilising a meagre 1.4 per cent of the total envisaged investment of Rs. 1,35,598 crore; and (c) in what manner Government proposes to complete the rest 94.8 per cent projects utilising the 98.6 per cent of investment during the remaining three years of the Mission? 	 (a) The duration of the Smart Cities Mission is five years i.e. from Financial Year 2015-16 to Financial Year 2019-20. The Mission may be continued thereafter in the light of an evaluation to be done by this Ministry and incorporating the learnings into the Mission. (b) & (c) Ninety-nine Smart Cities were selected in four Rounds. These cities have planned investment of Rs 2,03,979 crores. The Smart Cities Mission (SCM) is not business-as-usual Mission and projects have a strong qualitative element. It takes around 15-18 months from the date of selection of a Smart city to call tenders. The progress of implementation depends on the Round of selection. As reported by the cities, 753 projects worth Rs. 24,511.49 crores have been completed or under implementation. The implementation of the Smart Cities Mission is being done by a city level Special Purpose Vehicle (SPV). Regular monitoring by this Ministry is being done through Video Conference, webinar and meetings at State level along with handholding support to speed up preparation of Detailed Project Reports (DPRs), calling tenders and implementation on ground.
10.	Question No. 1465 8 March 2018	Allocations of funds under Smart Cities Mission	 (a) Whether it is a fact that a major part of the allocations made under the Smart Cities Mission have remained under-utilised; (b) If so, the amount allocated to each city under the Mission and the amount spent by each city; and (c) The steps taken to ensure faster implementation of the projects under the Mission? 	 (a) & (b) Utilization of the fund depends on the date of the selection of the Smart City. After selection it takes around 15-18 months to call for tenders. For Cities selected in Round 1 (January 2016), where 18 months have lapsed, about 51% of the projects are either have been tendered or under implementation. In Round 2, nearly all the cities have set up Special Purpose Vehicles (SPVs) and Project Management Consultants (PMCs). Round 3 and Round 4 cities have recently been selected and are in the process of establishing SPVs and procuring PMCs. The progress is as planned. As reported by cities, 3012 projects worth Rs. 1,38,984 crores have been identified for implementation. Out of which, 753 projects worth Rs. 24,511.49 crores have been completed or under implementation; tendering has started for 287 projects worth Rs. 14,296 crores. (c) The implementation of the Smart Cities Mission is being done by a city level Special Purpose Vehicle (SPV). Regular monitoring by this Ministry is being done through Video Conference, webinar and meetings at State level along with handholding support to speed up preparation of Detailed Project Reports (DPRs), call tenders and start implementation on ground.
11.	Question No. 1464 8 March 2018	Present Status of Smart Cities	(a) The details of the present status of 100 Smart Cities including Delhi; and(b) The target set to complete the announced projects under the Smart Cities Mission?	 (a) 99 Smart Cities including New Delhi Municipal Council (NDMC) have been selected. (b) The target date of completion is given by the cities in their Smart City Proposals (SCPs), which are available on the Mission's website (www.smartcities.gov.in).

	Question Num- ber and Date	Subject	Question	Answer Provided by Ministry of Housing and Urban Affairs
12.	Question No. 695 8 February 2018	Funds for Smart Cities Mission	 (a) The details of funds allocated by the Central Government for each city selected under the Smart Cities Mission, so far; (b) The details of funds raised by each smart city independently and the means through which it was raised; (c) The details of physical infrastructure and facilities created, so far, under the Mission by each smart city; and (d) Why the Mission has not included a universal design for infrastructure, for all smart cities to make them accessible and disabled friendly? 	 (a) The Central Government provides financial support of Rs. 500 crores to each selected Smart City. An equal amount, on a matching basis, has to be provided by the State/Urban Local Body (ULB). (b) In the 99 Smart Cities selected, projects costing total of Rs. 2,03,979 crores is proposed. Out of these the contribution of State and Centre is 45%, convergence projects are 21%, PPP projects are 21%, projects through loans are 5%, projects from own sources are 2% and from other sources are 7%. (c) Under the Smart Cities Mission work is ongoing or completed for 716 projects worth Rs. 21,873 crores. (d) The objective of the Smart Cities Mission (SCM) is to improve the quality of life of citizens living in cities in an inclusive way. Hence it is imperative that all projects taken up under the Area Based Development and Pan city Smart Solutions should be disabled friendly.
13.	Question No. 678 8 February 2018	Identification of 90 Smart cities	 (a) Whether it is a fact that only 5.2 per cent of the total identified projects have been completed with just 1.4 per cent of the total envisaged investment of Rs. 1,35, 958 crore; (b) If so, the details thereof; (c) Whether it is also a fact that 90 smart cities have identified 2,864 projects; (d) Of these 148 projects worth Rs. 1,872 crore have been completed; and (e) If so, the details thereof? 	 (a) to (e): Ninety-nine Smart Cities were selected in four Rounds. These cities have planned investment of Rs 2,03,979 crores. The Smart Cities Mission (SCM) is not business-as-usual Mission and projects have a strong qualitative element. It takes around 15-18 months from the date of selection of a Smart city to call tenders. The progress of implementation depends on the Round of selection. 2997 projects worth Rs 1,38,175 crores have been identified for implementation by the cities. 220 projects worth Rs. 3,112.93 crore have been completed and work has started for 496 projects worth Rs. 18,760.92 crore, which are at different stages of completion.
14.	Question No. 677 8 February 2018	Funds under Smart Cities Mission	 (a) Whether it is a fact that 27 cities which have been chosen under Smart Cities Mission have not issued a single tender for works to be carried out under the mission; (b) If so, the details thereof; (c) Whether it is also a fact that Government has released so far a sum of Rs. 9718.20 crore under the Mission programme to various States; and (d) If so, the breakup thereof, State-wise? 	 (a) & (b) Twenty-seven Smart Cities were selected in Round 2 (September 2016). Out of these, twenty four cities namely, Kalyan-Dombivali, Ujjain, Tirupati, Nagpur, Mangaluru, Vellore, Thane, Gwalior, Agra, Nashik, Rourkela, Kanpur, Madurai, Tumakuru, Kota, Thanjavur, Namchi, Shivamogga, Salem, Ajmer, Varanasi, Hubballi-Dharwad, Aurangabad & Vadodara, have issued tenders. (c) & (d) The Central Government has released Rs. 9,939.20 crores to States for Smart Cities under the Smart Cities Mission. The State wise details are at Annexure-I.

	Question Num- ber and Date	Subject	Question	Answer Provided by Ministry of Housing and Urban Affairs
15.	Question No. 676 8 February 2018	Investment under Smart Cities Mission	 (a) Whether it is a fact that work on 407 projects accounting for about 14 per cent of the total investment envisaged under the Smart Cities Mission has started; (b) Whether it is also a fact that about 72 per cent of the indentified projects are still at the stage of preparation of detailed project reports; (c) Whether out of 90 cities that have been approved under the Smart Cities Mission, only 31 have completed; and (d) If so, the details thereof? 	 (a) Ninety-nine Smart Cities were selected in four Rounds on the basis of a competition. These cities have planned investment of Rs. 2,03,979 crores. The Smart Cities Mission (SCM) is not business-as-usual Mission and projects have a strong qualitative element. It takes around 15-18 months from the date of selection of a Smart city to call tenders. The progress of implementation [including preparation of Detailed Project Report (DPR)] depends on the Round of selection. 2997 projects worth Rs 1,38,175 crores have been identified for implementation by the cities. Work is ongoing or completed for 716 projects worth Rs. 21,873 crores. (b) For Cities selected in Round 1 (January 2016) where 18 months have lapsed, about 49% of the projects are in DPR stage. In Round 2, nearly all the cities have set up Special Purpose Vehicles (SPVs) and Project Management Consultants (PMCs). Round 3 and Round 4 cities have recently been selected and are in the process of establishing SPVs and procuring PMCs. The progress is as planned as it takes around 15-18 months to call for tenders from the date of selection of a city as Smart City. (c) & (d) Thirty-eight cities out of sixty cities selected in Rounds 1 and 2 have completed at least one project. The total number of projects completed by these 38 cities is 219.
16.	Question No. 674 8 February 2018	Status of Smart Cities Mission	 (a) The names of towns included under the Smart Cities Mission and the funds released therefore, so far, State-wise; (b) Whether most of the funds released under the Mission has not been spent and due to this the Mission is far behind its targeted success; and (c) If so, the reasons for non-utilization of funds? 	 (a) Ninety-nine Smart Cities have so far been selected. The Central Government has released Rs. 9939.20 crores to States for Smart Cities. State-wise details is at Annexure-I. (b) & (c) The progress of implementation depends on the Round of selection as it takes around 15-18 months from the date of selection of a Smart city to call tenders. 2997 projects worth Rs 1,38,175 crores have been identified for implementation by the cities. Work is ongoing or completed for 716 projects worth Rs. 21,873 crores.
17.	Question No. 1168 28 December 2017	User charges for smart cities	 Will the Minister of Housing and Urban Affairs be pleased to state: (a) Whether Government is planning to impose higher taxes or user charges for smart cities; (b) If so, the details thereof and the reasons therefore; and (c) Whether citizens are already saddled with different kind of cesses and if so, what is Government's plan to ensure that these smart cities are made affordable for all? 	(a) to (c) User Charges, Municipal taxes, Municipal levies etc. are State subjects. It is for the State Governments and Urban Local Body to take appropriate decisions in this regard.
18.	Question No. 1163 28 December 2017	Jobs under Smart Cities Mission	 Will the Minister of Housing and Urban Affairs be pleased to state: (a) the details regarding the number of young individuals trained and total number of jobs created by Government by creation of smart cities in Country, State-wise? 	The training requirement and skill development under the Smart Cities Mission, is being addressed through the convergence with various Schemes/ programmes of other Departments/ Ministries. As per reports available, 10,15,039 and 9,54,603 persons have been trained and 3,17,935 and 2,45,880 candidates have been placed (including smart cities) under the Deendayal Antyodaya Yojana (DAY) - National Urban Livelihoods Mission (NULM) and Pradhan Mantri Kaushal Vikas Yojana (PMKVY) respectively. The State-wise and Scheme-wise list is at Annexure-I and II

	Question Num- ber and Date	Subject	Question	Answer Provided by Ministry of Housing and Urban Affairs
19.	Question No. 1162 28 December 2017	Diversion of funds meant for smart cities	 Will the Minister of Housing and Urban Affairs be pleased to state: (a) The details regarding the number of smart cities developed in the country out of the 100 smart cities announced by Government during the last three years; (b) How much fund has been released and utilised under the Smart Cities Mission; and (c) Whether the funds have been diverted for some other causes and if so, the details thereof? 	 (a) Ninety Smart Cities (twenty cities in January 2016 in Round 1, thirteen cities in May 2016 in fast track round, twenty seven cities in September 2016 in Round 2 and thirty cities in June 2017 in Round 3) have so far been selected. The implementation of the Smart Cities Mission is being done by a City level Special Purpose Vehicle (SPV). So far, out of Ninety Smart Cities, Seventy seven cities have incorporated city level Special Purpose Vehicles for implementation of the Mission. Presently, Cities have, identified 2,864 projects worth Rs.1,35,958 crores. Out of which, 148 projects worth Rs.1,872 crores have been completed; work is underway for 407 projects worth Rs.15,600 crores; tendering has started for 237 projects worth Rs. 13,514 crores, DPRs have been approved for 47 projects worth Rs. 2,712 crores and DPRs are being prepared for 2,025 projects worth Rs.1,02,260 crores. (b) Subsequent to the selection and setting up of Special Purpose Vehicle (SPV), Government of India (GoI) grant of Rs 9,863.20 crores has been released to sixty Smart Cities through respective State Governments out of which an amount of Rs. 644.77 crores has been utilised by these cities. (c) No, Sir.
20.	Question No. 1329 27 July 2017	Expenditure on smart cities	 Will the Minister of Housing and Urban Affairs be pleased to state: (a) The details of amount spent on construction / renovation / infrastructure of the sixty smart cities in the country after their announcement on the basis of the prescribed norms out of the Rs. 4.13 lakh crore allocated for the same; and (b) The details of total amount spent on the smart cities, smart-city-wise? 	 (a) & (b) The total proposed investment by the sixty Smart Cities under their smart city proposals is Rs. 1,33,368.50 crore. In terms of Smart Cities Mission Statement & Guidelines, the Central Government will provide financial support of Rs. 500 crore to each selected Smart City. An equal amount, on a matching basis, will have to be provided by State Governments/ Urban Local Bodies. The balance funds as required by the city in terms of their Smart City Proposal are expected to be mobilized from other sources which includes convergence with other Missions. Since the launch of the Mission (25.06.2015) and till date, total of Rs. 9,640.20 crore has been released by Government of India for the first sixty Smart Cities. The city wise details are at Annexure-I. So far, these cities have identified 2,313 projects worth Rs. 96,336 crore which are in various stages of implementation. The details of completed projects are at Annexure-II.
21.	Question No. 1311 27 July 2017	Beneficiaries under Smart Cities Mission	 Will the Minister of Housing and Urban Affairs be pleased to state: (a) With regard to the Area Based Development (ABD) under the Smart Cities Mission, what is the estimated number of residents or population of the respective cities who are expected to be benefited under these projects; (b) The percentage of population of cities they would represent and the socio-economic status of residents of this section of the cities; (c) The per capita GDP of this section of the cities; and (d) The estimated per person expenditure for this project, city-wise? 	 (a) Total population in the Area Based Development (ABD) area of 90 cities is 99,26,317. This is 9.4% of the total population of 90 cities. It needs to be mentioned that the projects in the ABD areas are expected to have much wider benefit for the city as a whole and not just to the ABD area. A substantial proportion of the investments planned under the Mission will also provide city-wide benefits. (b) The details are given in column 5 of the Annexure attached. (c) The per capita GDP data at city level is not maintained by the Government. (d) The details are given in column 6 of the Annexure attached.

	Question Num- ber and Date	Subject	Question	Answer Provided by Ministry of Housing and Urban Affairs
22.	Question No. 1306 27 July 2017	Funding and investment pattern for Smart Cities	 Will the Minister of Housing and Urban Affairs be pleased to state: (a) Whether, under the Smart Cities Mission, 80 per cent of the total funds, i.e. Rs. 1.31 lakh crore, would go into less than 3 per cent, 246 sq km of the total 9,065 sq km area of the mission cities; (b) If so, the details thereof; and (c) If not, what are the funding and investment pattern for the Smart Cities Mission? 	 (a) to (c) The Smart Cities Mission has adopted a three-pronged strategy focusing on creating city-wide core infrastructure through convergence, applying Smart Solutions across such core services to improve service delivery, and developing area-level models for improving aspects such as street design, walkability, public spaces, heritage conservation, preservation of ecological assets etc. Thus, a substantial proportion of the investments planned will provide city-wide benefits. Of a total investment of Rs. 1.95 lakh crore proposed by 90 selected cities, about Rs. 40,000 crore is earmarked for creating city-wide core infrastructure through convergence. Additionally, the ICT-enabled Smart Solutions, with an aggregate investment of about Rs. 37,000 crore will also have a pan city impact. Besides, the area taken up for development in each city varies with the size of the city, population and geographical spread. In many cities, proportion of population in the area covered under Area Based Development (ABD), is much higher compared to the proportion of area under ABD.
23.	Question No. 530 20 July 2017	Area Based Development under Smart Cities Mission	 Will the Minister of Housing And Urban Affairs be pleased to state: (a) With regard to Area Based Development (ABD) under Smart Cities Mission, what is the estimated number of people who are expected to benefit from these projects, city-wise; (b) What is the current population density in the areas under these projects and what is the expected population density after the project is completed, particularly in Ludhiana and Visakhapatnam; (c) Whether utility tariffs would be revised in the project areas and if so, what would be estimated rate of revision; and (d) Whether Government has any alternative plan to accommodate those people who would be displaced and if so, the details thereof? 	 (a) Total population in the Area Based Development (ABD) area of 90 cities is 66,13,129. This is 9.04% of the total population (7, 31,53,153) of the 90 cities. It needs to be mentioned that the projects in the ABD areas are expected to have much wider benefit for the city as a whole and not just to the ABD areas. A substantial proportion of the investments planned under the Mission will provide city-wide benefits. (b) Ludhiana city population density is 101.8 persons per hectare and Ludhiana ABD area population density is 109.5 persons per hectare. Vishakhapatnam city population density is 33.6 persons per hectare and Vishakhapatnam ABD area population density is 119.8 persons per hectare. The future population density of these cities would depend on a number of factors including implementation of various urban missions. (c) Water Utility, Electricity Utility etc. are State subjects. It is for the State Governments to decide revision of rates of Utility tariffs. (d) Most of the Smart City Proposals envisage retrofitting as area based development strategy. All redevelopment projects also envisage in-situ rehabilitation of existing population. However, in affected cases, it is for the State Government to decide the issue of displacement of people as per their State laws.

	Question Num- ber and Date	Subject	Question	Answer Provided by Ministry of Housing and Urban Affairs
24.	Question No. 3979 6 April 2017	Infrastructure for disabled in Smart Cities	 Will the Minister of Urban Development be pleased to state: (a) The details regarding the number of smart cities identified till date and their status of completion, State-wise; (b) Whether Government has taken into consideration the people with special needs, disabilities, senior citizens, etc., to develop requisite accessible infrastructure in Smart Cities; and (c) If so, the details thereof and if not, the reasons therefore? 	 (a) So far, 60 cities (20 cities in Round 1 in January, 2016, 13 cities in fast track round in May, 2016 and 27 cities in Round 2 in September, 2016) have been selected for development into Smart Cities. The lists of these cities are enclosed at Annexure-I, II & III. The implementation of the Smart Cities Mission is on course. At the city level, it is done through a Special Purpose Vehicle (SPV). Out of 60 Smart Cities, 58 cities except Mangaluru and New Town Kolkata have incorporated city level Special Purpose Vehicles. 20 cities selected in Round 1, have identified 702 projects amounting to Rs.41,395.05 crore, out of which, 28 projects (worth Rs.391 crore) have been completed, works in 75 Projects (worth Rs.4,474.18 crore) have started, RfPs for 96 projects (worth Rs.6824 crore) have been issued and remaining 503 projects (worth Rs.29705.90 crore) are at pre-tendering stage or feasibility stage. (b) & (c) The basic purpose of Smart Cities Mission is to drive economic growth and improve the quality of life of people. Among others, the core infrastructures elements in Smart Cities also include affordable housing especially for poor, safety & security of citizens, particularly women, children and elderly. Provision for accessibility infrastructure has been made in many Smart City Proposals prepared by Smart Cities.

ANNEXURE IV: Sustainable Development Goals, Targets, and Indicators Relevant for India's Smart Cities Mission

Relevant Sustainable Development Goal (SDG)	Relevant SDG Targets	Relevant SDG Indicators Applicable to the Smart Cities Mission
Goal 1. End poverty in all its forms everywhere	1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)
	1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
	1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable	1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable
	1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to	1.4.1 Proportion of population living in households with access to basic services
	basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	1.4.2 Proportion of total adult population with secure tenure rights to land, (<i>a</i>) with legally recognized documentation, and (<i>b</i>) who perceive their rights to land as secure, by sex and type of tenure
	1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least	1.a.1 Proportion of domestically generated resources allocated by the government directly to poverty reduction programmes
	developed countries, to implement programmes and policies to end poverty in all its dimensions	1.a.2 Proportion of total government spending on essential services (education, health and social protection)
	1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication action	1.b.1 Proportion of government recurrent and capital spending to sectors that disproportionately benefit women, the poor and vulnerable groups
Goal 2. End hunger, achieve food security	2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious	2.1.1 Prevalence of undernourishment
and improved nutrition and promote sustainable agriculture	and sufficient food all year round	2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)
Goal 3. Ensure healthy lives and promote well- being for all at all ages	3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	3.8.1 Coverage of essential health services
	3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases	3.b.3 Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis

Relevant Sustainable Development Goal (SDG)	Relevant SDG Targets	Relevant SDG Indicators Applicable to the Smart Cities Mission
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning	4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	4.1.1 Proportion of children and young people (<i>a</i>) in grades 2/3; (<i>b</i>) at the end of primary; and (<i>c</i>) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex
opportunities for all	4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex
	4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill
	4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations	4.5.1 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated
	4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all	4.a.1 Proportion of schools with access to (<i>a</i>) electricity; (<i>b</i>) the Internet for pedagogical purposes; (<i>c</i>) computers for pedagogical purposes; (<i>d</i>) adapted infrastructure and materials for students with disabilities; (<i>e</i>) basic drinking water; (<i>f</i>) single-sex basic sanitation facilities; and (<i>g</i>) basic handwashing facilities (as per the WASH indicator definitions)
Goal 5. Achieve gender equality and empower all	5.1 End all forms of discrimination against all women and girls everywhere	5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex
women and girls	5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age
	5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	5.5.1 Proportion of seats held by women in (<i>a</i>) national parliaments and (<i>b</i>) local governments
	5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	5.a.2 Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control
Goal 6. Ensure	6.1 By 2030, achieve universal and equitable access to safe and affordable	6.1.1 Proportion of population using safely managed drinking water services
availability and sustainable management of water and sanitation	drinking water for all	6.1.2 Proportion of population using (<i>a</i>) safely managed sanitation services and (<i>b</i>) a hand-washing facility with soap and water
for all	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Proportion of population using (<i>a</i>) safely managed sanitation services and (<i>b</i>) a hand-washing facility with soap and water
	6.b Support and strengthen the participation of local communities in improving water and sanitation management	6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management

Relevant Sustainable Development Goal (SDG)	Relevant SDG Targets	Relevant SDG Indicators Applicable to the Smart Cities Mission
Goal 7. Ensure access to affordable, reliable,	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	7.1.1 Proportion of population with access to electricity
sustainable and modern energy for all		7.1.2 Proportion of population with primary reliance on clean fuels and technology
	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	7.2.1 Renewable energy share in the total final energy consumption
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment	8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	8.3.1 Proportion of informal employment in non-agriculture employment, by sex
and decent work for all	8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities,	8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities
	and equal pay for work of equal value	8.5.2 Unemployment rate, by sex, age and persons with disabilities
	8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training	8.3.1 Proportion of informal employment in non-agriculture employment, by sex
	8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	8.8.2 Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status
Goal 9. Build resilient infrastructure, promote inclusive and sustainable	9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	9.1.2 Passenger and freight volumes, by mode of transport
industrialization and foster innovation	9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020	9.c.1 Proportion of population covered by a mobile network, by technology
Goal 10. Reduce inequality within and among countries	10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average	10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population
	10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status	10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities
	10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	10.3.1 Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law
	10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality	10.4.1 Labour share of GDP, comprising wages and social protection transfers
	10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies	

Relevant Sustainable Development Goal (SDG)	Relevant SDG Targets	Relevant SDG Indicators Applicable to the Smart Cities Mission
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing
	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities
	11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	11.3.1 Ratio of land consumption rate to population growth rate
	11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	11.4.1 Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage
	11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	11.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
		11.5.2 Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters
	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities
		11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)
	11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities
		11.7.2 Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months
	11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	11.a.1 Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by size of city
	11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels	11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030
		11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies
	11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials	11.c.1 Proportion of financial support to the least developed countries that is allocated to the construction and retrofitting of sustainable, resilient and resource-efficient buildings utilizing local materials

Relevant Sustainable Development Goal (SDG)	Relevant SDG Targets	Relevant SDG Indicators Applicable to the Smart Cities Mission
Goal 12. Ensure sustainable consumption and production patterns	12.2 By 2030, achieve the sustainable management and efficient use of natural resources	12.2.1 Material footprint, material footprint per capita, and material footprint per GDP
	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	12.5.1 National recycling rate, tons of material recycled
	12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	12.6.1 Number of companies publishing sustainability reports
	12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (<i>a</i>) national education policies; (<i>b</i>) curricula; (<i>c</i>) teacher education; and (<i>d</i>) student assessment
Goal 13. Take urgent action to combat climate change and its impact	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
		13.1.2 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030
	13.2 Integrate climate change measures into national policies, strategies and planning	13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	16.1 Significantly reduce all forms of violence and related death rates everywhere	16.1.3 Proportion of population subjected to (a) physical violence, (b) psychological violence and (c) sexual violence in the previous 12 months
		16.1.4 Proportion of population that feel safe walking alone around the area they live
	16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children	16.2.2 Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation
	16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all	16.3.1 Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms
	16.6 Develop effective, accountable and transparent institutions at all levels	16.6.1 Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar)
		16.6.2 Proportion of population satisfied with their last experience of public services
	16.7 Ensure responsive, inclusive, participatory and representative decision- making at all levels	16.7.2 Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group

For more information on the Sustainable Development Goals, Targets, and Indicators, see: https://sustainabledevelopment.un.org/sdgs

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Housing and Land Rights Network (HLRN)—based in New Delhi, India—works for the recognition, defence, promotion, and realization of the human rights to adequate housing and land, which involves gaining a safe and secure place for all individuals and communities, especially the most marginalized, to live in peace and dignity. A particular focus of HLRN's work is on promoting and protecting the equal rights of women to adequate housing, land, property, and inheritance. Housing and Land Rights Network aims to achieve its goals through advocacy, research, human rights education, and outreach and network-building — at local, national, and international levels.

In June 2015, the Government of India launched the ambitious **Smart Cities Mission**, which aims at developing 100 'smart cities' in the country. Given the scope of the Mission, the large amounts of proposed funding, and its implications on urban development in India, Housing and Land Rights Network has been monitoring the Mission with a human rights lens. This included reviews of the process as well as of the selected Smart City Proposals and their implementation. The focus of HLRN's work on the Smart Cities Mission has been to assess to what extent the Mission has achieved the realization of the human rights of the most marginalized.

As the Smart Cities Mission completes three years in June 2018, HLRN has published this updated report to share major findings of its analysis, highlight important developments, raise human rights concerns related to the Mission, and propose recommendations to the Government of India and other involved agencies and actors, with the aim of ensuring a more inclusive, integrated, equitable, and sustainable paradigm of urban and rural development in the country.



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