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Achieving Localization of SDG11:
A critical review of South Asian region and learnings for India

Neeharika Kushwaha[1*], Charu Nangia[1] and Bhargav Adhvaryu[2]

1. Amity School of Architecture and Planning, Amity University Noida
2. Amrut Mody School of Management, Ahmedabad University
** Corresponding Author, Email: kushwaha.neeharika@gmail.com*

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Abstract: Home to one-fifth of the world's population, South Asian countries act as loci for interlinked sustainability issues owing to rapid urbanization. Given the context of formidable problems that threaten to overwhelm the region's cities and towns, the localization of SDG 11 has become desirable for sustainability. This paper reviews the literature encapsulating the progress of developing economies such as China, Singapore, Thailand, Indonesia, and Malaysia towards SDG 11 and intends to extract substantiated strategies adopted for comprehensive localization of the goal through certain examples. The results conglomerate key enablers such as inclusive institutional and financial environment, stakeholder engagement for the reorganization of people-centered resource flows, efficient data ecosystems to promote social innovation, and adaptive policy reform measures for generating cross-cutting innovative solutions. These enablers serve as the initial step for informing the essential parameters required to prepare the contextual framework of SDG 11 for Indian cities and induce a paradigm shift with informed policy decision-making at the city level.

1. INTRODUCTION

India is seen as a rapidly urbanizing and rapidly developing nation on the global platform, and in the future, this urbanization is expected to double, with the addition of approximately 400 million people over the next three decades (MoUHA, 2018). Such high urbanization increases the absorption of diverse groups in urban areas, thereby impacting resources (Vidyarthi, Hoch et al., 2013). These imbalances create a gap between the demand and supply of utilities in Indian cities (Randhawa and Kumar, 2017), impact climate, and increase the propensity of natural disasters affecting local communities (Oosterhof, 2018). All of these factors eventually lead to a degraded quality of life. Thus, in the course of Sustainable Development Goals provided by

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Agenda 2030 of the UN (Fox and Macleod, 2023), SDG 11 of sustainable cities and communities is an effective tool to fulfill these gaps for a country like India and deliver sustainable urban development (Medeiros and van der Zwet, 2020). However, the scores attained by India in the SDG 11 category of UNDP report 2021 show that the efforts appear stagnating or decreasing in the maximum indicators of the goal (Sachs, Kroll et al., 2021), and currently, the country stands at a global ranking of 120 of 165.

This impels us to understand the approaches that can be taken to enhance the local-level planning for a context-sensitive approach towards the goal. This study conducts a preliminary qualitative literature review on the impediments encountered by India and further examines the development strategies, actions, and practices adopted by some case examples of South Asian regions that harness cities' growth by overcoming these impediments due to their similarity of development challenges with India. This is also supported by taking an approach to present and compare the target-wise progress of the countries quantitatively (percentages are allotted across indicators), along with mentioning their best efforts toward certain targets. Hence, the discussions generated through this mixed approach aim to address the planning priorities essential for localization of the goal by answering the following research question: What successful strategies adopted in the South Asian region may act as the cardinal requirements for SDG 11 localization in Indian cities?

2. LITERATURE REVIEW

2.1 Importance of SDG 11

World's population residing in cities is likely to be two-thirds of the total population by 2050 (UNDP, 2019), laying down huge strain on urban infrastructure and public systems (Zinkernagel, Evans et al., 2018). Thus, cities have become the engines of global development and catalysts for promoting inclusivity and inventiveness. Cities will determine whether the inclusive growth of an area is achieved or yields greater inequality. In these cities, new growth engines will arise, or opportunities will get hampered (Ma and Li, 2022). Additionally, cities will shape the effective utilization of the world's resources or decide whether there is a long journey yet to be taken for a sustainable future. They acquire <2% of the planet's surface but enthrall 78% of the energy to produce >60% of the carbon dioxide globally (Thunell and Norström, 2014). Therefore, the vision for urban areas has never been more important than it is today where SDG 11 "Make cities and human settlements inclusive, safe, resilient and sustainable" becomes a relevant goal in this context for built environment professionals who aim to renew and plan communities on a sustainable path (UN-HABITAT, 2012). The overall research of this study intends to deal with the importance of this goal, as it allows the planning of cities and other human settlements in a way that offers opportunities for all, with access to basic services, energy, housing, transportation, and green public spaces, while reducing resource use and environmental impact (Croese and Duminy, 2023), as can be seen in its targets, as shown in *Figure 1*.

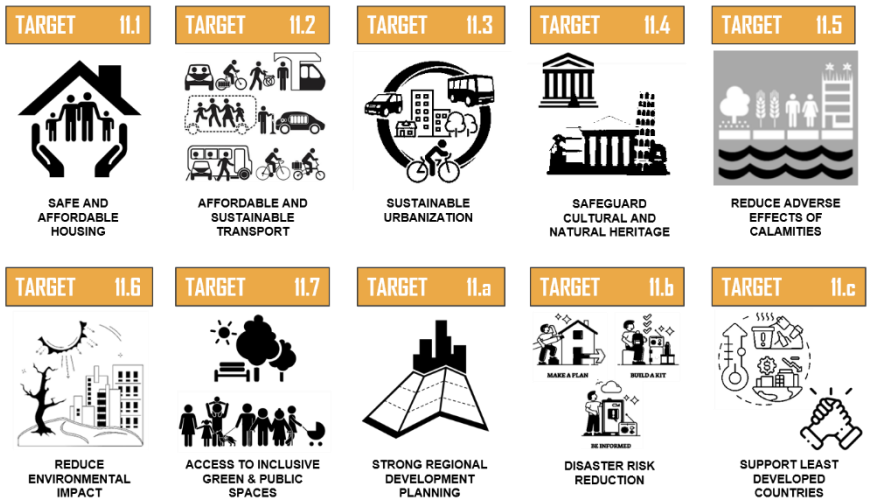


Figure 1. SDG 11 targets as defined in Agenda 2030
Source: https://www.totabc.org/sdg/sustainable-cities-communities

2.2. Challenges of rapidly urbanizing South Asia

The South Asian region plays an indispensable role in marking a paradigm shift for Agenda 2030, with economic, environmental, and social changes experienced within its urban areas for SDG 11. As the subregion accounts for one-fifth of the world's population (Department of Economic and Social Affairs, 2019), the endorsement of SDG 11 as a global effort to foster sustainable and resilient cities has become more significant. This lays a profound focus on how effectively the cities can gauge aspirational and transformational methods to venture opportunities for the localization of goals (UN ESCAP, 2019). In addition, the success of achieving the SDG 11 targets sets the stage for aligning them with other SDG as well, increasing the relevance of the goal for developing economies. *Figure 2* shows the linkages of SDG 11 targets with other goals to achieve sustainable cities beyond Agenda 2030 and provides an opportunity to harness cities' transformational force for innovation and sustainable development



Figure 2. Visualization of interlinkages for SDG 11
SDGs image source: https://sdgs.un.org/goals

However, the high densities created and spatial-temporal urbanization patterns experienced by South Asian countries due to various urban challenges at the local level comprehensively impact the achievement of SDG 11. This is also evident from the fact that India has 63 of the 100 most polluted cities in the world according to the World Air Quality Report (IQAir AirVisual and Greenpeace, 2018) and stands at a completion rate of only 31% for proposed affordable houses under 2015 Prime Minister's Housing Scheme (Tewari, 2016). This scenario questions the factors that lead to impediments in achieving the targets and hinder the achievement of high SDG scores in developing economies. Only a few countries such as Singapore, Malaysia, Thailand, and China have been able to mainstream SDG 11 in their urban planning and development frameworks (Rahman; and Khan, 2019). For instance, 90% of the population live in owned flats built by the Housing and Development Board (HDB) of Singapore, whereas the remaining 10% live in affordable rental housing, as a result of an overarching housing policy for the country adopting SDG 11.1 (Hoe, 2016). This is a rare example because a key barrier for nations in the South Asian region towards poor implementation of the goal is the weak institutional governance framework at the central, state, and local levels to deliver course action plans (Takase, 2018). Governance is not only an enabler but also a goal in the SDG 16 agenda; therefore, lack of participatory approach and representative decision-making in the process of achieving SDG 11 may result in flunked targets of SDG 16. Although shared power between authorities has increased over the years, the importance of strengthening local governance systems to be responsive, inclusive, and accountable remains trivialized for developing economies of the region (UNDP, 2019). This leads us to further focus on India as one of the fastest developing economies of South Asia, in the next section.

2.3. Impediments to achieve SDG 11 in Indian Cities

SDG 11 aspires for the universal application of the agenda through a variety of indicators that help accurately measure, monitor, and control different dimensions related to sustainable urban development (Guijarro and Poyatos, 2018). India gauges the achievement of global SDG 11 with over 17 standardized indicators spanning various targets to measure the sustainability performance of urban areas (Niti Aayog, 2020). Although these targets are presented as an indivisible whole to assess the sustainable growth of urban areas, in practice, there is little knowledge of the tradeoffs and synergies between and across them at the local level (Sterling, Pascua et al., 2020). An analysis of cities in the purview of Urban Sustainability Indexes has also shown that Indian cities are substantially lagging towards sustainable development (Patel, Rakshit et al., 2019). "It is realized that there still remains a long-standing commitment towards achieving the sustainable vision and moreover, a deterministic relationship between 3 pillars of sustainability as their performance based upon the indexes could not be established so far" (Patel, Rakshit et al., 2019).

SDG 11 is highly influenced by the quality of urban planning sectors related to transport, energy, design of public spaces, and the interactions of people with these sectors (Lützkendorf and Balouktsi, 2017). City development planning in India is no longer seen as predictive and decisive but as more provisional and inclusive in the face of an uncertain city future. As city development plans (CDPs) represents the link between regional plans and project based plans, a lot of efforts have been taken on the actual ground to broaden the involvement of a diverse range of actors in decision-making and

make spatial plans incremental as well as collaborative (Vidyarthi, 2018). This aligns with SDG 11.a target of enhancing regional development planning and incorporating urban plans as the foundation of project implementation. Over the course of years, although different ministries have advocated preparation of specific sector plans such as Slum Redevelopment Plan, Comprehensive Mobility Plan, City Sanitation Plan, Coastal Zone Management Plan, Environmental Conservation Plan, Riverfront Development Plan, Heritage Conservation Plan, and Tourism Master Plan, they struggle to integrate these plans and in overall spatial planning aspect of cities (Ministry of Urban Development, 2020). Similarly, sustainability issues remain inherently disconnected from spatial planning in India (Sharma, Sharma et al., 2022) and hinder the construction of CDPs as comprehensive sustainability plans for the SGD 11.7 target (Patel, Rakshit et al., 2019). In his study, Patel reported that other South Asian cities have endeavored towards sustainable development by not laying their focus only on execution capabilities but also striding their attention on "industrial restructuring, designing sensible transit systems and green space, pushing improvements through standards" (Patel, Rakshit et al., 2019). These cities have incorporated a long-standing commitment to a sustainable growth vision in their spatial planning framework, whereas Indian cities struggle to define the relationship between sustainable urban growth and their performance on the proposed indices. Among the important planning deficits, the issue of disintegration of national policies from any CDP is the most pressing concern. For instance, a major drawback of the national policies towards SDG 11 is the absence of a requirement to include and work around its indicators as the project targets (Singh, Panda et al., 2018). CDPs made under the current urban planning framework represent a paucity in the provision of sustainability factors concerning SDG related to equity, gender, and socioeconomic factors (Haque, Mehta et al., 2019). Another concern for the already limited capacity urban local bodies of Indian cities is that multiple resources and a large amount of time are spent on fulfilling the assessment checklist under different schemes. However, a more focused approach to evolve the existing city planning framework towards sustainability remains unattended. Adapting globalized business as a usual approach by standardizing indicators for comparative weightage among different indexes makes it difficult to realize relative and continuous developments toward sustainability at the local level (Lützkendorf and Balouktsi, 2017). Owing to the different yet interconnected nature of SDG 11, individual schemes or proposals for new ranking indices may also not act as a prolonged strategy for India; rather, a convergent set of interventions on a sustained basis through city-level planning can be beneficial in the long run.

The poor interactions between stakeholders and the negligible understanding of target application for SDG 11 create another weak link in the adoption of this goal in Indian cities. In his study, Klopp mentioned that Bangalore struggles to access adequate data for proposed indexes measuring SDGs and an "incompatibility existed between what is useful at the practical level of city politics and administration (Cao and Zhang, 2022), and what was useful for the scientific goal of better characterization and understanding of the complexity of city" (Klopp and Petretta, 2017). In the report *"India and Sustainable Development Goals: The Way Forward,"* the choice of indicators and their cross-sectional comparability were considered major issues for evaluating the impact of a development program across varying physiological and socioeconomic characteristics of an Indian city (RIS for Develoing Countries, 2016). Issues of data ecosystems with a lack of quality and up-to-date data for indicators are another major setback for cities (Fonseca, Domingues et al., 2020). With 15-17 indicators defined for the goal globally,

conceptual clarity and an established methodology for contextual development play important roles in the localization of factors. Availability of data and the frequency of collection may vary from city to city (Kushwaha, Nangia et al., 2022), hence the reliability of the current data ecosystem followed in developing cities creates bottlenecks (Kushwaha and Nangia, 2022) in the effective monitoring of SDG and eventually presents a false picture of the context (SDSN, 2020). The lack of awareness of the goal itself among various stakeholders acting at the local level is closely linked. In a survey (UNDP, 2019) to establish city-level expectations and priorities around SDG 11 implementation, limited knowledge of the goal among people and local institutions was found to be a concerning issue by Asean (UNDP, 2019). This can be further corroborated by the limited stakeholder engagement attained in the due process. Many NGOs and civil society organizations provide a wide array of ideologies and inputs but are not streamlined for the input of the indicator dataset, as is clearly visible in the case of India's SDG assessment system (Niti Aayog, 2020).

As the implementation of Agenda 2030 progresses, a growing body of research has focused on the role of local spatial planning and urban governance as important anchor tenants or process leaders for sustainability interventions rather than index measurement (Gustafsson, Hermelin et al., 2019). Gustafsson and Mignon (2020) concluded that integrating SDG 11 in strategic spatial planning and regulatory systems at the city level poses a significant challenge for local authorities. These pointers assume paramount importance for urban development because evidence-based planning decisions can shape contextual issues more sustainably from conception, by taking a proactive approach in strategic planning, to its final implementation; therefore, it becomes essential to chart a comprehensive course of action for the development and management of cities if global sustainability is the objective (Alfaro-Navarro, López-Ruiz et al., 2017). Thus, the relevance of the study lies in gathering varied experiences from neighboring nations and knowledge transfer opportunities through cross-learning, thereby becoming of paramount importance for Indian cities, emphasizing the relevance of this study

3. METHODOLOGY

This study utilizes a literature review as a major research method by qualitatively analyzing the case studies through secondary data and presenting a comprehensive picture of substantiated efforts taken in China, Singapore, Thailand, Indonesia, and Malaysia for SDG 11 localization. These countries were selected because of the similarity of challenges faced by the rising urban population in cities compared to their Indian counterparts. The annual urban population growth of these countries is mapped out in relation to their SDG 11 score in *Figure 3*, and the major question that lingers is "though we are urbanizing rapidly, but how sustainably this urbanization is happening?" The data used for the study scrutinized publicly available policy documents, comprehensive country/state reports, UNDP sustainability reports, contextual urban planning policy/proposal documents, and the SDG Gateway data repository for the Asia-Pacific region. These resources aid in extracting the relevant data and information that deliberate the achievement of different goal targets, as shown in *Figure 1* of the Introduction section.

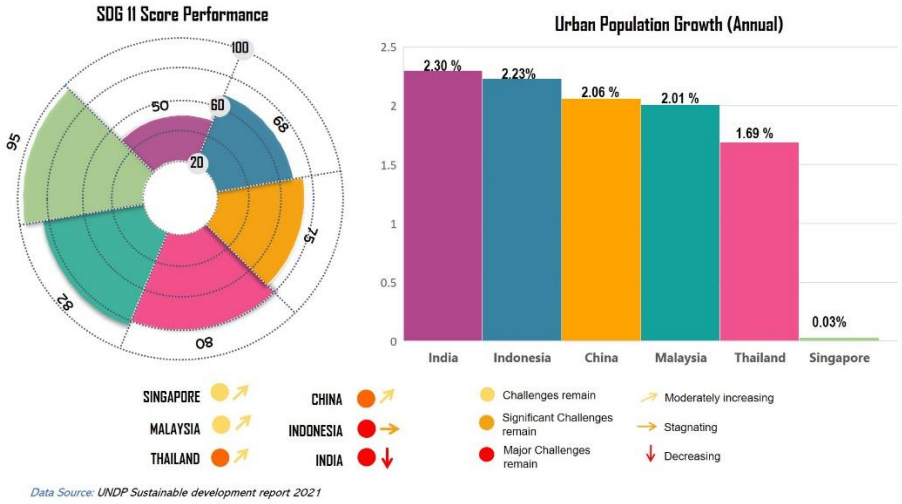


Figure 3. South Asian countries representing urbanization rates and their respective SDG 11 achievement score

For quantitative information and representation of *Figure 4* in the Results section, indicators under the different targets of SDG 11 were mapped out with the percentages extracted from the individual country's Voluntary National Review (VNR) reports and Sustainability Index reports. This mapping provides statistical information about a country's performance, but certain qualitative targets are difficult to capture with statistical data, as in the case of target 11.4. Thereafter, a comparison among the countries was made based on the level of achievement towards the different targets, to present their comprehensive approach towards SDG 11, described as either "target achieved," "moderately increasing," "achievement stagnating," or "major challenges remaining." The Results section discusses the parameters and strategies for specific cases where progress towards the target achievement is seen as positive with innovative pathways in goal localization. They illustrate the combination of strategies that deliver significant benefits to the process and identify the core enablers necessary for meaningful sustainable development.

4. RESULTS

Carrying forward the unfinished Millennium Development Goals, South Asian countries are acting to increase the global achievements of SDGs (UN ESCAP, 2019). Singapore and Malaysia are frontrunners in achieving the SDG 11 targets. Many factors play a role in these results; however, certain specific approaches that intend to act as key enablers of goal achievement are discussed in this section. Housing is one of the most perplexing challenges faced by many countries in alleviating the quality of life of people living in slums to achieve the target SDG 11.1. Singapore was a pioneer in the South Asian context with an efficient public housing landscape. It sought to deliver basic public housing at an affordable rent to as many people as possible to replace the widespread slum dwellings (Hoe, 2016). Regulatory environment for the inclusion of various stakeholders enhances aspects of community building and identification with the living place; hence, Singapore's HDB policies enable securing the property as a financial asset for slum dwellers. With these efforts, Singapore runs an efficient cycle of homeownership in relation to the social welfare system of the country, which prefers individual

saving and asset building over direct social spending and income redistribution (Hoe, 2016), resulting in nil slum population within the country (*Figure 4*).

		THAILAND	SINGAPORE	MALAYSIA	INDONESIA	INDIA	CHINA	EFFORTS AND ACTION TAKEN
11.1	%age of people living in slums	23% ↘	0% →	1% →	30% ←	35% ←	24% ↘	Singapore's Housing board policy for affordable housing secured the property as financial asset to provide income security in old age - **Singapore**
	%age of slums covered with basic services	87% →	100% →	99% →	22% ←	68% ↓	92% →	Modular water & sanitation infrastructure solution blocks of sanitation, water treatment & supply, organic waste processing, energy & nutrient recovery for in built infrastructure solutions – **China**
11.2	%age of cities with efficient public transport	76% ↘	95% →	61% ↓	78% ↘	54% ←	83% ↘	Integrating existing local semi-private transit modes in the already established intelligent transport system of cities, enhancing the feeder routes along with provision of offline data on bus schedules built as prototypes and then scaled up for other regional level- **Indonesia**
11.3	%age of cities with integrated development plans	38% ←	100% →	100% →	70% ↘	34% ←	88% →	SDG localization model contributed towards integrated working across all city departments, initially to shrivel list of indicators apt for the contextual development and progressively define targets zone wise in coordination with various vertical state departments- **China**
11.4	restoration and reuse of historic building	**No data available**						
11.5	vulnerabilities attributed to disasters per 1,00,000	89 →	25 →	480 ↘	409 ↘	2,821 ←	909 ↓	Coordination mechanism among concerned government agencies to include the development of Disaster Risk Reduction focal points in line to ministries and provincial agencies, responsible for coordinating the implementation of disaster management plans, with localized sectoral interventions – **Thailand**
11.6	%age of solid waste regular collection	65% ↓	70% ↘	80% ↘	69% ↓	68% ↓	70% ↘	Extension of the tax incentive for Green Technology on residential level to encourage incorporating combination of waste management techniques with other core recycling, recovery, or waste treatment activities.- **Malaysia**
	annual mean levels of fine particulate matter and air quality (PM 2.5 and PM 10)	24.2 ↘	19 ↘	14.8 →	16.2 ↘	90.6 ←	48.6 ↓	Cross cutting innovation of nuclear analytical techniques of the air quality monitoring project for cities on producing large sets of unique data about the elemental compositions of airborne particulate matter in determining possible sources of air pollution - **Indonesia**
11.7	per capita availability of green space (sqm) [WHO proposed- 9sqm]	6.7 ↘	8 →	8.5 →	7.01 ↘	1.8 ←	13.5 →	Industrial restructuring and mixed-use high-density planning links to land renewal promotion and increase in "green" urban planning. It is prioritized by government and non-governmental partnerships, for consensus with local stakeholders in releasing more land for urban parks and spaces- **China**
11.a	%age of population living in cities that implement urban and regional development plans	38% ←	100% →	100% →	70% ↘	34% ←	55% ↓	4-tier link established involving global, national, state, and local corridors to work towards local level related initiatives. Platforms created to share knowledge and partnerships with NGOs, academia, and private organizations recognize and contribute towards the successive efforts – **Singapore & Malaysia**
11.b	Whether the country has adopted and implemented national disaster risk reduction in line with the Sendai Framework	yes	yes	yes	no	yes	yes	-
	Proportion of State and local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction	52% ↓	100% →	100% →	20% ←	85% ↘	86% ↘	Creation of SDG 11 awareness among community and local governments with mechanisms of peer-to peer learning and involvement of CSOs at forefront for risk mitigation - **Malaysia**
11.c	Financial and technical assistance to least developed countries	**No indicator developed**						-

↑ **Target achieved** → **Achievement Stagnating**

↗ **Moderately increasing** ↓ **Major challenges remain**

Figure 4. SDG 11 targets achievement by the South Asian countries and actions taken by specific countries to achieve them

China's cross-cutting innovation parameters for providing basic services to such slum areas comprehensively support goal localization. The adoption of modular water and sanitation solution blocks installed in the areas shows that investment in a wide range of skills, not only in technology but also in design, engineering, and management, serves as an essential tool for target implementation. This helped China to achieve 92% level of 11.2 target for the slum areas and make the areas habitable for the people.

In the context of housing, accessibility to public transport has also evolved as a necessity (Adhvaryu, Chopde et al., 2019) not only for the social pillar but also for the environmental pillar of sustainability (Adhvaryu and Kumar, 2021), as established by many studies in the Indian context (Shah and Adhvaryu, 2016). With ongoing efforts in the localization of SDG 11, innovative solutions for resolving the target 11.2 using prototyping and piloting models for projects support the localized models to scale up on different city hierarchies in Indonesia. Mobility pattern studies provide insights into people's challenges, preferences, and governance issues during project incubation and serve as pedestals for prototyping. Based on this, areas for resolution are identified under the parameters of high cost, reliability of public transportation, and disparate geographical distribution of services, with the involvement of stakeholders at all decision levels (United Nations Environment Programme, 2019). For instance, in Makassar city, with stakeholder workshops and participant surveys, the provincial transport authority identified integrated solutions to ease congestion and enable reliable transportation services (UNDP, 2019) by realigning semi-private transport of the city (*Figure 5*). The social innovation model facilitated interest from other cities in Indonesia for its replication and positively contributed to the achievement of contextual solutions for SDG 11.

Learnings for Indian context: These implementation criteria with respect to building internal expertise on the SDG enhance contextual solutions with an in-depth understanding of challenges first and then testing the ideas in the field within pilot zones (Zhang, Cai et al., 2020). This increased the credibility of the agenda among external public and various stakeholders affected by the targets. The initiative advanced the scaling up of SDG localization as a replicable model for peer cities and promoted future development models for further exploration of the concept contextually rather than at the country level.

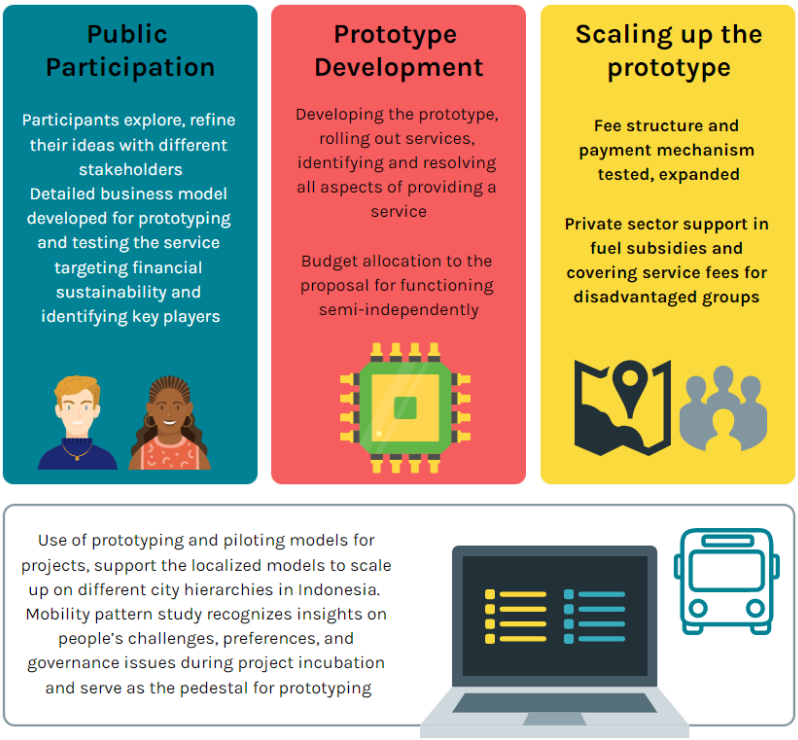


Figure 5. SDG 11.2 achieved by social innovation model adopted by the Makassar city transportation boards in Indonesia

Such applications further promote the holistic achievement of target 11.3 concerning the preparation of integrated development plan proposals for cities. The SDG localization model adopted under the State Council's Agenda 2030 policies for Chinese cities contributes to integrated working across all vertical and horizontal departments involved in city planning. It initially shriveled a list of indicators apt for contextual development and progressively defined target zones in coordination with various local departments to enhance inclusive and sustainable urbanization (Zhang, Cai et al., 2020).

Learnings for Indian context: Provision of passing new regulations in relation to specific city requirements and restructuring the public expenditure under the course strengthened the policy and institutional environment at the local level.

Achievements of target 11.5 and 11.b work simultaneously for localization efforts with consideration of mitigation and management to avoid vulnerabilities. The Sendai Framework for Disaster Risk Reduction 2015-2030 clearly outlines the importance of strengthening disaster risk governance and investing in disaster reduction in resilient and sustainable cities. Thailand and Malaysia are achievers in this category, with substantial reductions in losses of lives, livelihoods, and health and in the economic, physical, social, cultural, and environmental assets of countries (Asian Development Bank, 2017). Key local stakeholders enhance existing local-level databases with structured tools and training modules to collect and analyze datasets for disaster preparedness. These vulnerabilities may also be reduced if the target 11.6 braces the city's output towards the environment. Innovative solutions of nuclear analytical techniques in the air quality monitoring project for Indonesian cities enable the production of large unique datasets on the elemental compositions of airborne particulate matter (Ministry of National Development Planning and National Development Planning Agency, 2019). Possible sources of air pollution are easy to determine and can help Indonesia acquire low mean levels of particulate matter in air quality. Similarly, the extension of tax incentives for Green Technology (applied to industrial units) at the residential level encourages the incorporation of a combination of waste management techniques with other core recycling, recovery, or waste treatment activities in Malaysia (Federal Department of Town and Country Planning, 2016).

Learnings for Indian context: a) The involvement of key local institutions and civil service organizations, not only increases the mechanisms of peer-to-peer learning at the local level but also successively helps ground task implementation and b) the use of ICT tools and establishment of innovation/research centers boost the cross-cutting solutions in target accomplishment for goal localization.

5. DISCUSSIONS

The case studies indicate that although the current system of measuring SDGs performance with sustainability assessment tools provides a quantitative and measurable definition of the elements of national sustainable policies, the gap in the need for research remains to associate it with the local context of cities (Rodrigues and Franco, 2018). The indicators must be comprehended as guides for the evaluation of progress towards SDG 11 but not as prescribed benchmarks to judge the cities using the same yardstick. An efficacious approach to systematically recognize, characterize, and address interactions between SDG 11 and other goals remains challenging for many

cities (Nilsson, Chisholm et al., 2018). Thus, to help cities adopt Agenda 2030, the process marks a shift in global politics (Biermann, Kanie et al., 2017). There is no legal obligation for the transfer of SDG indicators into national legal systems; therefore, the agenda provides an alternative window to manifest the agenda by establishing innovative frameworks towards the localization of SDG 11 (Janoušková, Hák et al., 2018). The opportunity must be seized to determine the benefits and barriers SDGs pose for efficient city planning and how contextual elements can play a role in tradeoffs to actively contribute to the agenda. As Sterling, Pascua et al. (2020) concludes that achieving SDG 11 "holistically requires multilevel and interdisciplinary efforts at the local level of urban planning," radical change for contextualization of goals needs to take precedence over current sustainability assessment framework.

6. CONCLUSION

Sustainability emanates as a context-dependent approach, and SDG 11 particularly steers as a concept driven by the influence of local-level interactions. A definitive measure should be refined for the contextually sensitized approach to the urban goal, which requires us to further understand the city development planning framework of Indian cities and how these examples from South Asia can rate the requirements for the same. The results of the case studies compound factors such as the reimagination of domestic resource mobilization, reorganization of people-centered resources and data utilization, social innovation, and adaptive policy reform measures, which are essential for generating awareness about SDG 11 at the local level. Indian cities are affected by the dynamic changes occurring due to several urban challenges; thus, for the implementation of SDG 11, assistance in improving and ensuring contextual data availability is a critical need for a systematic modus operandi. This may not only be beneficial for the sustainable pillar of the city but also endure the changes to work in tandem with the people and city systems. Considering contextual factors as the foundation for indicator development, the disparate issues faced by continuously evolving cities can be integrated into a dynamic and interdisciplinary approach for the localization of the goal. This study serves as the initial base for reviewing the approaches and efforts taken across the South Asian developing cities facing challenges similar to those faced by Indian cities. This research further intends to apply the identified parameters across Indian cities using primary surveys and provide a viewpoint on their standing position in various targets. It may not only act as a way forward to imply a cross-country learning experience for Indian cities but also enable us to propose a framework required for the paradigm shift in the Indian context.

AUTHOR CONTRIBUTIONS

Conceptualization, Kushwaha N., Nangia C. and Adhvaryu B.; methodology, Kushwaha N., Nangia C. and Adhvaryu B.; software, Kushwaha N.; investigation, Kushwaha N; resources, Kushwaha N; data curation, Kushwaha N; writing—original draft preparation, Kushwaha N., Nangia C; writing—review and editing, Kushwaha N., Nangia C. and Adhvaryu B.; supervision, Nangia C. and Adhvaryu B. All authors have read and agreed to the published version of the manuscript.

ETHICS DECLARATION

The authors declare that they have no conflicts of interest regarding the publication of the paper.

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