

India in the Urban Revolution Through the Lens of Sustainable Development Goal 11

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Abstract: Urbanization is not just about an unnatural increase in population, it reflects the deeper social transformation such as restructuring economies, new politics, different livelihoods, and developing infrastructure by considering people who migrate. On one side, Nations across the world are struggling to tackle climate change. On the other side, developing nations like India, with a huge population, result in over-exploitation of resources, thus evolving the uncontrollable change to the climate. The purpose of this paper is to provide a broad analysis of current urbanization trends in India in relation to macroeconomic developments (throughout the National five years plans i.e., from the 1st fiveyear plan to 12th five-year plan) to place India in the global context and speculate about the country's future direction through the lens of Sustainable Development Goal 11: Sustainable Cities and Communities. This paper critically focuses on the core parameters & the existing scenario of SDG 11 in the country. In addition to this, this paper points out the issues (Governance and constraints to SDG 11) pertaining to urban growth in India.

Keywords: Urbanization, Sustainable cities and communities, Economic development.

1. Introduction

Today, twice many people around the world live in cities compared to three decades ago. However, this does not indicate an overall development or that the rural-urban divide has been reduced. This translates to an additional 1.8 billion urban population, to understand it better- around 60million people added to urban population since 1980 every year. Previously it was England, Northwestern Europe, and North America where urbanization increased rapidly, and now its east and South Asia where the urban population tripled in 30 years in China and India.

Cities have become important sites of production that demanded labour, and urbanization took off when an industry is established which is labour intensive, people even migrate in search of employment which creates a movement of population from rural to urban creating need for urbanization. Urbanization and industrialization should go hand in hand and that is when it's called sustainable development. These two propelled changes at wider scale affecting national economies and international trade, fueling imperialist tendencies with the new need for raw materials to keep the production apace. The growth in Information Technology (IT) sector id fueling the urban population growth, as if we see the population growth is concentrated in the Southern states of India where IT is at the forefront of the economy with cities like Hyderabad, Bangalore, and Chennai which are pulling the rural population from across the country. The IT sector facilitates unprecedented capital mobility as it is the case with China as well. In China, they first concentrated on the coastal cities like Shenzhen, Shanghai, and Guangzhou and later implemented the same strategy all over the country. In the case of India, regionally the most urbanized states are in the southern half like Andhra Pradesh, Karnataka, Kerala, Maharashtra. The urban systems in these states vary substantially, in the case of Maharashtra Mumbai, Nasik and Pune are dominant; in Kerala this is flat with many midsized towns. Karnataka and Andhra Pradesh are dependent on IT sector hoping growth and population movement to the main cities.

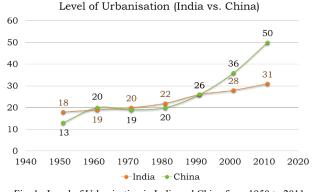


Fig. 1. Level of Urbanisation in India and China from 1950 to 2011 (Source: India in the Urban Revolution [1])

Across India, 18 new cities with more than million population added since last census which means people are migrating from rural to urban areas increasing the population growth. But this is indeed not the situation in megacities-growth in Delhi dropped from 52.24% to 26.69%, Greater Mumbai growth rate dropped from 30.4% to 12% during 1991-2001. As mentioned in the beginning of the paper, the reasons are severe economic mismanagement and less urban infrastructure. That means they doesn't have all the urban infrastructure, but these towns satisfied standard census requirements such as 400 people per square kilometer, town with a population of 5000 where less than a quarter male

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involved in agriculture. This is because of a greater increase of globalization, information technology having capacity to provide huge employment. In China, the growth declined during the first half of 20th century until 1960 because of the "cultural revolution". This had a huge impact in them, but the later period the 1970's had seen exponential growth. Because the China's policymakers emphasized on rural industrialization like encouraging small scale industries in towns/villages across the countryside instead of developing and depending on urban followed migration. China industrialization without urbanization policy where they did not spend money on housing for migrants or other infra projects to attract migrants, rather they used the local resources and displayed growth. In fact, megacities like Shenzhen were formed because of coalescence of multiple "urban villages". But at the same time, they did not leave the urbanization, they hold it firm in such a way that the region around Shenzhen, the Pearl River Delta is estimated to house more workers in manufacturing that can be found in entire USA. To control this migration to urban areas, China came up with a system called "hukou". This is similarly driven by the demand for the labour in urban areas.

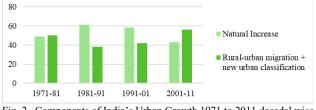


Fig. 2. Components of India's Urban Growth 1971 to 2011 decadal wise (source: census 2011)

The urban growth in India is unlike China, here the population increase is natural and less so to migration. Since agriculture is main occupation in India comprising half of the labour force. Manufacturing employment in India stayed at around 12% until 1990's. In India, industrialization lagged urbanization. According to USA Bureau of Labour Statistics, India today is estimated to have 10million jobs in manufacturing compared to 100million in China. Presently IT sector contributes to 7% of Gross Domestic Product (GDP) and about 20% of exports. But it is providing jobs for just 2% of the workforce, the IT sector can be viewed as economic driver of urbanization in specialized locals like Hyderabad and Bangalore. India is leading in manufacturing sectors such as chemicals, Pharma but these are not labour intensive. The exports of unskilled labour-intensive products halved from 30% between 1993-2010 whereas skill intensive products increased it from 25% to 54% at the same time. Major reason for this could be fast increase of outward FDI, where the outward FDI as a share of inward FDI jumped from 10.6% to 25.6%. On the other side, the agrarian crisis in India (low yields), led to suicides of more than 2, 40,000 farmers from the year 1995-2009.

2. Urban India and the National Five-Year Plans

In many ways, urbanisation in India is linked. The

tremendous population rise, along with economic and technical advancement, has accelerated urbanisation. Cities serve as opportunities' focal centres, which puts more strain on the housing and infrastructure already in place and also causes congestion. Rapid economic growth and urbanisation have resulted in significant environmental degradation that threatens the environmental resource base that is essential for sustainable development. Indian cities have turned into slums and squatters camps as a result of the unparalleled difficulty of such an urban move. With the percentage of the people living in urban areas rising from 14% in the 1940s to around 33% in 2000, India's urban growth is currently going through a particularly active phase.



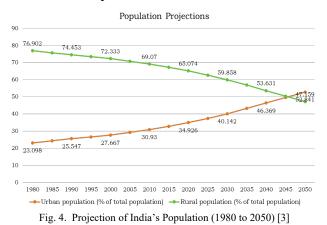
Fig. 3. Performance of the GDP in the period of National Five-Year Plans [2]

Planning for refugee housing from Pakistan and the construction of Chandigarh were the main priorities of the first five-year plan. It is still acknowledged for the well-planned low-cost yellow building model in Chandigarh. The National Buildings Organization and the School of Planning and Architecture were established during the same plan period with the goals of enhancing the effectiveness and quality of built investigating developing housing environments, and technologies, and developing a pool of qualified town planners. Slums and employer housing were the other two problems in the first plan. The Plan said that "employer housing building in the post-war years has fallen short of expectations." Setting up industrial towns as prospective urbanisation hubs was prioritised during the Second Five Year Plan (1956-1961) period. For coordinated urban development, Master Plans were created for 21 cities. To ameliorate slums, the idea of slum clearance has been updated. The Town and Country Planning Organization created a Model Town Planning Act in 1957. The Third Five Year Plan (1961–1966) placed a strong focus on town planning, for which the authority was transferred from the Center to the States. The Fourth Five Year Plan (1969–1974) placed a strong emphasis on developing smaller communities with spatial economic activity. The goal of these economic activities was to generate revenue for the people living in tiny communities. The introduction of measures to control land prices in cities, the creation of a framework for the growth of small and medium towns, and the expansion of essential services in cities and towns were the key focuses of the Fifth Five Year Plan (1974–1979). An initiative known as the Integrated Urban Development Programme (IUDP) was started to enhance the infrastructure of cities with a population of over 300,000. Improvements in drainage, sewerage, and sanitation

are necessary to enhance the environmental conditions in slums, according to the sixth five-year plan. The establishment of the Integrated Development of Small and Medium Towns (IDSMT), a federally funded programme with the aim of fostering growth in communities with less than 100,000 inhabitants, is the main aspect of the 6th Plan's urban component that is remembered today.

Urban Basic Services for the Poor (UBSP), an urban poverty alleviation programme, was introduced for the first time as part of the Seventh Plan, which specifically acknowledged the issues facing urban poor people. 1988 saw the introduction of the National Housing Policy. According to this, the government's responsibility is to "provide for the poorest and most vulnerable sectors and act as a facilitator for other income groups and the private sector by removing barriers and increasing the availability of land and services." For the amenities of drinking water supply and sanitation in urban areas, the Ninth Five Year Planning Commission budgeted 50,000 crore. By promoting public-private participation in urban infrastructure and services, the 10th Plan promoted overhauling the legislative, governance, and administrative structures of cities. It was therefore important to make urban local bodies financially strong so that they could rely less and less on state transfers. A key objective of the 11th Plan is "to improve efficiency and productivity of cities through deregulation and land development" and "to deconstruct the public sector monopoly of urban infrastructure and create a conducive environment for private investment" (GOI, 11th FYP). In accordance with the National Urban Housing and Habitat Policy, the government must continue to play a role in social housing in order to provide affordable housing to the lower and middle classes in urban areas, who do not have access to affordable housing and are hopelessly out priced on the land market.

3. Urban Population Growth Scenario in India



India is transitioning from rural to urban at a 1% yearly average growth rate (World Bank). Between the secondary and tertiary sectors, urban areas serve as a bridge. From 23.09 percent in 1980 to 34.92 percent now, the share of people living in cities has expanded dramatically [3]. India is anticipated to have more than six megacities with populations exceeding 10 million by SDG target year 2030. Slums are currently home to 17% of India's urban population [4].

As far as Mumbai is concerned, more than half population of Mumbai resides in slums (Census, 2011). It is a persistent issue in India because of the dual characteristics of urban setting. Everything changes when we compare the slums of Mumbai to rest of the part. Lifestyles, Cultural Attitudes, Planned Interventions, Implementing or improving infrastructure projects/facilities, Government Actions especially housing typologies varies (Pukka and Kutcha).



Fig. 5. The Growth trend in Urban Areas. (Source: created by author)



Fig. 6. The States/Union Territories performance on Sustainable Development Goal 11 (Source: NITI Aayog Sustainable Development Goals Index Report 2020-21)

According to the NITI Aayog SDG Index report [5] 2020-21 [6], the states were ranked into 4 categories namely, Achiever, Front Runner, Performer, and Aspirant. States' Index Scores [7] for SDG 11 range from 39 to 91, while UTs' SDG Index Scores range from 56 to 98. Punjab and Chandigarh, respectively, are the best-performing States and UTs. In the category of Front Runners, 22 states and 5 UTs were selected (scored between 65 and 99). Three states, namely, Arunachal Pradesh, Nagaland, and West Bengal ranked low with index score less than 50.

4. Sustainable Development Goals and the New Urban Missions/Programmes in India

Only few urban projects/programmes in the country are able to bring change in the overall scenario. The overall scenario of parameters of SDG 11 are:

• *Drainage facility:* 12 percent and above households in the country are struggling with the drainage issues.

- Sewage treatment facilities: Usage and artificial recharge of ground water is very in the urban local bodies with fully provided treatment facilities. Above 60 percent of the sewage is not being treated, resulting a threat to the blues and greens in catchment area of the water bodies.
- At source segregation of solid waste (both rural and urban under Swachh Bharat Mission-G&U): More 21.97 percent wards in the urban local bodies (municipalities, and municipal corporations) are unable to manage at source segregation of the generated solid waste.
- *Processing of the collected solid waste:* More than 30 percent of the waste is left in dump yards, which in turn intensifying the bad quality of ground water.
- *Housing for all:* According to NSSO survey, 90.2 percent of urban households live in pucca houses.
- *Road accidents:* 17 people per hour die in road accidents (MoRTH, 2019) [8]. The road conditions in India are very horrible, for every one lakh population 12 people are vulnerable to road accident deaths.
- *Green Cover:* Green Cover Availability is only 5.08 square meters per person (ISFR). But the required coverage is 8-12 sq. m. per person.
- *Drinking Water:* Less than 50% of population has access to safely managed drinking water.



Fig. 7. Connection between Sustainable Development Goals and New Urban Programmes in India (Source: created by author)

The continuous efforts by the world's prestigious organizations such as United Nations, World Bank, Rockefeller Foundation, etc. resulting in sustainable and resulting strategies and this became a fruitful opportunity to the developing and underdeveloped nations. At the same time, the developing and underdeveloped nations are not coping up with the targets/goals that are to be achieved by 2030. There are many issues related to this scenario. One of the major issues is with the financing sustainable development projects. In the current scenario, economic stability is considered for granting loans to the developing nations. In case of India, the economy is facing issues with inflation rate. The external debt is raising day by day, from the table 1, it is clearly evident that the government is unable to invest at least 1 percent of the country's GDP annually. Over the period of 11 financial years (including 2021-26 budget allocations), the government of India, has allocated only 2,04,945.94 Crores to the sustainable development projects [9]. The existing budget allocations are not enough to achieve the targets of National Action Plan on Climate Change (NAPCC), National Mission for Clean Ganga (NMCG), National Clean Air Programme, and National Mission on Sustainable Habitat. According to the Ministry of Power, more than 80% [10] of the urban local bodies in the country are dependent on Thermal Energy. Now, the important question to be noticed is who is going to govern the implementation and progress of sustainable development goals. Do Sustainable Development Goals lack in governance aspects? Extending up to National Level or even at local level, who or which department of the government is going to look after the aspects of sustainability in the implementation of the projects? India's bureaucratic system is again a loophole that the government have to resolve. The continuous posting in various ministries or sectors lacks the quality and building up the expertise /knowledge pertaining to specific issues or challenges (including governance). In fact, the new government came up with new urban missions as mentioned in figure 7, but the previous government also implemented Rajiv Awas Yojana now replaced as Pradhan Manthri Awas Youjana (Rural and Urban).

A. Sources of Finances for the Urban Local Bodies

a) Internal

- Property tax
- Profession tax
- Entertainment tax
- Advertisement tax
- Octroi and entry taxes

b) External

- Market Borrowings
- Federal and State Grants
- External assistance

c) Innovative

- Land Monitizing
- Transferrable Dev. Rights
- B. Constitutional Impediments

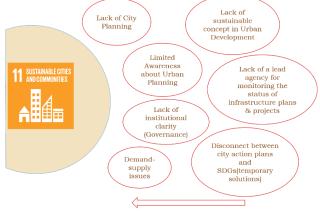


Fig. 8. Constraints to the progress of SDG 11: Sustainable Cities and Communities in India (Source: Created by author)

Urban Local Bodies (ULBs) are unable to effectively perform their duties as a result of the disparity between the powers and obligations entrusted to them. The implications of 74th Constitutional Amendment Act are narrowed down due to the following reasons. In India, there are 3894 census towns only (Census, 2011). 24,000 villages with more than 5000 population in India lose Census town category status (IIHS 2019). Despite its urban characteristics, a Census Town is governed by a Panchayat. States often apprehensive in nature while thinking of or bringing Census Towns under the "urban" fold. Peri-urban areas governed by ill-equipped bodies to understand urban needs.

5. Conclusion

Now, more than ever, is the most crucial and significant time for a human being to exist in his or her natural state, that is, as a fully human being. Our God-given environment and life cycles should not come to an end in a horrific way as a result of people scrounging for food or fighting for survival. In the Union Budget session 2022-23, Special Budget of 250 cr. Improving Urban Centres of Excellence in five Planning Institutions across the country (PTI, 2022) (such as School of Planning and Architecture, CEPT, etc.) but when these planning institutions receive this budget? Strengthening of the planning institutions across the country will help the urban growth in a sustainable way. The government should highly focus on the implementation of the 73rd and 74th Constitutional Amendments Acts, to ensure the maximum governance (minimum government - maximum governance) to be attained across the country. In addition to this, the institutions in the country should focus on full coverage and implementation of infrastructure projects to attain sustainability and inclusivity. The fragmented structure of urban administration itself contributes to the apparent inefficacy of its attempts to tackle urban issues. The national government's policies must be centered on:

- Supporting and offering incentives for the urban local government reform in accordance to the realities of urban circumstances. The national government's goal should be to make the urban local bodies/institutions stronger, quite efficient, transparent, approachable, and valuable to the communities.
- Improving the financial health of urban governing institutions with specific objective of ensuring that urban local bodies regularly have sufficient financial resources on hand or accessible to enable local initiatives in public sphere a reality.
- To provide improved and more up-to-date information on urban issues as well as supporting substantial and ongoing research in the matters pertaining to urbanisation.
- The Government must work to promote the creation of a significantly more acute awareness of the built environments, its relationship with the environmental resources and the critical role that aesthetics play in optimal urban development through both its own

practice and financial assistance.

References

- [1] India in the Urban Revolution (jstor.org)
- [2] Twelfth Five Year Plan, vol. 1. indb (niti.gov.in)
- [3] World Bank Population estimates and projections, Data Bank (worldbank.org)
- [4] Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable, NITI Aayog
- [5] The NITI Aayog developed its index in 2018 to track the country's progress toward its goals using data-driven analysis and to encourage states and union territories to compete in achieving them.
- [6] SDG_3.0_Final_04.03.2021_Web_Spreads.pdf (niti.gov.in)
- [7] NITI Aayog SDG Index: The average score of the individual goal scores was used to get the composite score for each State/UT by combining their performance across all of the goals. The composite score, which runs from 0 to 100, represents the State/overall UT's success in meeting the goals' objectives. A score of 100 indicates that the State/UT has met its 2030 goals.
- [8] Share of victim vehicles in road accidents (Source: Road Accidents Dashboard, MoRTH, GoI)
- [9] echap06.pdf (indiabudget.gov.in)
- [10] Integrated Power Development Scheme (IPDS), Government of India, Ministry of Power (powermin.gov.in)
- [11] Nijman, J. (2012). India in the Urban Revolution. Indian Anthropologist, 42(2), 1–17.
- [12] Nations, U. (2018). Generating power, United Nations. United Nations. United Nations. <u>https://www.un.org/en/climatechange/climate-solutions/cities-pollution#:~:text=Cities%20and%20Pollution,cent%20of%20the%20Earth's%20surface</u>
- [13] SDG 11: Sustainable Cities and Communities. (2018). Un.org. https://in.one.un.org/page/sustainable-development-goals/sdg-11/
- [14] Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable, NITI Aayog. (2015). Niti.gov.in. <u>https://www.niti.gov.in/goal-11-make-cities-and-human-settlementsinclusive-safe-resilient-and-sustainable</u>
- [15] Sustainable Development Solutions Network. (2022). Unsdsn.org. <u>https://www.unsdsn.org/sdg-index-and-monitoring?gclid=Cj0KCQjwma6TBhDIARIsAOKuANwg52pxJGTDE 1xSbmcq0nS3GAwlmG4srM2B9HO16IYWGMPhy1eBAeQaAsRfEAL</u> w wcB
- [16] India follows a holistic approach towards its 2030 Sustainable Development Goals (SDGs). (2019). Pib.gov.in.
- https://pib.gov.in/Pressreleaseshare.aspx?PRID=1577014

 [17]
 Reforms In Urban Planning Capacity in India, Final Report. (2021). https://www.niti.gov.in/sites/default/files/2021-09/UrbanPlanningCapacity-in-India-16092021.pdf
- [18] What COVID-19 can mean for SDG-11, sustainable cities and communities in India. (2014). Downtoearth.org.in. <u>https://www.downtoearth.org.in/blog/urbanisation/what-covid-19-canmean-for-sdg-11-sustainable-cities-and-communities-in-india-72987</u>
- [19] Integrated Power Development Scheme (IPDS), Government of India, Ministry of Power. (2015). Powermin.gov.in. <u>https://powermin.gov.in/en/content/integrated-power-development-schemeipds</u>
- [20] PTI. (2022, February). Budget: Govt plans paradigm change in urban planning; proposes to set up expert committee. The Economic Times; Economic Times. <u>https://economictimes.indiatimes.com/news/economy/policy/budget-govt-plans-paradigm-change-in-urban-planning-proposes-to-set-up-expert-committee/articleshow/89273080.cms</u>
- [21] 2018_sdg_index_and_dashboards_report.pdf
- [22] 2019GlobalIndexRankings.pdf (sdsna.github.io)
- [23] The Sustainable Development Report 2020 The Sustainable Development Goals and COVID-19.
- [24] 2021-sustainable-development-report.pdf
- [25] UrbanPlanningCapacity-in-India-16092021.pdf (niti.gov.in)
- [26] echap06.pdf (indiabudget.gov.in)
- [27] What COVID-19 can mean for SDG-11, sustainable cities and communities in India (downtoearth.org.in).