



## Sustainable Development Goal - 11

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This month we shall discuss the 11<sup>th</sup> Sustainable Development Goal: 'Sustainable Cities and Communities'. In this blog, we shall try to explain:

### 11 SUSTAINABLE CITIES AND COMMUNITIES

- What it is and why is this relevant
- What are its indicators and targets
- Where do we stand in India
- What can we do to support the goal



As stated earlier, I have little to contribute on my own. I have attempted to provide a few references, so that if anyone is interested in probing deeper, you could do so.

#### What is SDG 11? [1]

55.71% of global population lived in cities in 2019, and the proportion is growing. <https://www.macrotrends.net/countries/WLD/world/urban-population>. Therefore the focus of SDG 11 is 'to make cities inclusive, safe, resilient and sustainable'.

What is the meaning of making cities inclusive? WHO estimated that 15% of global population suffer from some form of disabilities. With increasing levels of urbanization, it is therefore important to design cities in a way that people with disabilities are able to access public facilities like libraries, schools, colleges, hospitals, museums etc. easily. Provision of ramps besides staircases, lifts, mass transportation systems having retractable ramps etc. are some examples.



Another dimension on inclusiveness pertains to income levels. Neighbourhoods of lower income groups need to be provided with affordable housing, good schools and healthcare facilities as well as access to green and public spaces, and other essential services including digital connectivity.

One way to ensure that cities are designed with these objectives in mind is to ensure that leaders from disadvantaged segments are involved in the city planning process.

What is meant by making the cities safe? Life In the rapidly expanding cities (mostly in developing nations) is at risk due to traffic accidents, air pollution and poor sewage, drainage and sanitation facilities in the slums. Inadequate industrial safety measures adds to the risks in urban and semi-urban areas. Making cities safe implies taking design measures to ensure reduction in accident rates, primarily through speed restrictions, providing separate lanes for pedestrians and cyclists, promoting mass transportation and electric and CNG driven vehicles, adequate sanitation, sewage and drainage systems and enforcement of all industrial safety measures.

Resilience means the ability to face disruptions and to recover from them quickly. Such disruptions may be caused by natural disasters or by humans. Man-made disruptions may be economic, industrial (Bhopal, Beirut), pandemic, or conflicts and terror attacks. Cities need to be designed in such a manner that the residents 'have the ability to absorb, recover and prepare for future shocks' according to OECD. [www.oecd.org/cfe/regionaldevelopment/resilient-cities.htm](http://www.oecd.org/cfe/regionaldevelopment/resilient-cities.htm)

What is meant by sustainable cities? Large cities in developing nations, and to some extent parts of it in developed nations are known for congested areas, polluted atmosphere, absence of greenery, unhygienic surroundings, long queues for fetching drinking water, and open drainage systems. However, as more and more people converge to the cities for a livelihood, it offers a hidden potential for change for the better. The concept of sustainable cities attempts to mobilise the innovative strength of the citizens who have assembled together to live in a city, and to channelize their resources in an organized manner to offer solutions for an overall well-being and fulfilling living experiences. One basic theme for this change aims at developing synergetic relations between cities and its neighbouring rural areas, complementing lives of the populations living in the rural and urban areas. The villages provide the food for the cities, while the cities offer modern education, communication, healthcare and IT facilities for the adjoining rural households.

We may find a similar approach in India under PURA and Shyama Prasad Mukherji Rurban Mission schemes of the central government. Dr. APJ Abdul Kalam, former President of India had proposed a strategy for rural development, calling for 'Provision of Urban Amenities to Rural Areas' (PURA). This scheme was based upon providing 3 basic connectivity to villages: physical (roads etc.), digital (mobile and internet) and knowledge (schools, colleges etc.). Pilot PURA programs were initiated in 2004 by the Government of India, and in 2016, this was merged into Shyama Prasad Mukherji Rurban Mission. This mission aims at providing the following facilities in the 300 odd selected rural clusters all over India:

“(i) Sanitation, (ii) Piped Water Supply, (iii) Solid and Liquid Waste Management, (iv) Village Street Lights and Electrification, (v) Access to Village Streets With Drains, (vi) Inter Village Roads Connectivity, (vii) Public Transport, (viii) Skill Development Training Linked to Economic Activities, (ix) Agri-Services Processing and Allied Activities, (x) Health, (xi) Education, (xii) Digital Literacy, (xiii) Citizens Service Centres, (xiv) LPG Gas Connection, (xv) Environment, (xvi) Employment Generation and SHG Formation, (xvii) Tourism Promotion, (xviii) Sports Infrastructure, (xix) Social Infrastructure, (xx) Rural Housing, (xxi) Social Welfare”.

You may find more details at: <https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1603885>  
(Accessed on October 12, 2020 11:50 IST).

### **Why is this important? [2]**

As the world becomes more and more urbanised, making the cities sustainable assumes greater importance. On the one hand, cities appear to be the breeding ground for several socio-economic challenges facing humanity, they also present a great potential for making a difference in a much more positive manner. The Covid-19 pandemic has hit the city dwellers the hardest, with around 90% of the affected people living in the cities.

The lives of more than 4 billion people on earth are dependent upon making cities sustainable and liveable, and these numbers are only going to rise. Cities account for only 3% of the land, yet they consume around 3/4<sup>th</sup> of the total energy consumption and greenhouse gas emissions affecting climate change. Simultaneously, major cities are built on water fronts and are likely to get affected adversely by rising sea levels caused by global warming. Hence it is very important that we take all necessary steps to realise the goals set for SDG 11 in this Decade of Action.

On a positive note, the SDG 11 also aims to preserve the cultural and natural heritage of particularly old cities.

### **What are its indicators and targets? [3]**

The indicators for SDG-11 are as under:

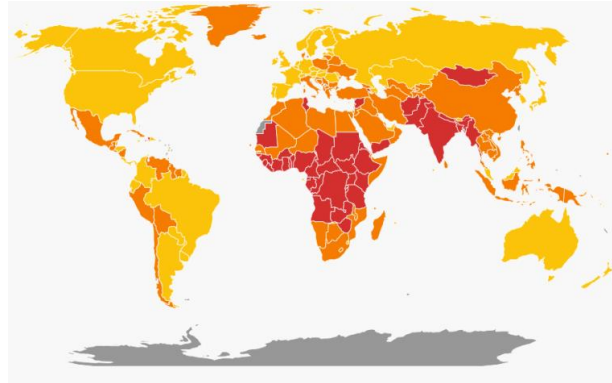
- 11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
- 11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, and children, persons with disabilities and older persons
- 11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
- 11.4 Strengthen efforts to protect and safeguard the world's 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
- 11.6 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
- 11.7 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.A Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning
- 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.C Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials

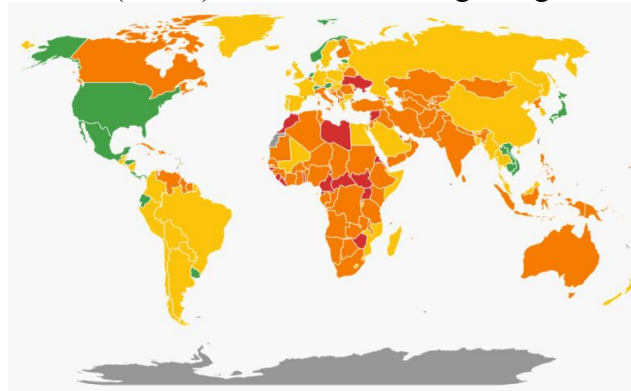
### Where do we stand in India?

The following images [4] offer some national as well as global status on SDG-11 and trends:



Status of SDG-11 in 2020

The above figure shows that the status in India comes under the category ‘Major challenges remain’ while the trend in India (below) shows that it is stagnating.



Trends SDG-11 in 2020

Specifically, India’s standing in 2019 [5] is shown below:

#### SDG11 – Sustainable Cities and Communities

Annual mean concentration of particulate matter of less than 2.5 microns of diameter (PM2.5) in urban areas ( $\mu\text{g}/\text{m}^3$ )	90.9	●	→
Improved water source, piped (% urban population with access)	68.7	●	↓
Satisfaction with public transport (%)	74.4	●	↑

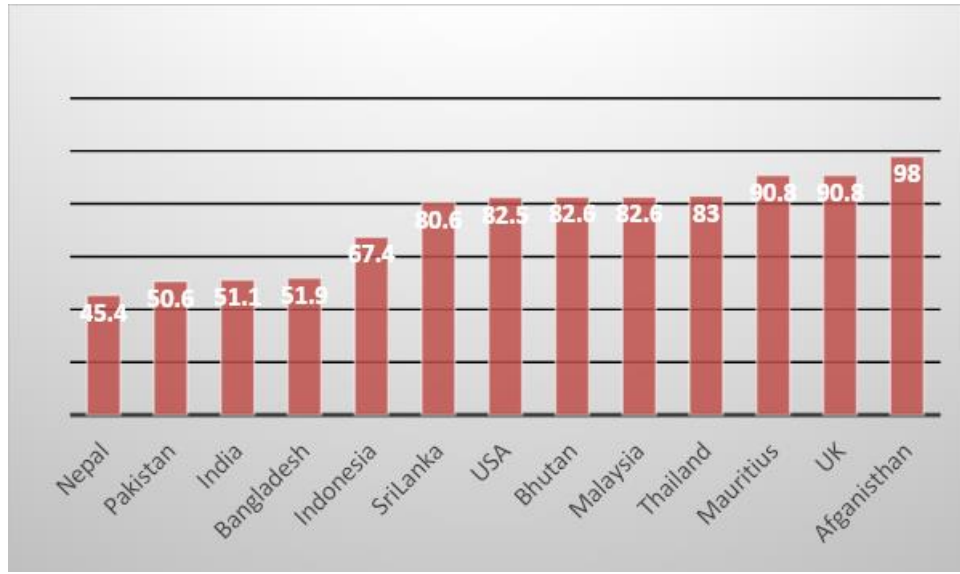
The standing in 2020 [6] is as under:

#### SDG11 – Sustainable Cities and Communities

Annual mean concentration of particulate matter of less than 2.5 microns in diameter (PM2.5) ( $\mu\text{g}/\text{m}^3$ )	90.9	2017	●	↓
Access to improved water source, piped (% of urban population)	67.9	2017	●	↓
Satisfaction with public transport (%)	71.9	2018	●	↑

Major challenges	Significant challenges	Challenges remain	SDG achieved	Information unavailable
↓ Decreasing	→ Stagnating	↗ Moderately improving	↑ On track or maintaining SDG achievement	

In the following graph we offer a comparison of SAARC nations, 3 ASEAN countries and UK, and USA on the performance on SDG-11 in 2019. We note that India is ahead of Nepal and Pakistan only. Some of the key indicators are: prevalence of slums, informal settlements or inadequate housing, convenient access to public transport, preservation, protection and conservation of all cultural and natural heritage and number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population.



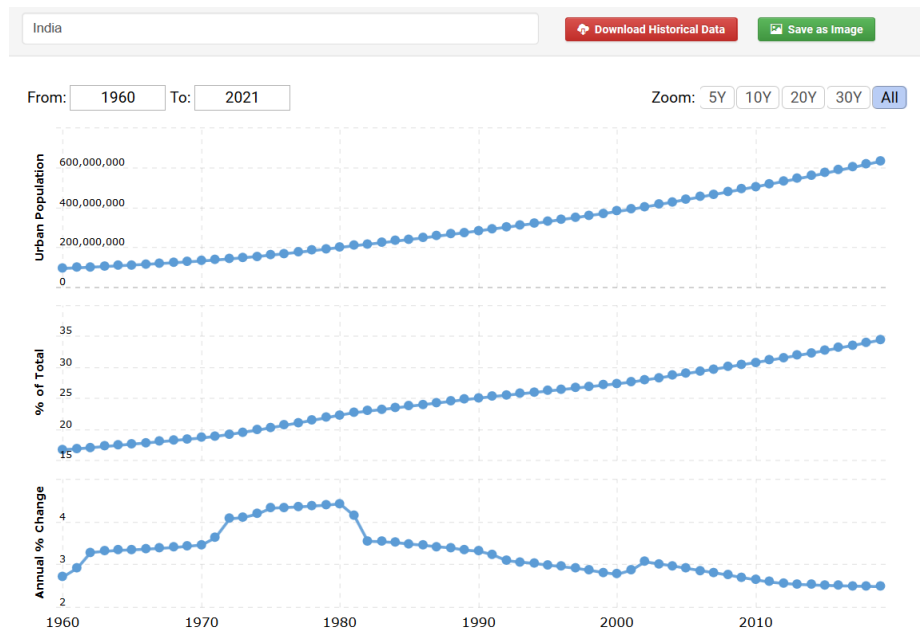
If we look at the indicators level, the comparison is shown below [5]:

This data should be cited as: Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G. (20

Country	Normalized Score sdg11_pm25	Dashboard Color sdg11_pm25	Normalized Score sdg11_pipedwat	Dashboard Color sdg11_pipedwat	Normalized Score sdg11_transport	Dashboard Color sdg11_transport
Afghanistan	37.29	red	25.94	red	39.38	orange
Bangladesh	32.41	red	33.92	red	89.37	green
Bhutan	60.81	red	98.95	green	88.02	green
India	0.00	red	66.61	red	86.76	green
Mauritius	89.89	yellow	99.91	green	82.58	yellow
Nepal	0.00	red	57.45	red	78.73	yellow
Pakistan	35.59	red	52.53	red	63.60	yellow
Sri Lanka	94.05	yellow	73.77	orange	74.01	yellow
Indonesia	87.36	yellow	20.47	red	94.36	green
Malaysia	87.94	yellow	98.36	green	61.56	yellow
Thailand	75.27	red	82.84	orange	90.97	green
United Kingdom	94.83	yellow	100.00	green	77.55	yellow
United States	98.63	green	99.60	green	49.18	orange
China	42.55	red	89.37	yellow	93.46	green

Particulate matter	Piped water	Transportation
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The following graph shows the trend in urbanisation in India from 1960 to 2019 [7]:



### What can we do to support the goal? [2, 8]

The UN SD site [2] suggests the following:

“Take an active interest in the governance and management of your city. Advocate for the kind of city you believe you need.

“Develop a vision for your building, street, and neighbourhood, and act on that vision. Are there enough jobs? Can your children walk to school safely? Can you walk with your family at night? How far is the nearest public transport? What’s the air quality like? What are your shared public spaces like? The better the conditions you create in your community, the greater the effect on quality of life”.

Specifically, one can actively participate in various schemes floated by the government. Here are some highlights of different schemes, culled out from the India Voluntary National Report 2020 [8] on SDG 11:

The Atal Mission for Rejuvenation and Urban Transformation (AMRUT), aims at providing water supply, sewerage and urban transport to 500 cities, with a focus on the economically disadvantaged. Door to door waste collection has reached 96% and waste processing has increased to 60% in 2019-20. *We can encourage full participation of neighbouring households in solid waste management.*

The ongoing Smart Cities Mission (SCM) in 100 cities focuses upon:

“city improvement (retrofitting), city renewal (redevelopment) and city extension (greenfield development), plus a pan-city initiative in which Smart Solutions are applied

covering larger parts of the city ... 5,151 projects worth more than INR 2 trillion (USD 26.7 billion) are at various stages of implementation”.

An ‘Ease of Living Index’ for cities has been launched. The index covers parameters like assured water supply, economy & employment, education, governance, health, inclusive housing, identity and culture, mixed land use / compactness, power supply, public space, reduced pollution, solid waste management, safety and security, transportation and waste water management.

The Pradhan Mantri Awas Yojana (PMAY) has plans to upgrade slums and provide:

“Adequate, safe and affordable housing and basic services for all by 2022. It has four components: in-situ slum redevelopment; credit linked subsidy scheme; affordable housing in partnership with public or private sector; and beneficiary-led individual house construction / enhancements”.

In addition, India has launched several other programs aimed at making the cities sustainable, including The National Urban Transport Policy (NUTP), The National Disaster Management Plan according to the Sendai Framework for Disaster Risk Reduction, the Energy Conservation Building Code (ECBC) etc.

The report identified the following challenges, going forward:

“Institutional capacity of Urban Local Bodies (ULBs) remains a persistent challenge. Financial autonomy, taxation powers and fund generation capabilities are the areas of concern. Consequently, development plans most often face financial constraints. Some ULBs are looking at alternate sources of financing such as Hybrid Annuity Models, municipal bonds, Infrastructure Investment Trusts etc.

“Being home to 15 out of the 20 most polluted cities in the world, the challenge of pollution, particularly air pollution, demands immediate attention in the country”.

## References

1. <https://www.un.org/sustainabledevelopment/cities/>  
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5. Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G. (2019): Sustainable Development Report 2019. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN).
6. Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., Woelm, F. 2020. The Sustainable Development Goals and COVID-19. Sustainable Development Report 2020. Cambridge: Cambridge University Press.
7. <https://www.macrotrends.net/countries/SAS/south-asia/urban-population>
8. VNR\_2020\_India\_Report.pdf

