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# Localization of SDG 11 for Urban life: Proliferated Experiences of Transformational Pathways in South Asia.

# Localización del ODS 11 para la vida urbana: Proliferación de experiencias de vías de transformación en el sur de Asia

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ABSTRACT

South Asian cities act as loci of interlinked sustainability issues because of the given weight of socio-economic development to be rendered for the urban life in these cities. Hence, localization of SDG 11 becomes a desideratum for functionality, livability, and sustainability of their habitants. This paper intends to provide a preliminary investigation on some of the actions and urban development practices adopted across South Asian context that harness cities' transformational force for innovation and sustainable development. The sequential analysis of the cases taken determine the gravity of the goal, according to: 1) Application: Context-specific innovative solutions for efficient application of the goal; 2) Implementation: combination of improvements in various spheres to benefit localization of SDG 11 3) Transformation: evidences on set of development changes that meet need of citizens. The discussions compound the reimagination of domestic resource mobilization; reorganization of the people-centered resource flows; social innovation for improving and ensuring contextual development of informed policy making for SDG 11. Such efforts taken as adaptive practices for the paradigm shift in Indian context, may not only be beneficial for the sustainable pillar of the cities but will also endure these changes to work in tandem with the people and city systems.

Keywords: Sustainable Development Goals, SDG 11, Agenda 2030, resource mobilization.

RESUMEN

Las ciudades del sur de Asia actúan como lugares de cuestiones de sostenibilidad interrelacionadas debido al peso dado del desarrollo socioeconómico que se le otorga a la vida urbana en estas ciudades. Por lo tanto, la localización del ODS 11 se convierte en un desiderátum para la funcionalidad, habitabilidad y sostenibilidad de sus habitantes. Este documento tiene la intención de proporcionar una investigación preliminar sobre algunas de las acciones y prácticas de desarrollo urbano adoptadas en el contexto del sur de Asia que aprovechan la fuerza transformadora de las ciudades para la innovación y el desarrollo sostenible. El análisis secuencial de los casos tomados determina la gravedad de la meta, según: 1) Aplicación: Soluciones innovadoras específicas del contexto

para la aplicación eficiente de la meta; 2) Implementación: combinación de mejoras en varias esferas para beneficiar la localización del ODS 11 3) Transformación: evidencias sobre un conjunto de cambios de desarrollo que satisfacen las necesidades de los ciudadanos. Las discusiones agravan la reinvención de la movilización de recursos domésticos; reorganización de los flujos de recursos centrados en las personas; innovación social para mejorar y garantizar el desarrollo contextual de la formulación de políticas informadas para el ODS 11. Dichos esfuerzos, tomados como prácticas de adaptación para el cambio de paradigma en el contexto indio, pueden no solo ser beneficiosos para el pilar sostenible de las ciudades, sino que también soportarán estos cambios para funcionar. en conjunto con las personas y los sistemas de la ciudad.
Palabras clave: Objetivos de Desarrollo Sostenible, ODS 11, Agenda 2030, movilización de recursos.

## INTRODUCTION

Cities are engines of economic growth, catalysts for creative environment of communities and hence come forth as one of the exigent measurement for envisioning sustainable future (Kharrazi et al. 2016). They are also marked by tenacious urban issues such as poverty, safety, segregation and environmental pressures to pave their way through towards territorial development (Medeiros 2020, Van der Zwet 2020). This balance of growth and inclusion underlines immense opportunity for the cities to move towards resilient pathways (Fisher and Fukuda-Parr, 2019) and hence it is no surprise when it is said that the battle of sustainability will be won or lost in the cities (Krellenberg et al. 2019). In this light, the effective application of Sustainable Development Goal 11 “Make cities and human settlements inclusive, safe, resilient and sustainable” becomes an indispensable goal to be maneuvered by built environment professionals (Nangia et al. 2019a, b). An important link to achieve the goal thus include strengthening the importance of capturing people’s perception towards attributes of built environment (Nangia et al. 2019b). Not only it encapsulates the essence of city functioning wheel but also project out the requirements to keep the wheel moving (Guijarro 2018, Poyatos 2018).

World’s population residing in cities is likely to be two-thirds of the total population by the year 2050 (UNDP 2019), laying down huge strain on urban infrastructure and public systems (Zinkernagel et al. 2018). India alone is expected to double the number of city dwellers by adding about 400 million people over the next 3 decades. Such high urbanization would increase the absorption of diverse groups in urban areas, impacting the resources (Vidyarthi et al. 2013). These imbalances create a gap between the demand and supply of utilities provided among Indian cities (Randhawa 2017, Kumar 2017), impacts climate and, increases the propensity of natural disasters affecting local communities (Olsson 2009). All of which eventually will lead to a degraded life quality of life (Gustafsson et al. 2019). Hence, an integrated approach to fulfill these gaps for a country like India, SDG 11 appears to be an effective tool to deliver future urban development that is sustainable (Kushwaha 2022, Nangia 2022, Kushwaha et al. 2022). However, the scores attained by India in the SDG 11 category of UNDP report 2021, show that the efforts appear to be stagnating or decreasing in maximum indicators of the goal (UNDP 2021) and further impels us to dwell on

understanding the cardinal requirements of local level planning for a context-sensitive approach towards the goal (Croese et al. 2021).

Thus, the question arises how context-specific variances resonate with decision-making groups of community at local level and enhance rational resource decisions within common territory? Thus, exploring these variances become extremely crucial in localization of SDG 11 (Sterling et al. 2020, Hassanzadehkermanshahi 2022, Shirowzhan 2022) and paper intends to contemplate on proliferated experiences taken across in South Asian cities to attain context-sensitive approach in adapting SDG 11 for urban life with various planning and policy reforms.

## MATERIAL AND METHODS

The study utilizes urban planning policies and proposal reports for the case examples of China, Thailand, and Indonesia along with evidence captured in UNDP reports, National & state level plans and policies, etc. Various journal publications along with the reports have been referred to acquire data on cases, giving a comprehensive picture on localization for SDG 11. Comprehensive document review ameliorates current frameworks, societal skills, government arrangements and resource management through lens of three criteria as described in the Fig. 1. Individual case discussed in results section corroborates to one single criterion and underpins evidences which have helped in accelerating adaptation of SDG 11 to meet the needs of their inhabitants.

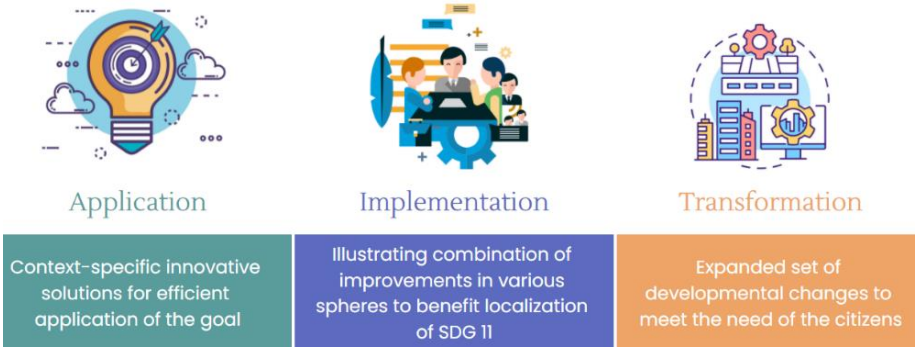


Fig 1: Case studies reviewed along the criteria of application, implementation, and transformation to achieve localization of SDG 11 in respective context.

## RESULTS AND DISCUSSION

A) The case of Makassar city, Indonesia applying social innovation to develop new transportation services

Makassar is a Tier II city of Indonesia, with approximately 2.4 million population in the region and acts as an essential port being propelled as a trade center. It faces issues in transportation sector bearing 2.5 million private vehicles on city streets, more than the handling capacity of the road infrastructure (UNDP, 2019). With ongoing efforts in localization of SDG 11, the city transport department introduced innovative solutions for enhancing the target 11.2 of the goal with provision of sustainable transport systems. It was resolved by integrating existing semi-

private transit modes in the already established intelligent transport system of the city, enhancing the feeder routes along with provision of offline data on bus schedules.

During incubation, mobility pattern study recognized insights on people's challenges, preferences, and governance issues in efficient provision of services. Based on this, areas for resolution were identified under the parameters of high cost, reliability of public transportation and disparate geographical distribution of services. With stakeholder workshops and participant surveys, the provincial transport authority identified 3 key proposals called Pasikola, Bajikia and eNassami acting as integrated solution to issues of easing congestion and enabling reliable transportation services (UNDP, 2019) as portrayed in Fig. 2. In its application, the project offers lessons in key areas such as: a) involvement of key local institutions to enable scaling up of services and facilitate innovation process; b) establishing financial management of resources c) most importantly involving public as participants along all phases to enhance inclusivity in proposals (Osman et al., 2021). The social innovation model facilitated interest from other cities in Indonesia for its replication and in the process positively contributed to achievement of contextual solutions for SDG 11.

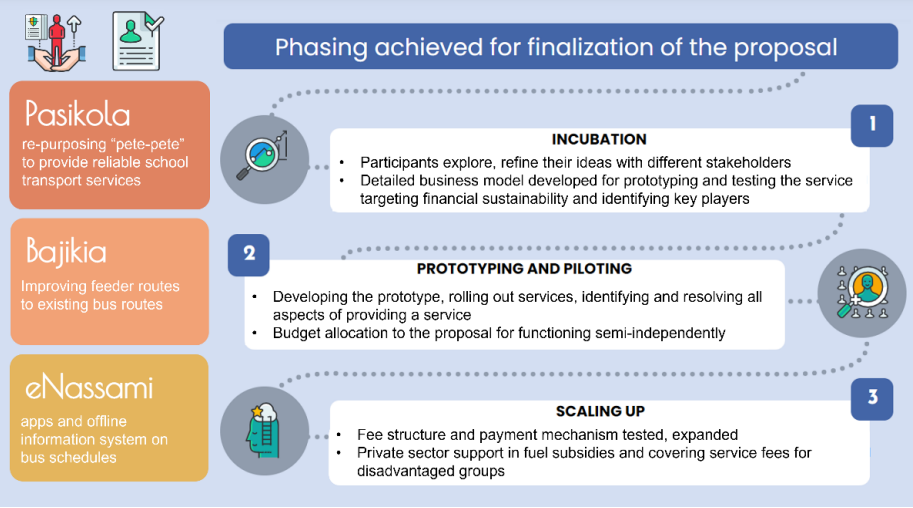


Fig 2: Social innovation model adopted by the Makassar city transportation board (DISHUB) in supporting SDG 11.2

B) Local capacity strengthening in Taiyuan city, China for implementation of SDG initiated pilot zone

Taiyuan is a capital city of Shanxi Province, driven by the manufacturing sector as main economic base. Limited awareness of the sustainability goals, no effective pilot programs emphasizing localization of SDGs and most importantly lack of integrated technological & financial support factors came across as major setbacks in the city (Xu et al., 2019). These were coupled with overlapping issues of knowledge creation on business management in promoting opportunities for sustainable urbanization (UNDP, 2019). In March 2018, it was approved in the first batch of SDG contextualized pilot zones and manifest itself as sustainable city on global level. In the process, Taiyuan exemplified a SDG localization model adopted under State council's Development Plan of China's Innovation

Demonstration Zones for the Implementation of the UN Agenda 2030 (UNDP, 2019) as described in Fig. 3. Taiyuan worked horizontally across all city department initially to shrivel list of indicators apt for the contextual development and progressively defined targets zone wise in coordination with various vertical state departments. It moved forward with working towards passing new regulations based on the innovative institutional reforms adopted by the city and restructuring the public expenditure under the course.

The implementation criteria in respect of building internal expertise on the SDG, enhancing contextual solutions with in-depth understanding of challenges first and testing the ideas on field within pilot zones, 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 promote future development models for further exploration of the concept contextually rather than at country level.

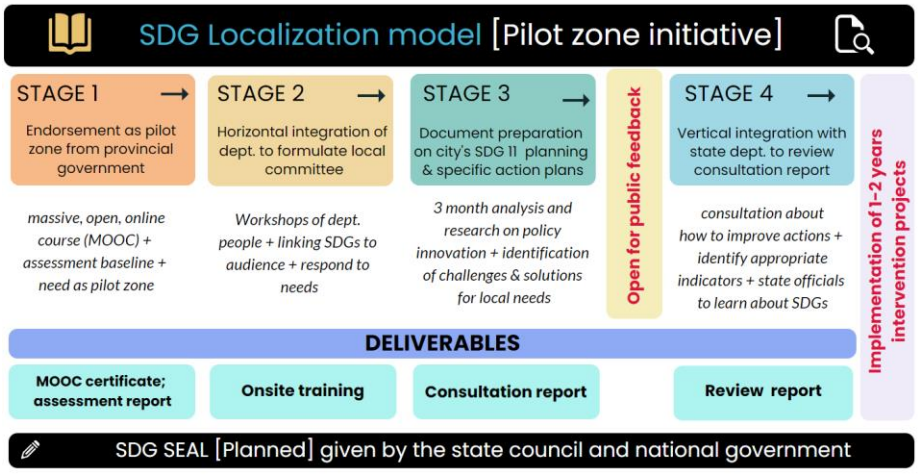


Fig 3: SDG 11 localization model adopted by the Taiyuan city, China for enhancing contextual solutions for the goal

C) Community based tourism in Sakhon Nakhon province, Thailand for transforming community economy

Tourism forms the backbone of Thailand's economy with annual increase in revenue of more than 10 million baht (Bocquier, 2014). Thus, in alignment to SDG 11.4 (safeguard natural and cultural heritage) Thailand has branched out community-based tourism (CBT) project for two-tier cities in order to redistribute revenue generated at community level. Potential of the Sakhon Nakhon province was assessed as a tourist attraction under the project and surveys indicated the uniqueness, security and service, cultural and natural heritage offered by the area to enhance CBT. In consultation with the community stakeholders, business model canvas was prepared based on the SWOT analysis (UNDP, 2021). It laid down the vision to attract customers by creating activities, storytelling workshops, representing the heritage with potential cost required for resources and income generation as revenue to the model described in Fig. 4.

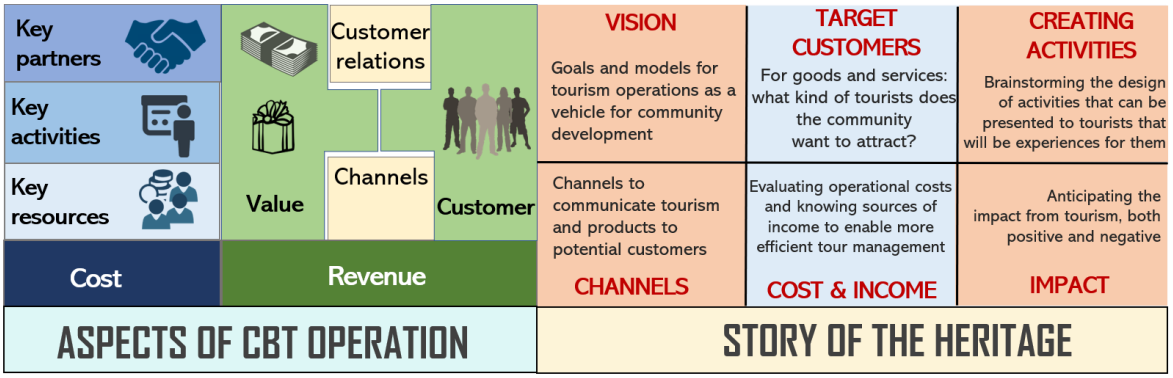


Fig 4: SDG 11 Community based tourism model and operations of Ban Nong San Community

This transformational approach provided supplementary income source to the farming community in off weather season, led to social integration or tying of generations with elderly population acing as hosts to tours while youths being prepared as guides for the project, and lastly acting instrumental in localization of SDG at community level. The project helped to distribute revenue effectively and equitably to local people without the risk of piddling machination. The Sakhon Nakhon province exemplified an initiative that could leverage various partnerships from public and private sector to edify local communities in improving contextually driven development initiatives to promote sustainable growth of the communities in tier-two cities.

## CONCLUSION

Sustainability emanates as a context-depending approach and SDG 11 particularly steers as a concept that is driven by the influences of local level interactions (Nilsson et al., 2018). Results of the case studies compound factors like reimagination of domestic resource mobilization; reorganization of the people-centered resource flows; social innovation and adaptive policy reform measures, as essentials for generating awareness about the SDG 11 at local level (Koch and Krellenberg, 2018). It is suggested that for implementation of the goal, assistance in improving and ensuring contextual data availability for the indicators lead to development of informed policy making at city level. To carry forward the research in this sphere, there must be a sharp need for a systematic modus operandi that may not only be beneficial for the sustainable pillar of the city but will also endure these changes to work in tandem with the people and city systems. Taking contextual factors as the foundation for indicator development, the disparate issues faced by continuously evolving cities could be integrated into a dynamic and interdisciplinary approach for the localization of SDGs (Fonseca L.M et al., 2020). The research further intends to apply the identified parameters across Indian cities with primary surveys and provide a viewpoint of their standing position in various targets. The paper thus intends to not only exemplify efforts taken across the South Asian developing cities, facing challenges similar to sister Indian cities but act as a way forward to imply cross-country learning experience for the paradigm shift in Indian context.

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