









Compendium on Good Practices for

Environmentally and Conomically Sustainable Child- and Youth-centric Cities



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आवासन और शहरी कार्य मंत्री पेट्रोलियम एवं प्राकृतिक गैस मंत्री भारत सरकार Minister of Housing and Urban Affairs; and Petroleum and Natural Gas Government of India

MESSAGE



India has witnessed rapid urbanisation in recent years. The Modi government has launched various flagship programmes and policy initiatives to capitalise on this massive opportunity. Undertaking the largest planned urbanisation exercise witnessed anywhere in the world has resulted in a fundamental transformation of our cities. Our urban spaces have become vibrant hubs of economic growth and innovation, attracting people from diverse backgrounds. One important strand of our endeavour has been to ensure that our cities are safe, inclusive and nurturing for our future generations.

The concept of child- and youth-friendly cities resonates with our vision for sustainable urban development. By placing children and youth at the centre of our planning and decision-making processes, we can transform our cities into child- and youth-friendly ecosystems. Such cities provide ample opportunities for learning, play, and engagement, enabling our children and youth to explore different opportunities and realise their full potential. The government is working towards this ideal through various initiatives in the Smart Cities Mission, alongside collaborating on other equally impactful measures at the local level.

This compendium on 'Environmentally and Economically Sustainable Child & Youth Friendly Cities' provides insight into some of the best practices adopted both in Indian cities as well as abroad in order to create cities that nurture the talents of our children and youth, encourage their participation, and empower them to become responsible and engaged citizens.

I congratulate the Ministry of Housing and Urban Affairs (MoHUA), National Institute of Urban Affairs (NIUA) and UNICEF India for coming together to comile this informative document.

New Delhi 03 July 2023









In this era of rapid urban transformation, cities are functioning as dynamic hubs of opportunities, diversity, and growth. The changing urban spaces also present key challenges, particularly for children and youth as their needs and aspirations are unique. As the G20 countries and other nations across the globe working towards creating child and youth-centric cities that are environmentally sustainable and economically vibrant, it is our responsibility to create urban environments that foster their full potential, safeguard their rights, and address their specific needs.

A child-friendly city often refers to a city or any local governance system that demonstrates a firm commitment to upholding children's rights which includes recognizing their right to participate in decisions that impact their city, engage actively in community, and social life, access essential services, be safeguarded against exploitation, violence, and abuse, and be considered equal citizens regardless of their ethnic origin, religion, income, gender, or disability status. As policy makers, we all should recognize the importance of creating cities that prioritize the well-being and development of our children and youth while ensuring environmental and economic sustainability.

I am pleased to note the collaborative efforts of the Ministry of Housing and Urban Affairs (MoHUA)-Government of India, through the National Institute of Urban Affairs (NIUA) and UNICEF India in bringing out this publication- "Compendium on Good Practices for Environmentally and Economically Sustainable Child and Youth centric Cities" which showcases good practices from around the world that serve as inspiring examples of how cities can be designed and managed to provide a nurturing and inclusive environment for our future generations.

I encourage all G20 member countries and other nations to study and draw upon the experiences shared in this compendium, while adapting them to their local contexts. I firmly believe, together, we can build a global network of child and youth-centric cities that prioritize sustainability, equity, and the realization of children's rights.

Yours sincerely,

(Amitabh Kant)

Place- New Delhi Dated- 30/06/2023





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REPRESENTATIVE, UNICEF INDIA COUNTRY OFFICE

MESSAGE



UNICEF stands committed to promoting sustainable urban development that places the well-being and interests of children, adolescents and youth at its core. We believe part of our work in advancing children's rights as enshrined in the United Nations Convention on the Rights of the Child (UNCRC) is to facilitate all cities and urban spaces to be child and youth friendly. Furthermore, when a city incorporates the requirements and perspectives of children into its policies and programmes, it rightfully transforms into an inclusive living environment suitable for everyone.

Across the globe, the environmental, social and cultural factors impacting the well-being of children both indoors and outdoors have often been under-prioritized by policy makers and urban planners. To address this gap, governments across the world are taking various initiatives to ensure that decision makers actively listen to and collectively work towards enacting the inputs provided by children and youth on their priority areas. There is an urgent need to make critical investments in making our cities more environmentally sustainable and responsive towards the needs and aspirations of children and youth.

It is with great pleasure, I appreciate the collaborative effort made by the Ministry of Home and Urban Affairs (MoHUA), National Institute of Urban Affairs (NIUA) and UNICEF India for bringing out this compendium of good practices from India and cities across the globe which can be useful to consider for other countries, including the G20. I strongly believe that our unwavering commitment to inclusivity, sustainability, and empowerment will guide us in our pursuit of sustainable urban development that truly places the needs and aspirations of children and the younger generation at the forefront.

Cynthia McCaffrey







राष्ट्रीय नगर कार्य संस्थान NATIONAL INSTITUTE OF URBAN AFFAIRS

MESSAGE



A majority of the world's population lives in the cities, a trend that is set to grow in the coming days. In India itself, it is estimated that about 60% of the population of the country will live in cities by 2050. Moreover, India also has one of the youngest populations in an otherwise aging world. With almost 40% of the population below the age of 20 years, India can reap the demographic dividend, through creating child and youth centric cities and nurturing environments. This is particularly relevant in the present time when climate change and induced disasters are increasing stresses in the cities.

Several missions and efforts of the national, state and city government have mainstreamed the concept of making cities more inclusive and livable for the vulnerable groups. These efforts have paid dividends and inclusive urban development has come a long way in the last decade. Cities are motivated to adopt a child friendly lens while developing neighborhoods to make them green, safe, playful, accessible, and inclusive to children of all ages, youth and caregivers. I am pleased that the initiatives and efforts have made its way into this "Compendium of good practices for environmentally and economically sustainable child and youth centric cities", which showcases India's story of inclusive and nurturing urban development. I am intrigued by the selection of impactful, diverse, and successful best practices captured from the length and breadth of the globe. I am certain that this anthology of best practices will imbibe peer learning and knowledge exchange among urban local bodies and authorities within India and other developing countries.

I am grateful to the Ministry of Housing and Urban Affairs, for their constant support and guidance in steering the dialogue on building urban areas conducive to the needs of children and youth. I congratulate UNICEF for bringing the insightful and timely publication. I am certain that the document will bring the right motivation, inspiration and guidance, leading to many such examples of nurturing, resilient and inclusive New India.

Hitesh Vaidya Director

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CHIEF, SOCIAL POLICY & SOCIAL PROTECTION, UNICEF INDIA COUNTRY OFFICE

MESSAGE



In today's rapidly urbanizing world, cities hold the key to shaping the future of our planet. With more than half of the global population residing in urban areas, it is crucial to recognize the pivotal role cities play in creating environments that are sustainable, inclusive, and nurturing for our most vulnerable citizens: children and youth. A city is often characterized as a child friendly city, town, community or any system of local governance that is committed to improving the lives of children within their jurisdiction by realizing their rights as articulated in the UN Convention on the Rights of the Child (UNCRC).

Four key domains often play central role for children's holistic development and well-being in our cities and urban space. These are, the built environment, such as houses, schools and open areas with proper WASH facilities and spaces for recreation and direct interaction; services and facilities such as child-sensitive health and social infrastructure; safety and mobility such as traffic safety, transport, and personal safety; and an enabling environment that provides safety during natural disasters.

This compendium provides a wealth of knowledge and practical insights into various dimensions of child and youth-friendly city initiatives in India and across the world. From innovative school zone improvement initiative to universal child allowance programme, to integrated child-friendly public spaces and child-friendly smart city centre, the compendium covers a wide range of innovations.

I extend my deepest appreciation for the Ministry of Home and Urban Affairs (MoHUA), Government of India and National Institute of Urban Affairs (NIUA) for making UNICEF India a partner in this initiative and hope that this compendium will be useful for all concerned in India and other countries including G20.

Hyun Hee Ban

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CLIMATE CHANGE, DISASTER MITIGATION AND CHILD-FRIENDLY CITIES: AN INTRODUCTION



"In the last few years, uncertainty of the rainfall has increased a lot. This has made floods more frequent. If there is drainage water stagnation, it's even more problematic. Water logging makes our life difficult for those few days. There is water everywhere. We are trapped in houses...unable to go to school or to play; I am scared of this water logging now when monsoon signs start."

- 13-year-old Khushi from Limbayat slum, Surat

Enmeshing climate emergency with child-friendly city agenda

The cities today are clearly striving for two crucial goals: achieving child friendliness and fighting the climate change vulnerabilities.

The existing discourse attempts a conceptual clarity on these goals. For example, a child-friendly city (CFC) is defined as "a city, town, community or any system of local governance committed to improving the lives of children within their jurisdiction by realizing their rights as articulated in the UN Convention on the Rights of the Child." The narrative of child rights has undergone a significant transformation since the early 2000s with the children's rights to crucial livelihood elements guiding child-friendly initiatives. India has ratified the United Nations Convention on the Rights of the Child (UNCRC), thereby committing itself to children's rights; however, the nation is yet to formulate or legislate comprehensive policy guidelines that ensure child friendliness at all levels of interaction.2

As regards the other goal of tackling climate change, the Sustainable Development Goals acknowledge climate change as Humanities Red Code Warning. Goal 11 lays stress on creating sustainable cities and communities by a focus on making cities and human settlements inclusive, safe, resilient and sustainable.³ Climate change refers to long-term shifts in temperatures and weather patterns. These shifts can be natural due to changes in the sun's activity or large volcanic eruptions. But since the 1800s, human activities have been the main driver of climate change.4 The world is considered in a state of climate emergency, because our climate is changing faster than nature can adapt to it. Urbanization adds to this emergency at a rapid pace in all regions.

¹ Child-friendly cities, https://childfriendlycities.org/what-is-a-child-friendly-city/

² United Nation Treaty collection, https://treaties.un.org/

³ Sustainable Development Goal, https://sdgs.un.org/goals/goal11

⁴ United Nations, https://www.un.org/en/climatechange/what-is-climate-change

The goals of child friendliness and climate resilience are not independent but are enmeshed with each other. The impact of climate change ranges from loss of lives to loss of productivity, livelihood, happiness and disturbed lives; thus climate crisis is the defining human and children rights challenge of this generation and is already having a devastating impact on the well-being of children. As of now, 774 million children across the world are known to be adversely affected by climate change.⁵

In a well-intentioned thought process, society aspires and plans to leave behind a joyful and liveable world for generations to come. Within the urban context, this thought process endorses the triple focus on urbanization, climate emergency and child friendliness. It must be acknowledged that every cityscape is different. The cities need local focal planning based on general guidelines. Similarly, cities need to be the learning institutions to derive lessons from experiences. Applying these principles is a key to success. Global agendas have started addressing these concerns on priority; for instance, the agreements like Paris Climate Agreement support promoting child participation in planning and decision making, assure access to information, protection in crisis, disaster and conflicts and protection against exploitation and abuse.

The majority of the world's population live in cities, and that number is set to rise. It's believed that by 2050, around 70 per cent of the world's children will live in urban areas. Sea level rise threatens coastal cities, while extreme weather events can cause urban flooding, droughts and heatwaves, resulting in deaths. It's often the case that those who have contributed least to the problem will be the most impacted. The most marginalized children and young people are often the most neglected. It is therefore vital to consider what our cities can do to combat climate change, especially when it comes to safeguarding the lives and futures of all children. Adaptation is just as important as mitigation, so we must work together to understand how best to structure our urban areas to withstand up to two degrees of global warming.⁷

COP26 is all about accelerating adaptation and mitigation: driving action towards achieving the goals of the Paris Agreement and the UN Framework Convention on Climate Change. We know now that climate change affects all aspects of our life. The present Compendium intends to capture good practices from India and globally looking at various aspects of child development including infrastructure, service delivery, schooling, early childhood development, nutrition, safe public spaces, availability of green areas etc. that translate the philosophical thought processes into an actionable road map. The Compendium aims to document good practices as guide towards helping cities across the globe to reduce the impact of climate change and disasters on children while enhancing focus on children's voices and their participation. The insights derived from the Compendium heavily draw from a desk review of international and national documents related to child rights, climate change and urbanization.

⁵ Save the Children-Generation Hope Report, 2022, https://resourcecentre.savethechildren.net/

⁶ Child Friendly Smart City Knowledge Center (CFSCKC) is a joint initiative of Surat Municipal Corporation, UNICEF and Urban Health and Climate resilience Center of Excellence (UHCRCE).

What can our cities do to combat climate change and improve them for children? - Cities4Children. https://cities4children.org/blog/what-can-our-cities-do-to-combat-climate-change-and-improve-them-for-children/

Impact of climate change on children



Climate change disproportionately impacts children due to their unique metabolism, physiology and developmental needs. All children are exceptionally vulnerable to the negative impacts of climate change, with the youngest being most at risk.8 Climate change can impact children through increased morbidity and mortality due to extreme weather events and subsequent disasters, water scarcity and food insecurity, air pollution, vector- and waterborne diseases; moreover, it also has an impact on children's mental health. In addition, other

potential effects of climate change on children are orphanhood, trafficking, child labour, loss of education and development opportunities, separation from family, homelessness, begging, trauma, emotional disruption, illnesses, etc.9 Climate change also disproportionately impacts children with disabilities, children on the move, poor children, children separated from their families and indigenous children. Climate change also heightens existing social and economic inequalities, intensifies poverty and reverses progress towards improvement in children's well-being.¹⁰

The above-stated negative impacts of climate change threaten children's rights to health, life, food, water and sanitation, education, housing, culture and development, among others. Child rights are cornerstones of an overarching aim of environmental justice; to achieve justice development policies, implementation agencies and law enforcement must strive for climate equity, ensuring every child has equal access to resources and a safe future.

A recent study has found that children in disaster-prone areas in India are twice as likely to be living in chronic poverty than to escape poverty and three times as likely to become impoverished.11 The below figure shows the co-relationship between climate change and socioeconomic factors and their impact on child rights.

Climate change and the full and effective enjoyment of the rights of the child: https://www.ohchr.org/sites/default/files/ Documents/Issues/Climate Change/Rights Child/Chilren One Pager.pdf

⁹ Climate Change: Protecting the Rights of Children https://www.ohchr.org/sites/default/files/Documents/Issues/ ClimateChange/materials/2PChildrenLight.pdf

¹⁰ Climate change and the full and effective enjoyment of the rights of the child: https://www.ohchr.org/sites/default/files/ Documents/Issues/ClimateChange/RightsChild/ChilrenOnePager.pdf

Protect a generation: Climate security for India's children https://www.pwc.in/assets/pdfs/research-insights/2020/ protect-a-generation-climate-security-for-indias-children.pdf

Figure: Impact of climate change on child rights

Short-term effects of Long-term effects of climate climate change: Extreme change: Rise in sea level, weather events (disasters, decreasing ground water table, heat wave, etc.) accelerated melting of glaciers **SURVIVAL RIGHT** Right to life • Right to health, clean water and nutritious food Right to participate in decision Right to information Right to non-discrimination **PARTICIPATION RIGHT DEVELOPMENT RIGHT** Right to education Increasing Increasing exposure to vulnerability to climate shocks climate shocks **PROTECTION RIGHT** Right to protection from exploitation • Right to protection as refugees Right to housing Right to care

Administrative vulnerabilities:

Conflict, fragility and lack of governance

Socio-economic vulnerabilities:

Poverty, migration and undernutrition

Multiple studies have explained the impact of climate change on children; the table below provides a snapshot of how climate change is affecting the lives of the children.

Child rights	Impact of climate change	Representative examples
Health	Increased mortality	Globally indoor and outdoor air pollution combined were linked to 543,000 deaths among children under 5 years of age. ¹²
		In Nepal, flood-related mortality of children was twice that of adults. ¹³
		In Gujarat, 971 students perished and 1,051 were injured during the Bhuj earthquake. ¹⁴
	Increased morbidityHeat-related illnessheat stroke,renal disorders	Worldwide children are disproportionately affected by vector-borne and infectious diseases including waterborne diseases, which spread notoriously fast in the aftermath of floods and storms. ¹⁵
	from heat-related dehydration Respiratory illness – asthma, pneumonia and allergic disease, cold-flu	Children may be more likely to feel anxious or depressed when they are confronted with the prospect of climate change. ¹⁶
		In the United States, childhood asthma incidence
		In Delhi, 4 out of every 10 children screened failed the lung health screening test. 18
	diarrhoea, malaria, dengue, cholera	According to Varanasi study, each unit (1°C) rise in maximum temperature (Tmax) was associated with an
	 Mental illness anxiety, post-traumatic stress and depression 	increase in diarrhoea by 3.97% (95% CI: 2.92, 5.02). ¹⁹ An Ahmedabad study revealed neonatal morbidity increases in non-climate-controlled settings during periods of extreme high ambient temperatures. ²⁰
	Injuries	

¹² Climate Change: Protecting the Rights of Children https://www.ohchr.org/sites/default/files/Documents/Issues/ ClimateChange/materials/2PChildrenLight.pdf

¹⁵ Bartlett, S., 'Climate Change and Urban Children: impacts and Implications for Adaptation in Low- and Middle-income Countries', Environment and Urbanization, vol. 20, no. 2, 2008, 501-519. https://doi.org/10.1177/0956247808096125

LUNA, Status of Children in Urban India, Baseline study, 2018, second edition, Delhi, India, 2018. https://www.niua.org/

¹⁵ Climate Change: Protecting the Rights of Children https://www.ohchr.org/sites/default/files/Documents/Issues/ ClimateChange/materials/2PChildrenLight.pdf

¹⁶ EPA. 2023. 'Climate Change and Children's Health and Well-Being in the United States'. U.S. Environmental Protection Agency, EPA 430-R-23-001. https://www.epa.gov/

¹⁷ EPA. 2023. 'Climate Change and Children's Health and Well-Being in the United States'. U.S. Environmental Protection Agency, EPA 430-R-23-001. https://www.epa.gov/

¹⁸ NIUA, Status of Children in Urban India, Baseline study, 2018, second edition, Delhi, India, 2018. https://www.niua.org/

¹⁹ Singh, N., R.K. Mall, T. Banerjee, and A. Gupta, 'Association Between Climate and Infectious Diseases Among Children in Varanasi City, India: A prospective cohort study', Science and Total Environment, vol. 796, 2021, p. 148769. doi: 10.1016/j. scitotenv.2021.148769. Epub 2021 Jul 1. PMID: 34274660. https://pubmed.ncbi.nlm.nih.gov/34274660/

²⁰ Kakkad, K., M.L. Barzaga, S. Wallenstein, G.S. Azhar, P.E. Sheffield. 'Neonates in Ahmedabad, India, During the 2010 Heat Wave: a climate change adaptation study', Journal of Environment and Public Health, vol. 2014, 2014, p. 946875. doi: 10.1155/2014/946875. Epub 2014 Mar 10. PMID: 24734050; PMCID: PMC3964840. https://pubmed.ncbi.nlm.nih. gov/24734050/

Child rights	Impact of climate change	Representative examples
Nutrition	Malnutrition Under nutrition Obesity Anaemia Increased vulnerability of already malnourished children	Global climate changes are projected to impact agriculture, livestock and fisheries sector putting enormous pressure upon nutrition and food security of the vulnerable groups. (SAPCC 2014 report) Child born in 2020 will experience on average nearly seven times more heat waves in their lifetime compared with a person born in 1960, and nearly three times the exposure to crop failure. ²¹
	Decreased crop production Negative impact on livestock and fisheries sector Disruption of government nutrition focus programmes (e.g. ICDS)	In South Asian countries, an average of 30 per cent decrease in crop yields due to climate change is expected by mid-twenty-first century in South Asian countries. ²² In India, the odds of a child suffering from stunting increased by 32 per cent, wasting by 42 per cent, underweight by 45 per cent and anaemia by 63 per cent if the child belonged to a district, which were very high vulnerable according to index on vulnerability of agriculture to climate change when compared to those categorized as very low. ²³ All the services being provided to women and children may get disrupted for a prolonged period until the anganwadi centres (AWCs) start functioning. ²⁴
Education	Damage to school infrastructure Impacts school performances Increase in school dropouts	Worldwide exposure to abnormal or prolonged heat and humidity is likely to cause children to miss school. ²⁵ In families with lower levels of education, children are more likely to be removed from school in order to work when disaster strikes. ²⁶ Climate-driven heat is expected to impact school performance in United States, leading to a 4–7 per cent reduction in academic achievement each year and potentially impacting future income. ²⁷ In some Indian poor families, the education of children is a low priority as families migrate out of their villages in search of subsistence livelihoods. ²⁸ Climate-induced disasters are likely to damage/destroy schools; children are likely to lose school days depending upon the inundation days. ²⁹

²¹ Climate Change: Protecting the Rights of Children https://www.ohchr.org/sites/default/files/Documents/Issues/ ClimateChange/materials/2PChildrenLight.pdf

²² Srinivasa Rao, Ch., R.S. Prasad, and T. Mohapatra, Climate Change and Indian Agriculture: Impacts, coping strategies, programmes and policy, 2019, https://naarm.org.in/

²³ Mahapatra B., M. Walia, C.A.R. Rao, B.M.K. Raju and N. Saggurti, 'Vulnerability of Agriculture to Climate Change Increases the Risk of Child Malnutrition: Evidence from a large-scale observational study in India', PLoS One, vol. 16, no. 6, 2021, p. e0253637. https://doi.org/10.1371/journal. pone.0253637

²⁴ Child risk and impact analysis - 2019, Gujarat.

²⁵ The Climate Crisis is a Child Rights Crisis: Introducing the Children's Climate Risk Index. New York: United Nations Children's Fund (UNICEF), 2021.

²⁶ The Climate Crisis is a Child Rights Crisis: Introducing the Children's Climate Risk Index. New York: United Nations Children's Fund (UNICEF), 2021.

²⁷ EPA. 2023. 'Climate Change and Children's Health and Well-Being in the United States'. U.S. Environmental Protection Agency, EPA 430-R-23-001. https://www.epa.gov/

²⁸ Protect a generation: Climate security for India's children https://www.pwc.in/assets/pdfs/research-insights/2020/ protect-a-generation-climate-security-for-indias-children.pdf

²⁹ Child risk and impact analysis - 2019, Gujarat.

f climate	Representative examples
abour rafficking ce against en in number of d migration to	Worldwide discrimination exposes children to the risks of abuse, neglect and abandonment in the event of climate shocks. ³⁰ Girls may face heightened risks of child labour, sexual violence and trafficking because of climate change. ³¹ In Asia, migrant children are more vulnerable: least likely to attend school; more exposed to violence; typically unreached by child protection services. ³² In India, child's right to development gets hindered due to extreme climate events. ³³ Disasters lead to disruption of services at orphanages, observation homes etc., which adds to the burden of existing lack of child protection ³⁴ Children may resort to unsafe migration in search of livelihood in case of death/injury/disease of single/both
	d probability abour rafficking ce against en in number of d migration to cture

Participation or procedural human rights are equally affected by climate change, but they are not mentioned very often in the context of environmental damage.³⁶ It is well known that children are the least responsible for the causes of climate change and yet they will unfairly inherit a legacy they did not choose. Furthermore, child's right to participation is not acknowledged as an important child right; therefore, they are not included in decision-making procedures. The children have the right to participate in all matters that affect them and yet this rarely happens.³⁷ While the rhetoric and case for action on the increasing threats of climate change for vulnerable populations has gained significance and traction in recent years, often the impacts of climate change on children, and specifically their rights both now and in the future, are still overlooked. New opportunities are available for countries to fulfil their CRC commitments by concretely linking CRC implementation to other government processes for climate change.38

³⁰ Climate Change: Protecting the Rights of Children https://www.ohchr.org/sites/default/files/Documents/Issues/ ClimateChange/materials/2PChildrenLight.pdf

³¹ Climate Change: Protecting the Rights of Children https://www.ohchr.org/sites/default/files/Documents/Issues/ ClimateChange/materials/2PChildrenLight.pdf

³² Chatterjee, Sudeshna, Climate Change Risks and Resilience in Urban Children in Asia: Synthesis report for secondary cities, Da Nang, Khulna, and Malolos, 2015.

³³ Protect a generation: Climate security for India's children https://www.pwc.in/assets/pdfs/research-insights/2020/ protect-a-generation-climate-security-for-indias-children.pdf

³⁴ Child risk and impact analysis - 2019, Gujarat

³⁵ Child risk and impact analysis - 2019, Gujarat

³⁶ Sanz Caballero, Susana, 'Children's Rights in a Changing Climate: A perspective from the United Nations Convention on the rights of the Child', Ethics in Science and Environmental Politics, vol. 13, 2013, pp. 1-14. 10.3354/esep00130

³⁷ Analytical study on the relationship between climate change and the full and effective enjoyment of the rights of the child, https://documents-dds-ny.un.org/doc/UNDOC/GEN/G17/110/91/PDF/G1711091.pdf? Open Element the control of the control of

³⁸ Child Rights at Risk: The case for joint action on climate change. https://www.unicef-irc.org/article/928-child-rights-atrisk-the-case-for-joint-action-with-climate-change.html

BACKGROUND AND CONTEXT © UNICEF/UN0491184/Vishwanathan

The needs of children in urban areas are different from those of adults, as they perceive their surroundings differently. Across nations, urban planners and designers have overlooked and/or under-priortized these needs affecting children's well-being both indoors and outdoors. UNICEF believes that in order to support children's rights as enshrined in UNCRC, all cities and urban spaces should be child and youth friendly. If a city can integrate the needs and voices of children within their policies and programmes, then the city justifiably becomes a living space fit for all.

In 1996, worldwide, the CFCI brought together UNICEF and various local authorities to create more inclusive spaces where children could access essential services, be heard and spend leisure time in safety. The initiative developed guidelines and a framework based on the nine 'building blocks' for cities to become child friendly, and allowed local authorities to integrate the overall growth of children within decision making. In all or most child-friendly initiatives, four key domains need to be addressed for children's holistic development and well-being. These are: the built environment, such as houses, schools and open areas with proper WASH facilities and spaces for recreation and direct interaction; services and facilities such as child-appropriate health and social infrastructure; safety and mobility such as traffic safety, transport, and personal safety; and an environment that is ambient in all respects and also provides safety during nature disasters.

Based on these domains, each city can develop a few achievable goals that provide opportunities for children and youth to participate in civic issues, increase interaction with nature, make neighbourhoods safe, and promote social cohesion. Broadly, a CFC can have a rights-based approach that encourages local authorities to promote the rights of children. Countries like Australia, Japan, Brazil, Philippines, Jordan, Spain, France and Switzerland have applied the rights-based approach by involving children in local governance. Another approach to building a CFC is to keep it environment-based that focuses on building better physical and social environments for children. Cities in Sweden, Finland, Netherlands and Canada have used this approach to improve urban and environmental resources and their distribution.

The concept of child-friendly cities (CFCs) is currently gaining acceptance among urban planners under the design of smart cities in India and across the globe.

A brief discussion on child-friendly cities in the literature

A cursory look at the literature reveals multiple conceptualizations of CFCs. Some of the studies are concerned with children's needs, and others with their rights. The social environment or the physical environment in which children interact is the site of observation in a few studies. A focus on neighbourhoods in some studies can be seen, while a few others are interested in cities. CFCs are viewed through existing theories and practices, which can be classified into two broad categories: rights-based and environment-based approaches.

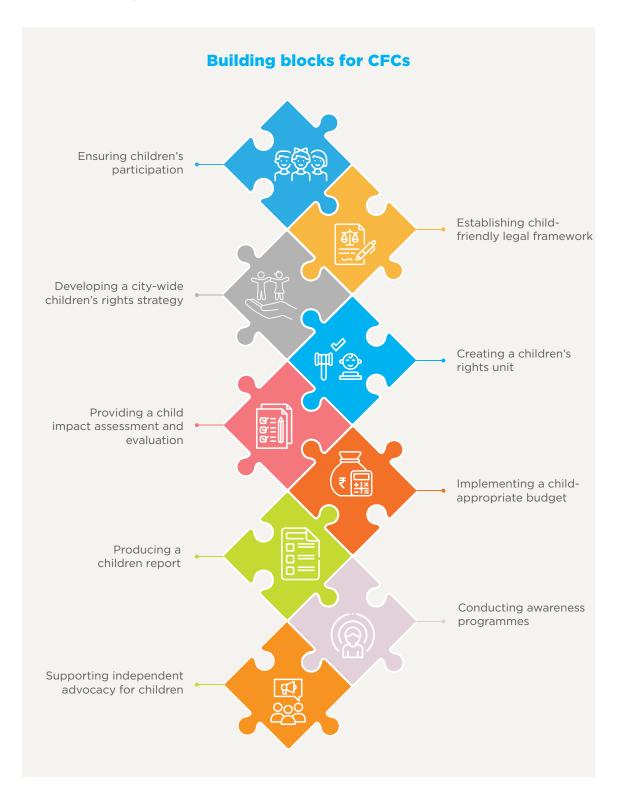
Rights-based approach focuses on child rights and encourages local governments to make decisions in the best interests of children and promote children's rights by providing a healthy, protective, educative, stimulating and inclusive environment (NIUA, 2016).

> A child-friendly city is a city or any local system of governance that is committed to fulfilling children's rights, including their right to influence decisions about their city; express their opinion on the city they want; participate in family, community and social life; receive basic services such as health care, education and shelter; drink safe water and have access to proper sanitation; be protected from exploitation, violence and abuse; walk safely in the streets on their own; meet friends and play; have green spaces for plants and animals; live in an unpolluted environment; participate in cultural and social events; and be an equal citizen of their city with access to every service, regardless of ethnic origin, religion, income, gender or disability.

> > - UNICEE

The CFCI was launched by the UN in 1996 alongside initiatives such as Growing Up in Cities (UNESCO) and Safer Cities (UN-HABITAT). The CFCI has created a framework for action to guide cities and communities to make cities child-friendly. Becoming child-friendly is a process that entails several steps, defined in nine components known as 'building blocks'. These are ensuring children's participation, having a child-friendly legal framework, developing a city-wide children's rights strategy, creating a children's rights unit, providing a child impact assessment and evaluation, having a child-appropriate budget, having a children report, conducting awareness programmes time to time and supporting independent advocacy for children.

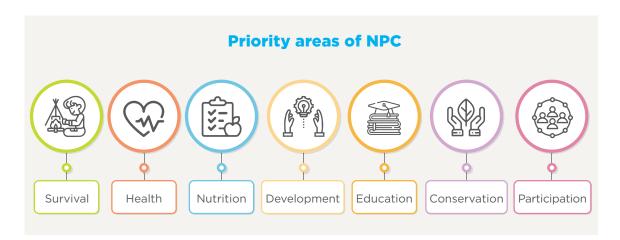
Australian cities such as Victoria and Hobsons Bay have imbibed the child rights model for CFC. Other countries applying a child-rights-based approach are Japan, Brazil, the Philippines, Jordan, Spain, France and Switzerland.⁴⁰ Most of these cities treat children as a significant interest group, integrate children's plans into health and land-use planning, train planners to interact with children and initiate participation of children in local governance.



The environment-based approach focuses on children's physical and social environments. It closely analyses how the environment in which children grow can positively impact their lives. This work has been undertaken in individual countries as opposed to a unified context as in the rights-based approach (NIUA, 2016). The healthy growth of children is crucially determined by the types of houses and dwelling units, access to basic services, safety and security, urban and environmental qualities and resource provision and distribution (Horelli, 2007). Some of the countries that have adopted child-friendly initiatives are Sweden, Finland, Netherlands and Canada (NIUA, 2016).

The India context

The NPC, 2013 affirms the government's commitment to addressing the challenges faced by children in India. The NPC recognizes that childhood is an integral part of life with a value of its own and that children are not a homogeneous group and their different needs call for suitable responses, especially the multidimensional vulnerabilities experienced by children in different circumstances. NPC also acknowledges the need for a long-term, sustainable, multi-sectoral, integrated and inclusive approach for children's overall and harmonious development and protection. The priority areas of NPC are survival, health, nutrition, development, education, conservation and participation. The Ministry of Women and Child Development (MWCD), responsible for executing the NPC, has also drafted the National Plan of Action for Children (NPAC) (2016) to provide a road map linking the policy objectives to actionable strategies. Among various other child-friendly objectives, the action plan focuses on creating child-friendly spaces at disaster rescue sites, saving them from abuse and violence, providing child-friendly toilets and WASH facilities and providing child-friendly transport systems.



A number of rights-based programmes and missions related to children, developed by the central government, are being implemented by state governments at the city level. These programmes include the needs of children like nutrition (Mid-day Meal), education (Right to Education) and health, and they also focus on a specific

demographic of children such as adolescent girls (Kishori Shakti Yojana), street children and young children (Integrated Child Development Services).

The NPAC was drafted in 2016 by MWCD, which is also responsible for the implementation of NPC, 2013. The NPC acknowledges that a long-term, sustainable, multi-sectoral, integrated and inclusive approach is required to address the multidimensional vulnerabilities faced by children in different groups. The NPAC, which links the policy objectives to actionable strategies, has action plans that focus on creating safe spaces for children during disasters and violence and provide child-friendly WASH and transport facilities in cities.

Currently, India does not have an established model of CFCs that relates urban planning and urban development to outcomes in children's development. From an urban development perspective, several programmes developed by the Ministry of Urban Development (MoUD) and the Ministry of Housing and Poverty Alleviation (MoHPA) have incorporated some aspects that are relevant to children, like 'Housing for All by 2020'. In this context, NIUA is undertaking a programme on building Child-Friendly Smart Cities (CFSC) embracing policies and practices to make Indian cities child-friendly within the urban agenda of building smart cities. The NIUA has partnered with the Bernard van Leer Foundation, a Dutch grant-making organization, to develop a programme of activities focused on interventions and advocacy regarding urban planning and management in India for addressing the needs of children.

Some of the child-friendly initiatives under various missions focusing on infrastructure and services are highlighted below:

Smart City Mission (SCM): Currently, there are 160 projects in 60 cities under SCM that aim to provide solutions for efficient use of a city's resources. These include designing green corridors, walkways and cycle tracks, ecosystem restoration, slum rehabilitation, housing units for weaker sections of the society, and in-situ housing upgradation. Bhubaneshwar is the first pilot smart city for this initiative.

Atal Mission for Rejuvenation and Urban Transformation (AMRUT): Apart from ensuring access to safe drinking water and improved sanitation facilities, and developing green and open spaces, the AMRUT mission mandates creation of one children's park in every city every year for all the five years of the mission.

Swachh Bharat Mission (Urban) (SBM-U): SBM, a flagship programme implemented by the Ministry of Housing and Urban Affairs (MoHUA), aims to improve sanitation facilities in cities to make them defecation-free, which would improve the health of the children.

Overview of initiatives

Global initiatives

Many more low, middle and high income countries are realising the need to support child-friendly initiatives as a mark of development and good governance. There is also a large number of growing population in urban centres, especially in low and middle income countries which necessitates a shift in governance. The report details the childfriendly initiatives taken globally in health and well-being, education, nutrition, safety and resilience based on either the rights-based or environment-based approach.

- South Korea: In 2011, a School Zone Improvement Project was introduced under which a 300-meter radius around all schools and childcare facilities were designated as school zones and traffic safety measures installed.
- Indonesia: The Ruang Publik Terpadu Ramah Anak (RPTRA) programme introduced in 2006 integrated child rights in development plans and focussed on constructing multipurpose parks. These parks provided children and communities with open spaces for gainful interactions and also helped absorb groundwater that tackled flooding.
- New York City: The Comprehensive Afterschool System (COMPASS) was introduced to bridge the educational gaps existing across income and racial groups, and support the needs of changing family and neighbourhood structures. These programmes are located in public and private schools, community centres and parks and offered to children and youth at zero cost.
- United Kingdom: Trees for Cities, a non-profit organisation working to improve the living and environmental conditions in cities, is partnering with city and town councils to implement their Edible Playgrounds initiative. This unique initiative provides valuable outdoor and multi-sensory experiences that teach children how to grow and eat healthy food, and also manage organic waste.



- Sri Lanka: The School Nutrition Programme (SNP) first introduced in 1931, was restarted in 2002 with the objectives of improving children's nutritional intake, promoting healthy eating habits, building a national food culture, and increasing enrolment and attendance in schools. Due to the current ongoing economic crisis in the country, the programme is no longer being implemented.
- Brazil: In 2016, Brazil introduced the Programa Criança Feliz or Happy Child Programme to address the issue of integral development of children in families living below the poverty line. It is the largest programme that incorporates home visits for health and nutritional support for children and pregnant women in the world and a significant one in Brazil.
- Argentina: Asignación Universal por Hijo (AUH), the Universal Child Allowance Programme was introduced by the Argentinian government in 2009. It is a conditional cash transfer scheme that covers children and adolescents living in poverty or vulnerable conditions. The aim of the programme is to improve the health and education of these children so that they are able to break the intergenerational poverty cycle in the long term.
- Tanzania: In 2021, Tanzania launched the National Multi-sectoral Early Childhood Development Programme (NM-ECDP), the first such programme in Eastern and Central Africa. Inspired by the global Nurturing Care Framework (2018), the programme uses a multi-sectoral approach to work on five aspects of good health of child and caregiver, nutritional support since pregnancy, responsive caregiving, opportunities for early learning, and security and safety of children.

Initiatives in India

Developing cities with a focus on children's needs encounter multiple challenges such as urban poverty, congestion, environmental degradation and crime. Though it is difficult to fully actualize implementation due to the disparity in the needs of various groups, efforts and initiatives are being made by local governments and civil society organizations to make public spaces inclusive. These initiatives include restructuring playgrounds, painting zebra crossings, creating street art and allocating one childfriendly police station in each district (in states like Bihar, Odisha, Rajasthan, Kerala, Maharashtra, and Jharkhand). Under the Smart Cities Mission, numerous smart cities are implementing initiatives such as nature and beach parks (Bhubaneshwar, Odisha), children's science park (Belagavi, Karnataka), science centre (Kakinada, Andhra Pradesh), themed nature park (Coimbatore, Tamil Nadu), happiness areas (New Delhi), riverfront parks (Guwahati, Assam and Indore, Madhya Pradesh) and lakefront development (Jabalpur, Madhya Pradesh).

The SCM, known as the Nurturing Neighbourhoods Challenge (NCC), encourages cities to adopt an early childhood lens while developing neighbourhoods to make them green, safe, playful, accessible, and inclusive to infants, toddlers and caregivers. In phase two of this challenge, cities are replicating successful projects, strengthening institutional set-ups, engaging partnerships, introducing database planning, monitoring and evaluation, conducting capacity-building workshops, enhancing civic engagement, and ensuring financial sustainability.

This report highlights the child-friendly initiatives taken by ten smart cities without judging their qualitative aspects. These cities are Udaipur in Rajasthan, Bhubaneswar and Rourkela in Odisha, Pune in Maharashtra, Indore and Jabalpur in Madhya Pradesh, Bengaluru in Karnataka, Kakinada and Visakhapatnam in Andhra Pradesh and Warangal in Telangana. Six of these cities were part of the 'Nurturing Neighbourhoods Challenge' while cities like Bhubaneswar, Pune, Udaipur and Vishakhapatnam, which were not a part of the NCC, have successfully implemented some childfriendly initiatives. The criteria used for selecting initiatives were: physical design of interventions to make cities child friendly; inclusion of children in the planning process; use of specific budget allocated for children's needs; redevelopment of existing structures or promoting walkability as a safety measure; and initiatives that are environment friendly, sustainable and scalable.

- Bhubaneshwar: As the first smart city to implement child-friendly initiatives and launch a CFSCC, Bhubaneshwar used a participatory approach to hear children and youth's voices, understand the requirements, and include their needs in planning and mapping of areas. So far, they have developed/built playgrounds, traffic signal posts, zebra crossings near schools, child-safe routes with cycling and walking tracks, one sensory and three smart parks, child-friendly police stations, libraries in public spaces, and an Ahaar Kendra that provide meals for homeless children.
- Pune: Pune aims to become a pioneering city in developing child-friendly amenities. The initiatives introduced so far include a traffic park that teaches traffic rules to children, redesigned open spaces and road crossings to include children's requirements, a counselling room for children in railway stations, child-friendly police stations, a playful waiting area in a few hospitals, and street programmes to encourage use of less vehicles on roads.
- Udaipur: The city has taken traffic calming measures at busy school junctions and redesigned parks and public spaces to make them accessible to children.
- Vishakhapatnam: Working with the vision of creating a 'Resilient and Healthy Metropolis for People', Vishakhapatnam has developed vehicle-free zones, redesigned parks to include the differently abled, restored open spaces, beautified beach fronts to make it accessible for all, and created child-friendly police stations and safe routes for children.
- Bengaluru: The city has redesigned small unused spaces in high population density areas that can be used by children and caregivers. Open spaces in hospitals have also been renovated to include play areas, and an area in Cubbon Park has been designated for children with special needs.

- **Indore**: Redevelopment of a park in a slum area to make it accessible to all, development of a children's zone in city parks and gardens and refurbishing of aanganwadis are some of the initiatives taken in this city.
- Jabalpur: Apart from redeveloping parks and aanganwadis, introducing a vaccination centre and lactation room in a PHC and creating a child-friendly waiting space in the inter-state bus terminal, Jabalpur Smart City Limited has introduced the Smart School System in 20 classrooms in five municipal schools to improve the quality of education and infrastructure in these schools.
- Rourkela: The Rourkela Municipal Corporation has redeveloped 57 parks to include walking paths, boundary walls and play equipment. The city has also introduced lactation pods for caregivers to access space in busy areas and market spaces, reimagined aanganwadis to include the needs of toddlers and children, and created play area for leprosy affected children among other initiatives.
- Kakinada: Infrastructural development was undertaken in 15 government schools under the Nurturing Neighbourhoods Challenge. Unused roads and open spaces were reclaimed to make them accessible and child friendly along with the rejuvenation of a city lake and parks.
- Warangal: Redeveloping anganwadis, redesigning street junctions by introducing safe crossings and pedestrian plazas, improving parks and creating spaces for children and pets are a few of the initiatives introduced in Warangal.



Challenges and the way forward

Developing cities to include child-friendly infrastructures and environment is a fairly new concept in India. As such, implementing agencies have to grapple with multiple challenges as each city in India has grown over the years with specific geographic and demographic characteristics, limitations and issues. However, broadly, there are a few specific challenges that are common and can be addressed through a participatory and collaborative approach.

- In India, people are reluctant to differentiate the needs of the children and adults as traditionally people view childhood as a temporary and transitory phase. Hence, there are limited discussions around children's rights and needs.
- As the concept is new, there is not only a lack of awareness among policy makers but also a lack of political will to change city plans to make them inclusive.
- Incorporating child-friendly infrastructure in an already built/developed city is difficult as land use pattern and physical spaces are locked for generations. Due to high density of population, resources are prioritised and allocated to programmes that cater to serving the basic needs and essential services for all.
- Cities increasingly face environmental degradation and challenges as they continue to grow. In future they will be prone to more natural disasters.

Some recommendations for planners and decision makers as a way forward are given below:

- Conducting knowledge and needs assessment surveys can help to understand the requirements of children, youth and caregivers. It can also help with data collection at a unit level to know the status of children.
- Every city can publish a children's report that focuses on monitoring and data collection on the state of children and their rights.
- Cities must encourage children and young people to participate in civic discussions and planning.
- Cities should ensuring adequate budget and resources for children and youth.

Cities provide opportunities and enable growth on one hand, while harbouring numerous inequalities on the other. Children's opinions are rarely heard and their needs similarly not considered in the decision making processes which impact their overall development. CFCs, therefore, can provide a planning framework to assist cities in becoming more child-friendly in all aspects of governance, environment and services.



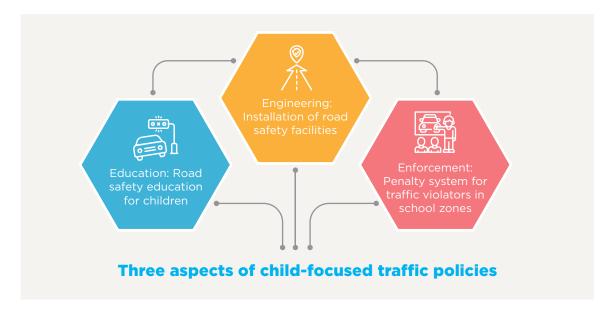


Since CFCI was launched in 1996, many governments in low-, middleand high-income nations have begun to realize that initiatives taken for developing CFCs are not only a felt need of the families and communities but also a marker of good governance and development. The child-friendly initiatives also assume significance as there is a growing population of children in the cities across the world. In fact, by the year 2002, nearly half of the world's children were living in the urban centres, with larger proportions in low- and middle-income countries. 39 The countries have adopted various approaches, broadly a mix of rights-based and environment-based measures, to designing CFCs. This section illustrates the examples of good practices in CFCs from a set of developing and developed countries across the world. The measures towards developing CFCs in South Korea, Indonesia, New York City, United Kingdom, Sri Lanka, Brazil, Argentina and Tanzania are presented in the form of case studies here. It is evident from the case study presentations that each country has focused on a distinct thematic area of intervention such as health and well-being, nutrition, safety, resilience and education.

1.1 SCHOOL ZONE IMPROVEMENT **PROJECT - SOUTH KOREA**

South Korea has witnessed unprecedented and remarkable urbanization in the past 60 years. While the total population in South Korea grew from around 21 million in 1955 to 48 million in 2010, the urban population increased from 5 million in 1955 to nearly 45 million in 2010, clearly showing that its rate of urbanization was much faster than the overall population growth. The capital city, Seoul, had reached the one million population mark in 1955 and became a megacity, by exceeding 10 million in population in 1988 (The National Atlas of Korea, 2023). By the 1990s, the population in other major cities like Busan, Daegu, Incheon, Gwangju and Daejeon also crossed one million. Rapid urbanization across the cities led to increased traffic in the urban areas and traffic regulation and road safety began to draw much attention in the urban centres. Accidents were often caused by drivers who failed to observe traffic rules and speed limits, leading to collisions with pedestrians. What was alarming was that one of the affected populations due to traffic violations was children, especially school-going children.

³⁹ UNICEF (2003). Poverty and exclusion among urban children. UNICEF Innocenti Research Centre.



The trends in child traffic fatalities showed an increasing trend from 1970s until 1988, and began to decline thereafter. One of the contributing reasons for the decline in accidents was the introduction of active road traffic safety measures and programmes for children. They included programmes to improve school zones, ensure safe operation of school buses for children, initiate road safety education for children, foster civic groups specializing in road safety and strengthen the pertinent legal framework. The child-focused traffic policies can be classified into three aspects: engineering, education and enforcement. In terms of engineering, the school zone system was introduced in 1995. This system led to the designation of about 15,799 school zones around kindergarten and elementary schools as well as the installation of road safety facilities. As for education, all kindergartens and elementary schools were required to conduct road safety education for children. From the enforcement point of view, the school bus protection system was introduced in 1997. Further in 2011, a new penalty system was introduced, under which traffic violators in school zones were punished with double fines and double penalty points. The School Zone Improvement Project is a part of these initiatives inaugurated in 2003.

Picture 1.1: A School Zone Improvement Project, South Korea



Source: Sul et al. (2014).

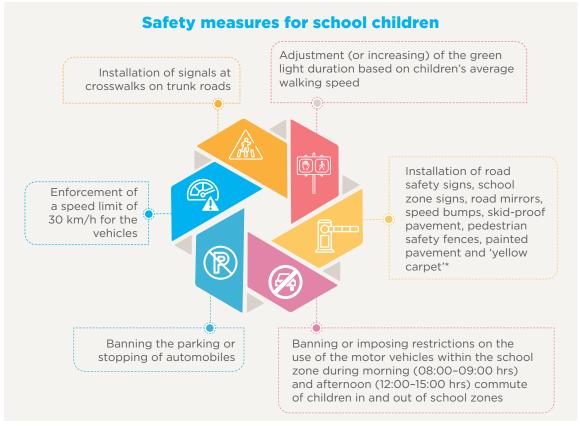
Programme objectives

The School Zone Improvement Project in South Korea aimed at improving road safety in and around school zones. A school zone refers to an area in which traffic safety facilities are installed and managed to protect children from potential traffic accidents as they travel to and from educational institutions such as kindergartens, elementary schools, special schools and private cram schools or childcare facilities used by 100 or more children.

Programme description

The School Zone Improvement Project is a Korean government initiative related to national traffic safety. Pursuant to the Transportation Safety Act, 12 central government ministries handle affairs related to national traffic safety, including the Ministry of Land, Infrastructure and Transport (MOLIT), the Ministry of Security and Public Administration (MOSPA), Ministry of Education (MOE), Ministry of Strategy and Finance (MOSF) and the National Police Agency (NPA). Other organizations engaged are Korea Transportation Safety Authority (KOTSA), Korea Road Traffic Authority (KoROAD), the Korea Transport Institute (KOTI), Korea Occupational Safety and Health Agency, the General Insurance Association of Korea and the Citizens Coalition for Safety.

Under the School Zone Improvement Project, the area falling within the 300-metre radius from the main gate of the educational institutes and childcare facilities is designated as the school zone. There are several measures that are implemented in the school zone to ensure the safety of school children.



^{*} Yellow carpet refers to using yellow paint as visual aids to driver so to alert them of areas where they need to drive more carefully and attentively.

Picture 1.2: Before and after school zone safety installations near Uam Elementary School in Seoul, South Korea





Source: Seoul's Seocho District Office, The 2006 Basic and Execution Designs for School Zones in Seocho District,

According to the available information, School Zone Improvement Project was implemented at 9,021 locations across South Korea from the year 2003 to 2012. There are over 20,000 designated school zones across South Korea as of 2022. From 2003 to 2012, the total budget of the programme was roughly 1,456.6 billion won, which is equal to an average of 160 million won for each school zone.

Key impacts

The School Zone Improvement Project led to large declines in the road fatality cases among children. For instance, data shows that the number of children killed in road traffic accidents in Korea went down by more than 95 per cent from the peak of 1,766 in 1988 to 83 in 2012. Also, in 2012, children accounted for 1.5 per cent of a total of 5,392 road traffic fatalities nationwide. It is also worth noting that, in comparison to the rate of child traffic deaths among all traffic deaths, South Korea showed a steeper drop (from 3.3 to 1.9) than the Organisation of Economic Co-operation and Development (OECD) average (from 3.5 to 3.2) during the period 2007-2011. In 2011, South Korea showed a much lower rate of child traffic deaths than the OECD average (1.9 versus 3.2). Latest data from 2020 showed that the total number of fatalities in the 0-14 age group was 26.

Replicability

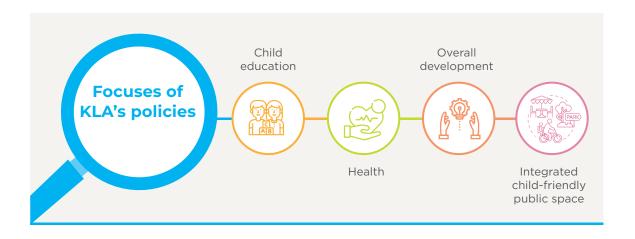
The recent report by Ministry of Road Transport and Highways on road accidents in India, 2021, revealed high fatal road accident cases among children in India. The introduction of a programme like the School Zone Improvement Project can help reduce the road fatality cases, especially for the school-going children. The elements of the programme like installation of safety signs and imposition of higher quantum of penalty (twice or thrice than the usual) on offenders in cases of road accidents involving children can be easily replicated. Further, road safety education (RSE)

should be mandatorily taught as part of school curriculum, as currently the RSE in India is limited to occasional road safety campaigns. The RSE must include lessons on road safety signs, rules of safe driving, mechanisms for emergency situations like emergency contacts and grievance centres.

1.2 RUANG PUBLIK TERPADU RAMAH ANAK (INTEGRATED CHILD-FRIENDLY **PUBLIC SPACES) - INDONESIA**

Indonesia's megacity Jakarta, spread over an area of 699.5 km², had a child population of more than 2.9 million representing nearly 29 per cent of the total population in 2015. The city is facing serious challenges from the growing population and degrading environmental conditions. Some of the challenges include providing safe living environment and inclusive public space for children in the city.

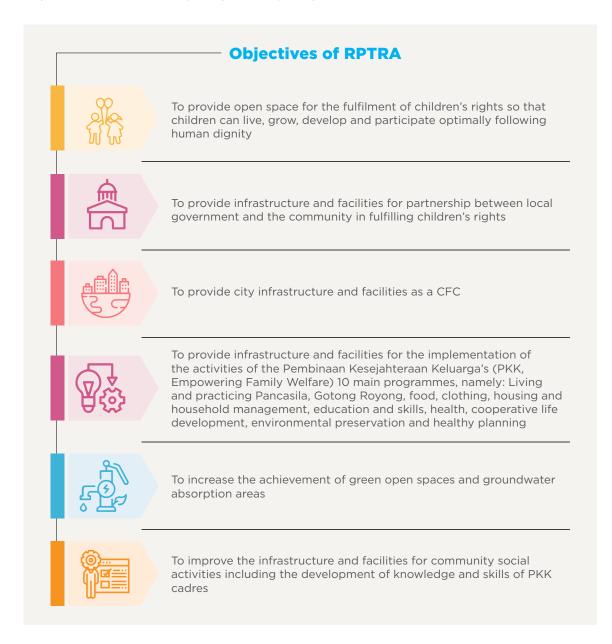
Public spaces for children are useful to facilitate the activities of children for them to learn and understand the surrounding environment. The national government of Indonesia, following the concept of CFC (which was originally conceived in 1971) and driven by international commitment towards World Fit for Children, declared a new programme, Kota dan Kabupaten Layak Anak (KLA, Cities and Districts Eligible for Children) in 2005. The programme marked the adoption of the UN Convention on the Rights of the Child and is often presented as an Indonesian version of CFC. Over the years, KLA's policies have been followed by several programmes focused on child education, health and overall development. Integrated child-friendly public space (RPTRA, Ruang Publik Terpadu Ramah Anak) is one such CFC programme that follows KLA and was developed to accommodate children's rights in development. RPTRA, as an idea, began to develop in 2006 and was legitimized by the Ministry of Women Empowerment and Child Protection's Ministerial Regulation Number 2 of 2009 concerning the CFCs policy, when the programme was piloted in 10 districts/cities.



Programme objectives

The RPTRA is primarily the concept of building multipurpose parks for supporting children's needs and rights. However, RPTRA, apart from making Jakarta a CFC, also functions towards increasing open green spaces for communities and making the city flood resilient by functioning as a place for absorbing groundwater (as Jakarta faces severe floods due to lack of watersheds and green spaces).

Based on Governor Regulation Number 196 of 2015 concerning Guidelines for RPTRA Management, which was updated by Governor Regulation Number 40 of 2016 concerning Guidelines for RPTRA Management, which contains directions regarding positions, duties and functions; services and activities; ban; organizing; work partners; division of tasks for handling infrastructure and facilities, mentions the following objectives of RPTRA (Septiady & Tehupelory, 2021):



Programme description

RPTRA is one of the flagship programmes for developing CFCs in Indonesia. RPTRAs are built strategically in the middle of residential areas, usually densely populated areas. They are usually located within a minimum radius of 300 to 1,000 metres from residential houses. A minimum of 70-80 per cent of the total garden area is planted with plants or converted into green space. As a child-friendly space, RPTRA provides a variety of play facilities made of special plastic and metal materials by prioritizing safety, such as slides, swings, see-saw and other games. In addition to playing facilities, futsal and badminton fields are also available as children's sports spaces. The RPTRAs also have sitting areas, fish ponds, vegetable gardens (called 'Taman Toga') with various plants and compost centres that recycle waste.

With RPTRA, it is hoped that residents can enjoy the coolness of green open space and encourage children to care for the environment. Apart from being a concept of public space in the form of green open spaces or parks equipped with various playing facilities for children, the RPTRAs also have supporting infrastructure that serves the interests of the community around the RPTRA such as gazebo for a child's learning place, library, Wi-Fi, restroom, CCTV monitors, PKK Mart and lactation rooms. RPTRA even allows the holding of meetings, celebrations, recitals and social services. In addition, in an emergency, the RPTRA can be a refugee camp for residents affected by disasters, such as floods and fires.

Picture 1.3: Facilities in RPTRA in Kembangan, Jakarta



Source: Aji et al. (2016)

Picture 1.4: Low-cost or free course organized by the subdistrict office and local trainers at RPTRA, Jakarta





Source: Arlinkasari et al. (2020)

The programme was initiated by the provincial government of Jakarta under the former Jakarta governor Basuki 'Ahok' Tjahaja Purnama. The governor issued regulations regarding RPTRA and controlled the development of RPTRAs. The regulations also stipulated the government agencies responsible for development and operation of RPTRAs. The regional government appointed 11 architects who designed RPTRAs in the first phase of development. The designs from the first phase of development were used as prototypes for second and third phases of development. Contractors, private and local government companies (as funding agencies) were involved in the construction of the RPTRAs. To maintain the RPTRA and all the facilities in it, the Provincial Government has also deployed officers for the Handling of Public Infrastructure and Facilities (PPSU). In addition, surrounding communities were also part of the collaboration in every stage of development and maintenance of RPTRAs (Simatupang et al., 2021).

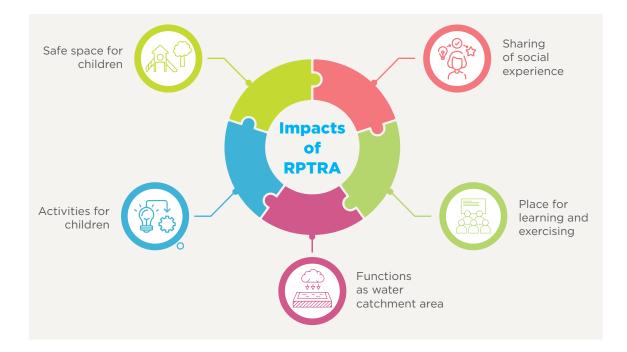
In general, the influential stakeholders for the development of RPTRAs were internal stakeholders and external stakeholders (Febriani & Latief, 2018):

- Internal stakeholders: Governor, the Regional Secretary, Head of Family Welfare Education Driving Team, Welfare Assistant Regional Secretary, Head of Community and Woman's Empowerment and Family Planning Agency, Head of Financial Management and Regional Assets Agency, Head of One-stop Integrated Services Agency, Mayors, Head of Housing and Government Buildings Department, Head of Park and Funeral Department.
- External stakeholders: Contractors, subcontractors, construction management consultants, NGOs, community and planning consultants

The RPTRA is largely built on funds drawn from the Corporate Social Responsibility Fund and Anggaran Pendapatan dan Belanja Daerah (APBD, Regional Revenue and Expenditure Budget). By 2018, the DKI Provincial Government had established 293 RPTRAs in Jakarta (Prakoso & Dewi, 2018).

Key impacts

In general, RPTRAs promoted a good social environment and improved the quality of community living. Research has shown that the easy accessibility of RPTRAs and the available infrastructure in RPTRAs has benefited the surrounding communities in many ways. RPTRAs, primarily meant for children, served as a place where children shared their social experiences with others. Importantly, RPTRA was not just a place to play and socialize for children but was also a place of learning and exercising. Organized activities like dancing, drawing and reading were liked by children (Prakoso & Dewi, 2018). The monitoring of RPTRAs by in-charge park officers maintained the quality of the parks. The fencing, gates and the cameras made these parks a safe space for children. Further, the activities organized by the PKK for the women proved to be beneficial for them in learning and developing new skills and socializing (Haerani, 2017). Further, the RPTRAs have also benefited the city as a water catchment area.



Replicability

Parks and open spaces have already been introduced as part of CFC initiatives in selected cities of India. However, utilities of these parks can be improved if some components of RPTRA programme be replicated in the Indian context. These programme components include involvement of social groups or organizations (similar to PKK in Indonesia), which can help organize learning and skill development activities for the surrounding community, especially women, in the parks and open spaces. The concept of learning spaces like libraries and reading spaces can be easily replicated in the Indian context to engage children more productively in these parks. RPTRAs like parks in India can also serve as water catchment areas in cities that face frequent floods.

1.3 COMPREHENSIVE AFTER SCHOOL **SYSTEM (COMPASS) - NEW YORK CITY**

Background

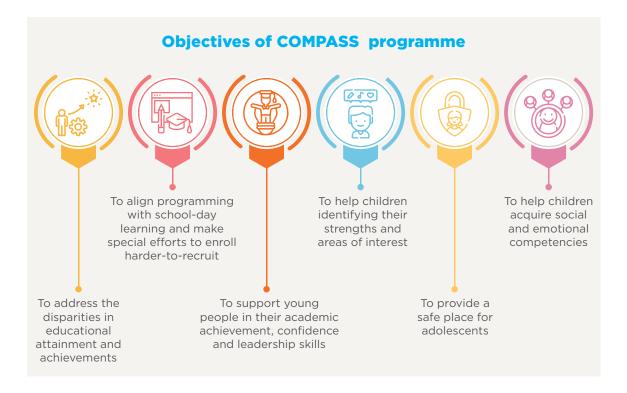
Young people's educational attainment and achievement in the United States has long remained a concern for policymakers. Over the years, though impressive gains have been made in educational attainment, gaps persist in the levels of education attained across income and racial groups. Urban-suburban 'geographic' gap is also evident. Additionally, change in family structure and female labour force participation over the years have created need for child supervision that are no longer met by traditional family roles and structures. Also, the expansion of urban areas and tenement housings have raised concerns for child health and safety in the urban play environment (Mahoney et al., 2009). To bridge these gaps and meet the needs of the changing families and neighbourhoods in United States, an after-school programme was conceived to be introduced throughout the country. The Comprehensive Afterschool System of NYC (COMPASS) is one such after-school programme in New York City (NYC), which was started in 2014. The COMPASS, which was formerly known as the Out-of-School Time (OST) Programme, is comprised of nearly 890 programmes serving students enrolled in K-12 grade. These programmes have a good balance of academics, recreation, enrichment and cultural activities to support and strengthen the overall development of the student.

Programme objectives

The COMPASS programme, as an after-school programme, has the following objectives:

- Address the disparities in educational attainment and achievements based on socioeconomic factors like race, class and residential location.
- Work with school principals to align programming with school-day learning and make special efforts to enrol harder-to-recruit struggling students, like those at the risk of not being promoted who benefit more than other students from participation in after-school activities.
- Help young people build skills to support their academic achievement, raise their confidence and cultivate their leadership skills through service learning and other civic engagement opportunities.
- Help children identify their areas of interest and strength.
- Provide a safe place for adolescents to study, socialize with peers, play sports, explore the arts and establish meaningful relationships with caring adults.

Help children acquire social and emotional competencies which includes selfawareness, managing emotions and difficult interpersonal situations, ability to demonstrate care and concern for others, establishing and maintaining positive relationships with peers and adults and making responsible, healthy decisions.



Programme description

The COMPASS plan is the result of a collaborative planning process, which involved representatives of the NYC's Mayor's Office for Economic Opportunities, the Department of Youth and Community Development, Department of Education, afterschool providers and youth development experts. Started in 2014, the COMPASS programme was based on the Out-of-School Time (OST) Programme initiative of 2005, which had an initial investment of \$46 million. COMPASS is, in fact, the expansion of the OST in terms of improved programming for the middle school youth. In the COMPASS programme, children get to participate in literacy and science, technology, engineering and mathematics (STEM) learning. They also get to engage in activities that are hands-on, project-based and aligned with educational standards. High-quality arts and sports programming are also available. Programmes are typically three hours each day, five days per week, including on school holidays. Programmes are offered at no cost to youth and are purposefully located in public and private schools, community centres, religious institutions, public housing and parks recreational facilities throughout the city both to leverage the use of public spaces and also to help youth find a place that best fits their needs.

Picture 1.5: COMPASS afterschool programmes, New York City

Source: 1. https://childcenterny.org/tag/compass/ 2. https://www.nyc.gov/site/dycd/services/after-school/comprehensive-after-school-system-of-new-york-citycompass.page

Some of the COMPASS programme models are:

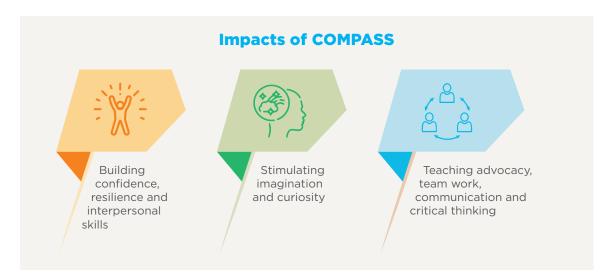
- **COMPASS Elementary model:** It is a robust design built to cater to a child from kindergarten through 5th grade. Some of the features of the programme apart from usual learning are homework help, basic art lessons, physical activity and nutritional programming for healthy living.
- School's Out NYC (SONYC): It is a model that helps students in their middle school (6th, 7th and 8th grades). The model includes instructions on sports, arts and youth leadership.
- SONYC Pilot: It is a pilot programme that was launched especially for the middle school youth of the homeless facilities. It is a tailored programme that helps the youth to cultivate supportive relationships, to stay on track and foster optimism. The programme aims to stimulate curiosity, nurture talents, broaden horizons, build resilience and encourage youth to visualize brighter futures.
- COMPASS High: The model is designed to help the incoming high school (or the ninth graders) to navigate their new surroundings and matriculate to the tenth grade. It also offers targeted academic, social and emotional support to the students.

COMPASS - Explore: The model allows providers more flexibility to tailor their programmes to different audiences throughout the city. Its programmes are as varied as exploration and preparation for legal careers to boat building.

Through continued advancement from COMPASS - Elementary to SONYC to COMPASS - High, Department of Youth and Community Development (DYCD) helps prepare the young people achieve healthy success in school and motivate them to become lifelong learners beyond school.

Key impacts

The COMPASS programme has actively engaged youth in building their selfconfidence, resiliency and interpersonal skills, while reinforcing the school-day learning. It has helped in stimulating curiosity and imagination of the youth. The programme has taught the youth the 'twenty-first century skills' like advocacy, teamwork communication and critical thinking, which have been instrumental in their success at school and workplace. The programme has also helped struggling students by reinforcing school-day instructions, providing individual attention and offering them a chance to practice the newly learned skills in supportive settings.



Replicability

In Indian context, the COMPASS can be replicated as an after-school or extra-school programme for the youth enrolled in various government schools in India, which faces challenges like early-dropouts and poor academic performance. For such an initiative, various non-governmental and private organizations can be collaborated with. Using the space, infrastructure and teaching aids from the existing schools, teaching volunteers can be from these organizations. A programme like COMPASS in India can fill the gaps in educational attainment and achievement for struggling students, especially those who cannot afford high-priced private teachers and educational centres in cities.

1.4 EDIBLE PLAYGROUNDS INITIATIVE -**UNITED KINGDOM**

Exposed to unhealthy food habits, most of the children of primary schools, living in the inner cities of the United Kingdom (UK), are obese. Childhood obesity is regarded as one of the most serious issues by the World Health Organization (WHO). Also, these children are disconnected from nature. Moreover, most of them are unaware of where their food comes from or what a worm looks like. Motivated by the issue, 'Trees for Cities', which is one of the UK's charity organizations that is dedicated to improving living conditions of UK cities by planting trees, has tied up with various city and town councils to focus on education and learning environments in schools through their Edible Playgrounds initiative as part of the school curriculum. Schools hold a unique position in societies as they can provide valuable outdoor experiences, especially to the urban children who lack outdoor open spaces in their neighbourhoods.

Programme objectives

Edible Playgrounds initiative aims to offer a lively, engaging and a multisensory way to teach children about growing and eating healthy food.

Programme description

Edible Playgrounds is an interactive programme that supports schools to transform areas in school grounds into vibrant outdoor spaces as productive food-growing and learning resources. Through the programme, children are given an opportunity to grow, harvest, cook and eat healthy food in a positive and safe environment. The children are usually given a fruit, vegetable or food prepared from the produce. There are also special waste bins to throw the peels and other leftover, which is later used to make organic compost for new plants. It is hoped that through a fun and practical process children learn important lessons about the food they eat, have access to fresh and nutritious food, grow close relationship with nature and develop sustainable food choices and habits. The programme usually provides funds (to 50 per cent) to the cost of creating an Edible Playground at school, an academic year of gardening support training, three chef visits from Chefs Adopt a School and Food for Life Award support from School Food Matters. The main partners of the initiative are the charity organization Trees for Cities, city or town councils and the city or town schools.

Picture 1.6: Edible playgrounds in schools, United Kingdom





Source: https://www.treesforcities.org/our-work/schools-programme/edible-playgrounds

Key impacts

According to the Trees for Cities Edible Playground Lead Teacher Survey 2018, Edible Playgrounds have helped teachers to work with children with special needs or challenging behaviour. The survey also found that the initiative had significant positive impacts on child's moods, attentiveness, self-esteem and physical and mental health. The pupils gained significant knowledge on food and nutrition because of the initiative. It had positive impacts on children's attitudes to healthy eating and their connection to nature, helping them develop sustainable behaviours in the long term.



Replicability

The growing unhealthy food habits among young kids and adolescents, especially in urban India, makes programmes like Edible Playgrounds a necessity. The programme can be replicated in urban government and non-government schools by dedicating a small portion of the playgrounds for this initiative. In the absence of enough playground space, pots in vertical arrangement and other creative spaces in the school can be utilized. The programme should be combined with a comprehensive educational module on food, nutrition, health and hygiene in the curriculum.

1.5 SCHOOL NUTRITION PROGRAMME -**SRI LANKA**

In Sri Lanka, the total number of children in the age group 5-17 years was estimated to be nearly 4.6 million in 2016. Out of them, about 50.5 per cent are males and 49.5 per cent are females. Out of 4.6 million children in the same age group, 90.1 per cent are currently attending school, and the remaining 10 per cent of children are either dropouts or not enrolled in school.

According to the United Nations, around 42 per cent of children in Sri Lanka were living below the poverty line and one-third of the children faced the problem of undernutrition and malnutrition. In order to increase school enrolment and improve the nutritional status of children, the Sri Lankan government has introduced several programmes at different times. One of the most popular programmes is known as the School Nutrition Programme (SNP).

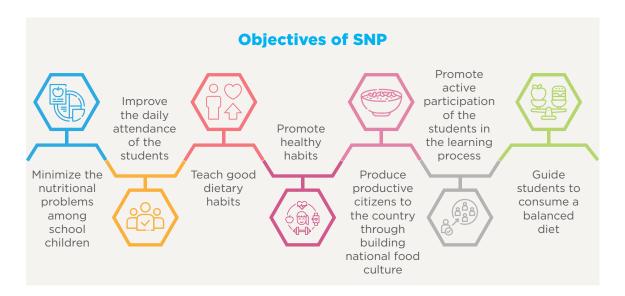
The School Nutrition Programme began in 1931 in Sri Lanka. However, due to changes in economic policy and the civil war, the organizational structure of the school food programmes has changed over time. In 2002, the Sri Lankan government started a plan to provide a meal to first-graders in a few schools. The programme's primary goals were to reduce nutritional issues, encourage the consumption of local foods and spread awareness of healthy eating practices. Broadly, the School Nutrition Programme in Sri Lanka cover three subprogrammes:

- The Government Programme to Provide Meals to School Children
- Food for Education Programme (FEP)
- Programme to provide a glass of fresh milk or milk packets as an additional nutritional supplement

The first and last programmes are fully funded by the Government of Sri Lanka, and the second programme is jointly implemented by the Ministry of National Policies and Economic Affairs of Sri Lanka and the World Food Programme (WFP).

Programme objectives

The overall objectives of the SNP are as follows, but the broad aim is to improve the nutritional status of students and increase their school attendance (which are the first two objectives of the programme).



Programme description

The SNP is implemented directly by the Ministry of Education. The health promotion committee, food committee and school development society at the provincial, zonal and school levels are responsible for implementing the SNP at the local level. The Zonal Deputy Director or Assistant Director is responsible for the implementation and coordination of the FEP since the programme is jointly run by the Government of Sri Lanka and the WFP. For the FEP, the Ministry of National Policies and Economic Affairs should participate in the monthly meeting conducted by the District Secretaries.

There is a strict hierarchy monitoring system of the SNP in Sri Lanka. At the initial level, a routine progress report of review meetings at the school level should be sent to the zonal education office. The progress report of the review meeting conducted at the provincial or zonal level should be sent to the Ministry of Education on a routine basis.

Procedure to select schools and students

The procedure to select schools and students under the government programme to provide meals to school children is as follows:

All the students in schools with a total enrolment of fewer than 100. If a school previously chosen for the programme had fewer than 100 students but continues to grow in enrolment, it must remain in the programme.

- Students from grades 1-5 of selected schools.
- Students of the special education unit.

The coverage of the second programme is larger than the first programme since it covers the school and students from grades 1 to grade 9. Under the third programme, that is, the milk supply programme, only students from grades 1-5 from selected schools are eligible.

Procedure to select the food suppliers

- In the programme, the Samurdhi or parents must be chosen as the food suppliers. If neither parent expresses an interest in providing food, the committee may choose any other nominee.
- The maximum number of students per supplier should be limited to 100. If the school is small, then the zonal committee decides the supplier of food for the school.
- The chairman of the SNP of a school is the school principal. For the supply of food to the school, there should be a proper agreement between the school principal and the supplier. The agreement should follow proper guidelines issued by the public health inspector, Divisional Deputy or Assistant Education Director and Deputy or Assistant Director in charge of the School Nutrition Programme. The agreements should be then submitted for the approval of Zonal Education Director.
- A package of milk has been provided to each selected student in the school under the Milk Scheme Programme. The milk is supplied to the school by a private company called MILCO.

Food distribution at school

The meal is advised to be served in the first hour after commencing school, that is, from 7:30 a.m. to 8:30 a.m. However, due to some special circumstances, the principal has the authority to change the time. However, the time of serving the food should not exceed 9.30 a.m. Normally, 15 to 20 minutes are allotted for the students to consume the meals.

Under FEP, the Ministry of National Policies and Economic Affairs provides rice, oil, dhal and canned fish. The district secretariat distributes these food items to the respective schools. One of the major recommendations of the programme is that the food should be prepared with coconut oil. At least three verifiable varieties should also be included in the meal. On the other hand, under the milk programme, each student gets 150 ml of milk per day for five days in a week.

In different subprogrammes, the procedure of fund allocation is different. The allotted amount for each student per one-day meal is Rs. 28.00. When the school attendance rate is between 90 and 100 per cent full funding is approved for the school. On the other hand, when the school attendance rate falls below 90 per cent, only 90 per cent of the total fund is approved for the school.

The school receives funds per student based on the number of students enrolled. In the free milk programme, for fresh milk in total, Rs. 75 is paid per litre of milk. Out of which the supplier gets Rs. 70.00 per litre of milk, and the school gets Rs. 5.00 for other expenses. The milk packages are given directly to the schools. For the supply of milk to the Ministry of Education, it enters into an agreement with the Ministry of Rural Economic Affairs and the MILCO company.

Picture 1.7: Meal and milk given under School Nutrition Programme, Sri Lanka

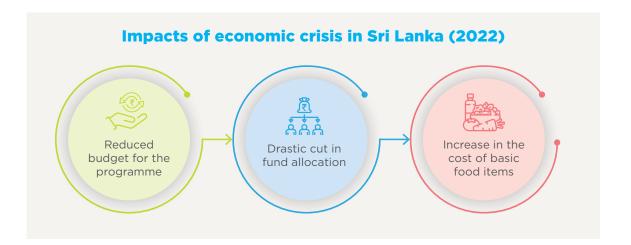


 $\textbf{Sources:}\ 1.\ https://cdn.wfp.org/wfp.org/publications/Schools\%20Meals\%20Programme\%20-\%20Fact\%20Sheet.pdf$ 2. https://fil-idf.org/dairys-global-impact/school-milk-knowledge-hub/addressing-childhood-malnutrition-in-srilanka/

Key impacts

The SNP is very important for school-going children in Sri Lanka. According to the statistics for the year 2017, 1,105,605 students in 7,871 schools benefited from the school meal programme of the government. On the other hand, 112,088 students in 414 schools benefited from the programme of providing fresh milk. Moreover, the SNP increased school enrolment in Sri Lanka.

However, the unprecedented economic crisis in Sri Lanka in 2022 had a direct impact on the SNP. Due to the economic crisis, the budget for the programme has been reduced from 6 billion to 2 billion rupees. Due to this drastic cut in fund allocation, children are not getting enough nutritious food at school.



Replicability

SNP is very important for the overall development of children because it creates a dual effect: first, it increases school enrolment, and second, it improves the nutritional status of the children. The most important component of the SNP is providing milk to the children at school, which provides a sufficient amount of protein to the children. The programme is very successful in Sri Lanka since it increases enrolment and the nutritional status of school-going children. Like SNP, a similar kind of programme is also available in India, known as the Pradhan Mantri Poshan Shakti Nirman Scheme, erstwhile known as Mid Day Meal in school. The scheme provides a cooked meal to the child at school.

1.6 PROGRAMA CRIANÇA FELIZ (HAPPY **CHILD PROGRAMME) - BRAZIL**

Brazil is the biggest nation in South America, with a population of over 207 million spread among 5,570 municipalities in 26 states and a federal district. In Brazil, 11 per cent of the population is under the age of six, and 6.5 per cent of households have monthly incomes below the poverty line (Buccini, Venancio, and Escamilla, 2021). As a response, the Ministry of Development and Social Assistance, Family, and Fight against Hunger of the Brazilian government introduced the Happy Child Programme (Programa Criança Feliz) on 5 October 2016. It is a significant initiative of the Brazilian government for the integral development of children. The programme is considered one of the largest home visit programmes for health and nutritional support of children and pregnant women in the world.

Programme objectives



The Happy Child Programme (HCP) covers four categories of the population: first, pregnant women; second, children up to 36 months old are included in the Single Registry for Social Programmes of the Federal Government; third, children up to 72 months old and their families benefit from the Benefit of Continued Provision (BPC); and fourth, children aged up to six years away from family life due to the application of a protection measure.

Programme description

The HCP has two main components: (i) home visits and (ii) intersectoral initiatives.

Home visit: The HCP's primary activity is home visits. The visits are made to the programme-involved family's home. Home visits are intended to support the improvement of family skills, especially those of the most vulnerable children. Before the home visit, every visitor has been provided training. The training materials and the handbook were developed by UNICEF, the World Health Organization (WHO) and the Pan-American Health Organization.

Picture 1.8: Home visitors of Programa Criança Feliz-Brazil



Source: https://ww11.ceara.gov.br/2019/12/13/ execucao-do-programa-crianca-feliz-no-ceara-edestaque-nacional/

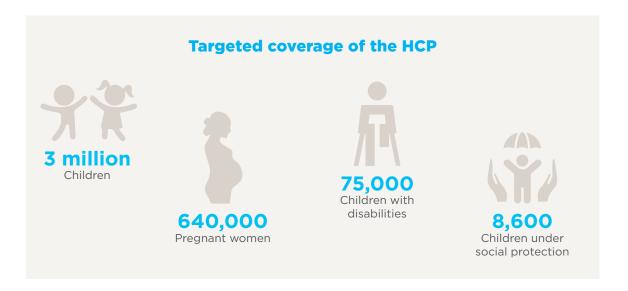
The number of home visits for the different sections of the population is different. The pregnant women receive one home visit per month; the children from birth to 3 years receive one visit per week; and the children aged 3-6 years receive one visit every 15 days.

Intersectoral initiatives: It is an initiative of all the sectors of the government to strengthen regional policies for social assistance, health care, education, culture, human rights and children's rights. The programme features an intersectoral steering committee and a technical group, along with a coordinating organization at each of the three levels of government -federal, state and municipal. At the federal level, within the Ministry of Citizenship, the National Secretariat for Social Assistance is the platform for passing on funding for states and municipalities, and the National Secretariat for Early Childhood Development is responsible for coordinating HCP implementation. The federal government coordination team is responsible for planning national policies, assisting the states and developing training programmes for master trainers, supervisors and home visitors.

At the state level, the state coordination team is responsible for providing support to the municipal team. The state government is also responsible for implementation in their area, awareness-raising initiatives, mobilizing and training municipal supervisors and monitoring. At the bottom level, the municipalities are responsible for implementing programmes under their jurisdiction. The municipality is also responsible for training the home visitor, planning visits, supervising the fieldwork and monitoring and assessing the visit.

In 2017, the budget for the programme was US\$98 million. Which increased to US\$167 million in 2018. In the financial allocation, the federal government transfers funds to the state government through the National Social Assistance Fund (NSAF) to cover training and expenses, and finally, the state government transfers funds to the municipality. The staff of the home visitor is divided into two parts: supervisors and home visitors. Each municipal supervisor is responsible for up to 15 home visitors, and each home visitor can attend to up to 30 children or pregnant women. For the service, the supervisors are paid an average of US\$609 per month, and home visitors are paid US\$318 per month.

Although the HCP is an important initiative of the Brazilian government towards the improvement of the nutritional status of children, the programme is facing some important challenges: first, a shortage of skilled and technical human resources, mainly to assist the municipalities; second, a shortage of funding for training. Third, irregularity in the visits by the health staff is another important shortcoming of the programme.



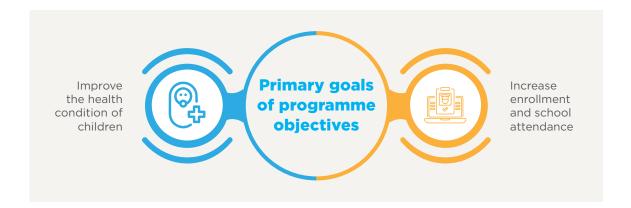
Key impacts

The programme is very significant for pregnant women and children in Brazil. The main aim of the programme is to reach 3 million children and 640,000 pregnant women, including 75,000 children with disabilities and 8,600 children under special protection measures. During 2018, out of the 5,570 municipalities, 2,614 had joined the programme. Further, the coverage increased to 2,934 in 2020. In the same period, 862,600 vulnerable children and 190,800 pregnant women benefited from the scheme.

Replicability

HCP covers primarily two types of populations: first, pregnant women; and second, children up to 6 years of age. HCP is a very important programme for both the mother and the child. The programme is very successful in Brazil. Since it is a home visit and incentive-based programme, it has had a significant impact on the pregnant mother and the children. The programme can be replicated in any country where the population pressure is very high, there is a lack of health institutional facilities and the child and maternal mortality rates are very high.

1.7 ASIGNACIÓN UNIVERSAL POR **HIJO (UNIVERSAL CHILD ALLOWANCE PROGRAMME) - ARGENTINA**



In 2009, the Argentinian government introduced and implemented the Universal Child Allowance Programme, known in Spanish as Asignación Universal por Hijo (AUH). The programme covers children and adolescents younger than 18 years old and those living in poverty or vulnerable conditions. It is a conditional cash transfer scheme under which the household gets monthly monetary benefits against the fulfilment of predetermined conditions of the government. The programme mainly aims to improve the health and education of children and adolescents with the intention of breaking the intergenerational poverty cycle. At present, the programme covers 3.5 million children under the age of 18 and 1.8 million households in Argentina.

Programme objectives

The programme has two primary goals: (i) to increase enrolment and school attendance and (ii) to improve the health condition of children. More importantly, the programme also places an emphasis on making sure that children and teenagers from families without jobs or families who work in the informal economy receive the benefit.

Programme description

The National Social Security Agency (ANSES) is the leading implementing agency of the AUH. The programme covers children and adolescents up to the age of 18 years. Following are the identification criteria of the household under this scheme.

The scheme covered children and adolescents from unemployed households and temporary worker households.

- The scheme covers the children and adolescents of the workers registered under the domestic worker category.
- Children and adolescents of informal workers with income below the legal monthly minimum wage of 12,500 pesos in March 2019.
- The programme covers the children and adolescents of the seasonal worker and certain categories of self-employed workers.
- The programme also covers children and adolescents from small taxpayer households. Moreover, it also includes pregnant women for the improvement of their health status.
- The programme covers five maximum number of children in a household.

The beneficiaries of the programme received an amount of money against the fulfilment of certain criteria set by the government. The eligible household gets 80 per cent of the monthly money through the usual system of social security payments in Argentina. The remaining 20 per cent will be deposited into the savings accounts of the beneficiaries on the confirmation of health check-ups, immunization records and certification of the completion of the school year by their children and/or adolescents.

The programme is significant for the overall development of the children because it covers two significant achievements of their lives: health and education. However, the programme faces some challenges. The major problem with the programme is that it does not cover more than six children in a family. Moreover, due to the rigid eligibility criteria, the programme is not able to cover some specific populations, such as migrant children, children lacking parental care and families with non-traditional structures.



The administrative efficiency of the programme determines its effective implementation. If the administrative system is not efficient, then there are higher chances of households being excluded from the programme. In Argentina, due to administrative limitations such as delays in issuing birth certificates and a lack of documentation, most eligible children and adolescents face barriers to accessing benefits.

The AUH budget made up almost 0.6 per cent of the GDP in 2017. Each qualified child in a household receives 2,652 pesos per month under the programme (3,448 pesos in some provinces). On the other side, each household receives 8,642 pesos per month for each disabled child (11,235 pesos in some provinces). The payments are made using a bank card, which may also be used to make purchases and withdraw cash. Beneficiaries may occasionally pick up the cash at predetermined locations, such as a post office.

Key impacts

The review of the literate shows that the AUH is able to accurately target beneficiaries belonging to the lower income group. However, a number of needy households belonging to the lower income group have been excluded from the programme. Some of the key impacts of the programme are as follows:

- The AUH has a larger positive impact on the poorest sections of society. In 2015, 12.5 per cent of households that received benefits from the AUH programme were no longer below the poverty line (UNICEF et al., 2017).
- Due to the effective implementation of the programme, total poverty in Argentina dropped by 6.7 per cent and extreme poverty decreased by 2.3 per cent (Calabria et al., 2010).
- The impact of the programme is greater on reducing child poverty. Due to the programme, child poverty in Argentina reduced by 13.1 per cent and extreme child poverty reduced by 4.6 per cent (Calabria et al., 2010).
- The programme has a significant impact on school attendance. After the implementation of the programme, it was observed that there was a significant improvement in the school attendance rate of eligible boys aged 15-17 years in secondary school.
- However, the programme is not able to show any significant impact on female attendance.
- The programme also helps in reducing child labour in the country (Jiménez and Jiménez, 2015).

Replicability

The AUH increased the school enrolment and health status of children. The programme had a significant impact on low-income households. The programme is already successful in Argentina. A similar kind of programme may be replicated in countries with high incidence of child poverty. The AUH programme demonstrates the potential to increase school enrolment and nutritional status of children from poor households if replicated in similar countries.

1.8 NATIONAL MULTI-SECTORAL **EARLY CHILDHOOD DEVELOPMENT** PROGRAMME - TANZANIA

The National Population Projection (NPP) from the National Bureau of Statistics (NBS) of Tanzania estimates that there are roughly 8,328,142 boys and 8,196,059 girls between the ages of O and 8 years. This accounts for over 30 per cent of the nation's total population. At present, almost 43 per cent of Tanzanian children struggle with issues like malnutrition, poverty, food insecurity, family stress, child neglect and abuse. Hence, in order to maximize the utilization of human resources, the quality of early childhood care and education programmes must be introduced with some positive and planning-oriented goals.

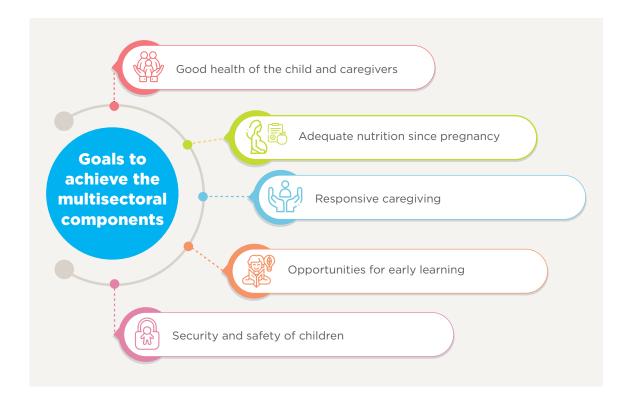
In Tanzania, the first child development programme was initiated in 2004 with support from UNICEF. It was known as the Early Childhood Development (ECD) programme. It was further upgraded in 2007 and renamed the Integrated Early Childhood Development (IECD). The programme was jointly implemented by the Prime Minister's Office (PMO), the Ministry of Health and Social Welfare, the Ministry of Education and Vocational Training, the Ministry of Community Development, Gender and Children and Regional Administration and Local Government.



In 2011, a draft report on the performance of the IECD programme was submitted to the ministry. In 2018, the government sought to expand IECD to the National Multi-Sectoral Early Childhood Development Programme (NM-ECDP), which was launched in 2021. The United Republic of Tanzania started the first national Multi-Sectoral Early Childhood Development Programme (NN-ECDP) in Eastern and Central Africa, which will be executed from the fiscal year 2021-22 through 2025-26.

Programme objectives

The primary goal of the programme is to develop a multi-sectoral approach to young children's nurturing care to ensure holistic early childhood development. In order to achieve the multi-sectoral goal, the programme places a lot of importance on the following five components: (1) good health of the child and caregivers; (2) adequate nutrition since pregnancy; (3) responsive caregiving; (4) opportunities for early learning; and (5) security and safety of children.



Programme description

The programme is inspired by the global Nurturing Care Framework (2018). The Prime Minister's Office (PMO) of Tanzania directly leads and coordinates the overall NM-ECDP. The Office of Regional Administration and Local Government (ORALG) ensures coordination, supervision, monitoring and evaluation of the programme by the regional and local government authorities. The integration of nurturing care components remains under the control of the existing high-level steering committee on nutrition and relevant technical working groups. This programme supports a

coordinated approach putting into action various laws and policies relevant to ECD, including the Law of the Child Act (2009), Child Development Policy (2008), Education and Training Policy (2014) and Health Policy (2007) to address the holistic developmental needs of children aged 0-8 years. The programme calls upon all key government actors across the relevant sectors, as well as development partners and civil society organizations, to work together to ensure the development of all children in the age group of 0-8 years.

The development of the NM-ECDP has been guided by a blend of the theory of change (TOC). The TOC is the visual mapping of the pathway towards achieving the desired changes. The NM-ECDP has prioritized and aims to address the following four expected outcomes:

- Enabling environments are improved to facilitate efficient coordination and delivery of ECD services.
- Service delivery and quality assurance systems capacities are strengthened for the delivery of multisectoral ECD services.
- All young children 0-8 years and their caregivers have increased access to quality and coordinated ECD services.
- Caregivers, families and communities should be empowered to adopt good parenting practices for nurturing care.

Picture 1.9: Multi-Sectoral Early Childhood Development programme, Tanzania





Source: https://www.afro.who.int/news/tanzania-launches-national-multi-sectoral-early-childhood-development-

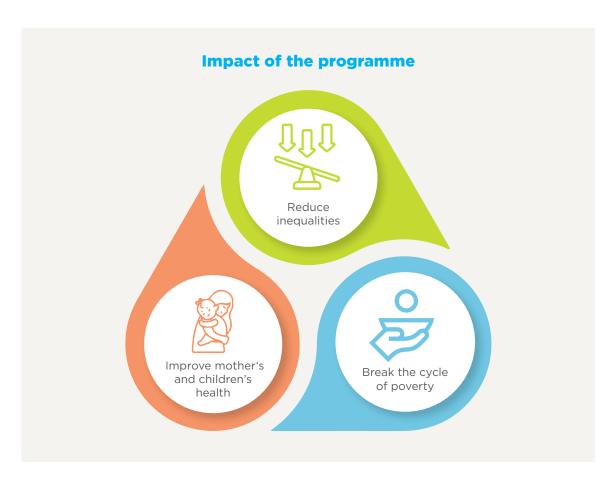
Different experts have voiced varied opinions on the total budgetary expenditure for the programme. For the quality of early childhood care and education and for the success of the programme, the experts have recommended a minimum public expenditure of 1 per cent of the Gross Domestic Product (GDP) (Neuman & Devercelli, 2013). Again, for the successful implementation of the education, health, and protection intervention components of the programme, the government should spend around 2-2.5 per cent of GDP on the programme (Vargas-Baron, 2008). Despite these estimates, the Tanzanian government is only spending an average of 0.1 per cent of GDP on ECD.

The total budget for the NM-ECD programme for a period of five years is US\$394,392,824. The budget is mainly for achieving the following four long-term goals: first, an improved enabling environment; second, a strengthened service delivery and quality assurance system for multi-sectoral ECD services; third, increased access to quality and coordinated ECD services; and fourth, caregivers, families and communities empowered to adopt the practice of nurturing care.

The total budget expenditure of the programme is divided into four parts. The majority of the budgetary funds are allocated to increasing access, quality and coordination of ECD services. Around 14 per cent of the budgetary expenditure goes into improving the enabling environment to facilitate efficient coordination and delivery of nurturing care services. Around 7 per cent of expenditure is allocated for strengthening the service delivery and quality assurance systems for multisectoral ECD services. Finally, 3 per cent of the budgetary expenditure is allotted to increase access, quality and coordination of ECD services.

Key impacts

The programme will help in the improvement of the education, health and behaviour of children, which will have an overall effect on the income and expenditure of the household. Further, the programme will help reduce inequalities, break the cycle of poverty and improve outcomes in later life. The programme also improved the mother's health and children's health condition.



Replicability

The programme is a multisectoral programme for the overall development of children. The programme covers child health from the womb to birth and up to the age of five. The programme covers pregnant women, caregivers and children. The programme also provides opportunities for early childhood education and nutritional education for mothers. The programme is mainly useful in countries where poverty and the level of inequality in the society are very high. Countries like Somalia and the Congo are facing various problems related to the children, such as malnourishment and undernourishment. Moreover, the parents have less knowledge of nutritional education and childcare. The multi-sectoral programme will play a significant role in nutritional training and the improvement of child health in such countries.





2.1 KEY CHILD-FRIENDLY **INITIATIVES**

Some of the key initiatives that include child-friendly components are outlined below. All these missions are critical to the infrastructure and services being built across the country. These also measure the liveability component in the city.

2.1.1 Smart City Mission

SCM aims to provide smart features and solutions for efficient use of a city's resources, addressing the needs of all citizens, especially children. Some features are access to housing for all, creation of walkable localities, preservation and development of open spaces and promotion of a variety of transport options. The housing projects include slum rehabilitation, rental housing, in situ housing upgradation and construction of housing units for economically weaker sections and lower income groups. Under SCM, currently 160 projects in 60 cities are ongoing for creating green corridors, developing innovative use of open spaces, designing walkways and cycle tracks, riverfront development and eco-restoration projects.

The total investment in this is around INR 7,000 crores.40

Children are also encouraged to be a part of the decision-making processes in planning.

Bhubaneswar is the first proposed smart city and the pilot city for including the CFSC initiatives.

2.1.2 Atal Mission for Rejuvenation and Urban **Transformation**

This mission aims at infrastructure creation within cities with a direct link to service provision. Some of the child-friendly components are ensuring access to improved drinking water and sanitation services in every household along with sewerage connections, developing green and open spaces to be maintained and reducing pollution by promoting public transport or non-motorized transport system. The AMRUT mission mandates one children's park in every city every year for the five years of the mission. A robust system must be developed for maintaining parks, playgrounds and recreational spaces. This mission essentially upholds the environment-based approach to the development of CFCs.

⁴⁰ http://164.100.161.224/upload/uploadfiles/files/Listof%20Projects_OpenSpaces_Riverfront.pdf

2.1.4 Swachh Bharat Mission (Urban) (SBM)

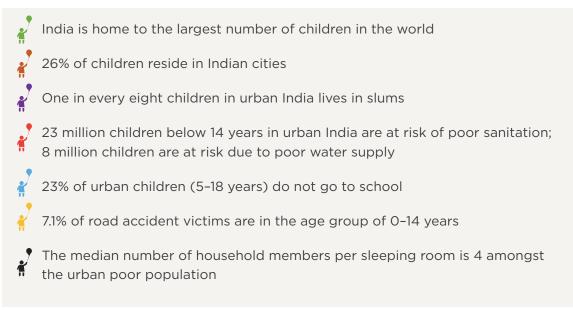
SBM is Government of India's flagship programme implemented by the Ministry of Housing and Urban Affairs. The mission's various components aim to increase sanitation levels in urban areas and make all cities open defecation free. Improved sanitation means preventing communicable diseases and improving the city's health profile (including the child population). Due to poor sanitation, malnutrition among children has become a grave problem. When schools have clean toilets, access to clean water and handwashing facilities and menstrual hygiene management facilities, it not only prevents the transmission of communicable diseases but also contributes to more children attending school and learning. Children often join various drives to clean the neighbourhoods and their own schools.

Child-friendly initiatives in India

The time is right for India to start planning for CFCs because of the high share of the young population (nearly 40 per cent), 27 per cent of whom reside in urban areas (NIUA, 2018). There are also considerable challenges like poverty, congestion, environmental degradation and crime. Some of the major issues are highlighted below.

- The built environment plays a crucial role in the holistic development of children. The spaces to live, learn, play and grow depend on how the built environment of the cities interacts with children. The roads, footpaths, crossings and lanes are not safe and inclusive for children. Children tend to spend a lot of time in outdoors by travelling to and from schools or in the playgrounds and neighbourhood areas. These spaces need to be safe and secure.
- Open spaces or green spaces are not available in the bustling cities. This makes communication among children limited to those from the neighbourhood. During the pandemic, the children could not even access their spaces due to the restrictions imposed as a result of lockdowns.
- Access to basic amenities is not always equal for all children. The children residing in slums often live in deprivation. The government schemes need to reach them to improve their living conditions.
- Crime and fear often restrict children's mobility (like going to school or playgrounds) because of the perceptions of risks in their environments. The absence of street lighting, footpaths and police posting make the cities unsafe for children.

Figure 2.1: Status of children in India



Source: https://niua.org/cfsc/sites/default/files/Smart%20Urban%20Design%20and%20Planning%20for%20 Child%20Friendly%20Cities.pdf

The concept of CFCs in India faces many implementation challenges. However, there are examples of initiatives taken by the local governments and NGOs to make public spaces inclusive for children. The initiatives broadly include restructuring of playgrounds and beautification, painting of zebra crossings and allocating one childfriendly police station in each district (in states like Bihar, Odisha, Rajasthan, Kerala, Maharashtra, and Jharkhand), and painting of street walls with cartoons and scenery.



Currently, 160 projects in 60 cities are ongoing under the Smart Cities Mission for creating smart classrooms, green corridors, development and innovative use of open spaces. Theme-based parks like nature parks, beach parks and riverfront green areas are being developed in some of these cities, such as Bhubaneshwar. Other few examples are a children's science park in Belagavi and science centre at Kakinada, a themed nature park in Coimbatore, happiness areas in New Delhi, riverfront parks in Guwahati and Indore and lakefront development at Jabalpur (Ramnani, 2019). Various NGOs have requested Delhi Development Authority to include child-friendly spaces while drafting the Delhi Master Plan, 2041 (Hindustan Times, 2019). Other cities with prominent childfriendly initiatives are Pune, Indore, Gwalior, Chennai, Chandigarh, Hyderabad and Udaipur (NIUA, 2022). A three-year initiative, 'The Nurturing Neighbourhoods Challenge', was undertaken by the Smart Cities Mission, Ministry of Housing and Urban Affairs, Government of India, in collaboration with the Bernard van Leer Foundation and World Resources Institute (WRI) India. This initiative for children younger than six years has five objectives of making the neighbourhood safe, playful, accessible, inclusive and green.⁴¹ For achieving this objective, Indian cities must adopt an early childhood lens while developing neighbourhoods. Ten winning cities out of 65 participants integrated projects to improve public spaces, mobility and access to services for infants, toddlers, and their caregivers.

Phase two of NNC started in July 2022 with eight strategies for city agencies to achieve scale and sustainability. These are replicating previously successful projects, strengthening institutional set-up, engaging partnerships and diverse leaders, bringing effective policy changes, introducing database planning, monitoring and evaluation, conducting capacity-building workshops, enhancing civic engagement and ensuring financial sustainability.

Good practices in child-friendly cities in India

Cities being 'people-friendly' is emerging as one of the key focus areas under the larger umbrella of making them smart, inclusive and sustainable (NIUA, 2019). It is crucial to fill the gap between the policies that facilitate the creation of child-friendly infrastructure and its actual design and implementation to ensure that the fruits of good planning get translated on the ground and benefit all sections of the society.

Most of the child-friendly initiatives in India are taken under the Smart Cities Mission and Nurturing Neighbourhood Challenge (in smart cities). Hence, a few smart cities in India have incorporated child-friendly practices while planning and redeveloping them. This section outlines the good practices in CFCs of India, where 10 cities are selected based on the number of children-friendly initiatives. It is to be noted that all these cities are smart cities and have attempted to implement more than one child-friendly initiative. Since CFC is a new concept in India, limited information on cities is available

⁴¹ https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/

from verified sources. The report attempts to showcase the child-friendly components in these cities and does not intend to judge the qualitative aspects of each initiative since field verification was not possible.

The cities selected for this study are Udaipur in Rajasthan, Bhubaneswar and Rourkela in Odisha, Pune in Maharashtra, Indore and Jabalpur in Madhya Pradesh, Bengaluru in Karnataka, Kakinada and Visakhapatnam in Andhra Pradesh and Warangal in Telangana. Out of the 10 cities, six were part of Nurturing Neighbourhood Challenge (NNC) and secured some position in the top 10. Bhubaneswar, Pune, Udaipur and Vishakhapatnam were not a part of NCC but successfully implemented some childrenfriendly initiatives.

A list of child-friendly initiatives is selected from these cities based on the following criteria. The initiatives must have one or more preconditions met.



Map 2.1: Location of selected CFCs



Source: Prepared by the author

2.2 BHUBANESWAR

Bhubaneswar, the capital of Odisha, is one of the smart cities in India. Located in the Khordha district, the city is a cultural and educational hotspot of the state. It scored 59.85 (out of 100) in the Ease of Living Index and ranked second among the category of less than million city.⁴² The population of the city is 885,363 and 32.2 per cent of the population is younger than 20 years (Census of India, 2011). The child sex ratio of the district is 916, and the Child Development Index (2022) rank is 122 out of 640 districts.⁴³ The percentage of slum population is around 19. The figure below shows the share of the children and adolescent population in the city.

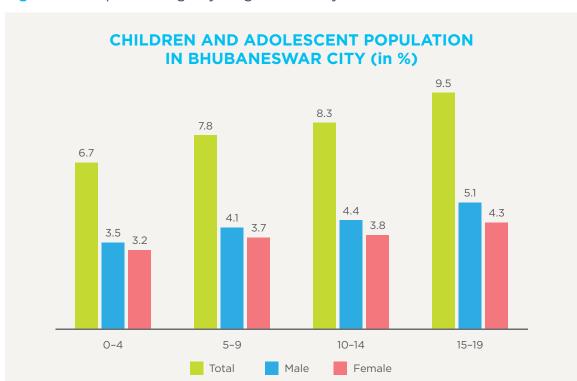


Figure 2.2: Population aged younger than 20 years in Bhubaneswar

Sources: RGI & Census of India, 2011; Table C-14

Bhubaneswar Smart City Limited plans, implements, manages and operates smart city development projects. Bhubaneswar is the first smart city in India to launch a CFSCC. Bhubaneswar Development Authority and Bernard van Leer Foundation (BvLF) joined the flagship movement of 'Urban95', which envisions cities from a height of 95 cm, that is, the height of a three-year-old. It essentially promotes changes that a child would like to have in their cities while interacting with the built environment. However, it essentially focuses on the need for safe and healthy environments for

⁴² https://eol.smartcities.gov.in/dashboard

⁴³ https://www.nipfp.org.in/media/medialibrary/2022/02/WP_371_2022.pdf

babies, toddlers and caregivers to grow, learn, create, imagine and play.⁴⁴ Along with Bhubaneswar, Pune and Udaipur also joined this urban project. In 2017, Bhubaneswar completed a mapping of neighbourhoods, gathering data on the number of children in each ward and the services available to them, like anganwadis, health facilities, parks and access to public transport. Children were invited to highlight the problems they faced, such as parks not being accessible, lack of footpaths, streetlights and safe places to crossroads; lack of public transport to get to the nearest school and other problems which are not child-friendly. The city administration plans to develop or build playgrounds, public spaces, traffic signal posts and zebra crossings near school areas. The administration also aims to create zonal plans for the construction of safe and well-equipped playgrounds and parks for children. A part of the programme was set up to improve opportunities for children aged 0-8 years living in disadvantaged areas, which includes transforming green public spaces into child-friendly areas, making health care more accessible, supporting parents and using locally-collected data to target resources better.

Bhubaneswar is the first child-friendly smart city with certain initiatives for children. They are outlined below.



Problems faced by young children were identified, including open defecation; parks not being accessible; lack of footpaths, streetlights and safe places to cross roads; and children in some neighbourhoods needing to use public transport to get to the nearest school (NIUA, 2019). After receiving inputs from children and government officials, some significant changes were done to make the city more accessible to children.

⁴⁴ https://bernardvanleer.org/solutions/urban95/

- Redevelopment of four informal settlements with a participatory approach and children-led planning (NIUA, 2019).
- Transformation of existing physical spaces into accessible places for children to play and explore nature with modern playing equipment (NIUA, 2019). Bhubaneswar Development Authority (BDA) and Bhubaneswar Smart City Limited (BSCL) plan to develop three city parks as 'Smart Parks' as part of the Smart City initiative. These parks will be incorporated with child-friendly features like Water ATMs, Wi-Fi and Informative variable signage systems to connect the local communities with the open spaces in the city.⁴⁵
- Construction of one sensory park.
- 'Safe routes to school' programme that ensures safe ways for kids to walk or cycle using traffic calming measures like installing pelican crossing, using art on important junctions near schools and public places and introducing child-friendly buses with ramps.
- Opening libraries in public spaces.
- Opening of 'Aahar Kendra' to provide meals to the homeless population, including children.
- 'Socially Smart Bhubaneswar', an initiative under which 254 adolescent girls were trained in self-defence techniques.⁴⁶

Child-friendly city initiatives in Bhubaneswar

Sensory park: First ever and fully equipped sensory park with exclusive features for differently abled children was set up in Shaheed Nagar, Bhubaneswar, by the Bhubaneswar Smart City Limited. It is designed for all children by Bhubaneswar Urban Knowledge Centre (BUKC) and covers an area of 16,117 square feet.⁴⁷ It has special open-air gym equipment, insulated pathways, playing equipment for children and other child-friendly components. The children's rides inside the Sensory Park include wheelchair swing, two-seater swing, bucket swing, multiline swing, single-seater spring rider, musical polls, sound play, drum track, musical panel, sound play table, shoulder builder, three-seater ground-level merry-goround (MGR), multi-seater MGR, wheelchair MGR, slides, two-seater spring seesaw, double bar see-saw, monkey bar climber, ball pool, adventure climber and multi-play. There is also a Braille wall of alphabets, a basketball court, a security room and adequate dustbins.48

⁴⁵ https://orissadiary.com/odisha-three-smart-parks-sahid-nagar-bhubaneswar/

⁴⁶ https://mycitylinks.in/empowering-girls-through-self-defense-classes-under-socially-smart-bhubaneswar/

⁴⁷ https://thelogicalindian.com/uplifting/bhubaneshwars-first-sensory-park-for-children-adults-with-special-needs-30370

⁴⁸ https://updateodisha.com/2021/08/21/smart-city-readies-sensory-park-for-children-with-special-needs-at-saheednagar-72880/



Picture 2.1: Sensory park at Bhubaneswar

Source: https://www.newindianexpress.com/states/odisha/2022/may/11/bhubaneswar-gets-sensory-park-fordifferently-abled-2452220.html

Three smart parks at Shaheed Nagar: Shaheed Nagar Park, OMC park and triangular park were redeveloped, incorporating child-friendly elements like children's play equipment, splash pool, a watchtower, an open gym, portable e-toilets, screen wall for graphic presentation and in general beautification through the plantation. These parks were revamped using low-cost sustainable materials, including waste and discarded items.⁴⁹

Picture 2.2: Smart parks in Bhubaneswar



Source: 1. https://www.newindianexpress.com/states/odisha/2022/jul/12/land-filling-eats-up-budget-features-maybe-dropped-for-smart-park-in-odishas-burla-2475621.html

 $^{2.\} https://www.telegraphindia.com/odisha/expert-help-for-smart-parks/cid/1409414$

⁴⁹ https://smartcitybhubaneswar.gov.in/smart-park-redevelopment

Child-friendly airport police station: Located at Biju Patnaik International Airport, it has created a child-friendly room with toys, puzzle games and painted walls. The idea is to make minor victims and children accused of committing offences to feel safe and comfortable. Children often hesitate to come to police stations. To do away with fear and uneasiness, Odisha police have announced that at least one police station in each district will be converted into a child-friendly police station. At present, there is one in the Gajapati district. There are toys and children's books inside the station. The details on the child helpline number are painted on the wall. There are also paintings of cartoons and pictures on the walls.

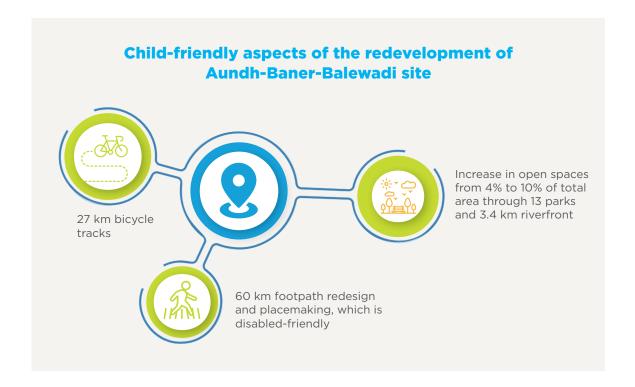
Picture 2.3: Child-friendly police station



Source: https://timesofindia.indiatimes.com/city/bhubaneswar/child-friendly-police-stations-to-come-up-in-alldistricts-odisha-cm-naveen-patnaik/articleshow/87304516.cms

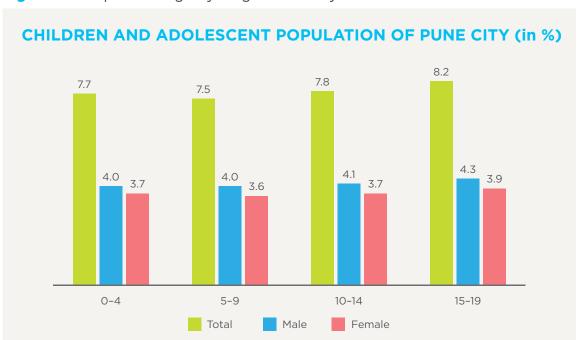
2.3 PUNE

Pune is the second largest city in the state of Maharashtra after Mumbai and ranks second (with a score of 66.27 out of 100) on the Ease of Living Index. Pune is also emerging as an education hub in the country with 811 colleges. It is known as 'Oxford of the East'. The total population of the city is 312,4458, with 31.1 per cent population younger than 20 years (Census of India, 2011). The child sex ratio of the district (Pune) is 883, and around 22 per cent of the population in the city lives in the slum. The Child Development Index of the district is 0.787 (ranking 124 out of 640 districts). Pune is one of the prominent smart cities in India, with the aim of becoming one of the pioneers in developing child-friendly amenities around the city (through the Urban95 project in collaboration with BvLF).



Pune Smart City Development Corporation and Pune Municipal Corporation (PMC) are in charge of planning and remodelling Pune into a smart city. Pune aspires to create a model neighbourhood of liveability and sustainability matching global standards in the selected local area (Aundh-Baner-Balewadi (ABB)) by deploying a few innovative features.

Figure 2.3: Population aged younger than 20 years in Pune



Sources: RGI & Census of India, 2011; Table C-14

Some of the children-friendly aspects of the redevelopment of the site include 27 km bicycle tracks, 60 km footpath redesign and placemaking, which is disabled friendly and an increase in open spaces from 4 to 10 per cent of the total area through 13 parks and 3.4 km riverfront. There is also a list of projects to be initiated under placemaking - patriotic theme park, fitness park, augmented reality park, park for specially abled, environment part, water conservation park, community farming, roller ball and skating rinks and science park.⁵⁰ Pune also has the best documented information on childfriendly initiatives in the public domain.

Child-friendly initiatives in Pune

Traffic park: The traffic park is built by PMC to educate children (0-12 years) about traffic and driving rules on the road. The linear park has all the elements of the actual roads in Pune, like traffic signals, footpaths, cycle tracks, circles, speed boxes and breakers. It is a 200 m stretch of park owned by the transport department.

Picture 2.4: Children's traffic park at Bremen Chowk, Aundh



Dinkar%20Gojare_PMC_Pune_Urban95.pdf

Counselling room: A dedicated child-friendly counselling room is available at the Pune railway station. It is developed to make children feel safe and comforting when lost or stressed in a runaway or missing situation. The initiative was undertaken by the Central Railway (CR) in collaboration with the Women and Child Development Department, Pune (WCDD) and Hope for the Children foundation. This is the first such counselling room started at any of the railway stations in Maharashtra and the third one in the country. 'Child-friendly jackets' have also been launched, which are specially designed in bright, eye-catching colours so that policemen do not come across as scary cops but as friends offering support to kids.

⁵⁰ https://punesmartcitv.in/area-based-development-initiatives/



Picture 2.5: Child-friendly counselling room at Pune railway station

Source: https://www.hindustantimes.com/cities/pune-news/states-1st-child-friendly-room-started-at-pune-railwaystation-101651254300582.html

Child-friendly police stations: It is a collaborative initiative by the Pune police and Hope for Children Foundation, started three years ago. Pune already has about 10 child-friendly stations. These child-friendly police stations encourage free and fearless conversations with underaged victims, accused persons and witnesses of crimes. The environment is made friendly by incorporating infrastructural changes and colourful cartoons painted on the walls of the stations. The initiative also involves rehabilitating children accused of offences. One trained personnel is deputed in the police station to interact with the children.



Picture 2.6: Child-friendly police station at Pune

Source: https://www.hindustantimes.com/pune-news/child-friendly-police-station-inaugurated-in-pune/story-1fBAmrXhXwzoal60KA6ToO.html

Infant, toddler, caregiver (ITC)-friendly garden corner: It is located at Sambhaji garden, Pune. The garden lacked sensory touch, and there was not enough space for toddlers. The garden was made appealing by painting walls and using sustainable materials such as tiers and used bottles. This intervention was a part of the Urban95 project.

Picture 2.7: Garden corner at Pune



Source: https://www.pmc.gov.in/en/urban95_Pune

ITC-friendly, playful area: Located at Anganwadi No.92, Aundh. The place lacked properly organized play space for anganwadi before the intervention. This area was repurposed from an underutilized play area to a street play space in front of anganwadi. This intervention was a part of the Urban95 project.

Picture 2.8: Playful area at anganwadi



Source: https://www.pmc.gov.in/en/urban95_Pune

ITC-friendly road crossing: This crossing is located at the Shivarkar Garden, Wanawari. The place attracts very high footfalls and is risky without a proper crosswalk and lack of a halfway crossing refuge area. To make the place childfriendly and the road accessible, these elements were incorporated into the change, and the crossings were also brightly coloured. This intervention was a part of the Urban95 project.

Picture 2.9: Colourful crosswalk in Pune



Source: https://www.pmc.gov.in/en/urban95_Pune

A playful waiting space: It is located at the Shivarkar maternity hospital. Before the intervention, the place lacked an organized sitting area for visitors and playing space in the hospital despite its high footfall. The safe space was created with vibrant colours, encouraging children to play outdoor. This intervention was a part of the Urban95 project.

Picture 2.10: Waiting space at Shivarkar maternity hospital



Source: https://www.pmc.gov.in/en/urban95_Pune

Few sensory elements: These were added to the Lonkar garden in Kondhwa. The area lacked a stimulative growth environment, and there was zero awareness of the importance of sensory development. A creative stimuli play area with adequate space was created. Sustainable and sensory materials like ropes and visual wall art were introduced. The children also helped in the pathway painting. This intervention was a part of the Urban95 project.

Picture 2.11: Sensory elements in Lonkar garden, Pune



Source: https://www.pmc.gov.in/en/urban95_Pune

A playful waiting area: It was constructed at Lt Sonawane Hospital near Ganjpeth. The area was dull and unhygienic, with limited space. Most of it was used for parking vehicles. The area was revamped by fixing broken pipes and levelling the drains. The bricks and concrete were used as seating. Like most of the initiatives, the walls and seating were painted to make them attractive. This intervention was a part of the Urban95 project.

Picture 2.12: Waiting area at the hospital



Source: https://www.pmc.gov.in/en/urban95_Pune

Pune street programme: Interventions were made near JM Road. The aim was to promote sustainable transportation and reduce private vehicle movements, which is done by providing visually appealing foot walks and tracks for cycling.

Picture 2.13: Intervention made through Pune Street Programme



Source: https://smartnet.niua.org/nurturing-neighbourhoods challenge/web/sites/default/files/202011/ Mr%20Dinkar%20Gojare_PMC_Pune_Urban95.pdf

Transforming urban mobility to nurture early childhood development: The project started in December 2019 in collaboration with the Bernard van Leer Foundation's (BvLF) global Urban95 initiative for children aged 0-5 years and their caregivers. The Institute for Transportation and Development Policy (ITDP) and the Pune Municipal Corporation also contributed to the project. It aims to make cities more accessible for children by promoting non-motorized vehicles with specific interventions and improvements dedicated to early childhood development to increase the safety, convenience, and vibrancy of public spaces and improve access to childhood services such as health care, education and play.51

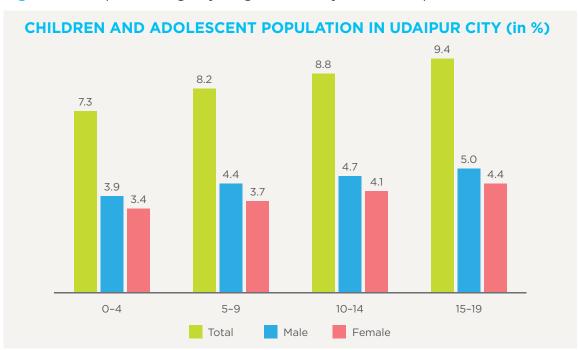
2.4 UDAIPUR

The walled city of Udaipur, located in the southern part of the state of Rajasthan, is known for its lakes and the Aravalli mountains. It is also one of the smart cities in India, working with BvLF in the Urban95 project to make city spaces more inclusive to the needs of children. The population of the city is 451,100, with 33.7 per cent population aged younger than 20 years. In terms of the Ease of Living Index, the city ranks 48 out of 62 (in the less than million category). The child sex ratio of the district is 924, and in terms of the Child Development Index, it ranks 579 out of 640 districts. Around 3 per cent population resides in slum areas. Udaipur Municipal Corporation and Udaipur Smart City Limited (USCL) support the city in acquiring its smart label.

⁵¹ https://www.itdp.in/pune-lights-the-way-for-child-friendly-cities/



Figure 2.4: Population aged younger than 20 years in Udaipur



Sources: RGI & Census of India, 2011; Table C-14

Phase two of the Urban95 challenge began in Udaipur in mid-2021, where BvLF plans to invest around EUR 1 million over the course of three years to scale up child-friendly features in public space, mobility and neighbourhood planning, early childhood services and data management across Udaipur's agencies. During the first phase, the city successfully brought interventions, including traffic calming, upgrading public

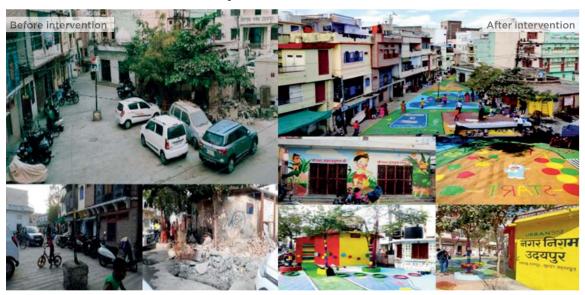
⁵² https://udaipursmartcity.in/completed/

spaces and festivals for kids. The city collected baseline data on young children and families and offered additional training to the workers in the city's anganwadis.53

Child-friendly initiatives in Udaipur

- Restoration of the park: Restoration of a five-decade-old Manikya Lal Verma Park from chipped paint and broken tiles to a multi-activity hub. The park was repurposed into zones and designed to engage children of all age groups. Lights were adequately installed in the park, and all the waterworks were made operational again.
- Activating an informal public space at Nayion Ki Talai Chowk: Under the Urban95 challenge, a tactical intervention was made to convert an unused, dead public space into a colourful, vibrant and child-friendly corner. Nayion ki Talai chowk in ward no. 13 was converted into an engaging and interactive space for kids by the urban local body. The 'chowk' has a temple around which the redevelopment took place. Previously it used to have a non-functional tube well and water tap, a defunct bathing cum toilet complex for women and a few trees with poorly maintained seating platforms. The 'chowk' was used as a parking space for vehicles, preventing any activities for children. The street corners were used as garbage dumps and were often found in unsanitary conditions. There are also anganwadis, pre-primary and primary schools in and around the area. The site has been made accessible with the help of kids themselves who painted the walls and the streets. At present, the citizens feel much safer using the space even late at night due to improved street lighting. Planters were put on the corners, and the walls are painted with cartoon figures. There are opportunities for caregivers and senior citizens to wait in the area due to the creation of seating spaces like raised planter seating. Citizens are now requesting the local authorities to make similar interventions in other localities of the city as well.

Picture 2.14: Intervention at Nayion ki Talai

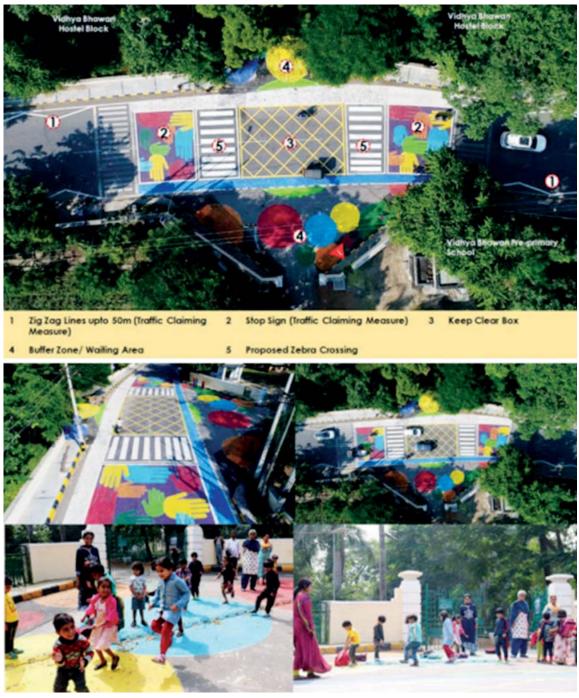


Source: https://udaipurmc.org/uploads/1653981833-8410.pdf

⁵³ https://bernardvanleer.org/news/phase-ii-of-urban95-officially-launches-in-udaipur/

Traffic-calming measures at Vidhya Bhawan Pre-Primary school entrance: This area is a major road connecting other neighbourhood schools. It encounters heavy traffic flow, especially during school hours. Since this location has high child footfall, it was decided to introduce innovative traffic calming measures, which include increased visibility, vibrancy and a visually compelling streetscape. This initiative was undertaken through Urban95 challenge by Udaipur Municipal Corporation. After this intervention, a reduced vehicular speed is observed. It has increased the overall safety of that area. The buffer zone, which is colourfully painted, is used as a waiting cum playing area by the children.

Picture 2.15: Traffic calming measures at Udaipur



Source: https://udaipurmc.org/uploads/1653981164-7525.pdf

2.5 VISAKHAPATNAM

Visakhapatnam is the largest city and financial capital of Andhra Pradesh. It is the most populous city in the state and one of the million-plus cities in India, with a population of 1,728,128. Visakhapatnam is famous as a port city due to the presence of two big ports, namely Visakhapatnam Port and Gangavaram Port. Around 31 per cent of the population in the city is younger than 20 years, and 6.6 per cent younger than five years. The child sex ratio is 961, and the city ranked 334 out of 640 in the Child Development Index. A substantial section of the population (44.6 per cent) dwells in slum areas. It is one of the aspiring smart cities in India, with the Ease of Living rank of 15 in the million plus city category. Greater Visakhapatnam Municipal Corporation and Greater Visakhapatnam Smart City Corporation Limited (GVSCCL) are in charge of implementing smart city projects.

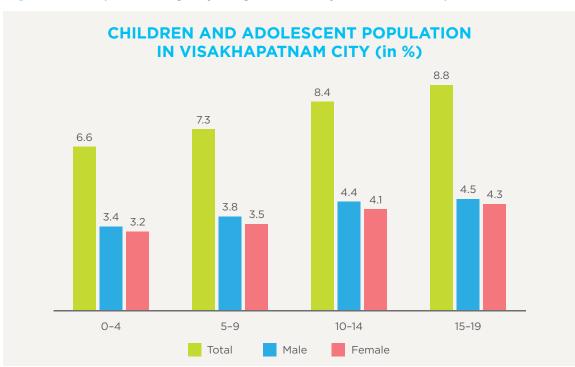


Figure 2.5: Population aged younger than 20 years in Visakhapatnam

Sources: RGI & Census of India. 2011: Table C-14

The Smart City Plan for Vizag revolves around the vision of creating 'Resilient and Healthy Metropolis for People' and the area-based development (ABD) focuses on the core theme of 'prevention is better than cure', which involves vehicle-free zones initiatives, beach beautification and shorefront restoration and building upon the ongoing initiatives within the city. The Vizag Non-Motorised Transport Plan created under the Sustainable Urban Transport Project (SUTP) recommends that Greater Vishakhapatnam Municipal Corporation institute a 'Safe Route to Parks and Schools' programme in order to ensure that all school zones are safely accessible by walk.⁵⁴

⁵⁴ https://bernardvanleer.org/news/phase-ii-of-urban95-officially-launches-in-udaipur/



Child-friendly initiatives in Visakhapatnam

All abilities park: Launched in 2018 under the Smart City Mission project, the park was created to ensure a better and improved life for all, including the differently abled. The park is at an ideal location facing the Bay of Bengal with no entry fee and opening hours from 10 a.m. to 10:30 p.m. The 'All Abilities Park' with an area of 2,156 sq.m seeks to balance the needs of the differently abled without segregating them from the community. The place is designed using sustainable and child-friendly materials. The swings are made of rubber, and the flooring is efficient for the visually impaired. Designs are made to minimize hazards and provide warnings where required. The park has dedicated zones for different age groups and activities.55 To provide knowledge about flora and fauna, the Visakhapatnam Municipal Corporation incorporated tyre planting, that is, using tyres to grow plants in them. This project aims to showcase the city's strong emphasis on enhancing the city's social infrastructure (in this case, for improving the health and wellness of all its citizens), which includes the differently abled. The park provides citizens with good quality open space, encouraging them to spend more time outdoors, thereby aiding physical activity and healthy living.





Source: https://www.thehindu.com/news/cities/Visakhapatnam/cm-to-open-first-of-its-kind-all-abilities-parktoday/article24754997.ece

⁵⁵ https://smartnet.niua.org/sites/default/files/resources/All_Abilities_Children_Park_Concept_FEB_22.pdf

- Child-friendly corner in the police station: A child-friendly corner has been facilitated at the III Town Police Station in the city. The walls of the room are decoratively hand-painted to provide children with a comfortable environment. This initiative was undertaken by Police Department, Chennai-based International Justice Mission (IJM) and a local voluntary organization, Dharani Social Welfare Society.56
- VUDA park: Taraka Rama Park, popularly known as VUDA park, is one of the major attractions of Vizag. Spread over 55 acres, the park has beautiful greenery and panoramic sea view along with a dancing musical fountain, boating facility, skating rink and a well-equipped gymnasium. It is developed and maintained by Visakhapatnam Urban Development Authority. It has over 2,500 trees and lawns, various fun-filled rides, and artificial caves for kids to explore.

Picture 2.17: VUDA park in Visakhapatnam



Source: https://visakhapatnam.ap.gov.in/gallery/vuda-park/

2.6 BENGALURU

Formerly known as Bangalore, the city is the capital of Karnataka. It is also known as India's Silicon Valley or the IT capital of the country. A booming economy, racy lifestyles and the large migrant population have made it one of the fastestgrowing cities in India. The city's population is 849,5492, with 30.7 per cent of the population are aged younger than 20 years. The child sex ratio of the city is 944, and the percentage of the slum population in the city is 8.4. In terms of the Ease of Living Index, the city ranks first among the million plus category. However, it ranks 110 (out of 640) in terms of the Child Development Index. Bengaluru Smart City Limited and the Directorate of Urban Land Transport are the nodal agencies for implementing child-friendly initiatives in the city.

https://www.thehansindia.com/andhra-pradesh/vizag-police-station-to-have-first-child-friendly-corner-in-state-680047

CHILDREN AND ADOLESCENT POPULATION IN BENGALURU CITY (in %) 7.8 7.5 7.5 4.0 3.8 4.1 3.9 3.8 3.6 3.9 3.6 0-4 5-9 10-14 15-19 Female Total Male

Figure 2.6: Population aged younger than 20 years in Bengaluru

Sources: RGI & Census of India, 2011; Table C-14

Under SCM, the city has transformed ordinary classrooms in municipal schools into digital ones. Out of the five initiatives to make the city child-friendly, four are from Nurturing Neighbourhood Challenge. Bengaluru enhanced the safety of an anganwadi to foster independence in toddlers and refurbished common areas, toilets and play spaces with child-specific design standards. Targeted interventions were taken in the Shanthi Nagar and Hombegowda Nagar wards, where infants and toddlers make up nearly 10 per cent of the population.



Child-friendly initiatives in Bengaluru

Slow street: The aim was to enhance the caregivers' and toddlers' pedestrian experience by incorporating various measures to ensure safety and opportunities to pause and play. Strategic sections of roads providing access to childcare amenities, hospitals, schools and colleges have been identified to create slow streets and safer junctions.

Picture 2.18: Slow Street



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/bengaluru

Pocket park at Shantinagar: Also known as Puttaani (tiny) park, it is located in an area with a dense population and lacks proper play space. The idea of a handy play space such as a pocket was envisioned. In the quarter's area of about (90 sq. km), the area was designed and coloured to the needs of children and the old unused space looked refreshed. The idea is to make it inclusive by engaging the caregivers and the kids. The place was given a friendlier appearance to generate a sense of belonging. This rejuvenation of unused space has also enabled a sense of ownership for the public space within the community and serves around 45 children and 100 caregivers.

Picture 2.19: Tiny Park at Shantinagar





Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/bengaluru

- Shantinagar Maternity Hospital: The project aimed to reclaim and reimagine space within the Bruhat Bangalore Mahanagar Palike (BBMP) maternity hospital to provide safe and cool shades with ITC-friendly seating and dining areas. Along with all the necessary infrastructure to ensure comfort to caregivers and toddlers who accompany the patient.
- ITC-oriented improvements in anganwadi at Shantinagar: The anganwadi is situated in a dense locality along with the school campus without any bordered play spaces. The space was refurbished, comprising dedicated play spaces of around 300 sq. m. for young children. The place offers age-specific play opportunities, appropriated handrails, washrooms and washbasins to adapt to the children's height. The place was put together by connecting paths and seating caregivers.



Picture 2.20: Improvements in an anganwadi in Bengaluru

Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/bengaluru

Park for children with special needs (Cubbon park): This popular park is spread over one acre in the prime location of the city. The turtle-shaped park has different zones for a wide range of physical, mental, therapeutic and touch-andfeel activities. The children can improve their agility, wellness and social skills through community and multisensory experiences. The park's infrastructure has been audited for accessibility by the Association of People with Disability (APD) with the participation of disabled children.⁵⁷

⁵⁷ https://timesofindia.indiatimes.com/city/bengaluru/bengaluru-kids-with-special-needs-get-play-area-in-lung-space/ articleshow/92464370.cms

Picture 2.21: Park for children with special needs in Bengaluru

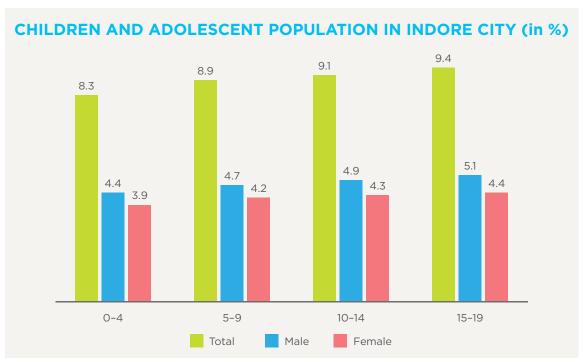


Source: https://www.thehindu.com/news/national/karnataka/states-first-exclusive-park-for-specially-abledchildren-opens/article65565052.ece

2.7 INDORE

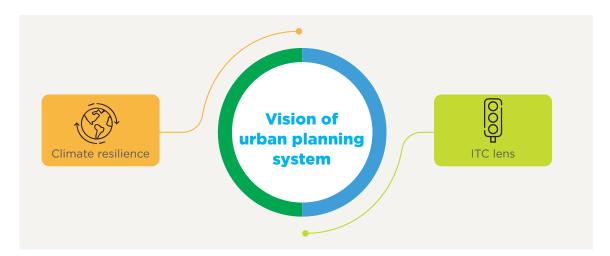
Indore is the largest city of the state of Madhya Pradesh and located on the banks of two small rivulets - the Saraswati and the Khan. It is also the commercial capital of the state. The city's population is 1,994,397, and around 36 per cent of the population is younger than 20 years. About 30 per cent population of the city live in a slum, and the child sex ratio is 901 (lower than the national average). The city ranks ninth in the Ease of Living Index among the million-plus cities category. In terms of the Child Development Index, it ranks 234 out of 640 districts.

Figure 2.7: Population aged younger than 20 years in Indore



Sources: RGI & Census of India, 2011; Table C-14

The child-friendly initiatives had been part of Indore for over two to three years.



The major vision of the urban planning system is climate resilience and an ITC lens. The child-friendly initiatives undertaken by the city fall under the Nurturing Neighbourhood Challenge. The nodal agency for implementing the projects is Indore Smart City Development Ltd. The neighbourhood chosen for the projects has higher concentrations of the 0-5 population and consists of many markets and open spaces frequented by young children and their caregivers. The presence of vulnerable population motivates to create an inclusive and equitable environment.

Child-friendly initiatives in Indore

Playful open space in Arjun Pura Slum area: The neighbourhood garden was isolated from the residential areas in the immediate surroundings. The city reconstructed the garden, making it inclusive and accessible by extending a gate with the adjacent community of around 200 families, thereby reducing the circuitous travel to reach the garden. The 2,000 sq. m. of garden space was improved with a buffer of air-purifying plant species to minimize exposure to pollution from the surroundings. Age-appropriate and nature-based play opportunities and a lactation room were added.

Picture 3.22: Redevelopment of the park near a slum area





Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/indore

Development of the young children-oriented zone at C.P. Shekhar Nagar Park: The city made the primary access to the pedestrians safe and created a public space at the entrance to the garden. This was done by cleaning and reorganizing the municipal garbage trucks and reorganizing the vehicle parking. The city also dedicated a children-oriented play area which includes sensory trails, colourful seating, play zones and a lactation booth for the mothers.

Picture 2.23: ITC elements at the park



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/indore

Improvement of anganwadi at Macchi Bazar Main Marg: The anganwadi was given a fresh look from the neighbourhood cleaning drive. The place was a dump yard and turned into a hub for various anti-social activities, hindering its functioning. A community-led revamping of the public space was initiated to put the place to better use.

Picture 2.24: Improvement of an anganwadi in Indore





Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/indore

Children-oriented zone at South Rajmaholla Garden: The park area was floorpainted with games at the entrance. The zone also included early children-specific play machines. The place was painted natural with images of trees and other visuals. To incorporate cognitive and motor skills, natural play segments like a sandpit, stepping stones, wooden logs, fallen trees and planks for balancing and jumping were added.

Picture 2.25: ITC elements at Rajamollah Garden





Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/indore

Improvement of an anganwadi at Sethi Nagar: The anganwadi was repainted, repaired and cleaned. The building was restored, water connections to the toilets were established and access to drinking water taps was created. All the play equipment was restored. The city also organized parking arrangements near the entrance.

Picture 2.26: Improved anganwadi at Sethi Nagar





Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/indore

2.8 JABALPUR

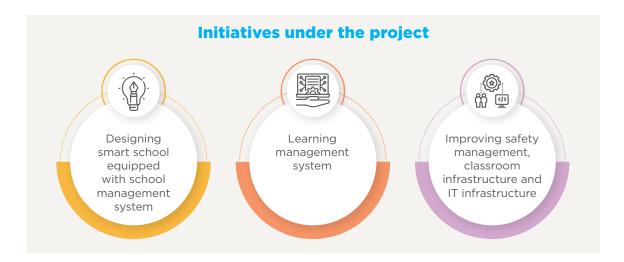
Jabalpur is a tier two city in the eastern part of Madhya Pradesh. According to the 2011 census, it is the third-largest urban agglomeration in Madhya Pradesh. The city is famous for marble rocks at Bheraghat. Jabalpur was selected as one of the 100 Indian cities to be developed as a smart city under Smart Cities Mission and the nodal agency for implementing the Smart Cities project is Jabalpur Smart City Ltd. The city's population is 1,081,677 with 45 per cent population living in slum areas. Around 34 per cent of the population is made up of children and youth. The child sex ratio of the district is 923. The city ranks 43 (out of 49 million plus cities) in terms of Ease of Living Index. The Child Development Index is 0.721 and the rank among the 640 districts is 293.

CHILDREN AND ADOLESCENT POPULATION IN JABALPUR CITY (in %) 9.0 8.1 7.3 5.2 4.7 4.7 4.3 4.3 3.8 3.8 3.5 0-4 5-9 10-14 15-19 Total Male Female

Figure 2.8: Population aged younger than 20 years in Jabalpur

Sources: RGI & Census of India, 2011; Table C-14

Jabalpur Smart City Limited (JSCL) has implemented the Smart School System in 20 classrooms across five municipal schools Jabalpur. The idea of the project was to design smart schools equipped with school management system, learning management system, safety management, classroom infrastructure and IT infrastructure, which would lead to significant improvement in quality of education. Prior to the implementation of this project, the schools lacked both infrastructure and technology to deliver quality education to students.



Other child-friendly initiatives were undertaken through the NNC. The Maharaja Agrasena and Deendayal Upadhyay neighbourhoods comprising wards 35 and 30 have higher concentrations of 0-5 population and have many markets and open spaces frequently visited by young children and their caregivers.

Child-friendly initiatives in Jabalpur

Children's vaccination centre and lactation room at Manmohan Nagar PHC: A child-friendly kids vaccination centre was opened, which was widely utilized during the pandemic. An existing PHC building was converted into a children's vaccination centre, and the vacant land around 260 sq.m. was transformed into a children-friendly area. Waiting spaces were reclaimed from unorganized parking and turned into play spaces. A lactation room, a diaper vending machine and a changing station were added.

Picture 2.27: Vaccination centre for children



 $\textbf{Source:} \ https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/jabalpur$

Improving anganwadis and Chandrashekhar park in Vijay Nagar: Anganwadis in the neighbourhood were revamped through painting, providing loose play parts, equipment and was accompanied by the development of Chandrashekhar Park with fixed play equipment and lighting.

Picture 2.28: Improvements in an anganwadi in Jabalpur



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/jabalpur

Child-friendly waiting spaces at ISBT: Jabalpur Inter-State Bus Terminal is a major transit terminal with a high footfall of around 10,000 users, where families spend long hours waiting. The city reimagined the waiting space to be friendlier for young children and caregivers by introducing a dedicated play area and secure breastfeeding space for mothers in the waiting hall. This has enhanced convenience and comfort for caregivers travelling with their young children.

Picture 2.29: Dedicated play area at Jabalpur ISBT



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/jabalpur

Shivnagar AMRUT park: Previously, the park had no age-specific play elements, and the neighbourhood was dilapidated. Around 400 residents from the community helped to transform the one-acre park by creating age-specific play spaces, sensory trails, plantation and shaded seating spaces. The city also signed a memorandum of understanding (MoU) with the Resident Welfare Association to monitor and maintain the park.

Picture 2.30: Shivnagar AMRUT park



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/jabalpur

Development of Vikas Nagar park: This community-led transformed park created play spaces, sensory trails, plantation and shaded seating spaces. The project experimented with nature-based play opportunities by involving local children to build bird feeders and plant stimulating species of shrubs and trees. Sensory paths of various textures, sandpit, mud pots to play with sounds, climbing mounds and seating arrangements were installed in the park.

Picture 2.31: Redevelopment of Vikas Nagar park



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/jabalpur

3.9 ROURKELA

The city is situated in the western border of Odisha in the Sundergarh district. The city area is around 53 sq. km with 40 municipal wards. The city has a population of 3.20 lakh city population of which 36 per cent live in slums.58 One of the largest steel plants of the Steel Authority of India Limited (SAIL) is situated here, named Rourkela Steel Plant, and hence the city is also popularly known as Ispat Nagar. Around 35 per cent of the population is younger than 20 years, and the sex ratio of the district is 946, which is higher than the national average. The Ease of Living ranking of the city is 54 out of 64 in the less than a million-city category. The city ranks 191 on the Child Development Index. The nodal agency to implement smart city projects is Rourkela Municipal Corporation (RMC).

CHILDREN AND ADOLESCENT POPULATION **OF ROURKELA CITY (in %)** 9.8 9.2 7.7 5.2 4.8 4.6 4.5 4.3 4.1 4.0 3.6 0-4 5-9 10-14 15-19 Total Male Female

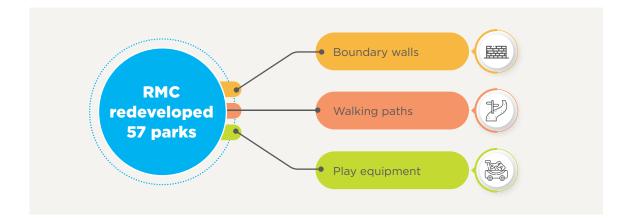
Figure 2.9: Population aged younger than 20 years in Rourkela

Sources: RGI & Census of India, 2011; Table C-14

In a phased manner, the RMC redeveloped 57 parks with boundary walls, walking paths and play equipment. Five model parks were identified for beautification with the provision of water, LED lighting, washroom and illuminated water fountain.⁵⁹ Around six ITC-friendly initiatives were identified in the city from the NNC.

⁵⁸ https://smartnet.niua.org/sites/default/files/resources/rourkela_annexures_12.pdf

⁵⁹ http://rmc.nic.in/parks.html



Child-friendly initiatives in Rourkela

Lactation pods: There was a lack of safe feeding spaces for mothers. This initiative was taken to give support to the caregivers. Multiple lactation pods were built in public parks, markets and early childhood services. This has encouraged women to travel with their babies and raised awareness among the community regarding healthy breastfeeding practices.

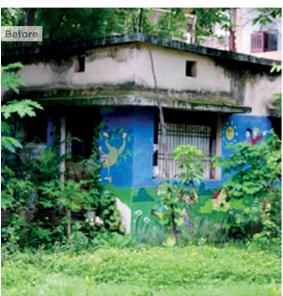


Picture 2.32: Lactation pod in public space in Rourkela

Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/resources

Anganwadi at Durgapur: The anganwadi was reimagined for the needs of toddlers and children. It was redeveloped with BaLA (Building as Learning Aid) concept, basic amenities, nursing stations, outdoor play opportunities for children and waiting space for caregivers. This has benefited 150 young children and women and led to anganwadis becoming a key public space in the neighbourhood.

Picture 2.33: Redeveloped anganwadi at Durgapur





Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/resources

Public play space for leprosy affected: A new play space of 200 sq.m. was created within the Leprosy pada slum by repurposing a residual open ground, adding play-and-learn elements and seating areas. This initiative has led to the inclusion of vulnerable groups in the neighbourhood redevelopment.

Picture 2.34: Public play space at leprosy pada slum





Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/resources

Health and wellness centre, DAVMAC: This primary health centre (PHC) serves around 10,000 people in the neighbourhood, but the access route had open drains, electric transformers, unorganized parking and was perceived as an unsafe zone. The local authorities closed the open drains and created a footpath along the premises, added play spaces for children, a waiting area for women, lactation pods and a traditional herbal garden. This has made the PHC safer and friendlier for children and women.

Picture 2.35: Health and wellness centre



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/resources

NSC Bose park: Initially, there was no pedestrian space in the area. Redesigning the 70-metre stretch of the street was done to develop a dedicated footpath space with a buffer from vehicular traffic and seating shaded with trees at regular intervals. This has led to increased safety and convenience for everyone using the street.

Picture 2.36: Safer walkways



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/resources

Public play space at Durgapur B slum: A community public play space was developed as the children played in unsafe surroundings. A new public play space of 200 sq.m. benefiting around 30 children was created in the central area of the slum by repurposing a residual open ground, adding simple play-and-learn elements and seating areas for women. The city enabled ownership of the place with women leaders from the slum and local women groups related to nutrition and health-related programmes to ensure monitoring and upkeep of the place.

Picture 2.37: Reimagined public space play at a slum





 $\textbf{Source:} \ https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/resources$



2.10 KAKINADA

Located in the eastern part of Andhra Pradesh, the city is a seaport (on the Bay of Bengal), with a barrier island to the east protecting its harbour. It is one of the smart cities in India, managed by the Kakinada Smart City Corporation Ltd. The city was in the East Godavari district, and on 4 April 2022, a new district was formed with Kakinada becoming the district headquarters. The city's population as per the Census of India, 2011 is 384,182. Around 33 per cent of the population is younger than 20 years, and the child sex ratio of the district is 968. The slum population of the city is 29.2 per cent. The city's rank in the Ease of Living Index is 4 in the less than a million city category (out of 62). The city ranks 344 out of 640 districts in the Child Development Index. The city is a special economic zone (SEZ) and a future Petroleum, Chemical and Petrochemical Investment Region (PCPIR).

CHILD AND ADOLESCENT POPULATION IN KAKINADA CITY (in %) 99 8.9 7.5 6.8 5.2 4.7 4.4 4.5 3.8 3.7 3.4 3.4 0-4 5-9 10-14 15-19 Total Male Female

Figure 2.10: Population aged younger than 20 years in Kakinada

Sources: RGI & Census of India, 2011; Table C-14

Under the Smart City Mission, initiatives to make the city child-friendly were undertaken through infrastructural development in education and neighbourhood redesign through NNC. An upgradation of education infrastructure was done through the introduction of virtual and digital classrooms and computer labs and studios.⁶⁰ Around 15 high schools have already received these benefits, and there are many such projects in the pipeline. These high schools were cleaned and repainted, and open spaces were created for children to enjoy school hours. Redevelopment and landscaping are done at Vivekananda Park, giving it a fresher and renewed look.

⁶⁰ https://www.ksccl.in/completed_projects.php

Ramarao Peta neighbourhood is a busy marketplace and public spaces frequented by young children and their caregivers. The strategic location is in proximity to early childhood development services. The neighbourhood also houses vulnerable populations and needs immediate attention to design and plan a more inclusive and responsive environment.⁶¹ This makes the area perfect for child-friendly neighbourhood development.

Child-friendly initiatives in Kakinada

- Creation of toddler zone and pedestrian plaza at Eat Street: The street was converted into Eat Street and was made user-friendly. Adjoining it, a dedicated toddler zone was created by reclaiming an unused vehicular street, added with age-specific play and overlooking seating spaces for caregivers. Earlier, the area was underutilized and unsafe for young people. The plaza has become a focus of community and is frequented by children.
- Claiming spaces for play near informal settlements at Anand Bharati: The space was revamped and made accessible by opening a gate. Age-specific and nature-based play opportunities were added along with lactation rooms. The site is a multipurpose ground with heavy footfall and is in proximity to informal settlements, a government school and a library. The abandoned space of around 240 sq.m. area along the entry to the ground was transformed to create play spaces. Open drains were closed, shaded spaces, barriers from traffic and play equipment made of recycled materials were installed. This has led to enhanced play opportunities for around 100 young children and multi-usable space for their caregivers, especially women.

Picture 2.38: Eat Street



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/kakinada

⁶¹ https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/kakinada

Picture 2.39: Pocket Park near the informal settlement





Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/kakinada

Revamping of Vivekananda park: A dedicated play space of about 1,260 sq.m. was created for toddlers by adding age-appropriate play equipment and natural material. The unused open-air theatre was renovated as a play space. This park is one of the city's oldest recreational spaces, attracting a huge footfall and offering a wide range of activities. However, the premises did not provide opportunities for play for young children.

Picture 2.40: Vivekananda Park



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/kakinada

Rejuvenation of pindala cheruvu lake: Family-friendly waterfront space was created in the heart of the city by rejuvenating the existing lake with interactive play opportunities for young children and improving access to the site and the surroundings.

2.11 WARANGAL

Warangal is a city and district headquarters of Warangal urban district and Warangal rural district in Telangana. It is the second largest city in Telangana after Hyderabad, spread across 406.87 sq. km with a population of 704,570. Greater Warangal Smart City Corporation Ltd is the nodal agency for implementing projects under Smart City Mission. About 33 per cent of the population is younger than 20 years, and 35 per cent live in slums. The child sex ratio of the district is 923, and the ranking of the district in the Child Development Index is 309 out of 640 districts. In terms of Ease of Living Index, the city ranks 19 in the less than a million category.

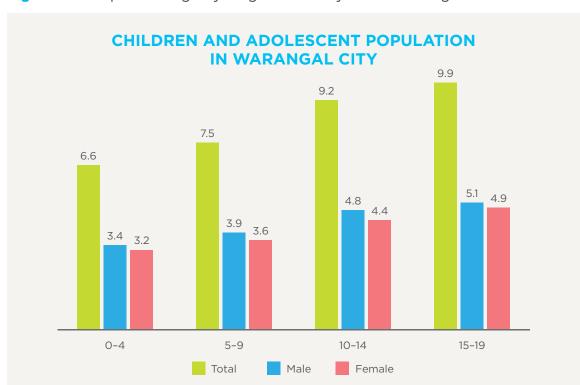


Figure 2.11: Population aged younger than 20 years in Warangal

Sources: RGI & Census of India, 2011; Table C-14

All the child-friendly initiatives undertaken by the city are done under the NNC. Warangal aims to create neighbourhoods with safe and vibrant activities for young children and caregivers, especially vulnerable groups. The neighbourhood is comprised of Balsamudram and Massaiah Nagar (Wards 37 and 18) with higher concentrations of children's population and many open spaces frequently visited by children and youth. The neighbourhood is ideal for child-friendly interventions as it has strategic proximity to existing facilities catering to children.



Child-friendly initiatives in Warangal

Anganwadi at balasamudram: A playful anganwadi was redeveloped by improving access to the facility by covering open drains and adding speed calming measures. Around 320 sq.m. of toddler-friendly play spaces were enhanced inside the anganwadi, including shaded seating and an assembly area. Murals, plantation and play on the street were also added. This emphasized the importance of the anganwadi as a community public space.

41: Playful anganwadi for children



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/warangal

Junction improvement: The key junction of the street was redesigned with safer crossings, a pedestrian plaza with play opportunities and waiting for spaces with seating arrangements for caregivers. This intervention was done to increase the safety of children while accessing their school.

Picture 2.42: Safe junction



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/warangal

Children's park: The access to the park was improved by introducing speed calming measures (Chicanes) and providing dedicated parking spots. To make the park more welcoming, the entrance was refurbished with playful elements and platers.

Picture 2.43: Children's park



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/warangal

Safe way to anganwadi: The project created child-friendly spaces along the road with a demarcated footpath, a cycling track connecting the children's park and added play pockets and shaded seating. This created a safer street for the anganwadi. Signage was also installed to direct people to the anganwadi nearby.

Picture 2.44: Safe street to school



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/warangal

Pet-friendly park: A dump yard is converted into a pet-friendly children's park. It has a gym facility for all ages, shaded seating, a flower garden and a lotus pond. Connectivity to the park was also improved by creating footpaths and signages through tactical interventions. This has enhanced the opportunity for children and everyone to interact with nature and animals.

Picture 2.45: Pet-friendly park



Source: https://smartnet.niua.org/nurturing-neighbourhoods-challenge/web/warangal





CHALLENGES, WAY FORWARD AND PROPOSED RECOMMENDATIONS



3.1 CHALLENGES

Building CFCs is a complex process which cannot follow a 'one size fits all' model. The idea of CFC is new for urban designers and policymakers in India. Therefore, it presents challenges almost at every stage. However, it is to be kept in mind that success of CFCs may often be limited by the geographic and demographic characteristics of the city.

For example, open spaces and development of parks are possible in newly planned smart cities, but space is not easily available due to unplanned growth (overcrowded) in metropolitan cities like Mumbai, Kolkata, Chennai and Delhi. Parks are difficult to develop or scale up as it is dependent upon the availability of open spaces in urban areas. While there could be small local playgrounds scattered over the city neighbourhoods, an 'all abilities' park would be difficult to plan in every city.

Some of the specific challenges are outlined below.

- **Initiating debates around child rights:** Children play a passive and invisible role and are primarily dependent on adults. There is a reluctance to understand the difference in needs of children and adults arises out of the traditional construct where people view children merely as adults who grow out, believing that focusing on temporary, transitory development is useless. As the built environment expands, space becomes even more constricted for children. Exploration of public places leads to increasing levels of physical activity (Whitzman et al., 2010). But the fast city life hardly provides time for leisure and play.
- **Political will:** The city administration or the state government must be willing to change the city plan and make it inclusive incorporating children's needs. Necessary actions are often lacking in the planning and implementation stage.
- **Cross-sectoral collaboration:** It is important to have an understanding and communication among departments for the smooth implementation of child-friendly plans. Designers, planners and policymakers often fail to collaborate, resulting in the delay of the action.
- Lack of awareness: Since the concept is new, capacity-building workshops, awareness programmes and campaigns need to be conducted for the relevant designers and implementers of public policy from time to time.

- Resource prioritization: There is always a dilemma in allocating resources. Usually, urban areas are preferred over rural areas for development. Maintaining a child-friendly setting could also be expensive in the long run. In a country like India, where dealing with poverty is a major goal, scope for making expenses for beautification and redevelopment of urban spaces could be limited.
- Population pressure: A high density of population often leads to the development of uncomfortable habitat to live in, resulting in squatters and congestion. There is often no space left for leisure and recreational activities. Once a city is built, its physical form and land-use patterns can be locked in for generations, leading to unsustainable sprawl. More population also means more programmes and policies catering to basic needs.
- Environmental challenges: Cities play an increasingly important role in tackling climate change, because their exposure to climate (like pollution) and disaster risk increases as they grow. For example, a city in the coastal region may focus on planning to mitigate storm surges, flooding or cyclones more often.
- Market-driven globalization on child friendliness: The travel, tourism, hospitality and real estate industries adopted the ideas of 'child friendliness' for the sake of business (like child-friendly destinations or child-friendly neighbourhoods to raise children) (Willem van Vliet & Lia Karsten, 2015). Even though such places are not ITC friendly in the truest form, they are labelled and marketed as one.



3.2 WAY FORWARD

It is estimated that by 2050, almost 70 per cent of the world's children will live in urban areas, many of them in slums.⁶² Cities can provide opportunities and enable growth but can also harbour inequalities. The agenda 2030 commits to 'leaving no one behind' and to providing children and youth with a nurturing environment for the full realization of their rights and capabilities. The Sustainable Development Goal 11 of the agenda specifically calls for making cities and human settlements safe, resilient and sustainable. The concept of a CFC is not based on an ideal end state or a standard model. It is a framework to assist any city in becoming more child-friendly in all aspects of governance, environment and services (UNICEF, 2004). A study by Tayefi Nasrabadi et al. (2021) finds that staying at home, playing with friends and cycling are the most favoured activities by the children regarding the sustainability indicators in the neighbourhood. Children's views are rarely heard and considered in the decisionmaking processes. The actions or inactions of government policies and programmes impact children more strongly than any other group in the society. Some of the steps that the government should take while planning for CFCs are outlined below.

- Collection of data: It is important to collect data at a unit level to know the status of children.
- Conducting surveys: A knowledge needs assessment needs to be done considering the children, youth and caregivers. An evaluation of programmes is also important. This should be done with help of baseline and end-line surveys. Self-assessment of child-friendliness needs to be carried out by the municipal authorities.
- Publishing city's children report: The report can be generated only after sufficient monitoring and data collection on the state of children and their rights.
- Ensuring children's participation: The city must encourage children and young people to confidently connect with their communities through involvement from the planning stage (Wilks, 2010).
- A children's budget: Adequate resource commitment and budget analysis for children has to be ensured by the city.
- Awareness: Awareness on children's rights should be raised among both children and adults.

⁶² https://childfriendlycities.org/growing-cities/

Under the NNC phase two, some cities are already initiating the upgradation of childfriendly projects. The status of cities (from this study) is given below.

Rourkela: Capacity building programmes have already begun. A Chief Child Development Officer has been appointed. The capacity building sessions are merged with the ICDS monthly meeting. A plantation drive with children was done at a nearby park, and this event also promoted children's interaction with nature through natural play elements. A convergence of social schemes between the state and districts was done to sustain NNC projects.

Indore: Replication of previously successful projects was done with varied elements for ICTs. A low-lying flood-prone area is being made resilient through nature-based solutions like planting native trees and building embankments.

Jabalpur: Five neighbourhood parks are in the planning stage for redevelopment. Initiatives are also being taken to prepare a master plan of the city with ITC components. A pedestrian usage survey was also done to replan the street design.

Warangal: Six parks were identified for redevelopment with ITC elements. A few anganwadis in a bad shape were also identified. Designs were approved for toddlerfriendly spaces at Bhadrakal lakefront.

Kakinada: Upgradation of anganwadis is in the planning stage. An urban PHC has been identified to be revamped with young children-oriented waiting spaces.

Bengaluru: No significant progress is seen in phase twoas the city has been facing a few roadblocks.



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3.3 PROPOSED RECOMMENDATIONS

The case boxes are derived from our previous work in which efforts were made to minimize the vulnerability and enhance the adaptive capacities of children from Surat, India.

Nine-point road map for urban local bodies (ULBs): Towards child-sensitive climate polices

Following are the recommendations aimed at minimizing the climate change vulnerability of children as well assist in firming up children's capacities for climate action. The recommendations are based on Surat's experience of CFC initiative (CFCI), spearheaded by UNICEF and UHCRCE, but they can be applied in a crosscutting manner across all the children's rights - survival, development, protection and participation.

- Contextual and holistic climate risk assessment for children: ULBs should use the existing secondary datasets efficiently. The data across different urban sectors/programmes relevant to children including weather-associated data should be integrated. This will help in generating the microlevel risk mapping. Primary methods used for generating the quantitative and qualitative datasets can be further added. This integrated mapping must thematically include the dimensions like physical, social, environmental and health vulnerability and resilience.
- Evidence-based and targeted climate actions for children: ULBs should refrain from data collection and mapping, which ultimately remains unused. All the children-centred climate actions must be backed by evidence - for example, identifying children residing in vector-borne disease-prone zones and accelerating the vector control activities, or special care and protection for intersectional subgroups like children associated with street or children with special needs.
- Encashing the institutional memories: Every city has an institutional memory of battling climate hazards and instituting adaptive practices. Such a knowledge repository must be documented and disseminated. For example, the 2006 flood management experience of Surat city or the water scarcity management strategies of Chennai city.
- Dedicated space for children-centric actions in the city climate action plan including climate action: Every cityscape is different. A blanket top-down action plan does not work for all the cities. Every city should prepare their own climate action plan and it should have a dedicated space for children as a vulnerable group. The plan needs to be revised and updated every year as the climate change scenario is a temporally dynamic phenomenon. The plan must have a sufficient budget allocation. A strong political will is a prerequisite for such a

planning. A technical joint working group of administrators, academicians, civil society members and children's representatives must drive this planning. The action plan can delineate a pool of general as well as child-centric actions. The capacity of the workforce dedicated to climate or environmental issues should be built for children-sensitive policies.

Some examples of such actions are the climate-resilient infrastructure of schools and other such institutions where children spend most of their time, technologyenabled forecast and early warning systems, low-cost technological interventions for climate change mitigation, food security interventions and demonstrating climate-friendly practices in public infrastructure.



"I like to play with my friends but there is no playground near my house, thus we are forced to play on streets. During summer vacations, we play in scorching heat as there are no trees on streets for shade. That's why we need playgrounds with trees to play and connect with nature."

- 10-year-old Riddhi, Althan, Surat

Multi-stakeholder collaborations: Both the agendas of climate- and CFC actions would fail if those are sectorally targeted and if stakeholders operate in silos. Emphasis has to be placed on the vision, resources and guidelines for building the capacity of cross-cutting actors.

We recommend convergence across the following trajectories.

- Intersectoral coordination across the government departments, for example, the education department working in collaboration with Swachh Bharat Mission (SBM) - A Pan India Initiative for Cleanliness.
- ULBs actively work with the local academic ecosystem for tasks like microscale evidence generation and identifying technological climate interventions. This would eventually prepare a local team and observatory for children-focused climate actions.
- Theme-based public-private partnership models for example, private doctors contributing to child morbidities surveillance, contractors and urban planners contributing to child-friendly and climate-sensitive spaces, role of nongovernmental organizations (NGO) in disaster relief operations.

Box 1: Pre-service and in-service cross-learning workshops

UHCRCE in 2015-16 organized the 'cross-learning' workshops for in-service and pre-service urban practitioners. Administrators and academicians brainstormed, learnt technical skills and even jointly prepared small learning projects envisioning the interdisciplinary approach for topics like heat stress prevention, climate and health data analysis, vector-borne disease control, child safety and protection etc. Sixty-five practitioners actively learnt with each other in these workshops.

'Nurturing the nurturers': Systematic capacity building of caregivers

Caregivers like parents, families and teachers are immediate contact points for the children. They play a vital role in a child's life and in safeguarding their rights. ULBs should understand the importance of these stakeholders as 'interconnecting links' when ULBs intend to reach children for climate action. The following can be some useful strategies in this regard: Systematic capacity building of caregivers with climate change-associated knowledge and skills, inter-generational dialogue between parents and children, social behaviour change communication (SBCC) strategies, supportive supervision of caregivers, promotion of traditional health and nutrition behaviour in lifestyle and life-skills education.

Box 2: Samvad approach: Beyond posters and lectures

Going beyond traditional means of posters and lectures, 600 students of Shardayatan school participated in an event dedicated for climate and health in December 2015. Expert-children interactive session highlighted the concern of parents' reluctance towards climate-positive changes. Given below is an excerpt from the session:

Facilitator: Can you tell me how we can save the environment?

Children: By opening windows during day and closing lights, vehicle pooling, closing tap while brushing

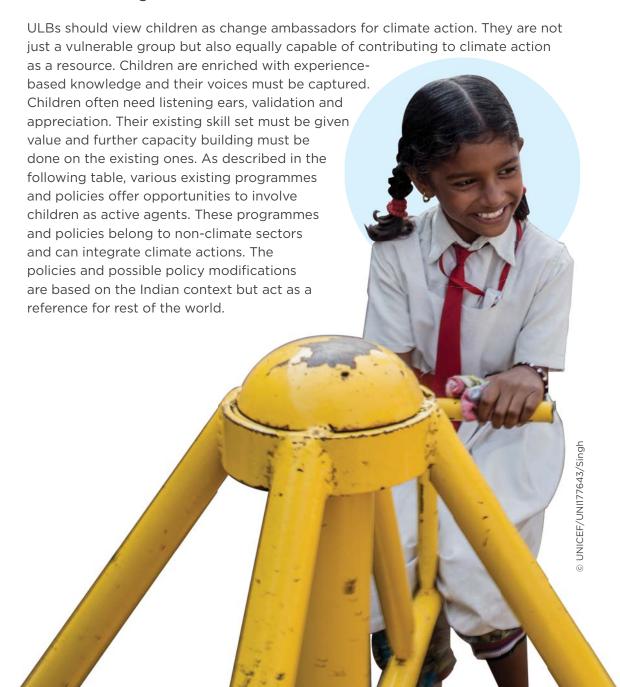
Facilitator: Do you practice what you just have said to save the environment?

Children: We try to, but our parents say that one person cannot bring the change.

Box 3: Life skills integration with environment education

In 2018-19, CFSCKC demonstrated a pilot model for LSE for children and adolescents in the context of climate change education. The model was executed as a joint action between schools, anganwadi centres (AWCs), health centres and NGOs in the most vulnerable zone of the city. The programme was implemented by creating a local pool of 30 master trainers and 170 teacher trainers. The programme impacted 5,000 children. One of the components was relating abstract life skills with real-life climate change issues for children - for example, decision-making for pre-monsoon flood preparedness, critical thinking for waste segregation and creative thinking (fancy dress competitions, posters) for climate change communication.

Children as change ambassadors for climate action



S. No.	Policy name	Description	Possible policy modification for enhancing the role of children in climate action
1	Rashtriya Kishor Swasthya Karyakram (RKSK)	Peer Educators (Knowledge dissemination to fellow in- and out-of- school peers on six RKSK themes, inform regarding the existing adolescent-friendly health services, facilitation of Adolescent Health days and participate in the Adolescent-Friendly Club meetings)	Inclusion of climate change and related topics in the RKSK themes and Peer Educators' kit. Relate existing themes of health, education and nutrition to effects of climate change.
2	Mamata Taruni Abhiyaan	Mamta Taruni Peer Educators (Focused on adolescent girls and pregnancy women. Deliver growth monitoring, nutrition awareness, micronutrient supplementation, and address personal hygiene and basic health issues. Educate and bring adolescent girls to the Mamta Taruni Sessions and to health care facilities for treatment.	Include effects of climate change on their health, nutrition education, and safety during crisis. Enable the target group with skills to withstand disasters. Include spreading awareness about health issues specific to climate change like heat waves, waterborne diseases, etc.
3	School Health and Wellness Programme (Under National Health Mission)	Health and Wellness Ambassadors (Teachers who transact with students regarding 11 SHWP thematic areas)	Link climate change as a theme in the programme and link its impact as sub-themes under theme 6 (Nutrition, Health and Sanitation). Possible contribution of children for climate change mitigation can be included in theme 4 (Values and Citizenship).
4	Swachh Bharat Abhiyaan	Swachhta Ambassadors (Celebrities who are responsible for creating awareness, participating in events, and sensitizing the public) Introduce the concept of Paryavara ambassadors – Children who have taken action for climate resilience a mitigation like Ridhima Pandey (Inc. Greta Thunberg)	
5	National Policy for Children, 2013	The policy states that children should be involved in planning, implementing and evaluating programmes and policies that affect them. However, there are no child representatives.	Child activists should be appointed at various levels: representatives, assistors in planning, implementation and evaluating programmes. More responsibility and designations should be assigned to children.

S. No.	Policy name	Description	Possible policy modification for enhancing the role of children in climate action
6	Right of Children to Free and Compulsory Education Act, 2009	Teachers are trained and appointed for the minimum completion of every child's elementary education.	Including the concept of linking the curriculum to climate change and its impact during teacher's training.
7	Integrated Child Protection Scheme (ICPS)	Nodal organizations They are academic institutes that volunteer their resources for the development of the child line Services (1098). Child volunteers are recruited for awareness campaign and assisting in project management. They also conduct research on issues related to child protection.	The Child Line Service (1098) should incorporate climate change as an additional module: calls regarding climate disasters and crisis should be catered to. Research could include the impact of climate change on children and possible protection services that could be required.
8	National Nutrition Mission (Poshan Abhiyaan), 2018	Mahila Arogya Samiti (MAS) works for organizing local collective action for Health promotion, health resource mapping, and monitoring and facilitating access to public services.	MAS, along with strong representation from different communities, should include children too. Similar to its composition rules depending on the number of households, it could also include criteria for the number of children to be involved. Along with health promotion and general public services, initiatives should include topics of climate change and possible resources the locals can use to combat its impact.
9	Integrated Child Development Services (ICDS) Scheme, 1975	Anganwadi worker (AWW) is an honorary female worker. She is selected and trained in different matters like child development, immunization, personal hygiene, environmental sanitation and breastfeeding.	Incorporating climate as a topic in AWW training module; AWW can sensitize children regarding climate change and its impact from young age.

Box 4: Climate-smart healthy children

Peer education (buddies) was used as an innovative and participatory form of communication between in-school and out-of-school children. Through different big and small-scale city events, the peer educator in-school students impart the knowledge, skills and attitudes of 'climate resilience actions' to out-of-school children in creative ways. The 'Children to Children' model creates more interest and dialogue among recipient peers. Heat stress, flood resilience, malaria-dengue fight, action against swine flu, insistence on motorbike pooling, food safety, healthy diet practices, green Surat, saving electricity - such resilience messages are being discussed, demonstrated and acted upon by youngsters.

Box 5: Participatory monitoring of climate data indicators by children with special needs

CFSCKC captured the voices of children with deafness and muteness often sympathized with but seldom included in civic participation - who spontaneously raised concerns about air pollution, noise pollution and road safety.

In 2019, 55 Students from Mukhbadir Vikas Trust Sanchalit School for Deaf and Mute Children were trained on Environment Monitoring Kit .They were involved in weather monitoring assembling toolkits, noting the readings and combating air pollution and heat stress. The entire workshop happened in sign language with the help of interpreters. Students actively shared their knowledge about the causes and impacts of air pollution. They talked about health impacts like respiratory problems, sneezing, coughing, irritation of eyes, skin problems, etc. The reasons listed by them included factory gases, coal burning, tree cutting and vehicular pollution. Noise pollution with high decibel frequency was another concern raised by them. They also shared how they are differentially vulnerable to these problems because of hearing and speech disabilities.

Urban networking at the heart of children-inclusive climate actions

ULBs or some nodal agency in the city must identify the key institutions working directly or indirectly on children's rights as well as climate action. Such institutions may comprise government departments, educational institutions, academia, civil society organizations and volunteer groups. This 'multi-stakeholder' think tank can participate in planning to exchange ideas, build a conceptual framework

for the policy, identify local indicators and prioritize key actions. The group also defined the possible role of each stakeholder in different activities. This networking approach acts as a 'cultural' enabler. The networking can be manifested at different levels - from brainstorming to grassroots execution.

Box 6: Children's voices for environment rights

On occasion of World Children's Day 2018, CFSCKC released the 'Children's Charter of Demands'. This charter acts as a guide for city to achieve the child-friendly and sustainable and development. This was the first charter 'by the children, for the children', The charter has been prepared after 30 empirical participatory interactions with 450 children of 43 city institutions (schools, anganwadis, NGOs and community-based organizations CBOs). The key demands for climate resilience were better green spaces that provide comfort during heat stress, pollution monitoring and measures for cleanliness, promotion of rainwater harvesting systems, flood risk management, disaster warning systems, systematic waste disposal, water logging management and effective drainage systems.

Urban observatory (learning institution) for climate action and child friendliness

At the institutionalization level, ULBs must develop novel urban Observatories (learning institutions) for integrating the agendas of climate action and child friendliness. Urban observatories can work towards systematic evidence generation and evidence-based actions, capacity building of different stakeholders, social behaviour change communication and education extension (outreach), demonstrating innovative actions to administrators and support in monitoring and evaluation.

Every child deserves a liveable and sustainable city



BIBLIOGRAPHY

Aji, H. S., R. B. Budiyanti and K. Djaja, 'The Development of Child-friendly Integrated Public Spaces in Settlement Areas as an Infrastructure of Jakarta', in WIT Transactions on Ecology and the Environment, edited by C. A. Brebbia, S. S. Zubir and A. S. Hassan, WIT Press, 2016, pp. 13-24. https://doi.org/10.2495/SDP160021

Arlinkasari, F., D. F. Cushing and E. Miller, 'Play, Work, and Rest: The developmental affordances of designated child-friendly public spaces in Jakarta, Indonesia', Children, Youth and Environments, vol. 30, no. 2, 2020, pp. 119-146.

Brown, C., A. de Lannoy, D. McCracken, T. Gill, M. Grant, H. Wright and S. Williams, 'Special Issue: Child-friendly cities', Cities & Health, vol. 3, no. 1-2, 2019, pp. 1-7. https:// doi.org/10.1080/23748834.2019.1682836

Buccini, G., S.I. Venancio and R. Pérez-Escamilla, 'Scaling up of Brazil's Criança Feliz Early Childhood Development Program: an implementation science analysis', Annals of the New York Academy of Sciences, vol. 1497, no. 1, 2021, pp. 57-73.

Census of India, 2011, https://censusindia.gov.in/2011census/population enumeration. html>

Department of Census and Statistics, Sri Lanka, Sri Lanka Demographic and Health Survey 2016, 2016, http://www.statistics.gov.lk/Resource/en/Health/ DemographicAndHealthSurveyReport-2016-Contents.pdf>.

Dimbleby, H., and J. Vincent, The School Food Plan, 2013, http://www.schoolfoodplan. com/wp-content/uploads/2013/07/School_Food_Plan_2013.pdf>

Etchichury, H. J., 'Planned Differences: Argentina's Universal Child Allowance from a human rights perspective', lus Humani, Revista de Derecho, vol. 7, 2018, p. 199.

Febriani, G., and Y. Latief, 'Stakeholders Analysis on the Project Time Performance Improvement of Integrated Child-Friendly Public Space (RPTRA) Development in East Jakarta', in 8th International Conference on Industrial Engineering and Operations Management, IEOM 2018, 2018, IEOM Society, pp. 3561-3572.

Freire, C., R. Ramos, R. Puertas, M.-J. Lopez-Espinosa, J. Julvez, I. Aguilera, F. Cruz; M.-F. Fernandez, J. Sunyer and N. Olea, 'Association of Traffic-related Air Pollution with Cognitive Development in Children', Journal of Epidemiology & Community Health, vol. 64, no. 3, 2010, pp. 223-228. https://doi.org/10.1136/jech.2008.084574

Girade, H., 'Criança Feliz': A programme to break the cycle of poverty and reduce the inequality in Brazil', Early Childhood Matters, 2018, Bernard van Leer Foundation, p. 12.

Haerani, E., 'RPTRA Evaluation as Social Facility', in The 3rd International Conference on Engineering of Tarumanagara (ICET) 'Smart Engineering for Future Cities', 2017, p. 246, https://www.researchgate.net/profile/Priskila-Rahayu/publication/323143944 DESIGNING_INFORMATION_SYSTEM_AS_BUSINESS_PROCESS_ REENGINEERING_WITH_SDLC_METHOD/links/5ce78a7292851c4eabba31dd/ DESIGNING-INFORMATION-SYSTEM-AS-BUSINESS-PROCESS-REENGINEERING-WITH-SDLC-METHOD.pdf#page=264>

Hollister, R. G., The Growth in After-School Programs and Their Impact, 2003, https://creativecommons.org/linearing-nc-4 eric.ed.gov/?id=ED474873>

Horelli, L., 'Constructing a Theoretical Framework for Environmental Child-Friendliness. Children', Youth and Environments, vol. 4, no. 17, 2007, pp. 267-292.

International Labour Organisation, 'Universal Social Protection for Children -Argentina', ILO Social Protection Department, 2017, https://www.ilo.org/global/ topics/dw4sd/WCMS_568704/lang--en/index.htm>

International Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021, https://www.itf-nternational Transport Forum, Road Safety Report: Korea, 2021,

Mahoney, J. L., M. E., Parente and E. F. Zigler, 'Afterschool programs in America: Origins, growth, popularity, and politics', Journal of Youth Development, vol. 4, no. 3, 2009, pp. 23-42.

Ministry of Education, Sri Lanka, Manual on School Nutrition Programme, 2017, https://moe.gov.lk/wp-content/uploads/2020/06/Manual-on-School-Nutrition- Program.pdf>

Navarro, A.I. and V.V. D'Elía, 'Universal Child Allowance and School Delay of Children in Argentina', Revista de Análisis Económico-Economic Analysis Review, vol. 28, no. 2, 2013.

Neuman, M.J., and A. E. Devercelli, 'What Matters Most for Early Childhood Development: A framework paper', Systems Approach for Better Education Results (SABER) Working Paper Series, No. 5, 2013, World Bank Group, Washington, DC, https://openknowledge.worldbank.org/handle/10986/20174

New York City Independent Budget Office, Fiscal Brief - Under the Radar: Big Rise in after-school programs for elementary and middle school students, 2019, https:// ibo.nyc.ny.us/iboreports/under-the-radar-big-rise-in-after-school-programs-forelementary-and-middle-school-students-april-2019.html>

www.theguardian.com/teacher-network/2016/apr/05/inside-the-schools-with-edibleplaygrounds>

NIUA, Indicators for CHIId friendly Local Development (I-CHILD), NIUA, 2016, https:// smartnet.niua.org/sites/default/files/resources/indicatorsl.pdf>

NIUA, Knowledge Needs Assessment Report and Capacity Gap Building Strategy, 2022.

NIUA, Status of Children in Urban India: Baseline study, second edition, 2018, https:// niua.org/cfsc/sites/default/files/repository/Status%20of%20children%20in%20 urban%20India_Baseline%20study%202018.pdf>

Office of the Mayor, Afterschool Programs for Middle School Students, 2014, https:// www1.nyc.gov/assets/home/downloads/pdf/reports/2014/after_school_programs_ white_paper.pdf>

Pierri, Gastón, and Ragui Assaad, 2014, 'The Impact of Argentina's Universal Child Allowance Cash Transfer Program on Children's Education Outcomes'.

Prakoso, S., and J. Dewi, 'Child-Friendly Integrated Public Spaces (RPTRA): Uses and sense of attachment', In IOP Conference Series: Earth and Environmental Science, Vol. 126, No. 1, 2018, IOP Publishing, p. 012199.

Prakoso, S., and J. Dewi, 'We Care for Our RPTRA: Children's views and expectations of child-friendly integrated public space (RPTRA) parks', 2018, https://www. researchgate.net/profile/Susinety-Prakoso/publication/330134229_We_Care_ for_Our_RPTRA_Childrens_Views_and_Expectations_of_Child-Friendly_ Integrated_Public_Space_RPTRA_Parks/links/5c2f11a4a6fdccd6b58fe6b4/ We-Care-for-Our-RPTRA-Childrens-Views-and-Expectations-of-Child-Friendly-Integrated-Public-Space-RPTRA-Parks.pdf>

Rahmawati, D., & N. R. Kusuma, 'Disability in Child-friendly Integrated Public Space (RPTRA)', In AIP Conference Proceedings, vol. 2230, no. 1, 2020, AIP Publishing LLC, p. 040029. https://doi.org/10.1063/5.0007458

Ramnani, V., 'Bhubaneswar Takes the Lead in Designing Children-centric Smart, Green City', Moneycontrol, 2019, https://www.moneycontrol.com/news/business/ real-estate/bhubaneswar-takes-the-lead-in-designing-children-centric-smart-greencity-4640841.html>

Rumaisa, F. S., A. Worsley, K. R. R. Silva and J. Nanayakkara, 'Opportunities and Challenges Associated with Food and Nutrition Education in Sri Lankan Primary Schools', International Journal of Health Promotion and Education, 2021, pp. 1-13. Save the Children International, School Meals Off the Menu for Children in Sri Lanka as Economic Crisis Bites, 2022, https://www.savethechildren.net/news/school-meals- menu-children-sri-lanka-economic-crisis-bites>

Schulze, S., and F. Moneti,. 'The Child Friendly Cities Initiative', Proceedings of the Institution of Civil Engineers - Municipal Engineer, vol. 160, no. 2, 2007, pp. 77-81. https://doi.org/10.1680/muen.2007.160.2.77

Septiady, Y., and A. Tehupeiory, 'RPTRA Concept In The Archipelago: Based On an equality and legal protection approach', International Journal of Research - Granthaalayah, vol. 9, no. 7, 2021, https://doi.org/10.29121/granthaalayah. v9.i7.2021.4105>

Simatupang, S., G. Widati and B. Erwin, 'Social and Physical Processes in Production of Urban Public Spaces Case: Development of RPTRAs in East Jakarta,' in IOP Conference Series: Earth and Environmental Science, Vol. 878, No. 1, 2021, IOP Publishing, p. 012014.

Sul, J., J. Lee, D. S. Kang, W. Y. Lee, J. I. Shim, M. Myeong, ... and J. K. Lim, 'Korea's 95% Reduction in Child Traffic Fatalities: Policies and achievements', KOTI Knowledge Sharing Report: Korea's Best Practices in the Transport Sector, Issue 15, 2014.

Tayefi Nasrabadi, M., E. H., García and M. Pourzakarya, 'Let Children Plan Neighborhoods for a Sustainable Future: A sustainable child-friendly city approach', Local Environment, vol. 26, no. 2, 2021, pp. 198-215. https://doi.org/10.1080/13549839 .2021.1884668>

The National Atlas of Korea, The Transformation of the Land, 2023, http:// nationalatlas.ngii.go.kr/pages/page_595.php>

Tree for Cities, 10 years, 100 Edible Playgrounds: The journey so far,

Tree for Cities, 2023, https://www.treesforcities.org/

Tree for Cities, Bringing the Curriculum to Life with Food Growing! https://www. treesforcities.org/downloads/files/Flyer.pdf>

UNICEF, Building Child Friendly Cities: A framework for action, 2004, UNICEF Innocenti Research Centre, https://www.unicef-irc.org/publications/pdf/cfc- framework-eng.pdf>

UNICEF, Universal Child Allowance, A contribution to the discussion on the role of conditionalities, 2018, https://www.unicef.org/argentina/media/4186/file/ Universal%20Child%20Allowance%20(AUH).pdf>

UNICEF, Universal Child Benefit Case Studies: The experience of Argentina, 2019, https://www.unicef.org/media/70446/file/ARG-case-study-2020.pdf

United Republic of Tanzania, National Multi-Sectoral Early Childhood Development Programme, Ministry of Health, Community Development, Gender, Elderly and Children, Tanzania, 2021, https://www.tecden.or.tz/resources/view/national-multi- sectoral-early-childhood-development-programme-nm-ecdp-2022-2026>

Vargas-Baron, E., 'Participatory ECD Policy Planning in Francophone West Africa', in Africa's Future, Africa's Challenge: Early childhood care and development in Sub-Saharan Africa, edited by M. H. Garcia, J. E. Evans and A. Pence, 2008, The World Bank, Washington, DC, pp. 187-198.

Whitzman, C., M., Worthington and D. Mizrachi, The Journey and the Destination Matter: Child-friendly cities and children's right to the city, Built Environment, vol. 36, no. 4, 2010, pp. 474-486. https://doi.org/10.2148/benv.36.4.474

Wilks, J., 'Child-Friendly Cities: A place for active citizenship in geographical and environmental education', International Research in Geographical and Environmental Education, vol. 19, no. 1, 2010, pp. 25-38, https://doi.org/10.10 org/10.1080/10382040903545484>

Willem, van Vliet and Lia Karsten, 'Child-Friendly Cities in a Globalizing World: Different approaches and a typology of children's roles', Children, Youth and Environments, vol. 25, no. 2, 2015, p. 1, https://doi.org/10.7721/chilyoutenvi.25.2.0001

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