

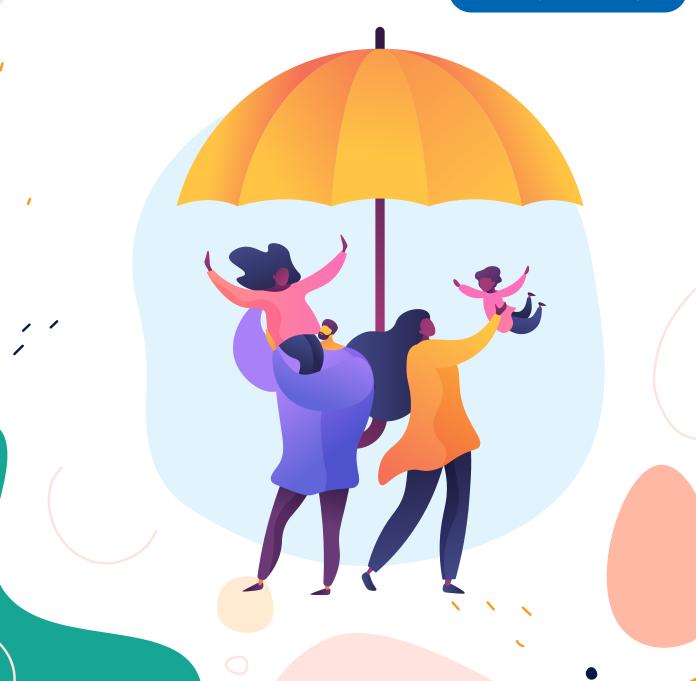






# City Planning from the Lens of a Young Child and Caregiver

Policy Advisory



# INTRODUCTION

he young child1 (0-6 years) and caregiver (the elderly, parents, family and relatives etc.) friendly approach to city planning aims to improve children's holistic development, health and access to built environment and open spaces beyond parks/ playground alone. This helps foster enabling positive urban environment for early childhood development. Since young children are on the learning and development curve, it is vital to shape their experiences and interaction with public spaces for their cognitive, social, emotional and physical development. Early childhood refers to the formative stage of first six years of life, with well-marked sub-stages (conception to birth; birth to three years and three to six years) having agespecific needs. The National Early Childhood Care and Education Policy (NECCE) 2013 specifies care, health, nutrition, play and early learning within a protective and enabling environment as the key elements for early childhood development Discussions with different urban stakeholder groups across Indian cities in May-July 2021 revealed a diverse set of challenges faced by the cities in planning and designing neighborhoods from a young child and caregiver perspective.

Many cities have incorporated a version of the child and family-friendly approach into their urban management systems under the national flagship missions including the Smart Cities Mission and the Atal Mission for Rejuvenation and Urban Transformation (AMRUT)<sup>2</sup>. There is, however, the need to mainstream the inclusive urban design approach across all Indian cities to make them cognizant of the development needs of young children and their caregivers and help create resilient and livable spaces for all. This advisory note identifies specific practices and challenges in Indian cities and recommends specific areas of intervention for creating

infant, toddler and caregiver-friendly cities. The relevance of young children's needs to city planning and design is analysed through the followin g questions:

- What are the specific development needs of young children and caregivers which can be met through appropriate neighbourhood design/plan?
- What are the existing qualitative and quantitative data gaps which inhibit assessment of Infant, Toddler and Caregiver (ITC) development needs for designing a ITC-friendly neighbourhood (ITCN)<sup>3</sup>?
- Which are the missing elements in neighbourhood/ city planning practices which hinder the development of an inclusive city plan?
- What are the links between spatial planning and mobility planning, and its impact on young children, especially from the lens of safety and security?
- How much awareness do city officials have on ITCN<sup>4</sup> guidelines and framework, and whether the guidelines are being adopted?
- What are some of the major capacity building needs of city officials to ensure that young children and caregiver needs are met in Indian cities?
- What are the major environmental challenges and their impact on quality of life of young children?

# 1. Young Child and Caregiver Appropriate Built Environment

An inclusive, resilient and equitable spatial plan sensitive to the development needs of young children and caregivers ensures that the built environment, streets, nature and all other city investments promote development of an inter-generational and sustainable city. The key intervention area is the pedestrian facilities, streets and open spaces in cities which constitute, on an average, 30 - 40% of a city's space<sup>5</sup>. Easy accessibility

<sup>&</sup>lt;sup>1</sup> Child Population by the Census is described as population of children in the age-group 0-6 years. They are further classified as Infants in the age group of 0-1 year, Toddlers 1-3 years and Young Children 3-6 years.

https://niua.org/cfsc/sites/default/files/repository/Status%20of%20children%20in%20urban%20India\_Baseline%20study%202018.pdf

<sup>&</sup>lt;sup>3</sup> https://bernardvanleer.org/publications-reports/infant-toddler-caregiver-friendly-neighbourhood-itcn-framework-and-guidelines/

Infant, Toddler and Caregiver-Friendly Neighbourhoods (ITCN) capacity building programme, the collaborative NIUA-BvLF initiative, aims to develop structured training modules for city officials and young professionals to promote family-friendly urban planning design and healthy environments for young children.

<sup>&</sup>lt;sup>5</sup> The average percentage varies from city to city, primarily depending on a number of factors such as city development plans and goals - https://next-city.org/daily/entry/how-much-public-space-does-a-city-need-UN-Habitat-joan-clos-50-percent

to pedestrian facilities and pavements<sup>6</sup> for safer commutation of young children and their caregivers is one of the facilities lacking in urban design and the built environment<sup>7</sup> in Indian cities. This also leads to barrier regarding seamless access to early childhood suppport services like pre-primary school, anganwadi and primary health centre.

India has 158.7 million children in the 0-6 years age group as per census, 2011 (Please refer to the Early Childhood Care and Education Policy, September 2013). Most of the young children, however, do not have access to a healthy environment since 30% of the urban population is living in unplanned settlements and even planned neighbourhoods lack facilities suitable for young children and their families. In urban India, 65.5 million people (17.4% of city population) live in slums. Young children belonging to economically vulnerable families often face increased health and development risks, with inequitable access to safe built environments and living conditions.8

# 2. Infant, Toddler and Caregiver Database

City planning and programme implementation departments have weak database for the preparation of city plans and programmes. Since data cycles in India generally stretch for a period of 5 - 10 years, cities are unable to appropriately respond to the dynamic needs of young children and their caregivers. In addition, disaggregated data for 0-3 years and 3-6 years age group are often not available in many of the cases. Further, cities do not have the requisite manpower and skills for data collection to update the existing database and to strengthen the weak and zero data zones. 64.7% of city stakeholders revealed that ITCN-related data is inaccessible to the general public, private and public entities.

### 3. Neighbourhood/City Planning Practices

The city and neighborhood plans are generally focused

on service provision and local economic development. The planning practices follow a piecemeal approach and result in exclusionary neighborhoods where citizens are often left out of the entire process. Urban neighborhoods are typically inaccessible and there is an unequal distribution of social and physical infrastructure (like pre-primary school, anganwadi, primary health centre, etc.) between the various socioeconomic groups. Lack of universal accessibility in cities results in the exclusion of marginalized population group from accessing public spaces and their movement. The obstacles faced by young children, impact their urban experience and infringe on their brain development making foundational learning, behavior and health weak. The first 1000 days are the most critical in brain development wherein 80-90% of the development happens.

## 4. Integration of Infant, Toddler and Caregiver-Friendly Neighbourhoods (ITCN) within City Plan

In spite of the existing policy framework for promoting Early Childhood Development,<sup>10</sup> young children's development needs are assigned a low priority at the programmatic levels. The harmonization of various child-related provisions in policy provisions would enable urban local bodies to formulate ITC friendly vision for the city. This would encourage them to strengthen their institutional mechanisms to cater to early childhood development especially from behavioural and environmental perspective. The consultations with city stakeholders highlighted the need for the unification of overall city development goals and objectives across all line departments. 11 In addition, civil society engagement on young children's issues at various forums would help identify and address the pressing challenges and concerns relating to ITCs. The needs of caregivers of young children are not addressed within spatial plans and designs of built environments. The city plans do not adequately provide for waiting areas and shaded spaces, benches,

Drawing on the empirical analysis by Monica Montserrat and Rose, Gillian in their study 'The Sensory Experiencing Of Urban Design: The Role Of Walking And Perceptual Memory' which argues sensory urban experiencing produces different forms of mobility and perpetual memories which further enhance the cognitive development of individuals. Further the study argues how good design can help create lively places with a distinctive character; streets and public spaces which are safe, accessible and pleasant inspire imagination and sensitivity.

Greater Chennai Corporations' recent initiative 'Streets for People' addresses concern of inclusivity and pedestrian friendly movement. https:// www.itdp.in//chennai/

As per the 2011 census, India has 1.77 million homeless people out of which 0.27 million (15.3 %) are children in the 0-6 years' age group. Considering urban areas, 0.94 million (52.9 %) of homeless people reside on streets, out of which 0.11 million are children in 0–6 years' age group. These children constitute 41.7 percent of the total homeless children population in India and 12.0 per cent of the total urban homeless population.

A survey was conducted by ITCN team as a part of Knowledge Needs Assessment (KNA) study to understand capacity building needs of ULB officials in select pilot cities. The sample size undertaken was 16 and the mentioned percentage indicates 64.7% of the total 16 samples. Primarily the respondents include urban stakeholders including practitioners, academicians, caregivers and young adults.

<sup>10</sup> Early Childhood Care and Education (ECCE) Policy, 2013 lays down the way forward for a comprehensive approach towards ensuring a sound foundation for survival, growth and development of child with focus on care and early learning for every child. It recognizes the synergistic and interdependent relationship between health, nutrition, psycho-social and emotional needs of the child. National education policy 2020, also points out the importance of universal provisioning of quality early childhood development, care and education.

<sup>&</sup>lt;sup>11</sup> https://wcd.nic.in/sites/default/files/WCD\_AR\_English%20final\_.pdf

safe, accessible and playful pedestrian pathways. This is important as infants and toddlers cannot transit neighbourhoods/city on their own and require support of the caregivers. Cities for baby, toddler and caregiver are good for every one.

### 5. Awareness on ITCN guidelines

The city stakeholder's consultations and survey revealed that 52.9% of the 16 respondents (includes engineers, city planners, urban designers, environment officer etc.) have never used the ITCN framework (the framework was developed under the guidance of MoHUA, Smart Cities Mission and with the support of various partners) for planning and implementation of the on-going programmes and projects. The young child-centric planning and interventions especially for creating playful and safe spaces were found to be useful by the city development officers. The knowledge needs assessment study<sup>12</sup> points to how city officials have attempted to incorporate these lens (Pune and Gwalior's case studies have been highlighted). The city officials endorsed the need for a city audit to assess the progress made by cities to achieve the ITCN goals.

### 6. Capacity Building needs for City Officials

Enhanced efforts by state administration for capacity building of ULB officials on ITC aspects is critical. As there are no fiscal transfers or municipal budget allocations for ITC centric programme interventions, there is little attention currently on ITC-friendly cities. ITCN concept needs to be adopted as a cross-cutting consideration for urban planning and design, and city investments. Caregivers of young children do not have a voice in stakeholders consultations for plan preparation, and design and implementation of programmes across cities. Formation of a working group/ sector committee by city departments in collaboration with various stakeholders (including caregivers of young children) would help in achieving the goal. Pune<sup>13</sup> for instance, has a Non-Motorized Transport Committee which addresses specific concerns relating to footpaths, city street designs, ITC friendly streets etc.

City officials during the interactions with ITCN-NIUA suggested specific facilitation to strengthen the integration of ITC needs in urban designs and

programmes. These include training of city stakeholders for a better understanding of early childhood development and its relation to the built environment. Since young children with caregivers including pregnant women, elderly, differently-abled and others are vulnerable in a city environment, city plans and urban policies need to contribute to achieving tangible outcomes. An inclusive approach, which assesses gaps and existing challenges in planning approaches specifically from ITC lens would support enhanced accessibility for young children and their caregivers.

### 7. Healthy Environments for Young Children

The Smart Cities Mission emphasizes promoting clean and healthy environments. Pune, one of the top performers in increasing green cover areas, has improved its biodiversity coverage, planning practices and budgetary provisions to ensure an increase in green cover. Exposure to air pollution is detrimental for unborn babies, newborns and young children, and harms them during the developmental stage of their life causing lifelong health problems. Exposure to air pollution at a young age can hinder lung growth, inhibit brain development and increase the risk of health conditions such as asthma.14 Even though reducing and managing environmental pollution is beneficial for everyone, it specifically helps mitigate the ill-effects on young children as they are most vulnerable to constantly high air pollution.<sup>15</sup> One of the major misconceptions of the cities is that increasing parks would help address environmental challenges and also serve as play areas for young children and their caregivers. There is generally a lack of adequate assessments of environmental change and its impact on ITCs, especially in spatial and transport planning, and requires specific considerations<sup>16</sup>. For instance, Master Plan Delhi 2041 has assessed the green public areas and parks from the ITC lens and also touches upon needs of young children in transport and mobility planning. In addition, built environment has direct consequences on the cognitive and physical development of a child, when the young child is able to breathe in a cleaner environment.<sup>17</sup>

One of the major concerns that remain in cities is exposure to sound and air pollution for young children. High levels of pollution lead to detrimental

<sup>12</sup> ITCN, Knowledge Needs Assessment Study

<sup>&</sup>lt;sup>13</sup> https://www.pmc.gov.in/en/urban95\_Pune

<sup>14</sup> https://www.unep.org/news-and-stories/blogpost/young-and-old-air-pollution-affects-most-vulnerable

<sup>&</sup>lt;sup>15</sup> At least 1 lakh children below five years died in 2016 in India due to health complications associated with high outdoor and indoor air pollution, according to the report titled 'Air Pollution and Child Health.'

<sup>&</sup>lt;sup>16</sup> https://www.education.gov.in/sites/upload\_files/mhrd/files/NEP\_Final\_English\_0.pdf

<sup>&</sup>lt;sup>17</sup> The numbers of child-related traffic fatalities and casualties, especially of adolescents, are high, caused by dangerous driving behavior, poor street design, and lack of basic infrastructure and traffic safety requirements such as walkways, pedestrian crossings and street lights. Recent estimates also show that physical inactivity, linked to poor walkability and lack of access to recreational areas, accounts for 3% of global deaths. Smith, Fiona, et al., 'How dashboards can help cities improve early childhood development', Open Data Institute, 2017.

developmental growth in younger children. Increasing focus on ITC centric city planning would also help plan for a reduction in pollution levels, especially sound and air pollution. A neighbourhood clean air plan<sup>18</sup> to monitor air and noise pollution and to plan for local

improvements near pre-primary schools, primary health centers, day-care centers and anganwadis is required to reduce the number of private vehicles and ensure modal shift to clean transport modes.

### Recommendations

- Master Plans, Neighbourhood Plans, Local Area Plans and Urban Design Regulations in cities should focus on improving access of the ITCs to streets, pedestrian paths, open spaces, and other civic amenities and services.
- Short periodic data collection cycles need to be adopted to appropriately respond to the dynamic city demography by using reliable, recent and intertemporal data for decision making. The database should include variables relevant to overall health and well-being of the ITC and the data should be available in the public domain.
- Cities may pilot at the ward and local area level, ITC-sensitive planning to formulate/revise statutory planning provisions and development control rules. This will help the cities to deliberate on best practices to safeguard rights and health and wellbeing of young children and their caregivers.
- Regular programme audit of on-going citydevelopment investments should be undertaken to assess their alignment to the ITC needs. Similarly, Local Area Plans and Master Plans should be reviewed to identify gaps in the provisions for addressing young children and caregiver challenges.
- There is the need to address lack of capacity at the ULB level by initiating capacity building activities based on the consultations and Knowledge Needs Assessment Inputs to facilitate ITC centric planning.
- The urban planning regulations should be reviewed and revised to accelerate the clean energy shift at the local and city level. Research efforts should be enhanced to study the impact of air pollution on young children and the cities should adopt good practices for greener public spaces.

# References:

- i. Cohen, J., S. Boniface, and S. Watkins. 2014. Health implications of transport planning, development and operations. Journal of Transport & Health 1: 63–72
- ii. Degen, M.M., and G. Rose. 2012. The sensory experiencing of urban design: The role of walking and perceptual memory. Urban Studies 49, no. 15.
- $iii. \quad Dhar, Devashish; Thak re\ Manish\ 'No\ Child's\ Play:\ The\ Enduring\ Challenge\ of\ Creating\ Child-Friendly\ Cities'\ 2020$
- iv. Master Plan Delhi 2041, Delhi Development Authority; to be Published in the Gazette of India Extraordinary, Part II, Section 3, Sub Section (ii)
- v. Ministry of Women and Child Development Government of India; Annual Report; 2021
- vi. National Institute of Urban Affairs; Indicators for CHIId friendly Local Development (I CHILD), 2016
- vii. Niti Aayog; Five Year Annual Report; 2020.
- viii. UNICEF; Shaping Urbanization for Children: A Handbook on Child-Responsive Urban Planning; 2018
- ix. van Vliet, Willem, and Lia Karsten (2015). "Child-Friendly Cities in a Globalizing World: Different Approaches and a Typology of Children's Roles." Children, Youth and Environments 25(2): 1-15. Retrieved [date] from: http://www.jstor.org/action/showPublication?journalCode=chilyoutenvi
- x. http://119.226.139.196/tendernotices\_docs/aug2020/Draft%20MPD%202041%20(English)09062021.pdf
- xi. https://bernardvanleer.org/solutions/urban95/
- xii. https://bernardvanleer.org/publications-reports/infant-toddler-caregiver-friendly-neighbourhood-itcn-framework-and-guidelines/
- xiii. https://www.pmc.gov.in/en/urban95\_Pune
- xiv. https://udaipurmc.org/uploads/1633322092-5379.pdf
- $xv. \quad https://bernardvanleer.org/app/uploads/2018/06/3.5-Urban 95.pdf$

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As per the 15-minute Neighbourhood concept, maximum amenities should be accessible to ITCs. As per URDPFI cities in India have an average density of 45-200 people per hectare based on various city sizes as defined by URDPFI. This corresponds to a population of five to fifteen thousand people living within this zone, which in Indian planning norms, equates to a 'neighborhood unit'.