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Child-Friendly Approaches in Context to Neighbourhood Streets - A Case of Ward No 17, Rourkela

Anshulata Panda[1], Mr. Bhabani Shankar Sa[2], Ms. Shrestha Das[3]
[1]*M. plan Student,* [2]*Assisstant professor,* [3]*Guest faculty, Odisha University of Technology and Research, Bhubaneswar*

Abstract: ***Creating child-friendly neighbourhoods is pivotal for fostering the well-being and development of children while supporting the needs of their caregivers. Typically, adults' ideas and suggestions are prioritised over children's perspectives, even when the concerns are relevant to them. Children have always been an important part of society, and they are among the most sensitive and impacted users in today's urbanised environment. The United Nations Convention on the Rights of the Child recognised three P's: provision, protection, and participation. This initiative aims to design and implement urban environments that promote safety, accessibility, and engagement for children of all ages. Key components include safe pedestrian pathways, ample green spaces, recreational facilities, and inclusive play areas that cater to diverse needs and abilities. Additionally, ensuring proximity to educational institutions, healthcare facilities, and community centres is essential for supporting caregivers. This project emphasizes participatory planning, involving children and caregivers in the decision-making process to ensure that the neighbourhood reflects their needs and preferences. By integrating these elements, the initiative seeks to enhance the quality of life, promote physical and mental health, and build a strong sense of community. The outcome is a holistic, child-cantered urban design that not only benefits young residents but also contributes to a supportive and thriving environment for their families and caregivers.***

Keywords: Children, Neighbourhood, child-friendly city (CFC), Child-Friendly Indicators, United Nations Children's Fund (UNICEF), children's right, ITCN (infant, toddler, caregiver-friendly neighbourhood)

I. INTRODUCTION

Childhood is commonly thought of as a period of social development in a child's life. The child's character is shaped by the values of the society in which he or she is born. The influence of gender on a kid's values and life possibilities, the chance of the kid being raised in a nuclear or extended family, the spiritual aspects of the kid, and even banal things such as what the kid will eat for breakfast or lunch are all important topics to consider. Children are born into a society that has the power to either nurture, support, and protect them, or to ignore, frustrate, and imprison them. In other words, society is the source of their distinct social and individual identities. A child has his or her personality, but the culture into which they are born has an impact on how that personality develops, as well as whether or not they are supported in their desire and capacity to be themselves. As a result, one of the most important accomplishments a youngster may achieve to adjust to navigate through society. Social change occurs in tandem with physical change. Social transformation is also accompanied by changes in space. A once-safe and easy-to-navigate place in time might become unsafe, necessitating the presence of an adult. Home, school, street, Neighborhood Park, bus stop, playground, health clinic, library, garden, markets, and city center are all important parts of a child's universe.

II. NEED OF THE STUDY

The UNICEF hosted a summit for the CFCI in 2019, and 45 countries from around the world came together to engage in the effort. According to a 2017 NIUA analysis, India has the world's third-largest percentage of children (0-18 years) with 37.6%, making it one of the world's youngest countries. ((NIUA, 2017) This necessitates additional arrangements for children due to their unique needs and requirements. This section will examine how prioritising the health and liability of built environments for children can make them healthier and more liveable for everyone. A needs assessment study finds gaps in access to resources and opportunity for children from various demographic groups. This allows for focused actions to overcome systemic barriers and promote fairness and inclusion in the neighbourhood. Identifying the need for a child-friendly community is crucial for various reasons.

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1) Understanding Community Needs.
2) Assessing Existing Conditions.
3) Informing Policy and Planning.
4) Promoting Equity and Inclusion.

Neighborhood concepts: Neighborhood concepts were studied further to understand the planning of human settlement, consideration of open spaces and issues related to the safety and security of children and other residents.

III. RESEARCHED METHODOLOGY

This thesis aims to investigate the built environment of children as an approachable "neighbourhood," with a focus on how children's lives are shaped by their space and scale. A qualitative and quantitative research approach is being used. This study begins with a comparison of the literature on children in the community. This detailed review of the literature on the framework of a child-friendly approach provides a foundation for understanding the relationship between children and the neighbourhood. The literature will aid in understanding the character of the neighbourhood, which forms the narrative of children's experiences in the city. This will be accomplished by evaluating and exploring UNICEF, NIUA, and other articles related to children's well-being. Case studies support the literature by highlighting the positive effects of child-friendly interventions in the city. The case studies were chosen based on criteria established during the intervention development process. This study examines how the neighbourhood influences children's life and well-being, focusing on the physical environment. The research aims to get insight into children's perceptions of the city, leading to a more child-friendly approach.

IV. CASE STUDIES

1) *Vibrant play spaces along the street – Pune as a CFSC*

Improvement of motorized, non-motorized and public transport infrastructure on 1.87 km stretch of J. M. Road in Pune. Green buffers to segregate the vehicular and pedestrian traffic. Play areas with rubberized soft flooring have been designed at regular intervals between the green buffers. Clearly designated on-street parking, organized street vending and properly -scaled carriageways. Mobility policies that focus on ITC would equip decision makers to invest in sustainable mobility – walking, cycling, and public transport – with specific interventions and improvements dedicated for early childhood development to increase safety, convenience, and vibrancy of public spaces, and improve access to childhood services such as health care, education, and play.

2) *Gurgaon - Raahgiri day*

Raahgiri is a street revolution to ‘reclaim’ the space for all users. During these events, streets are temporarily closed for vehicles and opened to people for recreational activities.

The program was launched in Gurgaon in 2013 by a collaborative of schools, non-profit organizations, and private companies which continues till date successfully.





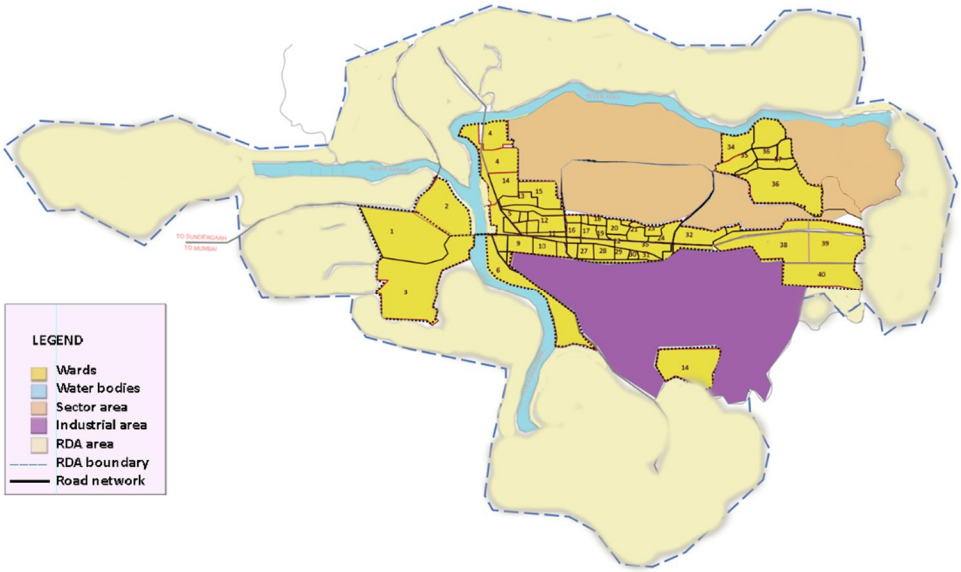
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V. STUDY AREA – ROURKELA

The city is located on Odisha's western border in the Sundergarh district. The city area is approximately 53 square kilometres, with 40 municipal wards. The city has a population of 3.20 lakh, with 36% of them living in slums.58 Rourkela Steel Plant, one of the largest steel facilities operated by the Steel Authority of India Limited (SAIL), is located here, and as a result, the city is also known as Ispat Nagar. Approximately 35% of the population is under the age of 20, and the district has a sex ratio of 946, which is higher than the national average.

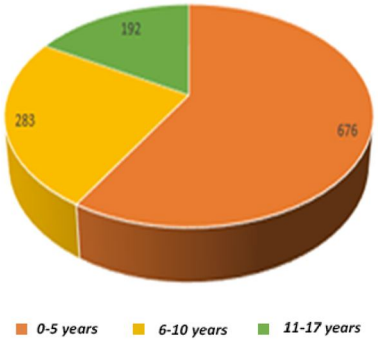
The city has an Ease of Living ranking of 54 out of 64 among cities with a population under one million. The city ranks 191 in the Child Development Index. Rourkela Municipal Corporation (RMC) is the key agency for implementing smart city projects.

VI. RESULT AND DISCUSSION



Ward no .17 Basanti colony

The neighbourhood in this residential colony is experiencing non-inclusive and unsafe street conditions, as well as a lack of infrastructure such as signage, seating areas, and shading. The concept of a child-friendly neighbourhood involves designing public spaces, streets, pedestrian connections, interaction points, and spaces for informal activities that children require on a daily basis. To make neighbour-hoods more child-friendly, indicators from UNICEF and NIUA are used.



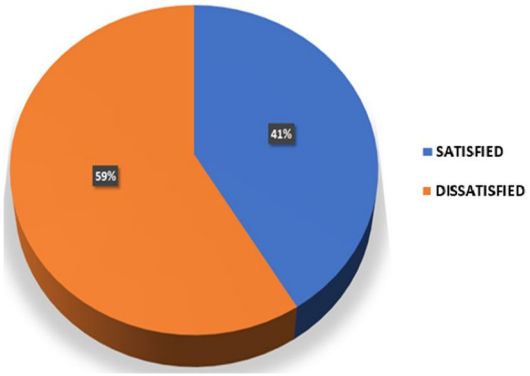
Pie chart 1.1 showing age structure of children

A. Satisfaction With Surrounding

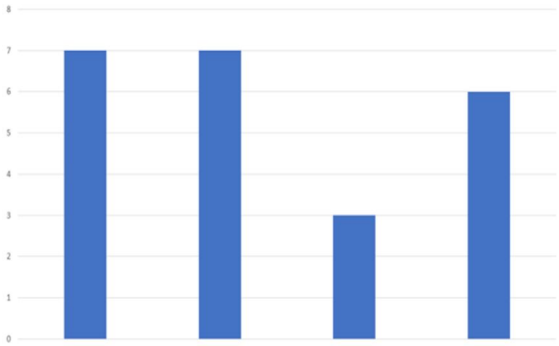
Children's care giver opinion on the existing facilities provisions in their neighborhoods.

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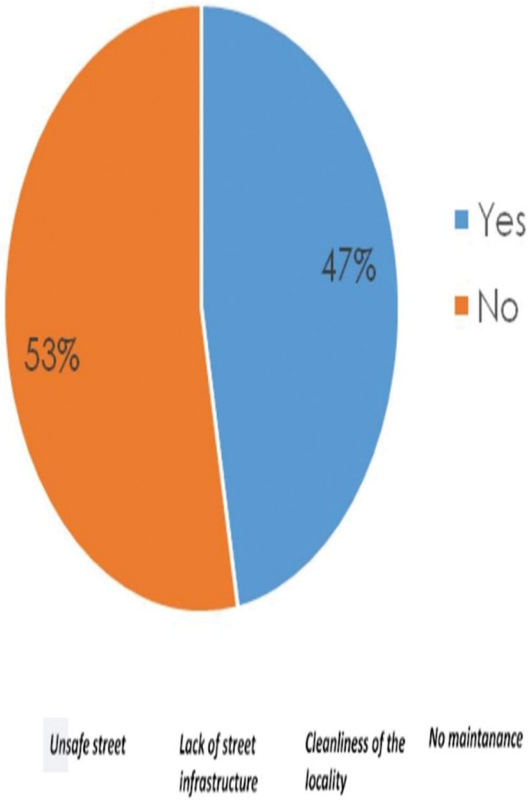
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Pie chart 1.2 showing people satisfied with the locality



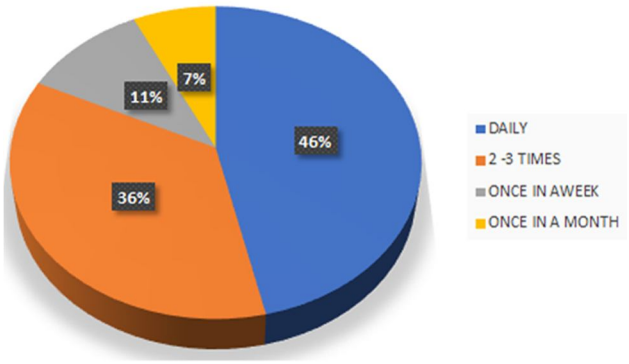
Graph 1.1 showing reason for dissatisfaction



Pie chart 1.2 showing Safety on road while walking at locality

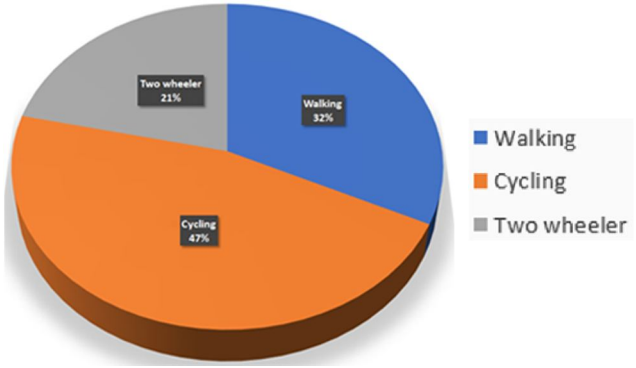
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B. *Frequency Of Visit To Play Outside*



Pie chart 1.3 showing frequency of visit to play outside

C. Mode of Travel



Pie chart 1.4 showing mode of travel used by children

D. Inference Drawn From Analysis

Due to lack of cycle tracks and footpaths in the locality, some of the respondents feel that the average speed of the vehicles on road is risky for the cyclists and pedestrians. Absence of traffic calming measures on to the alarming situation and makes the cyclists and pedestrians more vulnerable to accidents. significant percentage of the respondents feel that the roads in the city face very high encroachment problem majorly due to excessive parking, encroachment by hawkers/ vendors, display of materials by the shopkeepers etc.

VII. CONCLUSION AND RECOMMENDATION

By integrating these Urban95 concepts and 15 min neighbourhood into urban planning and design, streets may create surroundings that are not only child-friendly but also improve the quality of life for all people. Parks and Playgrounds Create parks with safe, interesting, and age-appropriate play equipment. Include covered places, carer seating, and open play spaces. Green corridors Create green walkways connecting different parts of the neighbourhood to encourage walking and outdoor activities. Ensure that these paths are safe, well-lit, and stroller-friendly. Traffic calming measures To enhance safety on the roadways, install barriers, pedestrian crossings, and traffic lights. Establish pedestrian-only zones around schools and playgrounds. Sidewalks and pathways Ensure that walkways are wide, smooth and free of barriers for strollers. Include ramps for accessibility. Creating a child-friendly city is a multifaceted endeavor that requires a holistic and inclusive approach. It involves not only designing physical spaces that are safe, accessible, and engaging for children but also fostering an environment where children's voices are valued and their rights are respected. Key aspects include

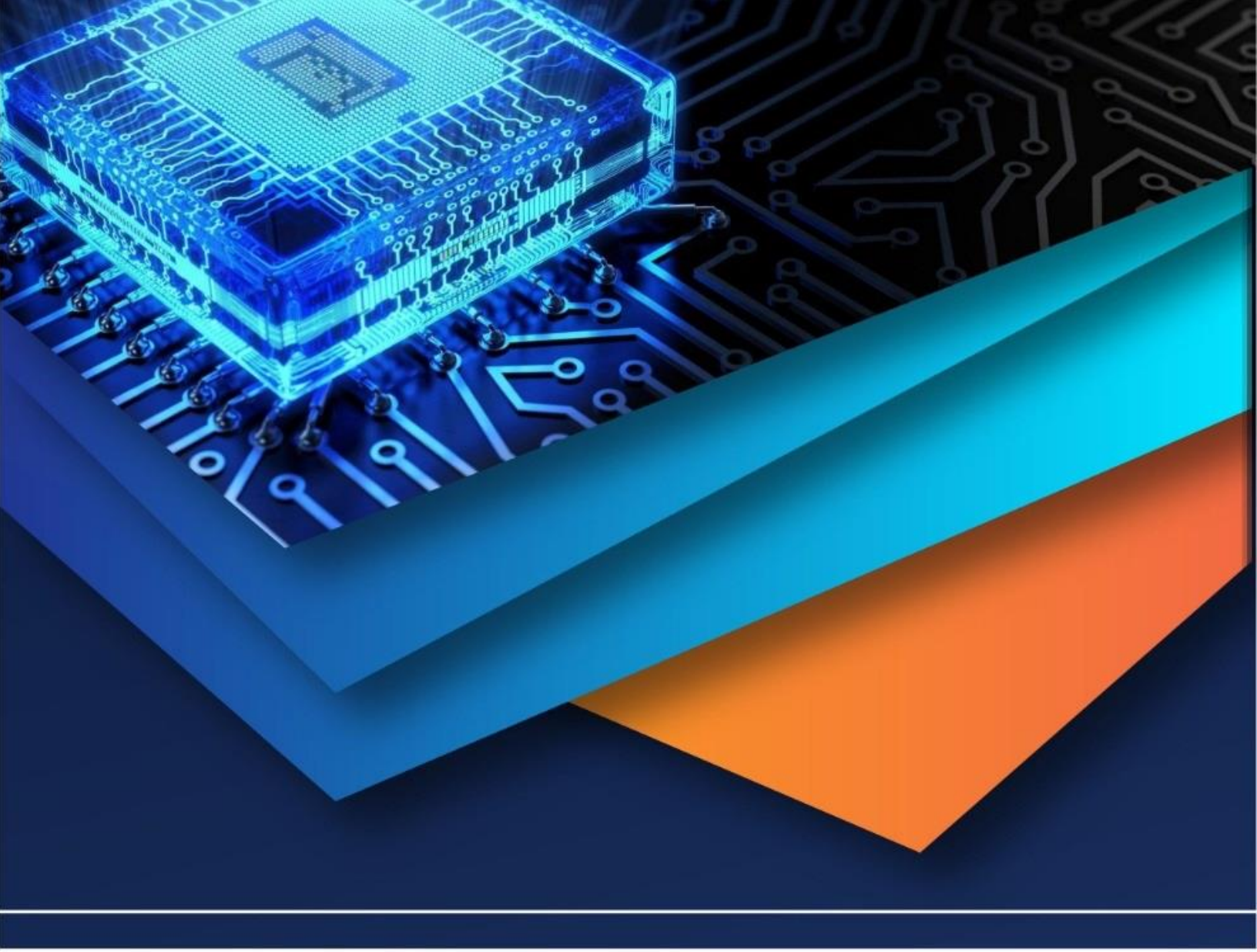
1) *Safe and Supportive Environments:* Creating environments where children feel safe and supported is crucial. This includes not only physical safety but also emotional and psychological well-being, achieved through supportive community networks and child-friendly services.
2) *Collaboration and Community Involvement:* Building a child-friendly city requires collaboration among various stakeholders, including local governments, urban planners, educators, parents, and children themselves. Community involvement ensures that the initiatives are well-rounded and effectively address the needs of all children.
3) *Ongoing Evaluation and Adaptation:* Continuously evaluating the effectiveness of child-friendly initiatives and being willing to adapt strategies based on feedback and changing needs is vital for sustained success.

By integrating these principles, cities can create environments that not only support the healthy development of children but also enhance the quality of life for all residents. Child-friendly cities are characterized by their ability to nurture young minds, promote safety and inclusivity, and provide opportunities for children to learn, play, and grow. Ultimately, these cities lay the foundation for a more vibrant, equitable, and sustainable future.

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