Sustainable Urbanisation in India and Delhi: Challenges and Way Forward

Debolina KUNDU and Arvind PANDEY

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Summary

The goal of *making cities safe, inclusive, resilient, and sustainable* (SDG 11) firmly places urbanisation at the forefront of the national development policy discourse. India has been making comprehensive efforts in this direction. While the Ministry of Housing and Urban Affairs (MoHUA) in India has been consistently making efforts to achieve SDG 11 through various developmental programmes, it is imperative for the cities to play an important role in localising SDG 11. Indian cities are plagued by congestion, pollution, climate change, food insecurity and urban sprawl, which are the manifestations of messy and haphazard urbanisation. Given the above context, this background paper attempts to understand a) how the goals of SDG 11 are being operationalised in India, b) the current status of the different targets of SDG 11 in India and Delhi, c) the challenges to achieve these targets and d) the way forward. Since urban development in India is a state subject, achieving the targets under SDG 11 depends on proper implementation and monitoring of programmes by city governments and state agencies. The progress made towards SDG 11 in the country and Delhi has been moderate. Cities in India face diverse challenges which are slowing the pace of achievement of SDG 11. The majority of these challenges are structural and need interventions from the state governments. Some of the major challenges common to both India and Delhi are limited efforts to localise SDGs, weak governance structure and financial situation of city governments, multiplicity of governance agencies and lack of robust and timely data at granular level. Until now, India has adopted a top-down approach to design, implement and monitor SDG 11 involving national and state governments. To achieve SDG 11, a bottom-up approach is required along with a robust SDG localisation process involving local governments.

About this background paper

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Disclaimer

The main author, Prof Debolina KUNDU, is Professor at the National Institute of Urban Affairs, New Delhi, India. The co-author, Dr Arvind PANDEY, is Assistant Professor at the Tata Institute of Social Sciences, Hyberabad, India. The views and opinions expressed in this article are the authors' own and do not reflect the views of the Asia-Europe Foundation (ASEF) nor the view of the Hanns Seidel Foundation (HSF).

List of Abbreviations

AMRUT- Atal Mission for Rejuvenation and Urban Transformation

ARC- Administrative Reform Commission

CAA- Constitutional Amendment Act

GDP- Gross Domestic Products

GIS- Geographic Information System

GoI- Government of India

MCD- Municipal Corporation of Delhi

MDGs- Millennium Development Goals

MoHUA- Ministry of Housing and Urban Affairs

MoSPI- Ministry of Statistics and Programme Implementation

NCT of Delhi- National Capital Territory of Delhi

NDMC- New Delhi Municipal Corporation

NIF- National Indicator Framework

NITI Aayog- National Institution for Transforming India

NULM- National Urban Livelihood Mission

RWAs- Resident Welfare Associations

SBM- Swachh Bharat Mission (Clean India Mission)

SDGs- Sustainable Development Goals

UA- Urban Agglomeration

ULBs- Urban Local Bodies

USD- United States Dollar

WDCs- Ward Development Committees

1. Background

The Sustainable Development Goals (SDGs) especially the goal of *making cities safe, inclusive, resilient, and sustainable* (SDG 11) firmly places urbanisation at the forefront of the national development policy discourse. India has been making comprehensive efforts in this direction. While the Ministry of Housing and Urban Affairs (MoHUA) in India, through its various developmental programmes, has been consistently making efforts to align its initiatives to achieve the SDGs, it is imperative for the cities to play an important role in localising SDGs.

India, the second most populous country in the world, accounts for 11 per cent of the total global urban population housing 461 million people in cities and towns in 2018 (UNDESA, 2019). In 2011, there were 7,933 cities and towns in India comprising 4,041 statutory cities/towns recognised by state governments and 3,892 census towns which met the census criteria of 'urban', but governed by rural panchayats[1] (Census, 2011). These figures are significant both because of their demographic weight and the dynamics of urbanisation (Kundu, 2014). The sheer size of urban population poses several challenges to civic infrastructure and public services. The high share of urban population coupled with low investments in urban development have resulted in a poor level of urban infrastructure in the country (Kundu & Pandey, 2021). Despite being an early achiever in several Millennium Development Goals (MDGs), India is still struggling to achieve progress in provisioning of water and sanitation, particularly in small and medium size cities and towns (Kundu, 2016). Cities are also plagued by congestion, pollution, climate change, food insecurity and urban sprawls, commonly the manifestations of messy and haphazard urbanisation (Ellis & Roberts, 2016).

Delhi, the national capital of the country with a population of 16.35 million, is the second largest urban agglomeration (UA) in the country. Delhi UA has grown by over 4.0 per cent per annum in every decade since 1931, unlike any other metropolis in India. However, during the decade 2001-2011, the annual growth rate of population declined to 2.39 per cent. The demographic growth has been extremely uneven in space (Kundu, 2015). The core of Delhi UA (New Delhi and Central Delhi) was fully urbanised with a negative growth during the previous decade. In contrast, the peripheral districts experienced higher growth rates which have absorbed a substantial proportion of the migrants (Kundu, 2015; Kundu, Pandey & Sharma, 2019).

In the last two decades, the importance of sustainable urbanisation has been globally recognised through several globally agreed agendas like the Millennium Development Goals (MDGs) in 2000 and the Sustainable Development Goals (SDGs) in 2015. Drawing lessons from the shortcomings and limited success of the MDGs in addressing urban challenges, the United Nations adopted a specific Goal (SDG 11) to "make cities and human settlements inclusive, safe, resilient and sustainable" which includes 11 targets.

[1] In India, urban development is a state subject. Urban centres are defined by a) administrative criteria adopted by state governments (cities/towns notified by state governments are known as 'statutory towns') and b) Census criteria adopted by the Registrar General of India (RGI), whereby 'villages' are designated as census towns if they meet 3 criteria: a) at least 5000 people, b) at least 75 % of the main male working population engaged in non-agricultural pursuits and c) a density of at least 400 persons/sq.km. These census towns, although urban by definition, are rural by governance and governed by rural local bodies known as 'panchayats'.

Each of these targets has globally standardised indicators. The adoption of a standalone SDG for sustainable urbanisation is a result of a successful campaign by UN-Habitat, Cities Alliance and Local Governments for Sustainability, among other stakeholders (Klopp and Petretta, 2016). In India, the commitment towards the SDGs is reflected in the importance given to inclusivity in the agenda of national development. The Ministry of Housing and Urban Affairs (MoHUA) is mapping its programmatic interventions like the Smart City Mission, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Clean India Mission (SBM Urban), Housing for All (Urban) and National Urban Livelihood Mission (NULM), etc. with SDG 11. These programmes, if achieved successfully, would help Indian cities to achieve SDG 11. Given the above context, this background paper attempts to understand a) how SDG 11 is being operationalised in India, b) the current status of the different targets of SDG 11 in India and Delhi, c) the challenges to achieve these targets and d) the way forward.

2. Institutional architecture for SDG 11

India has recognised that the SDG framework is essential for addressing the challenges of sustainable development, which is only possible through collaborative actions and building consensus among different stakeholders. The NITI Aayog (National Institution for Transforming India), a policy think tank of the government, has been designated for coordination and monitoring of the SDGs (NITI Aayog, 2020). It has mapped ministries responsible for achieving the targets under different SDGs including SDG 11 and the policies/schemes/programmes run by these ministries to achieve the targets. Table-3 (see Annexures) provides the details of this mapping exercise with respect to SDG 11. The Ministry of Housing and Urban Affairs is linking existing urban development programmes and Missions to achieve SDG 11 targets.

Since urban development in India is a state subject, the state government notifies the urban local bodies (city governments) and formulates legislations related to urban development (Kundu & Pandey, 2021). Therefore, achieving the targets under SDG 11 depends on proper implementation and monitoring of programmes by city governments and parastatal agencies, special purpose vehicles and other departments at the state and city levels. States/UTs have identified and tasked nodal departments for planning, financing and implementation of SDGs. They have formed working groups for each SDG and high-level committees have been established by several states to provide guidance and put in place mechanisms to achieve SDGs such as the creation of professional units (SDG Cell) in each nodal department to prepare the progress report, organise capacity building programmes and provide required inputs. Some states have also involved district level institutions to implement and monitor the progress of SDGs at the local level (NITI Aayog, 2020). Recently, a framework has been developed for cities to leverage SDG 11 for addressing several other interlinked SDGs. The summary of this framework is provided in Table-1 (see Annexures).

3. Assessment of progress towards SDG 11 in India and Delhi

The commitment of India and the National Capital Territory (NCT) of Delhi to achieve SDG 11 can be assessed by overviewing the progress made since the launch of this global agenda.[2]

Target 11.1

The indicators related to target 11.1 ('ensuring access to adequate, safe and affordable housing and basic services for all and upgrade slums') show a remarkable decline in the percentage of slum population in India and Delhi during 2001-2011 and an improvement in housing ownership and access to basic amenities such as improved source of drinking water and toilet facilities. However, in absolute numbers, the population living in slums of India (65 million) and Delhi (1.79 million) was significantly higher in 2011 as compared to 2001. The government has launched the 'In-situ Slum Redevelopment' programme under the Housing for All scheme (Pradhan Mantri Awas Yojana- Urban) to address this challenge. However, this programme focuses only on providing housing and neglects the improvement of the micro-environment and sustainability measures like basic amenities (Puttkamer, 2015). Progress of this scheme has been very slow (MoHUA, 2019) which stands in the way of meeting target 11.1.

In urban India, the percentage of households with access to improved source of water increased from 95.3 per cent to 97 per cent between 2012 - 2018. A similar pattern is found in Delhi where the coverage increased from 97.7 per cent to 99.8 per cent. The percentage of households having access to improved toilet also improved from 89.6 per cent to 95.4 per cent in urban India during 2012-18. In Delhi, more than 98 per cent households had access to improved toilets during this period. The improvement in the access to these two basic amenities can be attributed to the Atal Mission for Rejuvenation and Urban Transformation (AMRUT)[3] and the Clean India Mission (SBM-Urban) governmental schemes respectively. Importantly, AMRUT 2.0 has been launched recently, aiming to make around 4,700 towns / cities 'water secure'. It will build upon the progress of AMRUT to address water needs, rejuvenate water bodies, better manage aquifers, reuse treated wastewater, thereby promoting circular economy of water.

Target 11.2

Access to safe, affordable, accessible and sustainable transport along with road safety and inclusivity of vulnerable sections is one of the targets (target 11.2) under SDG 11. Among the two indicators related to this target, a) percentage of persons with disabilities who used/accessed public transport during last 365 days and faced challenges and b) persons killed/injured in road accidents), both India and Delhi show a slow progress in first indicator as more than one-third of persons with disability reported problems in accessing / using public transport in 2018. Regarding the latter, both India and Delhi have made remarkable progress as the number of deaths and injured people per 100,000 persons has declined between 2015 - 2019.

[2] The indicators developed by the Ministry of Statistics and the Programme Implementation (MoSPI) under the National Indicator Framework have been analysed for this exercise (see Table-2 in Annexures).

[3] AMRUT is a programme to provide basic services (water supply, sewerage, urban transport) to households and build amenities in Indian cities to improve quality of life for all (see http://amrut.gov.in/content/innerpage/the-mission.php for details).

Target 11.3

Urban planning (Target 11.3) is essential for achieving SDG 11 and the preparation of city Master Plan is a sine qua non for planned and sustainable urbanisation. Only 2,843 (35.84 per cent) Indian cities have Master Plans, either approved or under preparation. In the absence of Master Plans, most of Indian cities suffer from unplanned growth which is essentially organic. Delhi has prepared and implemented three Master plans and the fourth Master Plan of Delhi is under preparation. However, the Master Plans of Indian cities, including those of Delhi have not been able to address housing, basic services and urban infrastructure challenges. This is mainly because of the lack of financial outlays, weak enforcement and monitoring of Master Plans, as well as inaccurate projections, data gaps and lack of people's participation and ownership (Aizaj, 2021).

Target 11.4

Protecting and safeguarding the culture and natural heritage is an important target of SDG 11 (Target 11.4). Estimates from the Ministry of Culture show that both India and Delhi spent 40 USD per capita and 189 USD per capita respectively in 2019-20. Delhi, which is a major hub of historical sites, enjoys higher allocation in comparison to India.

Target 11.5

Making cities resilient against natural disaster and reducing the loss of people and property due to disasters is another target under SDG 11 (Target 11.5). In this regard, the National Disaster Management Authority designs plans, policies and guidelines to mitigate damage and destruction caused by natural and man-made disasters and adopts a pro-active, multi-hazard and multi-sectoral strategy to build disaster resilient India[4]. The efforts and initiatives taken by the government of India are evident as less than one death per 100,000 population due to disasters was reported in 2019. There was no death due to disasters in Delhi in 2019.

Target 11.6

Climate change and environment pollution is a harsh reality of the 21st century and cities across the globe are struggling to address the emerging environmental challenges. The Government of India along with the state governments have taken several initiatives like solid and liquid waste management, protection, preservation, rejuvenation and management of lakes, ponds, rivers, wetlands and forests in the recent past. Target 11.6 aims to reduce the adverse per capita environmental impact on cities. The two indicators, namely the percentage of wards with 100 % door to door waste collection and the percentage of waste processed out of total waste generated have been considered to examine the progress made by India and Delhi. India launched a flagship programme known as '*Swachh Bharat Mission-Urban*' (SBM-Urban) to make Indian cities clean by constructing households and community/public toilets, making arrangement for 100 % door to door waste collection and trying to make cities garbage free. Both India and Delhi have made remarkable progress in increasing the number of wards with 100 % door to door waste collection between 2016 and 2020, i.e. from 43 per cent to 96 per cent in the case of India and 85 per cent to 100 per cent in the case of Delhi. Regarding the second indicator, the improvement was significant as well. In India, the percentage of waste processed out of the total waste generated increased from 17.97 per cent to 65 per cent during 2016 - 2020.

[4] https://ndma.gov.in/

Delhi reported a modest increase from 52 per cent to 55 per cent in the same period. However, despite this progress, more than one third of waste generated in Indian cities are still not processed. In this regard, SBM-Urban 2.0 has been launched recently with a focus on sustaining the sanitation and solid waste management outcomes achieved and accelerate the momentum generated.

Target 11.7

For promoting healthy cities, providing universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities is essential (target 11.7). Unfortunately, Indian cities suffer from a lack of open spaces. The lack of data on this indicator is another challenge. However, a recent estimate shows that the per capita green cover in Delhi was 41 sq. m. in 2020, and only less than one-fourth of all wards in Delhi had been covered with 50% green cover (Devulapalli & Padmanabhan, 2019). Importantly, the AMRUT Mission is currently promoting green and open spaces in cities.

Targets 11.a and 11.b

Targets 11.a aims at strengthening the national and regional development planning approach by establishing economic, social and environmental linkages between urban, peri-urban and rural areas. Target 11.b focuses on making plans and policies aligned with the Sendai Framework for Disaster Risk Reduction 2015-2030 to mitigate and adapt to climate change and make cities resilient against disaster. It has already been discussed that only one-third of Indian cities have Master Plans and that these Master Plans also suffer from a lack of proper implementation, linkage with financial resources and participatory planning. Therefore, in the absence of development plans in cities, achieving target 11.a will be a difficult task. As for target 11.b, India has made noteworthy progress. In 2019, a total of 93 per cent districts in India had adopted and implemented local Disaster Risk Reduction strategies in line with national strategies and the Sendai Framework for Disaster Risk Reduction. Delhi has also prepared a disaster management plan under this framework.

4. Challenges to achieve SDG 11 in India and Delhi

Cities in India face diverse challenges which are slowing down the pace of achievement of the SDGs, particularly SDG 11. The majority of these challenges are structural and need interventions from the state governments. Some of the major challenges common to both India and Delhi are the following:

a) Limited efforts to localise SDGs

"Localising" SDG 11 is the process of implementing SDG 11 by taking into account cities/towns specific contexts from the setting of goals and targets, determining the means of implementation and using indicators to measure and monitor progress. In other words, localisation relates to a bottom-up approach within an urban development policy framework. However, preliminary assessment indicates that implementing and monitoring SDG 11 at the lowest spatial unit (municipal wards) has been a major roadblock.

b) Weak Governance Structure of Indian Cities

It is now three decades since India has recognised cities as the third tier of government through its 74th Constitutional Amendment Act (CAA), 1992. Through this Act, civic responsibilities were to be transferred

from state governments to city governments. However, several states have been reluctant to transfer funds, functions and functionaries to cities. Consequently, local governments especially in medium and small size cities are weak, ineffective and unable to function as democratic units of self-governance. Moreover, Indian cities have ceremonial mayors with brief tenures. The mayors also do not have power to design and implement any project (Kundu, 2020). The city officials do not have adequate capacities to address the emerging challenges of urban planning and management in a rapidly evolving urban scenario (Ahluwalia, 2019). There is a mandate under the 74th CAA to establish Ward Development Committees (WDCs) to promote citizen participation in urban governance. However, the WDCs have not been constituted in many cities or are non-functional. The emergence of powerful Residents' Welfare Associations (RWAs) in big cities as parallel agencies of governance have further diluted the scope and functions of WDCs and institutionalised elite capture of urban governance. In the case of Delhi, the RWAs are very active pressure groups representing mainly the middle-income and rich neighborhoods (Kundu, 2020).

c) Multiplicity of Governance Structure

Indian cities are governed by multiple agencies for provision and management of civic functions. The parallel functioning of parastatal bodies such as development authorities, housing boards, water supply and sewerage boards, etc. has further reduced the power of Urban Local Bodies (ULBs). These parastatals create overlapping jurisdictions and fragmentation of responsibilities which often work in silos. The lack of coordination between ULBs and parastatal bodies leads to unclear lines of accountability (Kundu, 2020; Tiwari, Chauhan & Varma, 2021). In Delhi, out of 18 functions to be devolved to cities under the 74th CAA, only four are under the Municipal Corporation of Delhi (MCD) while the remaining 11 functions are under multiple agencies and three are with the state government (Praja Foundation, 2020a). This multiplicity in the governance structure is one of the major challenges in implementing and monitoring the targets of SDGs at the local level. In addition, blurring of boundaries between the rural and the urban creates confusion. This is further aggravated by the multiplicity of civic services as each agency has its own area of jurisdiction which may or may not match with city boundary.

d) Weak Financial Condition of ULBs

The execution of the policies and programmes to achieve SDG 11 targets in the next decade depends on the mobilisation of financial resources (Prakash et al., 2020). Importantly, Indian cities, which are the least empowered financially, suffer from an absence of dedicated funds/budgets for localising SDGs. The Municipal Corporations' own revenues in India constitute only 0.23 per cent of the GDP in 2017-18 (Khare, 2019), much less compared to other emerging economies such as Brazil, Poland and South Africa. Weak administration and strong political interests limit the extent to which ULBs can tap into the tax base and enforce tax compliance (Kundu, 2020). In addition, the ULBs lack financial autonomy to introduce new taxes and user charges (Ahluwalia, 2019). Delhi exhibits a wide disparity in the provision of basic services, which could be explained by the differential tax raising capacities of various city governments. The New Delhi Municipal Council, which also receives grants from the Smart City Mission, has extensive funds which explains the high-quality housing and urban infrastructure in comparison to south, east and north city governments in the NCT of Delhi.

e) Lack of robust and timely data at granular level

Regular availability of critical datasets are essential for informed decision making and monitoring of SDG 11. Most of the official data sources provide information at the state level, making city, ward or neighbourhood level analysis difficult. Data on several indicators of SDG 11, such as data on access to safe, accessible and sustainable transport system (indicator 11.2.1), proportion of cities with a direct participation structure of civil society in urban planning (indicator 11.3.2) and average share of open space (indicator 11.7.1) are not available at the granular level. Also, regularity of publication of secondary datasets is another issue. The publication of municipal finance data, which is one of the important data sources to assess the economic bases of cities, have been discontinued since Census 2001. Besides, the release of important datasets such as datasets on migration has been delayed for several years (Kundu & Pandey, 2021), which restricts evidence-based policy interventions for SDG implementation.

In the recent past, MoHUA has taken several initiatives like Data Smart Cities Strategy, Data Maturity Assessment Framework, Climate Smart Cities Assessment Framework, Ease of Living Index and Municipal Performance Index for evidence-based planning, monitoring and evaluation of progress made in cities. Moreover, the NITI Aayog has developed an SDG India Index to regularly monitor the progress of SDGs at the state level. MoSPI has also played an important role in developing a comprehensive National Indicator Framework along with releasing the Progress Reports on SDGs. These are powerful tools for States/UTs to identify the gap areas and channelise resources to fill the gaps (Kundu & Pandey, 2021). However, despite these efforts, there are several indicators for which data is not available or collected by respective agencies.

5. The Way Forward

Until now, India has adopted a top-down approach to design, implement and monitor SDG 11 involving national and state governments. This effort has not percolated to the city level, especially in the medium and small size towns. The political economy of urban development is already biased towards metropolitan cities and big urban centres (Shaw, 1996, Kundu, 2020; Kundu & Pandey, 2021) and adopting top-down approach would lead to a lop-sided development. Therefore, to achieve SDG 11, a bottom-up approach is required.

The movement towards sustainable growth and development requires multi-stakeholder engagement under a long-term vision. India is a country with 28 States, 9 Union Territories and more than 700 districts and more than 7000 cities and towns with significant geographical, demographic and socio-cultural diversities coupled with regional variations in socio-economic development. Also, about half of the towns are ‘census towns’. Unfortunately, these towns are unacknowledged as ‘urban’ by the state governments. In this context, it is important to recognise these newly created towns as statutory towns and bring about planned development from the beginning. This would contain the growth of slums and sprawl development and promote sustainable urbanisation. Also given the large number of towns and cities, adopting a national action plan is not sufficient to achieve SDG 11. The Indian government needs to develop a robust SDG localisation process involving state and ULBs to adopt SDG 11 and its different targets, determine the local means of implementation and design the monitoring and evaluation frameworks. These tasks seem to have multiplied manifold due to the health and

economic challenges imposed by the covid 19 pandemic.

Several studies (Ahluwalia, 2019; Kundu, 2020; Jha, 2020) have recommended the implementation of the 74th CAA to empower cities as the third tier of governance by transferring the much-needed funds, functions and functionaries. This is still an unfinished agenda, although, the Government of India (GoI) has made several attempts to implement the tenets of this Act through mandatory reforms under various Missions of urban development (Sharma, 2013; Kundu, 2014, Praja Foundation 2020b). An early action in this regard would facilitate the cities to be at the forefront of planning, implementation and monitoring of SDG 11.

The overlap of functional jurisdictions is another challenge which needs to be addressed by assigning the development agencies clear roles and responsibilities without diluting the role of the ULBs. These agencies need to work together in a well-coordinated way (Khan, 2014). To localise SDG 11 at the neighbourhood level, ward committees need to be constituted and entrusted with adequate devolution of funds.

The achievement of SDG 11 also depends on the financial autonomy provided to ULBs for mobilising resources through taxes, user charges and other instruments. In the absence of financial autonomy, achieving SDG 11 in a time bound manner would be difficult task. Therefore, a transparent, progressive and implementable revenue sharing model between the states and cities is imperative to achieve SDG 11. The smaller cities and towns may adopt financial resource management by pooling their resources for shared infrastructure facilities by which two or more municipalities and adjoining rural areas can benefit.

Capacity building and advocacy are the most important part of localisation of SDG 11. Several small and medium sized cities lack the administrative, financial and technical capabilities to perform the mandated functions (Khan, 2014). Inadequate capabilities of municipal authorities prevent urban projects from achieving SDG 11 targets. A dedicated municipal cadre needs to be established with relevant skills and specialisation to perform the tasks required for improving the conditions in Indian cities/towns.

Availability of robust and timely data sources is essential for monitoring progress of SDG 11. In this regard, an SDG Cell needs to be established in every city to collect and compile local level data related to SDG 11. The cities need to have dedicated budget and specialised manpower to perform these tasks. A GIS-based approach should be adopted in the collection of data and monitoring of the targets and indicators. Technology driven solutions need to be promoted.

The Covid-19 pandemic has resulted in both health and economic crisis and laid bare the vulnerabilities of the urban poor. Also, a large section of the population, who were above the poverty line have slipped into a poverty trap. It has also shifted the goalposts of several targets at least by a few years. Serious efforts need to be taken by all stakeholders to reach SDG 11 targets within the 2030 timeframe. Launching new programmes to meet the goals will be a difficult task. In this regard, we need to reorient and repurpose current programmes related to SDG 11. In addition, vulnerable communities and the new poor in urban spaces need to be given more attention if the country wants to move towards a sustainable path and build sustainable cities and communities.

Further Readings

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ANNEXURES

Table-1 Framework for achieving SDG 11 through actions of ULBs in India

Sustainable Development Goals	Action Points for ULBs to achieve sustainability goals
SDG 11: Sustainable cities and communities – make cities and human settlements inclusive, safe, resilient and sustainable	**Map** – access of affordable housing and basic infrastructure for all, particularly slum dwellers and access of safe, affordable, accessible and sustainable transport systems for all
	Identify and track – potential areas for upgrading, redevelopment and greenfield development, environmentally sensitive development, link between infrastructure with urban land use and vulnerability assessment

Source: United Nations Resident Commissioner (2018)

Table-2 Progress in implementation of SDG 11 (India and Delhi)

Indicators	India		Delhi		Source of Data
Target 11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums					
Indicator 11.1.1: Proportion of urban population living in slums, informal settlements or inadequate housing					
Year	**2001**	**2011**	**2001**	**2011**	
Percent of Slum population	18.3	17.4	15.72	10.91	Census of India, 2001 and 2011
Year	**2012**	**2018**	**2012**	**2018**	
Percentage of Households living in Owned Houses	61.1	63.8	55.3	56.9	Unit Record Data of National Sample Survey (NSS)- 69th Round 'Drinking Water, Sanitation, Hygiene and Housing Condition in India' (July'2012 - December'2012) and NSS 76th Round for Schedule 1.2, 'Drinking Water, Sanitation, Hygiene and Housing Condition' (July-December, 2018)
Percentage of Households living in *pucca* dwelling unit	93.6	96	99.6	97.6	

Percentage of Households living in Rented Houses	35.4	32.8	40.6	38.9	
Percentage of Households having access to improved source of drinking water	95.3	97.4	97.7	99.8	
Percentage of Households having access to improved latrine facilities	89.6	95.4	98.7	98.5	
Target 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					
11.2.1.1 Percentage of Persons with disabilities who used/accessed public transport during the last 365 days and problems faced in accessing/using public transport					
Year		**2018**		**2018**	
Percentage of Persons with disabilities who used/accessed public transport during the last 365 days and problems faced in accessing/using public transport		65.1		62.3	National Sample Survey Report No. 583 (76/26/1) - July- December 2018
11.2.1.2 People killed/injured in road accidents (per 1,00,000 population)					
Year	**2015**	**2019**	**2015**	**2019**	
Total number of persons killed in road accident per 100000 population	11.81	11.42	7.77	6.3	Road Accident in India, 2018 and 2019, Ministry of Road Transport and Highways
Total number of persons injured in road accident per 100000 population	38.31	33.38	39.55	22.2	

Target 11.3: By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries					
11.3.2.1 Proportion of cities with Master plans					
Year	2015	2020	2015	2020	
Percentage of Cities with Master plans out of total cities in reference year	25.61	35.84	100	100	Ministry of Housing and Urban Affairs as reported in "Sustainable Development Goals-National Indicator Framework Progress Report, 2020", Ministry of Statistics and Programme Implementation http://mospi.nic.in/sites/default/files/publication_reports/Goal%2011.xlsx
Target 11.4: Strengthen efforts to protect and safeguard the world's cultural and natural heritage					
11.4.1.1 Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage					
Year	2016-17	2019-20	2016-17	2019-20	
Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage (in million)	0.0023	0.003	0.0052	0.014	Ministry of Culture as reported in "Sustainable Development Goals-National Indicator Framework Progress Report, 2020", Ministry of Statistics and Programme Implementation http://mospi.nic.in/sites/default/files/publication_reports/Goal%2011.xlsx
Target 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					

Year	2015	2019	2015	2019	
Number of deaths due to disasters per 100,000 population	0.82	0.61	4.04	0.00	Accidental deaths and Suicides in India- 2015 and 2019, National Crime Records Bureau, Ministry of Home Affairs
Target 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 households from where solid waste is regularly collected, by agency of collection, by frequency of collection					
Year	**2016**	**2020**	**2016**	**2020**	
Percentage of Waste processed out of total waste generated	17.97	65.00	52.00	55.00	Ministry of Housing and Urban Affairs as reported in "Sustainable Development Goals-National Indicator Framework Progress Report, 2020", Ministry of Statistics and Programme Implementation
Percentage of wards with 100% door to door waste collection	43.00	96.00	85.00	100.00	
Target 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					
Year				**2019**	
Green cover per capita (in sq. m)	NA	NA	NA	41	https://www.livemint.com/news/india/which-is-india-s-greenest-metro-11572280645457.html
Population that lives in wards with greater than 50% green cover (in %)	NA	NA	NA	23.5	
Target 11.a: Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning					
11.3.2.1 Proportion of cities with Master plans					

Year	2015	2020	2015	2020	
Percentage of Cities with Master plans out of total cities in reference year	25.61	35.84	100	100	Ministry of Housing and Urban Affairs as reported in "Sustainable Development Goals-National Indicator Framework Progress Report, 2020", Ministry of Statistics and Programme Implementation http://mospi.nic.in/sites/default/files/publication_reports/Goal%2011.xlsx
Target 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: Whether the country has adopted and implemented national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030					
Yes					
11.b.2: Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies					
Year	2015	2019	2015	2019	
Percentage of districts that have adopted and implemented local DRR strategies in line with national strategies	90	93	NA	NA	Sustainable Development Goals-National Indicator Framework Progress Report, 2020, Ministry of Statistics and Programme Implementation http://mospi.nic.in/sites/default/files/publication_reports/Goal%2011.xlsx

Source: Authors' compilation

Table-3 SDG 11 "Make cities and human settlements inclusive, safe, resilient and sustainable": Targets, Ministries and Policies and Programmes

Targets		Ministries	Policies/Programmes
11.1	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	Ministry of Housing and Urban Affairs	Pradhan Mantri Awas Yojana (PMAY) - Urban
			Smart City Mission
			Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
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	Ministry of Housing and Urban Affairs	Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
			Smart City Mission
			MRTS and Metro Projects
		Ministry of Road Transport & Highways	Bharatmala Pariyojana
		Ministry of Railways	Schemes for Railway Infrastructure Development
11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	Ministry of Housing and Urban Affairs	Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
			Smart City Mission
			Clean India Mission (Swachha Bharat Mission)

11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	Ministry of Housing and Urban Affairs	National Heritage City Development and Augmentation Yojana (HRIDAY)
		Ministry of Culture	Scheme of Financial Assistance for Creation of Cultural Infrastructure
			Museum Grant Scheme
			Scheme for "Safeguarding the Intangible Cultural Heritage and Diverse Cultural Traditions of India"
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	Ministry of Home Affairs	Infrastructure of Disaster Management
			National Cyclone Risk Mitigation Project (NCRMP)
			Other Disaster Management Schemes
		Ministry of Water Resource, River Development and Ganga Rejuvenation	National Mission for Clean Ganga
			Flood Management & Border Areas Programme
			Development of Water Resources Information System
		Ministry of Earth Sciences	Atmosphere and Climate Research – Modelling, Observing Systems and Services (ACROSS)

			Ocean Services, Technology, Observations, Resources, Modelling and Science (OSTORMS)
			Seismology and Geosciences (SAGE)
		Ministry of Space	Design & Development of Applications for EO, Communication, Disaster Management, etc.
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	Ministry of Housing and Urban Affairs	Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
			Smart City Mission
			Clean India Mission (Swachha Bharat Mission)
		Ministry of Environment, Forest and Climate Change	National River Conservation Plan
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	Ministry of Housing and Urban Affairs	Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
11.a	Support positive economic, social and environmental links between	Ministry of Rural Development	Shyama Prasad Mukherjee RURBAN Mission

	urban, peri-urban and rural areas by strengthening national and regional development planning	Ministry of Housing and Urban Affairs	North Eastern Regional Urban Development Project (NERUDP) and other projects in the North Eastern Region
		Ministry of Panchayati Raj	Rastriya Gram Swaraj Abhiyan (RGSA)
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	Ministry of Housing and Urban Affairs	Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
		Ministry of Home Affairs	Infrastructure of Disaster Management
			National Cyclone Risk Mitigation Project (NCRMP)
			Other Disaster Management Schemes
		Ministry of Water Resource, River Development and Ganga Rejuvenation	National Mission for Clean Ganga
			Flood Management & Border Areas Programme
			Development of Water Resources Information System
		Ministry of Earth Sciences	Atmosphere and Climate Research – Modelling, Observing Systems and Services (ACROSS)
			Ocean Services, Technology, Observations, Resources,

			Modelling and Science (OSTORMS)
			Seismology and Geosciences (SAGE)
		Ministry of Space	Design & Development of Applications for EO, Communication, Disaster Management, etc.
11.c	Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials	Ministry of Finance and Ministry of External Affairs	

Source: NITI Aayog, 2018 Accessed from https://www.niti.gov.in/sites/default/files/2019-01/SDGMapping-Document-NITI_0.pdf dated 21.09.2021

About the main Author

Dr Debolina KUNDU
Professor, Urban Development and Policy
National Institute of Urban Affairs

Dr Debolina Kundu is a Professor at the National Institute of Urban Affairs, India and has over 25 years of professional experience in the field of development studies. She is the Chief Editor of Journals - Environment and Urbanisation, Asia (SAGE) and Urban India (NIUA). Her areas of interest are urbanization, migration, urban development policies, municipal finance, SDGs, governance and exclusion. She is the Country Investigator - India for the GCRF Centre for Sustainable Healthy and Learning Cities and Neighbourhoods, which is supported by UK Research and Innovation. A member of the Fifth Delhi Finance Commission, she has several articles published in books and journals. Her recently edited book is on National Urban Policies (Springer). She is currently working on Urbanisation and Urban Policies in the Global South.

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