



JANAAGRAHA CENTRE FOR CITIZENSHIP & DEMOCRACY

CHILDREN'S CITIZENSHIP IN BENGALURU

Bala-Janaagraha, civic education
and urban infrastructure challenges
through children's eyes

Published in India by the

Janaagraha Centre for Citizenship and Democracy

4th Floor, UNI Building, Thimmaiah road,

Vasanth nagar, Bengaluru- 560 052, India

First published in 2016

Author: Alia Dharssi, 2014-2015 American India Foundation William J. Clinton Fellow for Service in India, Janaagraha.

Report Design: by Shivakeshava M, Janaagraha.

Images: All photographs in this report were taken by the eighth-standard students who participated in this study except the cover photo which was taken by Robin Zutshi, Janaagraha.



Janaagraha Centre for Citizenship and Democracy

The Janaagraha Centre for Citizenship and Democracy is a non-profit organization based in Bengaluru, India. We aim to improve quality of life in urban India, through systemic change. Janaagraha sees 'quality of life' as comprising two distinct, but inter-related aspects – 'quality of urban infrastructure and services' (the quality of urban amenities such as roads, drains, traffic, transport, water supply, etc.) and 'quality of citizenship' (the role that urban citizens play by participating in their local communities). We work with both citizens and government to catalyze civic participation from the grassroots up, as well as governance reforms from the top down. You can read more about Janaagraha at www.janaagraha.org.



American India Foundation

The American India Foundation is committed to disrupting poverty, catalyzing social and economic change in India, and building a lasting bridge between the United States and India through high-impact interventions in education, livelihoods, public health, and leadership development, with a particular emphasis on empowering girls and women to achieve gender equity. Working closely with local communities, AIF partners with NGOs to develop and test innovative solutions and with governments to create and scale sustainable impact. Founded in 2001 at the initiative of President Bill Clinton following a suggestion from Indian Prime Minister Vajpayee, AIF has impacted the lives of 3.1 million of India's poor and aims to reach 5 million by 2018-2019. Learn more at www.AIF.org.

CONTENTS

1. Executive Summary	10
1.1 Overview	10
1.2 Findings.....	12
1.3 Policy recommendations	13
 2. Introduction: Children, cities and quality of life in India.....	16
2.1 The consequences of rapid urbanization for Indian children.....	16
2.2 The international movement for child-friendly cities	18
2.3 Children, citizenship and quality of life	19
 3. Methodology	22
3.1 Research objectives	22
3.2 Sample selection.....	24
3.3 Overview of data collection.....	26
3.3.1 Photography lesson.....	26
3.3.2 Photo walk	27
3.3.3 Written worksheets.....	27
3.3.4 One-on-one interviews.....	28
3.4 Data cleaning and analysis.....	28

4. Findings	32
4.1 Urban infrastructure and children's quality of life	32
4.1.1 Garbage disposal problems	35
4.1.2 Road safety and walkability.....	41
4.1.3 Public services	45
4.1.4 Nature, green spaces and parks.....	47
4.1.5 Environmental concerns	50
4.1.6 Animals.....	52
4.1.7 Social issues	54
4.1.8 Views of the government.....	57
4.2 Children's views of civic engagement	61
4.3 Impact of Bala-Janaagraha.....	62
4.3.1 Bala-Janaagraha's impact on how students perceive urban infrastructure challenges	63
4.3.2 Differences between Bala-Janaagraha and non- Bala-Janaagraha students	65
4.3.3 Limitations on the impact of Bala-Janaagraha.....	66
 5. Policy recommendations	 70
 6. Bibliography	 78
 7. Appendices	 82
Appendix A: Invitation letters	82
Appendix B: Student worksheet.....	86
Appendix C: Interview questionnaire	88

Acknowledgements

This project would not have been possible without the support and encouragement of the leadership at Janaagraha, including Major General KR Prasad, Katie Pyle and Srikanth Viswanathan, and the financial support of the American India Foundation, which gave me the chance to work with Janaagraha through the William J. Clinton Fellowship for Service in India. I am especially grateful to Katie Pyle and Sayantani Satpathi for their encouragement and assistance with conceptualizing and planning the study. Cassie Denbow, Elijah Monroe and Satya Narayanan at the American India Foundation also provided valuable support at various stages of the project.

In addition, various Janaagrahis, including Vivek Anandan Nair, Saskia van Belkum, Manjunatha Hampapura L, Rafia Anjum, Sharadha Ravi, Sangeetha Ravi, Sujatha Akula, Poornima N, Manjula Ravindra, Valli Narasimha, Anupama Purohit, Hemavathi Ravi and Srinivas Sridhar, helped carry out the study. Many of them spent hours of their time to help me identify schools and carry out interviews. In addition, Dhaval Bhatt, Suruchi Devanahalli and Mesha Tella provided research assistance. Suruchi Devanahalli also played an important role in helping formulate policy recommendations. Last but not least, I'm grateful to each and every one of the 63 children who participated in this project, as well as their teachers and schools, for giving me a glimpse into their lives.

EXECUTIVE SUMMARY

1. EXECUTIVE SUMMARY

1.1 Overview

India's rapidly growing cities will be home to 404 million more urban dwellers by 2050 than they were in 2014. Bengaluru, which had a population of 9.7 million in 2014, will soon become a megacity with a population of more than 10 million – if it isn't already – and is expected to be home to 14.8 million by 2030.¹ This urbanization has been accompanied by the proliferation of haphazardly planned settlements, poor infrastructure, rising inequality and urban poverty, all of which is highlighted most visibly by the proliferation of slums.

Such poorly planned urban development places great stress on all children, though the impact is most acute on the poorest. Rising pollution, hazardous traffic, poor footpaths and a lack of parks are among the range of urban planning problems that affect the physical and mental development of children by negatively impacting their health and ability to move around cities safely.

The importance of these issues and the dire consequences they might hold for India's future is underscored by the youthfulness of India's population. Just over one-fourth of all of the children in India, or 41.2 million children, were living in India's cities at the time

¹ UN Department of Social and Economic Affairs, 2014.





of the 2011 Census. In fact, India is set to become the most youthful country in the world by 2020 with a median age of 29.² Poorly planned urban growth that impacts the mental and physical development of children and youth risks diminishing India's potential for economic growth, which is powered by its cities.³

In spite of the urgency of such problems in India and other developing countries, there is limited research on how children think about infrastructure problems related to rapid urban growth or how they affect children's perception of themselves as citizens of their city.⁴ In addition, Indian cities have dedicated little to no resources to incorporating children's needs into urban plans.

This report tries to take a step towards filling that gap through a study involving 63 children who participated in a photography and interview activity in Bengaluru that captured how they view the city, their concerns about infrastructure problems and how they feel those problems should be solved. The study also assessed their understanding of civic engagement and whether they feel they have the power to play a role in tackling urban problems themselves. Finally, it looked at the role of civic education in shaping the children's civic engagement by comparing students who had passed through Bala-Janaagraha, a civic education program for eighth-standard students, with ones who had not.

1.2 Findings

This study indicates that urban infrastructure problems created by Bengaluru's rapid growth over the past two decades have had a significant negative impact on children's quality of life. Respondents across socioeconomic classes pointed to a number of issues – ranging from a lack of footpaths to poor garbage disposal infrastructure – that impinge upon their health and safety, as well as their ability to play in and move around Bengaluru.

The students who participated are all acutely aware of infrastructure challenges and their negative impact on quality of life. Their biggest concern was the garbage all over Bengaluru, which they said affected their health and ability to move around the city safely. Other key concerns for the students included road safety, poor pedestrian infrastructure, a lack of green spaces in Bengaluru and pollution.

The students saw a need for the local government to act and blamed it for many of the problems they experience. At the same time, they also pointed to how a lack of civic engagement worsened these issues. For example, students frequently blamed other urban residents for carelessly throwing their trash on the streets without considering how it would negatively impact others.

Finally, the study indicates that civic education can play a positive role in shaping how students relate to urban issues by comparing the attitudes of those in the sample who had passed through Bala-Janaagraha with those who had not. While the students had countless ideas about how to improve Bengaluru, Bala-Janaagraha students were more likely to identify a personal role they could play in response to urban problems. In addition, they indicated they had a greater awareness of the different levels of government involved in urban governance.

² Prakash, 2013.

³ To make matters worse, high-level statistics about the state of children in India's cities hide the real scale of the urban challenges India faces. Average data about cities do not capture the extent of problems among the poor, according to UNICEF's State of the World's Children 2012 report. Even though cities are seen as engines of economic growth and, on average, result in lower levels of childhood mortality, healthier children and increased schooling in low- and middle-income countries, the poorest sometimes fare worse than their counterparts in rural areas because of urban problems.

⁴ Ramezani & Said, 2013

1.3 Policy recommendations

The report concludes with two policy recommendations for the governments of Bengaluru, Karnataka and India. First, the report urges each level of government to incorporate children's needs into urban planning. Ad hoc development in Bengaluru is associated with a range of problems that affect children's safety, health and ability to play freely in the city including, but not limited to, inadequate footpaths, poor roads, electrical hazards and dirty parks. Even so, urban planners have largely ignored the needs of children.

This problem plagues cities across India. Both the Ministry of Women and Child Development and Urban Development Minister Venkaiah Naidu have called for the development of child-friendly infrastructure in cities, including as part of the Smart Cities Mission. But there has been little tangible action. Moving forward, it is critical for the relevant authorities to improve coordination and develop strategies for ward-level plans that are coordinated with the broader spatial plans for Bengaluru and responsive to the needs of children.

In addition to improving urban planning in general, such a strategy should involve efforts to engage children and their parents by asking for their input and involving them in decision-making. The benefits of such a strategy are two-fold: it can help officials gain insight into local needs while also promoting citizen engagement. Bengaluru and other Indian cities can move towards this objective by implementing the reforms mandated by the Nagara Raj Bill (or the Community Participation Law), which called for the creation of Area Sabhas in India's cities that would give citizens a venue to influence urban decision-making. Relevant government agencies can also work with and draw inspiration from civic education programs, such as Bala-Janaagraha, that have formulated ways to engage children in improving their own quality of life.

The second policy recommendation in the report urges all three levels of government to take steps to improve the quality and quantity of green space in Bengaluru. Psychological research indicates that both greenery and play areas that children can explore freely are important for their emotional, mental and physical development. In fact, one of the key themes that came out of this study has to do with the connection between green space and children's quality of life. The students who participated in the study discussed how green space improved their well-being, identified a need for more greenery and parks in Bengaluru and raised concerns about environmental issues. Several participants were also concerned with the quality of parks and play areas, as well as safety hazards that might affect their ability or that of other children to enjoy these public spaces safely.

But rapid urbanization in India is swallowing green spaces with little consideration for their preservation or enhancement, even though the Ministry of Environment, Forests and Climate Change has highlighted the issue. It is not uncommon to hear residents of Bengaluru lament the loss of trees in the city as a result of rapid urban growth. Many of the students who participated in this study were aware of this trend. This was highlighted by the concerns of those who worried that Bengaluru is changing from a "garden city" into a "garbage city." The issue is also a rising concern in other Indian cities. For example, in 2014, a chief justice in the Delhi High Court said that the city's parks were so poorly maintained that it was a "serious violation of human rights of children."⁵

The problem can be tackled with more strategic and detailed urban planning of the sort suggested by the report's first recommendation. But policymakers must make it a priority. They can also work with civic education programs like Bala-Janaagraha to teach children about environmental issues in their cities and the role that they can play in tackling them. In conclusion, an integrated solution involving various members of society is necessary, but the government must play a key role. As one of the students who participated in the study said: "If we are the change, we can bring the change in India. India can be improved."⁶

⁵ Arvind, 2014.

⁶ School 10, student 2.

The background is a solid red color with several diagonal stripes of varying shades of red running from the bottom left towards the top right.

INTRODUCTION: CHILDREN, CITIES AND QUALITY OF LIFE IN INDIA

2. INTRODUCTION: CHILDREN, CITIES AND QUALITY OF LIFE IN INDIA

2.1 The consequences of rapid urbanization for Indian children

India's rapidly growing cities will be home to 404 million more urban dwellers by 2050 than they were in 2014. Bengaluru, which had a population of 9.7 million in 2014, will soon become a megacity with a population of more than 10 million – if it isn't already – and is expected to be home to 14.8 million by 2030.⁷ This urbanization has been accompanied by the proliferation of haphazardly planned settlements, poor infrastructure, rising inequality and urban poverty, all of which is highlighted most visibly by the proliferation of slums.

Such poorly planned urban development places great stress on all children, though the impact is most acute on the poorest. With more cars and rising air pollution in India's cities, children are significantly more likely to suffer from respiratory ailments, ranging from coughing to lung cancer, with the risk being three times greater for those living in slums.⁸ In fact, 36% of children in Bengaluru suffer from poor lung health, which is comparable to other major Indian cities, according to a survey released in 2015.⁹ Air pollution also contributes to brain damage in children, which causes

⁷ UN Department of Social and Economic Affairs, 2014.

⁸ Ghosh & Mukherji, 2014.

⁹ Press Trust of India, 2015.





learning disabilities, hearing loss and behavioural abnormalities.¹⁰

Urban traffic also puts Indian children at risk. Worldwide, road traffic injuries are among the top four causes of death for children aged 5 to 14 and the top cause for youth aged 15 to 29. The majority of these deaths take place in haphazardly planned cities in low- and middle-income countries like India.¹¹ According to one estimate, 40% of the victims of road traffic injuries in India are youth aged 24 or under.¹² In addition, a survey of almost 6,000 children in Hyderabad found that one-sixth of them had suffered a road injury on their way to school in the previous 12 months. It did not account for children who had died.¹³

At the same time, problems related to urban planning and management, such as poor footpaths, a lack of parks, undisciplined traffic and overcrowding, restrict the times during which and places in which children are able to play freely and explore. Research shows that this can negatively impact children's development because play has an important role in enhancing creativity, emotional regulation, responses to stress, fitness and overall well-being.¹⁴ A lack of open spaces and parks in India's cities has also been identified as a factor in the growth of obesity among Indian children.¹⁵

The importance of these issues and the dire consequences they might hold for India's future is underscored by the youthfulness of India's population. Just over one-fourth of all of the children in India, or 41.2 million children, were living in India's cities at the time of the 2011 Census. In fact, India is set to become the most youthful country in the world by 2020 with a median age of 29.¹⁶ Poorly planned urban growth that negatively impacts the mental and physical development of children and youth risks diminishing India's potential for economic growth, which is powered by its cities.¹⁷

2.2 The international movement for child-friendly cities

India is far from alone in facing such challenges. The United Nations Children's Fund (UNICEF) has documented the uneven impact of rapid urbanization on the well-being of children in developing countries and the possible negative consequences for national development in the long-term. In 1996, such challenges spurred UNICEF and the United Nations Human Settlement Programme (UN-HABITAT) to launch the Child-Friendly Cities Initiative.

At the crux of the initiative is the idea that it is not possible for governments to fulfill the rights of children outlined in the Convention on the Rights of the Child without paying attention to urban problems. This approach calls on cities to broaden their focus from the provision of basic services, such as healthcare and education, to children's quality of life as a whole and children's rights, including "the right of the child to rest and leisure, to engage in play and recreational activities."¹⁸ A child-friendly city is one that develops and implements policies that pay special attention to the quality of life of children and take their views into consideration.

10 World Bank, 2000.

11 World Health Organization, 2015a; World Health Organization, 2015b.

12 National Institute of Urban Affairs, 2016.

13 Tetali, Edwards, Murthy, & Roberts, 2015.

14 Lester & Russell, 2010; Hart, 2011.

15 Kar & Kar, 2015.

16 Prakash, 2013.

17 To make matters worse, high-level statistics about the state of children in India's cities hide the real scale of the urban challenges India faces. Average data about cities do not capture the extent of problems among the poor, according to UNICEF's State of the World's Children 2012 report. Even though cities are seen as engines of economic growth and, on average, result in lower levels of childhood mortality, healthier children and increased schooling in low- and middle-income countries, the poorest sometimes fare worse than their counterparts in rural areas because of urban problems.

18 United Nations Children's Fund, 2012; Riggio & Kilbane, 2000; Lester & Russell, 2010; Day, Sutton, & Jenkins, 2011.

To date, the idea has had a limited impact on India's national and state-level governments, which seldom allocate funds to this issue or take it into account in their urban plans. However, the needs of children have been recognized by the Smart Cities Mission and child-friendly city programs have been initiated by a handful of Indian cities. Bhubaneswar intends to incorporate children's needs and views into its plans to become a smart city. Aurangabad, Lucknow, Mirzapur and Kolkata have also launched child development policies and projects that work toward making their cities child-friendly. In addition, a research and policy centre in Kerala aims to transform all panchayats (village councils) into becoming receptive to children's views and incorporating these into child development programs.¹⁹

2.3 Children, citizenship and quality of life

In spite of the urgency of India's urban problems or those in other developing countries, there is limited research on how children think about infrastructure problems related to rapid urban growth or how they affect children's perception of themselves as citizens of the city.²⁰ Such considerations are crucial for Janaagraha, where projects to improve the quality of life in urban India break the issue into (1) the quality of urban infrastructure and services, and (2) the quality of citizenship. A high quality of citizenship, where urban citizens play a part in improving their cities by participating in their local communities, can lead to improvements in infrastructure and services. An engaged citizenry can push politicians to respond to urban problems, in addition to informing solutions that are appropriate for local needs.

Significantly, such civic engagement can start young. Civic education programs like Bala-Janaagraha – a Janaagraha initiative that teaches eighth-standard students in schools around India about urban problems, how the government works and how students can tackle local problems – make children more civically aware. They also provide evidence that children who are engaged with civic issues can have an impact on local problems. For example, Bala-Janaagraha students survey their neighbourhood and track down local officials to ask them to fix problems they find. In Pune, Bala-Janaagraha students who were concerned about an area piling up with garbage near their school informed local officials. The officials, who said they were unaware of it, started sending a garbage truck to the area. Another Bala-Janaagraha group in Patna adopted a 45-metre stretch of road and lobbied the local government to fill potholes, fix streetlights and build dividers on it.²¹ Similarly, Prayasam, an NGO in Kolkata, organized children in a slum to make a map of and gather information about their community. The children found the community had 71 water sources, but not one with water clean enough to drink. They took their findings to local authorities as proof the area needed government assistance.²²

At the same time, there is little research about how children negotiate urban infrastructure challenges in India in general or Bengaluru in particular, as well as how they relate to these issues as citizens of the city. This report tries to take a step towards filling that gap through a study involving 63 children who participated in a photography and interview activity in Bengaluru. The activity sought to capture how they view the city, their concerns about infrastructure problems and how they feel the problems should be solved. The study also assessed their understanding of civic engagement and whether they feel they have the power to play a role in tackling urban problems themselves. Finally, it looked at the role of civic education in shaping children's civic engagement by comparing students who had passed through Bala-Janaagraha with ones who had not.

19 Nikku & Pokhrel, 2013.

20 Ramezani & Said, 2013; National Institute of Urban Affairs, 2016.

21 Smart, 2015; Times News Network, 2016.

22 Coulter, 2011.

The background is a solid orange color with several diagonal stripes of varying shades of orange running from the bottom-left towards the top-right. A white horizontal bar is positioned in the middle-right section of the page.

METHODOLOGY

3. METHODOLOGY

3.1 Research objectives

The first objective of this research project was to understand how children view urban infrastructure challenges in Bengaluru, as well as how these issues shape their quality of life, including quality of citizenship. A second objective of the research project was to provide insights into how the Bala-Janaagraha program shapes its participants' understanding of the urban challenges that Bengaluru is facing and their role as citizens of the city. With respect to the second objective, the project aimed to answer the following questions:

- Does Bala-Janaagraha shape how students perceive urban infrastructure challenges? If so, how?
- How do Bala-Janaagraha students, as compared to non-Bala-Janaagraha students, understand issues related to urban infrastructure?
- Are there any key aspects of the Bala-Janaagraha program that the students do not seem to have integrated into their view of the city? If so, what are these?





3.2 Sample selection

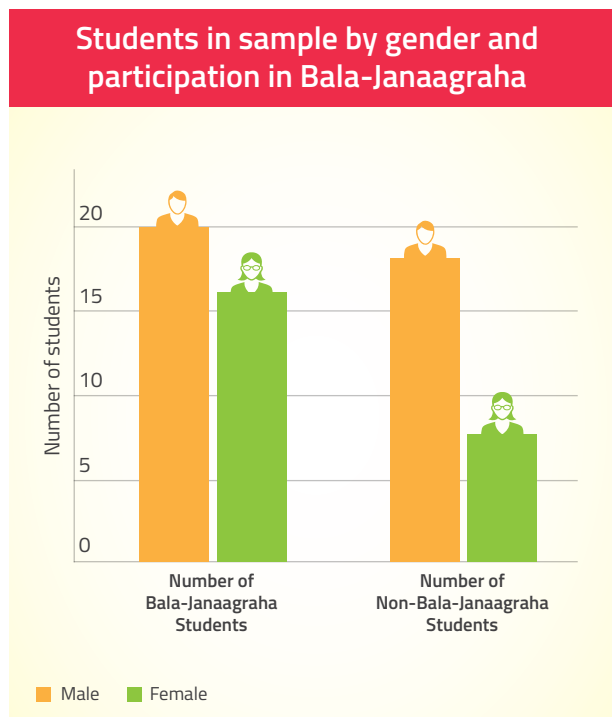
A total of 63 eighth-standard students from 10 schools participated in the research project. Each school nominated five to 11 students for the study. Thirty-nine of the participants, or just over 60% of the sample, were male, while 24 were female. Seven of the participating schools were English-medium, while two were Kannada-medium and one was Hindi-and-English medium. The participants were from a variety of social classes.

The sample included 38 students from five schools that participated in the Bala-Janaagraha program and 25 students from five schools that did not with the goal of comparing the responses of the students who had passed through Bala-Janaagraha with those of the ones who had not. Two of the students at one of the Bala-Janaagraha schools joined the activity although they had not participated in Bala-Janaagraha. This brought the total number of respondents who participated in Bala-Janaagraha down to 36 and the total number of respondents who had not participated in Bala-Janaagraha up to 27 (see Figure 1).²³

The research was carried out in February and March 2015, at the end of the 2014-2015 academic year, when students from Bala-Janaagraha had just passed out of the program. During this time, the ideas they had been exposed to in the program were likely to be fresh in their minds. Consequently, this was an ideal time to compare their views on urban issues with those of eighth-standard students in other schools.

Bala-Janaagraha facilitators, who are tasked with running the program around Bengaluru, helped identify schools that were and were not part of the Bala-Janaagraha program that represented children from across the economic spectrum in different neighbourhoods of the city. Principals and teachers in several schools around the city were approached with the help of Bala-Janaagraha facilitators, told about the project and given a formal invitation in either English or Kannada asking if they would like to join the project (see Appendix A) in February 2015. Nine of the 10 participating schools were identified in this way. A tenth school that had not participated in the Bala-Janaagraha program was identified with the help of the American India Foundation, which runs a digital video program in schools around Bengaluru in partnership with Adobe Youth Voices. The final set of 10 schools included a mix of government and private schools with students from a variety of socioeconomic backgrounds around the city. Table 1 provides an overview of the sample.

Figure 1



²³ It is possible that these two students might have learned about the subject matter of Bala-Janaagraha through their peers, so their observations were removed from the data set for the third portion of the analysis in which the attitudes and observations of Bala-Janaagraha students were compared with students who had not been exposed to the program.

Table 1 - Overview of Sample

School	School type	Language of instruction	Total participants	Male participants	Female participants	Economic classification
Bala-Janaagraha Schools						
School 1	Private	English	7 ²³	-	7	Lower class
School 2	Private	English	5	2	3	Lower class
School 3	Private	English	10	5	5	Lower class
School 4	Government	Kannada, English	11	11	-	Lower class
School 5	Private	English	5	2	3	Middle/Upper class
Non-Bala-Janaagraha Schools						
School 6	Government	Hindi-Urdu, English	5	5	-	Lower class
School 7	Private	English	5	3	2	Middle/Upper class
School 8	Private	English	5	3	2	Middle/Upper class
School 9	Government	Kannada	5	3	2	Lower class
School 10	Private	English	5	5	-	Lower class

For the purposes of analysis, schools were classified economically into two categories – middle/upper class and lower class. These categories were based on:

- the information that participants provided about their parents' occupations in the interview questionnaire;
- information about the fees, if any, charged by the schools;
- information about the economic status of the student body of the school from data gathered by the Bala-Janaagraha program, Bala-Janaagraha facilitators and teachers; and
- the economic status of the neighbourhood surrounding the school.

Given the small sample size, both categories are quite wide-reaching and capture a range of schools. For example, the lower class category includes government schools that charge nominal, if any fees, to students from very poor families and provide free uniforms and notebooks, as well as private schools in slum areas that cater to less poor families able to pay low fees for their children's education.

24 Two of the students that participated in the research project at this school had not passed through the Bala-Janaagraha program.

The students who participated from each school were selected by teachers. It is possible that this created a slight bias in the sample, as teachers may have selected students that they felt were particularly articulate and civically engaged. In addition, the sample is skewed towards Bala-Janaagraha students and towards male students. The sample included nine more Bala-Janaagraha students than non-Bala-Janaagraha students because some of the Bala-Janaagraha schools requested that more students participate in the activity. The sample included more male students because three of the schools that participated were boys' schools. While the gender distribution was not ideal, the study was conducted within a limited time frame and it was not possible to dedicate resources to finding more schools for the project to balance the gender bias.



3.3 Overview of data collection

Data was collected in each school through a qualitative research activity, which involved photography, a writing activity and one-on-one interviews with each student. The goal of the process was to gather information about how the students perceive urban problems, what they like about Bengaluru and the extent to which they feel they have the agency to change things they are concerned about. The activity was led by the lead researcher (Alia Dharssi) in the seven English-medium schools, while Janaagraha staff fluent in Kannada facilitated the activity in the two Kannada-medium schools. In addition, students in the Hindi-and-English medium school were significantly more comfortable in Hindi, so Hindi speakers helped to facilitate the research activity there. The session lasted two to two-and-a-half hours and consisted of four parts: a brief photography lesson, a photo walk, a written activity and one-on-one interviews. Janaagraha provided tablets for the students to take photographs during the activity. In addition, one to three Janaagraha staff helped the lead facilitator to run each session. The number of staff depended on how many students participated.

3.3.1 Photography lesson

Each session began with a brief 10-to 15-minute photography lesson. Each student was given a tablet they would use for taking pictures during the activity and taught how to operate it. They were also shown a video on basic principles of composition developed by Adobe Youth Voices, a project that works with students in marginalized communities by giving them a chance to work with digital media. This was followed by a brief discussion about how to compose interesting and diverse pictures.

3.3.2 Photo walk

The person leading the activity then explained to the students that they would go on a 30- to 60-minute walk around the school's neighbourhood and take pictures. The time frame for the walk depended on the block of time that the school provided to complete the activity. The students were asked to take pictures of positive things, such as things that seemed safe, helpful or nice for people coming through the area, as well as negative things, such as things that seemed unsafe, dangerous or difficult for people coming through the area. Each child was asked to take at least 10 pictures, urged to be creative and encouraged to incorporate people in their photography where relevant. The students were not given examples of specific things to photograph, as the goal of the activity was to see how they perceived urban issues without being prompted to focus on specific ones.

Students then split into groups of two to four and walked around the area near their school for 30 minutes to an hour. Each group was accompanied by a teacher and/or researcher from Janaagraha for safety reasons. All supervisors were asked not to provide students with any instructions about what things they should or shouldn't photograph. When students grouped together and took pictures of the same thing, they were asked to take pictures independently and minimize discussion with one another.

The routes for the walks were planned in advance of the research session. The lead researcher walked around the locality with a map of the area before meeting the students in order to plan rough routes for the photography activity. Though the neighbourhoods in which the schools were located were diverse, the routes were designed with the aim of exposing the students to similar types of spaces, such as parks, areas with shops and/or street vendors, busy roads and side roads. Those leading the walk were briefed on the routes, but could alter them if the students requested to go certain ways because the goal of the walk was to highlight the issues that mattered most to the students.

All of the photographs featured in this report were taken by students during the photo walks.

3.3.3 Written worksheets

After the photo walk, students returned to the school to complete the worksheets and discuss the walk. Each child was given a snack and asked to fill out a worksheet (see Appendix B) in which they could write a few sentences about up to 10 pictures they had taken. The worksheet asked students to select pictures (from only those they had taken themselves which they could view on their tablets) that they felt represented key positive and negative issues and to write a few lines explaining what the picture showed and why they had selected it. This part of the activity, along with part four, lasted 60 to 90 minutes.



3.3.4 One-on-one interviews

While the writing activity was going on, each student was pulled aside for an individual interview with one of the facilitators. Each student was asked a set of questions (see Appendix C) about what they had noticed on the walk, why they had taken the pictures they did, what they liked and disliked about Bengaluru, the role they felt they could play in improving the city and, if applicable, the impact of Bala-Janaagraha on their perceptions. The interviewer took detailed notes during the interview and, in most cases, also captured an audio recording for later reference. All interviewers were briefed on the questionnaire in advance of the interviews and asked not to prompt the student with examples of specific urban problems or solutions to the issues.

3.4 Data cleaning and analysis

The data set consisted of photographs taken by the students, the worksheets they completed and their responses to the interview questions. After the data was gathered, it was entered or loaded onto a computer. The Kannada language interviewers were asked to translate their notes on the interviews into English, but the Kannada worksheets were translated by a professional service. In one of the English-medium schools, the students were more comfortable expressing themselves orally in Hindi, but completed the worksheets in English. These Hindi language interviews were also translated by the interviewers. The lead researcher reviewed all of the notes and clarified doubts about them with the interviewers. In addition, either the research assistants or lead researcher reviewed the audio recordings for the interviews for which they were available to double check the notes and pull out relevant quotes. After the textual data had been translated and cleaned, it was anonymized and loaded onto NVivo, a qualitative research software. The textual data was reviewed in tandem with the photographs and coded for a variety of themes related to urban issues and citizenship. The coded data was then extracted from NVivo and analyzed to produce the findings detailed in the next section of this report.



The background is a solid blue color with three diagonal stripes in a lighter shade of blue running from the bottom-left towards the top-right.

FINDINGS

4. FINDINGS

In its work on urban issues, Janaagraha focuses on two elements of quality of life: (1) the quality of infrastructure and (2) the quality of citizenship. This analysis will focus on these two areas as they relate to the experience of children. The findings are divided into three parts. The first part looks at how urban infrastructure affects children's quality of life. The second part assesses children's quality of citizenship by analyzing children's views on civic engagement in relation to urban infrastructure challenges. Finally, the third part examines the impact of the Bala-Janaagraha program on children's understanding of urban issues.

The analysis highlights the importance of incorporating children's needs and views into urban planning and policies by showing how urban infrastructure problems created by Bengaluru's rapid growth over the past two decades have had a significant negative impact on children's quality of life. These challenges include road safety, poor pedestrian infrastructure, garbage disposal problems and access to green spaces. They affect children across socioeconomic classes.

4.1 Urban infrastructure and children's quality of life

This study shows that children are acutely aware of challenges related to the quality of infrastructure in



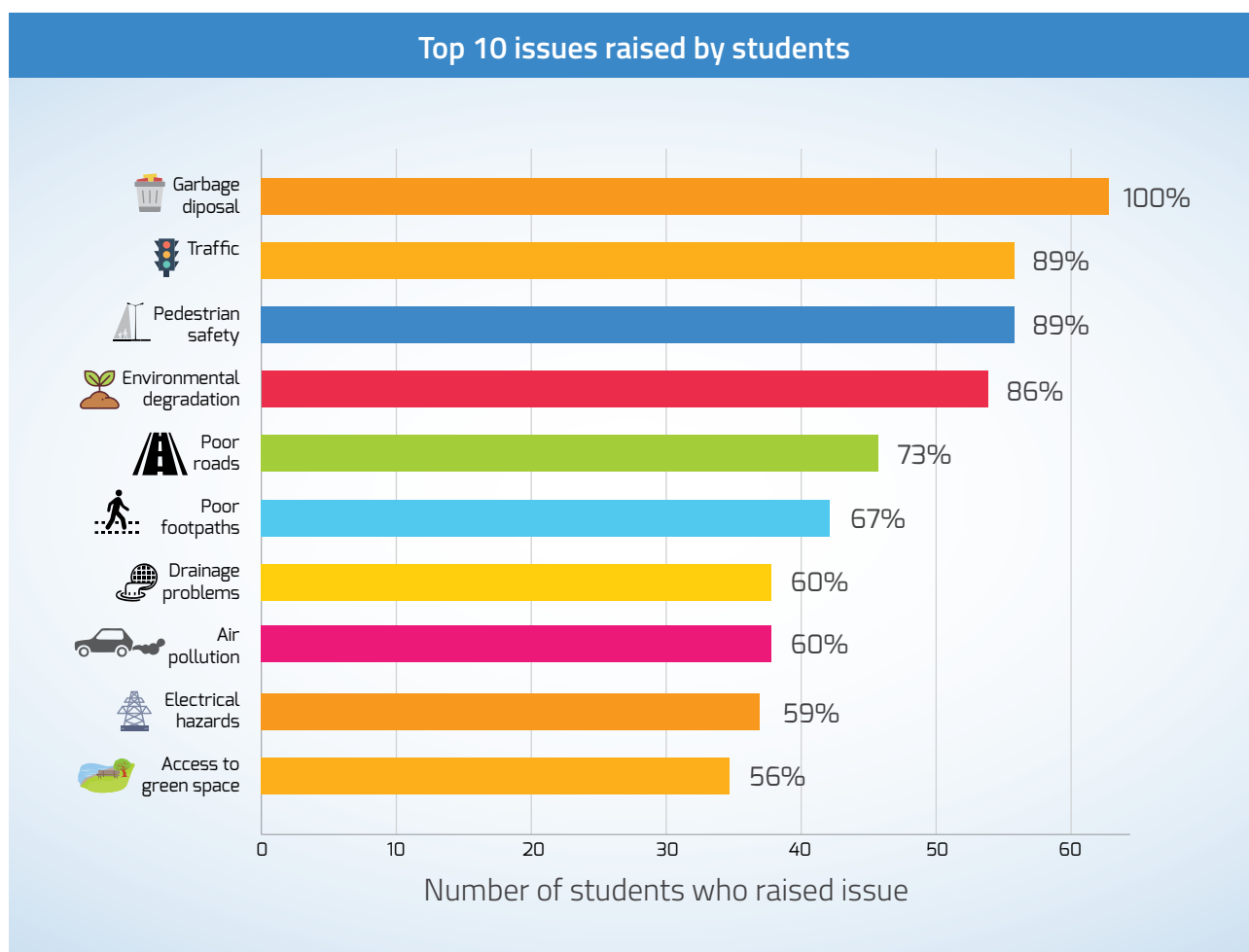


Bengaluru, especially issues related to garbage disposal and collection, road safety, pedestrian safety and green spaces, and that these issues have a negative impact on children's quality of life (see Figure 2). In particular, children pointed to a number of issues – ranging from a lack of footpaths to poor garbage disposal infrastructure – that impinge upon their health and their safety. The participants' main observations on issues related to urban infrastructure and quality of life are detailed below and fall into the following eight themes:

1. Garbage disposal problems
2. Road safety and walkability
3. Public services
4. Nature, green spaces and parks
5. Environmental concerns
6. Animals
7. Social Issues
8. Views of the government

A common theme that arises throughout the analysis is how these issues affect children's own safety and well-being, as well as their concern for the welfare of others. In addition, many of the children discussed how hazards posed by urban infrastructure limit the spaces in which they can play and move around safely.

Figure 2



4.1.1 Garbage disposal problems

Every single student who participated in the research project discussed the negative impact the garbage scattered around the streets of Bengaluru had on each of them and on others living in the city. Many mentioned it multiple times during the research activity. This is unsurprising given the prevalence of litter on Bengaluru's streets.

"In Bangalore, thousands of people throw garbage where they want," one student commented.²⁵ Another student wrote: "Nowadays in Bangalore, there are open sites almost everywhere where people have dumped their garbage, welcoming all types of insects, mosquitos, crawling creatures, etc."²⁶

More than three-quarters of the students who participated raised concerns about the impact of garbage on their own health and the health of others. These students linked insect-borne diseases, such as malaria, to garbage, noting that piles of trash near their school, in parks, in playgrounds, in vacant sites and on the roads attracted mosquitos, flies and other insects. Some also worried about how garbage piled up near hospitals or schools could affect the health of patients and children using those facilities.

"We can see the garbage thrown near main road," one student wrote in reference to an image of a footpath near her school (see Picture 1). "This is beside our school. A lot of the people are dumping the waste there. There is an electric transfer and parking system back of that garbage we can see the shops like clothes shop, hotels and there is also a school where more than 500 students are reading and they will get affected by the mosquitos and by diseases."²⁷

Picture 1



25 School 9, student 3.

26 School 5, student 3.

27 School 1, student 2.

Some children raised concerns about how garbage harms the quality of produce and other food sold on the streets, such as through flies that might carry germs by landing on produce after sitting on a garbage heap. “I don’t like this because woman was selling the vegetables on the roadside in the garbage,” wrote one child after walking past a row of vegetable vendors near mounds of garbage (see Picture 2). He also worried about the vendors’ babies who they brought with them as they worked.²⁸

In addition, the participants explained how garbage limited their freedom of movement and their ability to make use of urban space. Piling up on sidewalks, parks, roads and in vacant lots, children noted that garbage made it difficult for them and other children to walk around and to play safely in the city. Some blamed businesses and members of the public for failing to consider children and pedestrians when disposing of waste on the streets.

At the same time, almost all the students were concerned with how garbage was handled by the government and said local authorities needed to do more. About one-sixth (12 respondents) said there was a need for solutions like recycling, composting and segregation. At the same time, about half of the students (34 respondents) discussed how garbage presented a huge civic engagement problem in which the majority of the population dumped garbage in public spaces with no regard for the impact of their actions on others. Sixteen of the students were also concerned about the impact of burning garbage on the environment or air quality.

Several students took pictures of clean shop fronts, roads, parks and homes. They highlighted that they liked these places and wished more parts of the city were like them. In addition, about one-third of the children (19 respondents) took pictures of people cleaning and emphasized that they were making a positive contribution to the city. “It’s like our home, like the clothes we are wearing. There should be neatness. There should be cleanliness in it, as should be in India,” said one student.²⁹

Picture 2



28 School 6, Student 2.
29 School 10, Student 2.

Selected student pictures and reflections on garbage disposal problems



"It is about the situation of India where there is no place to put the garbage at place and the people don't care to clean up the waste there and there are no cleaners also." – School 7, Student 3

"The picture shows a damaged car that has been kept near a drainage. I took this because nowadays many people throw things and they spoil our city" – School 7, Student 4



"There is full garbage in the picture and in front of the garbage there is a clinic. The garbage smells very bad so the people walking on the road get vomiting and some other diseases. The people who goes to the clinic will feel uncomfortable and will feel the effect of that area. My request to the people to not to put the garbage in front of the clinic." – School 2, Student 2

"This is picture where we can see a vegetable shop and the garbage is thrown near the shop and the people are not bothered about that. I took this picture because so it a vegetable shop we go buy the vegetables and none of the people had noticed the garbage and cleaned and they buy the vegetables they have never imagined that what their health is going to be. The mosquitoes sit on the garbage will go and sit on the fresh vegetables and that is why so many diseases had taken place. My suggestion is that to clean the garbage and the people while buying vegetable should be vigilant." – School 2, Student 1

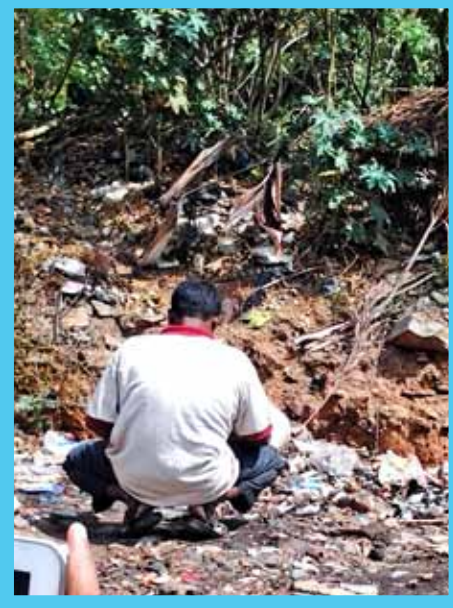




"Pillana garden football ground: this is the ground which is situated in pillanna garden. It is ground where the students play but the people urinates in the ground. Drinks the alcohol and breaks the liquor bottles in the ground. So, students are affected by these actions of people." – School 3, Student 2



"In the picture we can see a person urinating in public place and polluting the trees. We can see many trees but we can see garbage near it. I took this picture because it was getting very irritating to see when that person was doing urine." – School 3, Student 3



"The picture is about a garbage bin. In India we have garbage bin only in some places. Sometimes people are ignorant to put the waste materials to the bin. So its my opinion that garbage bin must be placed in each and every area. People must responsible and educated enough to put the waste products to the bin." – School 8, Student 5



"Plastic, paper and leaves have been burnt beside the park. Beside this there is a examination hall named Karnataka Government. Even then fire has been put and ash is there. So waste should be separated like wet and dry waste." – School 4, Student 2



"Some young people are cleaning the roads this can make the look of the road good and look clean. This is part of swachh bharaat. For cleaning India this movement is conducted." – School 10, Student 1



"This picture depicts a lady carrying the garbage. I took this picture because it gives us a moral not to throw garbage on the roads, to keep our city clean." – School 5, Student 3



"This picture talks about the maintaining of the dust bins even outside the school so that people can use. This is one such thing people can do to maintain their locality clean." – School 5, student 5



"I like this picture because they are cleaning park correctly, they want do daily. If they will not this park if will become dirty. No one people will come to this park." – School 6, student 1



"One could see huge piles of waste in cities like Bengaluru. If such garbage is dumped in roads poisonous insects may fly to the nearby houses and cause trouble. So waste should be separated as wet and dry waste. Garbage should not be thrown wherever we want. It will be a cause for ill health. So dispose waste properly." – School 9, student 4





"A clean and the beautiful look of the street and people love to walk in this type of street."
– School 3, Student 5



"I click this picture as it helps the people to keep the city clean and if every street is provided with dustbins we can preserve cleanliness."
– School 3, Student 1



"The picture is of good house and also it is well maintained home. I took this photo because all the people should maintain cleanliness in front of them house. In this picture it is very sufficient, and also plants is there which give us fresh air and keeps us healthy. If all the people maintain like this 70% of our city will be improved."
– School 1, Student 3



"They are demolished the building and they kept the stones and mud their itself. And they make a big holes their and kept like that only. The children or the persons who walk and the small children will play there. And they will not look the holes and they will fall down in the big hole and they will take some damages from the big stone so they should reclose the big holes."
– School 1, Student 6



"There is a women as a servant in near by apartment near Richards Park. I had took this pic bcoz after having so clean and tidy area there is garbage in that area and the women is taking keen interest and keeping her surroundings clean. If all the citizens do the same our city will change into clean city."
– School 3, Student 10



4.1.2 Road safety and walkability

Every single student raised concerns related to the roads in Bengaluru. Almost every one of them (56 respondents) was concerned about issues related to traffic, including rash driving and safety while in vehicles. Nearly as many (54 respondents) described road hazards, such as cows on the road, a lack of speed bumps, debris on the road and speeding, that increased congestion and contributed to accidents. Two-thirds of the students (46 respondents) were concerned about the poor quality of roads in Bengaluru. They noticed issues like potholes and poor drainage systems.

Another major concern for the students was walkability and pedestrian safety. Almost 90% (56 respondents) highlighted challenges that they faced as pedestrians or that they saw others face. “I noticed vehicles had been parked in footpaths and garbage was there so we couldn’t walk there,” one student said of the area around her school.³⁰ The majority of participants described similar problems that made it a struggle for them to walk around. These problems included damaged footpaths, vehicles parked on footpaths, garbage and other materials obstructing footpaths, shops or street vendors taking up pedestrian space, electrical hazards and drainage issues. Two-thirds of the students (42 respondents) also made specific comments about footpaths. Only seven of them said something positive about footpaths they saw on their photo walk. Moreover, these same seven students expressed concerns about walkability just like the others.

“The major problems of Bangalore is the footpath problem,” one student wrote in relation to the photograph below (see Picture 3). “We can’t walk on the roads due to the fast moving vehicles and on top of it we also can’t walk on the footpath due to its bad condition. Old people cannot walk and fear to walk on the footpaths. And also on top of the bad conditions, people illegally setup stalls here and there on the footpath causing inconvenience.”³¹

Picture 3



30 School 7, student 5.

31 School 5, student 3.

Similarly, many of the students highlighted how issues related to walkability affected them in their daily lives or how they affected children generally. A few students expressed concerns about how these challenges affected the elderly and disabled. "Nowadays in Bangalore, at many places, road work is going on. This road work should be completed quickly," another student said. "Because if they leave it half done the children who walk may fall into it and die. So I stress this point."³²

Picture 4



The participants also had related concerns about the accessibility of play areas and parks. About one-third of the students (23 respondents) described factors that affected their ability to use and benefit from parks, including garbage lying in play areas and hazards, such as open electric transformers, that could harm children if they were to get too close. "When children are playing games and the shuttle cock falls in the wires, they will get hurt if they try to pick it up out of the wires," one student explained.³³

In fact, exposure to electrical hazards around the city was a huge concern for almost two-thirds of the students (37 respondents), who worried about being electrocuted by loose wires on roads and sidewalks, as well as in parks. Some said that open transformers were an especial risk for young children.

"The picture is the image of an transformer where it is not protect by a metal grill. a part of it is cover and where the other part part of is not covered," wrote one student (see Picture 4). "The small children in there, may go there to pick the ball, but instead of picking the ball, they do other things like touching the circuit by which they can get electric shock and die."³⁴

Critically, many of the students concerns about safely navigating the city overlapped with and intensified one another. For example, one student who photographed a pile of garbage near an unsafe electric pole (see Picture 5) wrote: "Do not put garbage near electrical poles, it may cause short circuit. If the garbage is dumped near electrical pole there will be chances of getting fire. So it may spread to houses also. So if you find garbage near electrical pole inform it to the BBMP."³⁵

Picture 5



³² School 9, student 3.

³³ School 9, student 5.

³⁴ School 7, student 3.

³⁵ School 9, student 1.

Selected student pictures and reflections on road safety and walkability



"This is a picture where the footpath is filled with garbage. We cannot walk in those streets as there is too much of smell. The worms and insects accumulate there and there is a chance of people getting diseases. So, I want to inform this to the BBMP and would tell my friends and relatives to not litter the wastes on the ground." – School 7, Student 5



"We can see a good parking system over here. Every area should have at least one parking shed like this. But on the other side the vehicles are parked near their houses on the road. And through this the people feel uncomfortable to cross the road. If their vehicle is parked in those sheds the traffic jam will be less." – School 2, Student 3



"The first picture is of a ditch. We chose this picture because the blind people cannot see, so they will put their leg into it. If the school children come playing on the footpath and place their legs, their leg might pain or may get hurt also." – School 4, Student 2



"They have demolished the building and they kept the stones and mud themselves. And they make big holes and keep them like that only. The children or the persons who walk and the small children will play there. And they will not look at the holes and they will fall down in the big hole and they will take some damages from the big stones so they should reclose the big holes." – School 1, Student 6

"Encroachment of footpath by the vehicles opposite to the garbage causing disturbance to the pedestrian to walk on this busy street. People can't walk on this footpath and cause accidents." – School 3, Student 4





"Zebra crossing is in the picture. I click this picture because its convenient way for the people to cross the road safely, and this kind of zebra crossing should be provided to the roads close to the schools and hospitals." – School 3, Student 4



"I have taken this picture because if the people walk on the road and if it gets short circuit the people who walk will get problems." – School 4, Student 10



"This picture depicts a sign board which shows a school sign. I took this picture so that the people passing by with their vehicles are aware that there is school nearby and they have to move slow. Now a days in Bangalore people don't care about anything else and these signs should be put every where near the schools so as to prevent a this happening." – School 5, Student 3



"In the picture there is a transformer with out the board "Danger". I have taken it because we should keep a board so that no one will touch it." – School 10, Student 4



"This picture actually depicts a pit filled with full of mud and stones. It may turn to be problematic as that place is normally a playground for children and they may get into trouble if they fall into those stones." – School 5, Student 2



4.1.3 Public services

The majority of students commented on public services, especially access to potable water. About two-thirds of the students (40 respondents) discussed water infrastructure in Bengaluru. The bulk of these students were concerned about the quality of water infrastructure, including issues like access to water, water shortages, the cleanliness of drinking water and wastage of water. Just over one-of the students (24 respondents) said that they saw too much water being wasted in the city or in the areas around their school. In some cases, this was because of neglected infrastructure, such as broken or leaky taps. In others, it was because people were not careful about turning off public water taps after using them. This was a particular concern for children from poorer backgrounds. Some were concerned that a scarce resource was being wasted because their community only had access to water once every few days.

Another concern raised by 41% of the students (26 respondents) was the quality of the water that they or others in Bengaluru had access too. "Drinking water is like toilet water," one student said.³⁶ The students worried that water was contaminated because of a range of issues, including garbage and animals coming into contact with water sources. One even raised concerns about the source of water in her school. In contrast, only seven students made positive comments about water infrastructure in the city and two of these students were among those who raised concerns about the quality of water delivery. The bulk of the concerns about water quality and access to water were raised by students from the relatively poor schools. Just four of the students who mentioned concerns about water quality and access to water were from well-off schools.

In addition, about of the students (22 respondents) commented on the public transport system. The key concerns they raised included people putting themselves in danger by waiting for buses on the road instead of the footpath, delayed buses and other concerns about quality of service. A handful of students said it was important for the government to improve public transport and for people to use it to decrease pollution. Others said they liked the metro and other elements of Bengaluru's public transportation system.

Students had less to say about other public services. Only nine students expressed concerns about the quality of Bengaluru's sewage system and access to public toilets. Six said they were concerned about poor access to electricity in the city.

36 School 7, student 3.

Selected student pictures and reflections on public services



"In this picture you can see a lady who is collecting water from the water tank and near the tank there are fungi and bacteria and she is collecting the water from drinking purpose what happens to her when she drinking this water she falls sick. I talked to that she said that there is no taps in her house and she don't have enough money to build the taps. My suggestion is that the government should build the taps and providing the people the facilities." – School 2, Student1



"This is picture of garbage and sewage water and the fresh water is flowing in that dirty water. It is a picture near our school residence. And the flowing in the dirty water was collected by the people for the drinking purpose so they get weak and diseases. And the school children will also get a problem because the smell is stinking. The solution for this is we can clean all the waste and provide the taps in their houses so that every will be healthy and the waste should be cleaned by BBMP people should also cooperate." – School 2, Student 1



"There is a water tap which is fully covered with untidy wastage. And the pots are fallen in that wastage. I had took this pic to say that the people make the water tap facilities also dirty were they also fetch the water. After the pots became untidy they fetch the water in the same. They drink that water itself and then suffer from many diseases. By which our city will face many problems." – School 3, Student 10



"This is about wasting water. First in the earth we have pure water to drink. If we waste the water continuously there will be not water to drink we will die. We should stop wasting water from today. The water so precious to our life. We can't live without water. So please stop wasting water." – School 2, Student 4



"Wasting of water from the tap. ... Water is the importance thing to our survival. The people should contribute money & proper this damaged tap." – School 3, Student 4

4.1.4 Nature, green spaces and parks

After garbage and roads, the issues that came up most frequently during the research process had to do with nature and green space. Sixty of the 63 students discussed the quality of green space in the city. Of these, 51 students mentioned places with greenery, including parks, streets and houses that they liked. In addition, 49 students pointed out trees or areas with trees that they enjoyed looking at or spending time in. The majority of students also described the ways in which greenery and green spaces, such as parks and houses with nice plants, benefitted them and others in Bengaluru. The benefits they mentioned included cleaner air, shade and nice scenery. Some students noted that green space made them feel good, calm and happy. Several also said that green space improved the health of residents of Bengaluru by improving the environment of the city and providing areas for people to exercise and play.

Even as they discussed the benefits of nature, the majority of the students were concerned about the quality of green space in Bengaluru. Eleven of the students lamented that Bengaluru was losing its reputation as a “garden city” and becoming a “garbage city.” About a third of the students (22 respondents) pointed out cases in which garbage was thrown near trees and in green spaces with many noting the problems it posed for people who wanted to enjoy the spaces, as well as the negative impact garbage might have on trees and plants.

Just over half of the students (35 respondents) also said that they felt there was a need for more greenery in the city because of the benefits green spaces provided for personal well-being and to resolve concerns about environmental problems and pollution. “We should plant a tree in every house or in every place where we live so that carbon dioxide is cut down,” one student noted.³⁷ Another said: “If we keep cutting trees, in the future, we won’t get oxygen.”³⁸

37 School 7, student 3.

38 School 9, student 3.

Selected student pictures and reflections on nature, green spaces and parks



"It is an playground where the childrens should play and be healthy and become fit, but the in case of some schools the play ground is some cellar where they will not get vitamin D and be healthy and become fit enough and they will be strong enough." – School 7, Student 3



"In this picture we can see the beauty of the nature which attracts us the flowers with different colours attracts insects like honey bees, butterfly etc and insect do pollination and because of that flowers will grow well and this show that insect are friendly to the farmers" – School 10, Student 3



"This picture depicts a green scenery. I took this picture as we need to plant sapling so as to decrease the amount of pollution at its maximum level. Now a days there is a deficiency of parks in bangalore and children don't get to play in parks. And also by seeing the picture itself we get a soothing feeling then by experiencing it we can get peace of mind." – School 5, Student 3



"The people who are living in that area get good air and good pollution and they will be peace in that area. And they will not get any bad diseases. Plants will protect the peoples in that area from the disease. They are good to health when we plant the trees in front of our homes." – School 1, Student 6



"In the picture there is a tree. Why I choose it because there are a little trees left in our area Neelasandra. The trees gives us shade and provides oxygen to us. And helps the birds to rest, gives us shade and shelter for all the human beings. If a person cuts the tree also the tree will never take revenge but it will regrow again and help us. My request is that our government should plant as much as trees possible in the public area." – School 2, Student 2



"In the picture, we can see a very beautiful tree near the mosque. I took this picture because I love trees and plants. We can grow more trees to get greenery and to get fresh air. It is found near the citizens' primary school. It gives us shade from the sunlight and it take me very good to see it." – School 3, Student 3



"in this picture I saw the beauty of nature and I even thought plants are very beautiful when they are outside the pot and they even give shade and oxygen to the dog." – School 8, Student 3



"We saw many trees near the road. It was looking amazing and place was very clean. people says the cleaning is next to godliness." – School 3, Student 9



"In this picture, we can view the wonderful plantation alongside the street. The trees here shows us the wonderful greenery. This is a major plus-point on the road." – School 5, Student 1



"This is small park near the houses by this park the people living near the park get good oxygen to breath in and walking around park could help us in good health. The air smell fresh and its cool. The fog which comes in morning looks very good. This is good for health." – School 10, Student 1



4.1.5 Environmental concerns

In addition to green space, pollution, environmental degradation and conservation were some of the top issues that concerned the students. In fact, 86% of the students (54 respondents) voiced some sort of concern related to environmental issues. The students' top concerns were air pollution, the impact of garbage on the environment and the loss of trees.

Just over half of the students (38 respondents) talked about polluted air in Bengaluru. The main factor to which they attributed the poor air quality was traffic. "Our Bangalore has more number of vehicles," wrote one student. "Because of this environment is damaged and people are also facing problems. Pedestrians are facing problems to walk and people are dying of vehicle smoke. This smoke is also damaging the ozone layer."³⁹ Many students also talked about the pollution created by burning garbage, a common practice in Bengaluru. A handful discussed pollution caused by commercial activities like construction. In addition, 13 students said that air pollution was among the city-wide issues that bothered them.

More than one-third of the students (24 respondents) also discussed the negative impact that Bengaluru's garbage problem has on the environment. For example, one student worried that plastic waste spoiled the soil and hindered plant growth because it didn't decompose when thrown on the ground.⁴⁰ Another commented on how cows ate garbage and explained this would, in turn, affect the quality of milk.⁴¹

Finally, more than a third of the students (24 respondents) were concerned about the loss of trees, while more than half (33 respondents) called for planting more trees in Bengaluru. In total, two-thirds of the students (42 respondents) either raised concerns about tree loss, said more trees should be planted in the city or both. One student expressed a common sentiment when he said: "We should plant a tree in every house or in every place where we live so that carbon dioxide is cut down."⁴²

The students connected these environmental problems to their welfare in a variety of ways from pointing out specific negative impacts, such as the ways in which air pollution might harm the quality of vegetables sold by street vendors, to discussing the implications of environmental problems for society more broadly. Just under half of the students (30 respondents) said it was important to conserve environmental resources, especially water and trees.

Interestingly, the majority of students who discussed resource conservation were from lower income backgrounds (25 respondents). This may have had to do with shortages these students faced in their everyday lives. For example, 20 students from relatively poor schools were concerned about water being wasted in their communities. In some cases, these students said they did not have household taps or only had access to intermittent sources of water.

39 School 9, student 3.

40 School 10, student 1.

41 School 6, student 4.

42 School 7, student 3.

Selected student pictures and reflections on environmental concerns



"This picture is about garbage dump near drainage. I included this picture to show that how is the man concern towards nature and to himself. Though man knows that it has a devastating effect on other and himself he does this to get rid of garbage. Such actions should be stopped immediately by man." – School 7, Student 2



"Openly placed food at roadside: People will get bad health by eating openly placed food at roadside. If fly, mosquito and other insects sit on the food placed at roadside it may cause for ill-health because they carry poisonous items by their legs. And dust, smoke and poisonous gas may also fall on that food. Therefore one should not eat openly placed food." – School 9, Student 4



"In the picture there are the onions left on the corner of the road. The vegetable are not covered. It is on the side the vehicles which passes the road. The vehicle emit the smoke and the smoke will pollute the air as well as the vegetable will be polluted. If we eat those vegetables our health well be not correct we can get many diseases." – School 2, Student 2



"in this picture we can see that they have burnt plastic and plants. Because of that we can get environmental pollution because of burning trees the oxygen level will be reduce and carbon dioxide level will be increased. and if we burn plastic pollution will be also increased." – School 10, Student 3



"If we observe this picture we can see a cut coconut tree dumped on the footpath. There is no good environment in the present world. We have cut trees and plants. And the cut tree has been put on the road, so people are facing problems and getting accidents." – School 4, Student 6



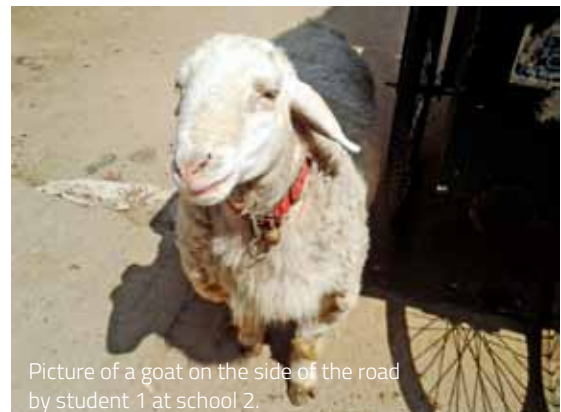
4.1.6 Animals

About half of the students (30 respondents) described animals they had seen on the roads or footpaths. Some simply took pictures of animals because they liked them (see, for example, Picture 6), but about one-fourth of students were concerned about the treatment of animals, especially stray dogs and cows. Just over half of those who mentioned animals (16 respondents) described problems affecting their welfare, such as a lack of shelters for stray dogs, the negative impact that eating garbage might have on the animals and poor infrastructure that might affect them, such as uneven roads that could cause a dog to fall.

For example, one student observed cows eating garbage and said he thought cows are not being treated with enough respect even though they are seen as goddesses in Indian culture.⁴³ Another student who photographed a dog sleeping on the foot path (see Picture 7) wrote: "It is bad because the pet animals they don't have place to sleep and they don't have the shelter, food to eat so that is a bad thing among these. We should give good shelter to animals also."⁴⁴

In contrast, one student photographed a dog in a cage (see Picture 8) and wrote "dogs should be tied" because he was worried that dogs would bite people.⁴⁵ He reflected views similar to those expressed by just under half of those who mentioned animals (12 respondents). They said they were concerned about public safety issues related to stray animals, especially dogs and diseases spread by animals that spent time in piles of garbage. Eight of the participants also discussed the traffic hazard posed by animals wandering Bengaluru's roads.

Picture 6



Picture of a goat on the side of the road by student 1 at school 2.

Picture 7



Picture 8



⁴³ School 8, student 2.

⁴⁴ School 1, student 5.

⁴⁵ School 4, student 5.

Selected student pictures and reflections on animals



"In this picture, there is a street dog. It will be a problem if it bite us, it causes of disease of rabies, so we should be careful and when we are taking some food it will bite and eat the food." – School 4, Student 3



"Many animals like dogs, cats, cows, etc walk on the busy road. They build up the traffic." – School 8, Student 5



"It shows the carelessness of our people. Due to this we get more diseases. We can see a dog eating the left ones and it is very horrible to see." – School 8, Student 3



"In this picture the animal is getting problem. The animal handler should take care the animal. If it is not in the road it may die any vehicle can come and hit the animal. The people should look and drive so accidents can be avoided." – School 1, Student 4

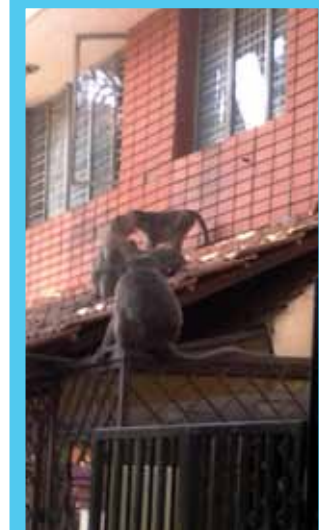


"I took this picture as stray dogs are a major problem. At least there are 5-6 stray dogs in a area. This causes inconvenience as they start banking and many a times children and small kids are scared to walk through a road due to strays dogs and if it bites you you have to bear the consequences." School 5, Student 3



"This picture depicts an electrical pole. This should be well a protected object since the slightest damage to it can cause a lot of trouble to the residents living in the roads. Since it is open at the top end, birds may come and sit , due to the strong flow of electricity, they die. it cause lot of inconvenience." – School 5, Student 4

"Here you see a troop of monkeys. By this you learn about the unity. They co-ordinate each other for their survival!" – School 8, Student 2



4.1.7 Social issues

The children were also concerned about social issues, the most prominent of which was poverty. Half of the students (32 respondents) brought up issues related to poverty either in writing or during the interviews. About one-fourth of the students (13 respondents) also raised concerns about child labour with many worrying about children who had to work instead of attending school.

A handful of students discussed other social issues, including the welfare of the elderly and disabled people, gender issues and equality. With regards to the elderly and disabled, the children's main concern had to do with the difficulties both groups would face when crossing the road. Some were also concerned about providing housing and other services for poor seniors.

Finally, ten students expressed concerns about alcohol and its negative social impact. The majority of them said that they were concerned about how alcohol affected youth, distracting them from their studies or other responsibilities. Eighteen of the students also raised concerns about the negative social impact of smoking. Many noted that, in addition to affecting the health of the smoker, smoking polluted the air and affected others nearby.

Selected student pictures and reflections on social issues



"A old lady who is very old and cannot do anything was cleaning a road. I felt bad by seeing it. This old women have to get a comfortable life as she is very old the government should provide her a house good food and a very comfortable life." – School 3, Student 7



"Many children are not educated. Education must reach to each and every person. Government is providing free education even many schemes are provided like scholarships that sponsor. Parents are not sending their children to school. So we should make awareness of education to the people." – School 3, Student 2



"In the pic you see a girl sleeping in the footpath. This image represents the poverty in India. Though our government provided everything it's being waste." – School 8, Student 2



"This shows us a picture of a street vendor again. We again asked him a few questions and here's what we've got - he says that he a isn't having a lot of money; about Rs 100 a day and finds it difficult to earn a living, he has a family to maintain and has a lot problems like financially etc." – School 5, Student 1



"It is a bad because the street vendors were selling a fruits, vegetables and other thing and their children also will suffer without education, food, shelter." – School 1, Student 5



"Begging on roads should not be. People should be provided with tents, old age homes, etc." – School 8, Student 4





"Homeless person is sleeping in this picture. He is sleeping near by a shop. This leads to more poverty. Government should still work hard to the poor people. They should give any job for people who is poor. If only educated are getting job and they will become good what about the poor people. So they should provide some jobs for them also." – School 1, Student 3

"This picture shows a man who is standing on an uneven platform which is high up. If he loses his balance there are great chances of fatal injuries. I have taken this picture to show the unsafe conditions that people are asked to work in and to what extent people go to feed their family." – School 5, Student 4



"The picture is about the man who is sleeping on the footpath. By this pic we would come to know that the man is very poor and he is below the poverty line. If he sleeps on footpath it will be problem for the people who walk on footpath and also the person who is sleeping." – School 1, Student 1



"Old people are not able to cross the roads in Bangalore. The pedestrians need to assist them to cross roads. The old people are very poor. Bikes and cars may hit them while crossing roads. So they have to go to government hospital since they are very poor. So their children should look after their parents, otherwise they have to be sent to old age homes." – School 9, Student 2



"In this image, I can see there is an old women doing her house-works but she don't have a proper house and she is staying in bad surroundings. Many people in India don't have even their house. People of India are suffering. There is more poverty in India compare to foreign countries." – School 10, Student 2



"A person is smoking in a auto. It is not good for his health and for the societies health and the oxygen gets mix with dirty air and also he gets many types of diseases like cancer, TB etc." – School 6, Student 5

4.1.8 Views of the government

All of the students discussed the government and/or public services in their responses. They pinpointed cases of poor public service delivery, including dismal garbage collection and badly built roads that affect their safety. As discussed above, their observations highlighted troubling ways in which poor management of public services affects the safety of children.

Just over one-third of the students (24 respondents) directly criticized the government for poor management of city infrastructure and services. These students commented on a variety of issues from late public buses to problems with the drainage system. Of these, nine discussed problems related to corruption, including police and government officials accepting bribes.

Some made incisive comments linking urban problems to poor governance. For example, one student who photographed an electrical hazard (see Picture 9) wrote: "This picture shows the violations of rules made by the government itself by fixing the transformer very closely to a house. We feel bad by seeing this that rules are not been followed well even by the government itself. Than how will the common man follow."⁴⁶

In the worst cases, the consequences of government neglect or mismanagement that students observed were fatal. For example, school 2 was located in a poor community within walking distance of a stream of sewage water with mounds of garbage (see Picture 10). All five respondents from this school highlighted this in their responses. They said it posed a hazard to children, created pollution, spread disease and overflowed into nearby homes when it rained. One commented that a small boy had fallen in recently and died because people were not able to pull him out quickly enough. This student added that she didn't feel she could do anything to help solve this problem because the community had already asked the Bruhat Bengaluru Mahanagara Palike (BBMP) for help, but adequate protective barriers had not been constructed. In other cases, students pointed

Picture 9



Picture 10



This photo was taken by a student in a poor community, within walking distance of a stream of sewage water. She wrote: "The drainage is open and is not having proper compound. Children who play near it fall into it and it makes the people cry... if the government picks the garbage and build a compound, it will be very useful to people near it and so that they can live safely" (school 2, student 5).

46 School 7, student 2.

out manholes, loose electrical wires, dangerous road crossings and water wells without protective barriers that endangered children's lives.

Though a minority of students directly criticized the government, it was clear that all had concerns about how public services or the government's decisions affected them. Picture 11 is a case in point. The student who captured it is one of six in the sample who didn't mention any actions the government should take in his written responses or during the interview, but he photographed a BESCOM box he felt was a danger to children. "Power supply box is open here," he wrote. "People will have to face problems. If small children touch that, there will be chances of shock."⁴⁷

In addition, 90% of students (57 respondents) identified ways in which they believed the government could play a role in improving the quality of life in Bengaluru and about half (31 respondents) identified specific problems they wanted to inform government officials about in the hope that they could be fixed. The potential actions they identified for the government ranged from improving garbage collection services to making footpaths easier to use to providing better schools for the poor. This is significant because it indicates that, in spite of the poor delivery of urban services and infrastructure in Bengaluru, many students have faith in the ability of the government to rectify local problems.

At the same time, the students didn't see the government as the only or, in some cases, the main solution to solving urban problems. Many of the students highlighted how urban residents could take responsibility for resolving local issues. In some cases, students said the government had taken some form of action, but the people had not done their part.

For example, one student said the government had repaired leaking taps in her neighbourhood, but they broke again because the people using them had not been careful. "We have to make people aware they should preserve that," she said. She added that the government and people should work together.⁴⁸

Another student expressed similar views in relation to Bengaluru's garbage problem. "Daily I will see the garbage dumping around that tree though the BBMP has given a notice that please don't dump the garbage," she wrote in reference to an image she had captured (see Picture 12). "Then the people are misusing that place. Near that place there is a temple, school and hospital too. They are getting disturbed from that. More than 150 people are suffering."⁴⁹

Picture 11



⁴⁷ School 4, student 6.

⁴⁸ School 2, student 1.

⁴⁹ School 1, student 2.

Similarly, a student who photographed a cow eating a pile of garbage on the sidewalk (see Picture 13) observed: "The people are using the footpaths like toilets and the Government have warned to don't use like toilets and they notice to the people even the people are seen the notice and they are using like toilets."⁵⁰

In addition, a handful of students (16 respondents) made positive comments about government policies or actions. These students pointed to things like road signs put up by the government and areas of the city where the government was handling garbage effectively. Some commended the Swachh Bharat campaign. Others said they liked infrastructure in Bengaluru, such as Bengaluru's metro and Lal Bagh. Many more highlighted infrastructure that helped them stay safe, such as zebra crossings, street signs and street lights, although they didn't directly link the provision of these services to the government.

Picture 12



Picture 13



50 School 6, student 4.

Selected student pictures and reflections on the role of government



"It shows as the broken dividers which are public property and how, it has been damaged. I took this to show you the condition of public property." – School 5, Student 1



"The waste of that shop has dumped near the shop. It is very bad that dumping like this near the road. I took this picture because the owner of that shop or garbage collector should clean this. But they are not doing these work properly." – School 1, Student 3



"In the picture, the roads were get polluted and the water was stagnant. There were garbage unit. I took it, because it was very dirty. If we go near by it we would get very angry. We should complained it to the MLA or to the Palike to get cleaned up very soon." – School 3, Student 1

"In this picture the boys are crossing the road without the zebra crossing. If any car cross and dash the or any accident takes places. So we should be careful while crossing the road and government has to provide zebra crossing in roads." – School 10, Student 3



"It's the picture of a sign board and it mentions the cross, main, phase. It's easy for us to recognise the roads and find the way easily while walking on the roads. It avoids the confusion of roads. Once with the help of the sign boards I was able to find the road and the house where I had to go. So, the sign boards are very useful for us, especially while walking." – School 7, Student 5



"A man with pushcart which is provided by BBMP. He is doing his job given by BBMP. He is cleaning the road very clean & tidy. The road has become beautiful. The garbage is took into a cart." – School 3, Student 4

"There is no proper traffic system in lower area.... They don't stop on the signal. The will ride very fast that they will cross the limit. The traffic police should be very strict. Some police are corrupt. They took some money and live out them easily." – School 2, Student 4



4.2 Children's views of civic engagement

In addition to the quality of infrastructure, this study also looks at the second aspect of quality of citizenship as defined by Janaagraha: the quality of citizen engagement. The quality of citizen engagement has to do with the extent to and ways in which residents of Indian cities recognize their role and take ownership over improving their neighbourhoods. In this vein, the study analyzes how students think the urban problems they mentioned can be tackled and what role they, as citizens of the city, might play in possible solutions.

The students were not short of ideas about how Bengaluru could be improved. Every student pointed out ways in which the city could be better. They saw roads that could be cleaner, dangerous intersections that needed crosswalks, piles of garbage that needed to be cleared, and places where there weren't enough parks and trees, among other issues. For each of these problems, they also mentioned many solutions.



This photograph was taken by a student who passed through the Bala-Janaagraha program. She wrote: "This picture shows a board that says 'cleanliness is happiness'. I have taken this picture since this was an initiative taken by our school, to make people aware of the garbage filled site right opposite to our school" (school 5, student 4).

Where children's understanding of solutions differed was in terms of who they thought should be responsible for improving the city. Ninety per cent of students (57 respondents) identified a specific way in which the government should play a role in improving the city. Many called on the government to ramp up efforts to clear garbage, improve pedestrian safety with crosswalks and better footpaths, plant more trees and improve local parks. Some also looked to the government to help the poor, reduce corruption and improve public bus services, among other issues.

By and large, the students also identified ways in which the behaviour of members of society in general contributed to problems and could solve them with 98% of students (62 respondents) describing ways in which the actions or behaviour of residents of Bengaluru would help tackle the issues. Of these, 87% (55 respondents) used a general "we" to describe the solutions, indicating that they saw themselves as part of this collective. However, only 52% (33 respondents) of the students used the adjective "I" to describe a solution. This is striking because students were asked "How do you think you can play a role in making the city a better place?" In other words, one-half of the respondents were unable to formulate a specific role for themselves and instead spoke of what people in general needed to do and/or what the government should do.

In addition, as described in more detail in the following section, the personal engagement of Bala-Janaagraha students was far higher than non-Bala-Janaagraha students with two-thirds of Bala-Janaagraha students (24 respondents) identifying a personal role for themselves, but only one-third of non-Bala-Janaagraha students (9 respondents) doing so. This indicates that, without civic education, it may be harder for children to see how they can personally tackle an issue that concerns them.

At the same time, the students are well-versed in urban problems and have ideas about how they can be solved. The participants clearly saw the need for society to play a role in solving urban problems, which indicates that they see collective action as an important part of improving the city. In addition, they identified ways in which the government could or should play a role, which is the first step in holding a public body to account.

However, a key aspect of quality of citizenship has to do with participating in one's community and having the ability to engage with the government. The fact that half of the students were not able to identify specific actions for themselves within the solutions to the collective problems they described indicates that they do not have a clear understanding of what they, as citizens of Bengaluru, can personally do in response to urban problems. This may limit their level of civic engagement. Even if people see society as responsible for solving problems, they may not step up and be part of the solution if they are unable to identify a role for themselves specifically.

4.3 Impact of Bala-Janaagraha

In addition to understanding how infrastructure problems affect children and how they think of themselves as citizens of Bengaluru, the study also examined how the Bala-Janaagraha program shaped the participants' views of infrastructure problems and their role as urban citizens. The main goal of the Bala-Janaagraha program, which was established in 2002, is to transform children into the active citizens. Bala-Janaagraha works towards this goal with a school program that focuses on civic engagement and urban problems that reached 34,800 eighth-standard students in 24 cities around India, including Bengaluru, Bhopal, Ludhiana, Mumbai, Ahmedabad, Pune and Delhi, in the 2014-2015 academic year.

During the program, trained Bala-Janaagraha facilitators work closely with schools to run structured classrooms sessions and a hands-on civic project that teaches students about urban issues, how the government functions and how they can tackle urban problems. The facilitators rely on a resource book called "I Change My City – A Guide to Active Citizenship." It had three main units at the time this study was carried out in 2015. The first unit focused on the basics of urban planning, how city governments work and urban democracy. The second unit delved into environmental sustainability, social justice issues, inequality and human rights. The third unit discussed what it means to be an active citizen, conservation of water, electricity and other resources, as well as health and safety in the city.

In addition to working through the textbook with their facilitators, Bala-Janaagraha students operationalize what they're taught in the classroom through a civic project. Students are split up into teams and identify a civic issue, such as a road in their community that needs to be improved, carry out a survey to learn more about it, analyze the information they gather and brainstorm solutions. Facilitators urge students to take personal actions, engage their local community and approach local government officials to ask them to resolve their problems using the information they find in their surveys. The program culminates with competitions called civic fests where students showcase their civic projects to their peers, civic agencies and the public. The best ones at each school are selected for a city-wide civic fest with the winners progressing to zonal and national civic fests.

At the time this research was carried out in the spring of 2015, just over half of the sample – 36 of the 63 participants – were Bala-Janaagraha students who had just completed the program. These students were asked how Bala-Janaagraha influenced what they noticed during the walk. Their response to this question

and other statements they made about Bala-Janaagraha, as well as a comparison of their views with those of students who had not participated in Bala-Janaagraha, provide insights into the impact of the program.

For the purposes of the comparisons made in this section, two of the non-Bala-Janaagraha students have not been included in the analysis because they were in the same class as students who had participated in Bala-Janaagraha and may have been influenced by what their peers told them about the program. This brings the sample for this section down to 61 respondents comprised of 36 Bala-Janaagraha students and 25 non-Bala-Janaagraha students.

The findings in this section are analyzed in three parts to respond to the three research questions laid out earlier:

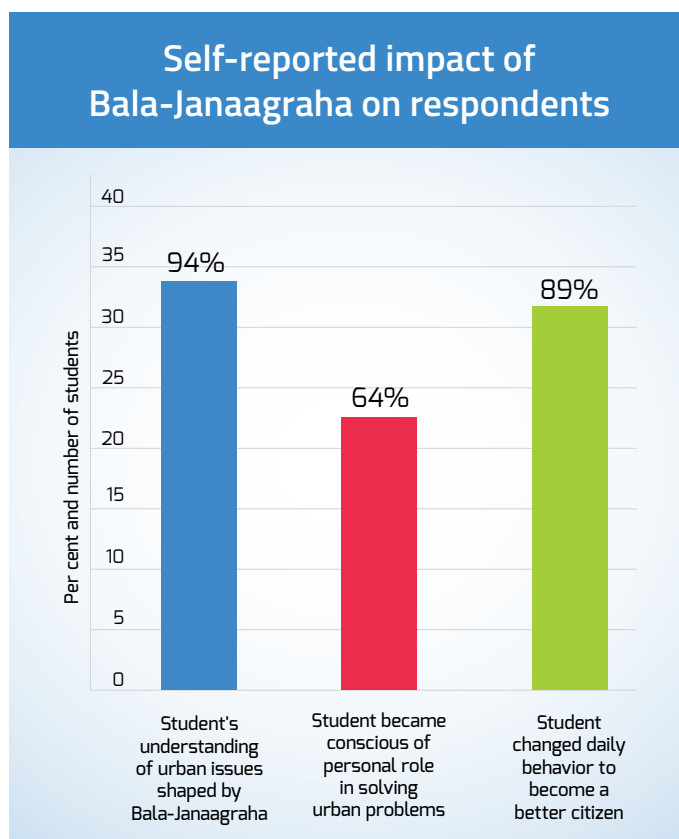
1. Does Bala-Janaagraha shape how students perceive urban infrastructure challenges? If so, how?
2. How do Bala-Janaagraha students, as compared to non-Bala-Janaagraha students, understand issues related to urban infrastructure?
3. Are there any key aspects of the Bala-Janaagraha program that the students do not seem to have integrated into their view of the city? If so, what are these?

4.3.1 Bala-Janaagraha's impact on how students perceive urban infrastructure challenges

The data indicates that the Bala-Janaagraha program does affect how children respond to urban issues, but not whether they notice them. All of the children, regardless of their participation in Bala-Janaagraha, had similar concerns about the day-to-day urban challenges affecting their lives, as is discussed in detail above. However, the Bala-Janaagraha students related to these problems differently with most saying their attitude towards urban problems had changed because of the program (see Figure 3).

One student explained that there were "things we noticed but used to ignore, such as improper footpaths, not proper government schools, garbage." With Bala-Janaagraha, she became involved with initiatives to improve these problems, such as by telling others to dispose of garbage in dustbins instead of in vacant lots, she said.⁵¹

Figure 3



51 School 5, student 4.

Thirty-four of the 36 students who participated in Bala-Janaagraha described how what they learned from Bala-Janaagraha influenced their views of urban issues and/or caused them to change their behaviour as urban citizens. One of the other two Bala-Janaagraha students did not explicitly state how Bala-Janaagraha had impacted her views, but displayed a high level of citizen engagement. She mentioned times in which she had taken part in activities to improve her neighbourhood, including a street clean-up with Bala-Janaagraha, as well as solutions that could be taken by members of the public in response to urban problems. Finally, one child said she had not been impacted by Bala-Janaagraha because she came from a community with a high level of citizen engagement where she had already learned many of the lessons Bala-Janaagraha aims to instill in students. For example, she said that, along with her parents and neighbours, she had helped clean a vacant lot near her apartment building that she now used as a playground with other children.

In addition, twenty-seven of the 36 Bala-Janaagraha participants described something they had learned from the program. Almost all of them (23 respondents) said that they became aware of ways in which they could help solve urban problems. Secondly, more than half of these students said they learned about how members of the public could work together on urban issues (16 respondents) and that they had become more conscious of urban problems because of the program (14 respondents). Finally, about one-third of these students (7 respondents) said they had learned about the roles and responsibilities of various government bodies.

Thirty-two of the 36 Bala-Janaagraha participants indicated what they learned in Bala-Janaagraha shaped their behaviour in relation to dealing with garbage, poor roads and other civic issues. For many, the program led to a significant change in attitude. "Before I was participating in Bala-Janaagraha, I would feel if anyone has thrown garbage and whatever they do, I would have told my parents: 'The BBMP will clean. Why we should bother?'" one child said. "When we were in Bala-Janaagraha and we did that project, then I came to realize that this is our city. We should make our city clean."⁵²

The most common examples the children described in relation to their change in behaviour and how they could influence other members of the public had to do with keeping public spaces clean. For example, one child said she had stopped throwing banana peels out of buses and auto rickshaws because of what she learned in Bala-Janaagraha.⁵³

Another explained: "I'm saying it's rude, but even I was throwing (garbage). But after this Bala-Janaagraha program, I have learned to not to throw garbage. It affects us more. So, even those childrens who have not participated, even they see the garbage around us and they will throw us. Even if they also participate with us, they learn that throwing the garbage affect us."⁵⁴ This student, like many of her counterparts, had not thought about how her actions negatively impacted the city and how she could encourage others to keep the city clean until she considered the problem in Bala-Janaagraha.

Other Bala-Janaagraha respondents discussed the importance of teaching their community about civic problems. Many described times when they had seen the impact of awareness-raising activities firsthand through Bala-Janaagraha. One student said that many problems had been resolved on the road he and his peers had selected for their civic project and that they continued to ask people contributing to urban problems, including people burning plastic in public or parking their vehicles in no parking zones, to change their behaviour.⁵⁵

52 School 1, student 2.

53 School 1, student 3.

54 School 2, student 1.

55 School 4, student 2.

Another student explained: “We should teach the uneducated peoples (because) they do not know that what happens if we throw the garbage on the road.” The child went on to describe the impact of Bala-Janaagraha’s November 2014 “I Change my Street” event in which schools from around Bengaluru undertook projects to improve their neighbourhoods. The students at his school did a skit about the importance of keeping the neighbourhood clean. After the event, the area became cleaner because many of the surrounding homes made an effort to throw their waste in a dustbin, he said.⁵⁶

Others felt they could set an example through their own behavior. “If I not throw the garbage, other people also will see me and they will not throw the garbage on the roads,” one student said.⁵⁷ Similarly, another student explained: “I used to put garbage around the house, but now I don’t. Now I tell people ‘Don’t put trash there. It affects me, you and other people too.’”⁵⁸ Some students talked about actions they hoped to take with their neighbours. “With my family, I want to clean the road which is not clean and I will advise our relatives, neighbours and friends not to put garbage on the road and the garbage should be dumped in a vehicle that comes daily to our area,” one student said.⁵⁹

Students also said they had learned that people could interact with the government to solve problems. “After I studied Bala Janaagaha, I can know if any road is not good over there,” one student said. “I can say that area people to please post a letter to BBMP so that BBMP can come over there and proper that zone.”⁶⁰ Similarly another student said that she learned the BBMP was responsible for planting trees, painting walls and cleaning up garbage because of Bala-Janaagraha and that she hoped to alert it to places where this was needed through social media or Janaagraha’s “I Change My City” platform.⁶¹

In addition, six of the children were so positively affected by the program that they said that programs like Bala-Janaagraha could be part of a solution to tackling urban issues. Finally, five students, including two non-Bala-Janaagraha students, said there was a need for civic education programs like Bala-Janaagraha.

4.3.2 Differences between Bala-Janaagraha and non-Bala-Janaagraha students

The impact of Bala-Janaagraha was also perceptible when the responses of Bala-Janaagraha students were compared with the responses of those who had not passed through the Bala-Janaagraha program. Half of the students (31 respondents) described past experiences with civic engagement during the research exercise. These activities included approaching a government body with the aim of resolving a problem, raising awareness of urban issues and promoting change among others, and taking actions to tackle urban problems, such as growing trees or cleaning up a dirty site. Of these 31 students, 30 were Bala-Janaagraha students. In other words, 83% of Bala-Janaagraha students (30 of 36), as compared to less than 1% of non-Bala-Janaagraha students (1 of 25) related past civic participation to the urban challenges they saw and discussed during the research exercise.

The fact that far more Bala-Janaagraha students were able to link specific examples of civic participation to the problems seems to be precisely because of Bala-Janaagraha. Each of these children either described a civic engagement activity they had participated in as part of Bala-Janaagraha or described civic actions they were taking because of what they learned in Bala-Janaagraha. A handful described activities unrelated to Bala-

⁵⁶ School 2, Student 3.

⁵⁷ School 2, student 4.

⁵⁸ School 4, student 1.

⁵⁹ School 3, student 4.

⁶⁰ School 2, student 3.

⁶¹ School 3, student 2.

Janaagraha. Since this research project was conducted in partnership with Bala-Janaagraha and described to the students as an activity related to Bala-Janaagraha, it is possible that the structure of the research exercise prompted them to describe Bala-Janaagraha activities. However, the students were not asked explicitly to give examples of civic engagement from Bala-Janaagraha. They made clear connections between the problems they saw during the photo activity and past civic engagement with Bala-Janaagraha without being asked about the relationship between the two.

In addition, the ways in which Bala-Janaagraha students discussed solutions to urban problems differed from the comments of non- Bala-Janaagraha students. Students in both groups had a range of ideas for solutions to urban problems. Most also discussed the role that could be played by the government, society in general and individuals. However, Bala-Janaagraha students were more likely to refer to specific government agencies that needed to be engaged in relation to specific issues or about approaching their local corporator, the lowest-level elected official they could approach with their concerns. Eighty-one per cent of Bala-Janaagraha students (29 respondents) referred to the BBMP, BESCOM and/or a corporator in their responses whereas 36% of non- Bala-Janaagraha students (9 respondents) did.

In addition, Bala-Janaagraha students placed more emphasis on educating the public about urban issues and personally engaging with the government to solve problems. Eighty-three per cent of Bala-Janaagraha students (30 respondents) discussed the importance of educating the public to resolve the urban problems they described, but only 68% of non-Bala-Janaagraha students (17 respondents) did. Moreover, 69% of Bala-Janaagraha students (25 respondents) said that they themselves or others should inform the government about issues and ask government officials to respond to them, while just 36% of non-Bala-Janaagraha students (9 respondents) did.

4.3.3 Limitations on the impact of Bala-Janaagraha

At the same time, the findings also indicate that the children may have assimilated the message of the Bala-Janaagraha program in limited ways. When speaking about behaviour change, the majority of Bala-Janaagraha students discussed how they had stopped throwing garbage on the road. While this is an important change, children had less to say about how Bala-Janaagraha had influenced their behaviour in relation to other civic issues, such as poverty and pedestrian safety. These issues are obviously more complex than cleaning up after oneself, but the students did have ideas about how to tackle such issues, such as by working on a solution with their community or petitioning local officials, and some had responded to these issues during the Bala-Janaagraha program.

In addition, a greater proportion of non-Bala-Janaagraha students than Bala-Janaagraha students noticed certain issues, and vice versa. Thus, a higher proportion of non-Bala-Janaagraha students than Bala-Janaagraha students discussed the negative impact of alcohol on urban residents (32% vs 6%), urban crime (36% vs 17%), air pollution (76% vs 47%), poverty (60% vs 44%) and their views on public transportation (52% vs 25%). In contrast, a slightly greater proportion of Bala-Janaagraha students noticed water wastage (42% vs 36%), electric hazards (64% vs 60%) and drainage problems (64% vs 56%). All of the issues that a smaller proportion of Bala-Janaagraha students noticed are not discussed or emphasized in the Bala-Janaagraha curriculum, whereas the ones a greater proportion noticed are.

Given the fact that students weren't asked specific questions about these themes and the limited sample

size, more research needs to be conducted to determine whether Bala-Janaagraha students are actually less likely to home in on urban problems not discussed in the program. If this is the case, it may be worthwhile for Janaagraha to consider how it can amend the curriculum so that students develop a flexible understanding of urban problems and apply what they learn in Bala-Janaagraha to topics not covered by the program.

In addition, the fact that Bala-Janaagraha students had less to say about how they had changed their behaviour with respect to issues other than garbage indicates that the impact the program had on their civic engagement may be limited. Littering is an easy thing to stop and a form of civic engagement they may be likely to practice most often after Bala-Janaagraha. It is also a form of civic engagement that was readily identified by many non-Bala-Janaagraha students as a solution to Bengaluru's garbage problem. The other issues students raised, such as poor footpaths and a lack of parks, are hard for them to tackle through their day-to-day actions. At the same time, stopping littering is an easy example for children to discuss with the interviewer and one that may have been at the forefront of their minds after walking around garbage heaps during the exercise. It is not an indication that the students do not engage in other forms of civic action. With this in mind, further research should be done to assess whether the students actually feel empowered enough to take actions on other issues or report them to the government outside of Bala-Janaagraha. This may be a critical challenge for Bala-Janaagraha to tackle in the future to ensure the long-term impact of the program.

Overall, these findings on Bala-Janaagraha show that the program is meeting its overarching goals. The comparison of Bala-Janaagraha students with non Bala-Janaagraha students indicates that Bala-Janaagraha does influence how children think about urban issues and sows the seeds of active citizenship by helping them think about the role that they can play in improving their city. "It helped us to focus on problems and think of solutions," one student succinctly explained.⁶²

62 School 5, student 2.

The background is a solid yellow color with several diagonal stripes of varying shades of yellow and orange running from the bottom left towards the top right. A white horizontal band is positioned in the middle of the page, containing the text.

POLICY RECOMMENDATIONS

5. POLICY RECOMMENDATIONS

Recommendation 1: Incorporate children's needs into urban planning

This study has highlighted how a range of infrastructure challenges that Bengaluru faces, including effectively disposing of garbage, maintaining urban parks and poor footpaths, affect the quality of life of children. Though these issues affect all urban residents, they can have an acute impact on children by restricting their access to public space and their ability to play, both of which are critical to their emotional development and physical well-being. Urban planning policies that are attuned to the needs of children can play an important role in tackling these issues.

Both Janaagraha and the Jana Urban Space Foundation have previously highlighted the need for a better urban planning strategy for Bengaluru. The Janaagraha-Brown Citizenship Index, which was released in December 2015, documented the existence of ghettos, slums and low quality of basic services in Bengaluru, and recommended that relevant government bodies prioritize infrastructure, social housing and planned development to make Bengaluru more equitable and increase its citizens' quality of life.⁶³

63 Bertorelli, Dharssi et al., 2014.





Without robust spatial and neighbourhood plans, authorities are not able to keep up with the pace of urban growth and infrastructure is constructed in a haphazard fashion. This study highlights that such unplanned growth has a significant impact on children's quality of life. Ad hoc development in Bengaluru is associated with a range of problems that affect children's safety, health and ability to play freely in the city including, but not limited to, inadequate footpaths, poor roads, electrical hazards and dirty parks.

Though Bengaluru has two draft master plans – the Bangalore Development Authority (BDA) Master Plan 2015 and the Bangalore Metropolitan Regional Development Authority (BMRDA) Master Plan 2031 – that provide guidelines for metropolitan and municipal planning, there are not provisions for ward-level planning. As a result, local needs and priorities, including those of children, fall to the wayside. Too often, urgent demand for infrastructure leads to hasty decisions, such as building arbitrary flyovers and ad hoc widening of roads, with little consideration for how they affect the city as a whole. The poor state of affairs is reflected by Bengaluru's score of 2.7 out of 10 on an internationally comparable measure of urban planning and design in Janaagraha's 2015 Annual Survey of India's City-Systems (ASICS).⁶⁴

Bengaluru is not alone in failing to develop provisions for neighbourhood planning. Only one of the 21 major Indian cities surveyed for ASICS 2015 has a ward-level spatial plan. Moreover, the cities surveyed scored an average of 2.4 out of 10 on the urban planning and design measure. They also largely fail to implement the plans that they do have. In any case, many of these urban plans are out of date. Twelve of the 21 cities surveyed for the 2014 ASICS survey had plans based on Town Planning Acts more than three decades old. The Karnataka Town and Country Planning Act, which governs planning in Bengaluru, dates back to 1961.⁶⁵

Insofar as it exists, urban planning in India has also ignored children, clubbing their needs together with those of adults. Major government initiatives focused on improving Indian cities, such as the Jawaharlal Nehru National Urban Renewal Mission, haven't dealt with child-specific concerns. Fortunately, this gap is slowly being recognized. In 2005 and 2016, the Ministry of Women and Child Development published National Plans of Action for Children, which, among other things, discussed the need for recreational spaces for children, measures to prevent environmental hazards that affect them and encouraging children to become aware of community issues.⁶⁶ In 2014, Urban Development Minister Venkaiah Naidu said that poor urban planning affected the mental and physical development of children, and called for the development of child-friendly infrastructure in India's cities.⁶⁷ Children have also been recognized as key stakeholders in the Smart Cities Mission.⁶⁸

Moving forward, it is critical for the relevant authorities to develop strategies for ward-level plans that are coordinated with the broader spatial plans for Bengaluru and responsive to the needs of children. As a part of these efforts, it is important to enhance coordination between the range of urban local bodies that are responsible for planning, including the Bruhat Bengaluru Mahanagara Palike (BBMP), the BDA, the BMRDA, the Karnataka Urban Infrastructure Development and Finance Corporation and the Archeological Survey of India, as well as urban local bodies that are responsible for basic service delivery.

In addition to improving urban planning in general, such a strategy should involve efforts to engage children and involve them in decision-making. Bengaluru and other Indian cities can move towards this objective by implementing the reforms mandated by the Nagara Raj Bill (or the Community Participation Law), which calls

⁶⁴ Janaagraha Centre for Citizenship and Democracy, 2015.

⁶⁵ Janaagraha Centre for Citizenship and Democracy, 2014; 2015.

⁶⁶ Government of India Department of Women and Children, 2005; 2016; Child Line India, 2005.

⁶⁷ Press Trust of India, 2014.

⁶⁸ National Institute of Urban Affairs, 2016.

for the creation of Area Sabhas in India's cities that would give citizens a venue to influence urban decision-making. Unfortunately, enshrining the principle of local participation in the law has not created it in practice. Of the 21 major Indian cities surveyed for ASICS 2015, only Hyderabad has operational Area Sabhas in place. State and municipal governments in India, including those governing Bengaluru, should facilitate citizen participation by taking the leadership necessary to put Area Sabhas in place and find ways to engage children and youth in the process.

Both children and their parents can provide officials with insight into local needs that might otherwise be overlooked. For example, parents of children with physical disabilities in Bengaluru who were concerned their children couldn't access local parks and playgrounds took matters into their own hands. In 2006, they established Kilikili, a non-governmental organization focused on creating accessible play spaces for children regardless of their physical abilities, and negotiated a partnership with the BBMP that led to the modification of some parks so that they would be more accessible. The group also designed a manual for the BBMP to guide the design of new parks so that children with special needs can use them.⁶⁹

Participatory budgeting – the allocation of public funds through debate about spending priorities and a decision-making process involving both citizens and elected representatives – could be another important venue for improving urban development and increasing citizen engagement. It, as well as other community engagement policies, could account for the needs of children by providing ways for them to participate and express their needs, whether by giving them a vote, holding a youth forum on the budget or through some other means. For example, Barra Mansa, Brazil, has previously allocated a small proportion of the city's budget to youth aged 9 to 15, thousands of whom have come together to elect child councillors and debate how to spend the funds.⁷⁰

Relevant government agencies can also work with and draw inspiration from civic education programs, such as Bala-Janaagraha, that have formulated ways to engage children in improving their own quality of life. Bala-Janaagraha accomplishes this by teaching eighth-standard students about urban challenges and encouraging them to find solutions. Students conduct surveys of their community and tackle local problems, such as dirty roads, by organizing members of the community and/or pressuring government officials to improve things. The most successful projects have a notable impact. For example, during the 2013-2014 academic year, students from Delhi Public School in Ludhiani conducted a detailed survey of a road in their neighbourhood and came up with a plan for improving it. Using this information, they convinced local authorities to take action to the tune of Rs. 5.13 crore to improve the road.⁷¹

Other organizations around India are also engaging children with civic issues in innovative ways. In 2010, UNICEF and Prayasam, an NGO in Kolkata, worked with children in a poor community to gather data on community problems, such as lack of access to drinking water, and put it on a map so that they could take the information to government officials and pressure them to improve services.⁷² Similarly, Humara Bachpan, an organization that advocates for improving the living conditions of poor children, has formed more than 300 child clubs in Indian cities to help children discuss urban challenges that affect them and take their concerns to civic bodies.⁷³

Like UNICEF, Humara Bachpan has conducted mapping exercises with children in major urban centres,

69 United Nations Children's Fund, 2012; Ghosh S., 2012; Kilikili, 2007.

70 Guerra, 2002.

71 Child Friendly News, 2014.

72 Coulter, 2011.

73 Humara Bachpan, 2014.

including Mumbai, Delhi and Hyderabad. This has helped children to highlight how special measures, such as the construction of child-specific toilets in informal settlements, could assist them. In Bhubaneswar, a 12-year-old girl working with Humara Bachpan drew a map of route to night-time tuition classes where children felt and unsafe and presented it to a ward official, who decided to improve lighting in the area. Other initiatives taken by Humara Bachpan include a “Meet the Mayor” program for children. In Bhubaneswar, more than 100 children from 15 informal settlements participated. They raised similar concerns to the students who partook in this study, such as improper garbage disposal, unavailability of dustbins, unsafe drinking water, poor public transport, hazardous roads and a lack of public spaces for children.⁷⁴

The strategies employed by Bala-Janaagraha, UNICEF, Prayasam and Humara Bachpan serve a two-fold purpose. First, they help to create an engaged citizenry by providing an avenue for children to learn about and express their views on urban issues. Second, they generate information about how urban services can be improved in specific neighbourhoods that could aid the local government. Policymakers should take inspiration from such approaches and integrate them into urban planning and educational initiatives. In fact, Bala-Janaagraha was designed with the hope that its principles could be incorporated into the formal curriculum of schools across India.

Recommendation 2: Develop urban planning policies focused on improving the quality of green spaces in Bengaluru

One of the key themes that came out of this study has to do with the connection between green space and children’s quality of life. The students who participated in the study discussed how green space improved their well-being, said there was a need for more greenery and parks in Bengaluru and raised concerns about environmental issues. Several participants were also concerned with the quality of parks and play areas, as well as safety hazards that might affect their ability or that of other children to enjoy these public spaces safely. These findings are similar to those that have emerged from previous research on how children relate to green space in cities in India and other developing countries.⁷⁵ Moreover, these findings affirm the views of psychologists that both greenery and play areas that children can explore freely are important for their emotional, mental and physical development.

As rapid urbanization in India swallows green spaces, these findings underscore how critical greenery is for a good quality of life. Indeed, concern about the preservation and enhancement of green space and parks in Indian cities has recently gained prominence. In 2014, a chief justice in the Delhi High Court said that the city’s parks were so poorly maintained that it was a “serious violation of human rights of children.”⁷⁶ That same year, the Ministry of Environment, Forests and Climate Change (MoEF) prepared a draft of guidelines for the conservation, development and management of urban green space. In 2015, the ministry of environment and forests announced that it will draw up a plan for the management of green space in Modi’s 100 smart cities.⁷⁷

Even so, there is a clear gap between these high-level policies and the reality. It is not uncommon to hear residents of Bengaluru lament the loss of trees in the city as a result of rapid urban growth. Many of the students who participated in this study were aware of this trend. This was highlighted by the concerns of those who worried that Bengaluru is changing from a “garden city” into a “garbage city.” This unease is borne out by data, which shows that Bengaluru is rapidly losing green cover and lakes. Between 1973 and 2007, the

⁷⁴ Sturgis, 2015; Humara Bachpan, 2014; India Education Diary, 2013; Prada, 2015.

⁷⁵ Ramezani & Said, 2013.

⁷⁶ Arvind, 2014.

⁷⁷ Aggarwal, 2015.

number of water bodies in Bengaluru declined by 61% and the vegetation cover declined by 63%. The most rapid decline took place in the last five years of that period and conditions have likely worsened since. Those green spaces that do remain are typically in poor condition, often mismanaged or used as de facto dumping grounds.⁷⁸

To make matters worse, Bengaluru's policies are out-of-date and poorly implemented. Parks are meant to be protected by the Karnataka Parks, Play Fields and Open Spaces (Preservation and Regulation) Act, which is more than 30 years old. Under the Act, the government is supposed to release a report to the public with information on how many parks there are and where they are located, but the BBMP didn't start releasing one until 2010 and rules against encroachment of parks are poorly enforced.⁷⁹

As highlighted above, more strategic urban planning involving ward-level detail can play a critical role in improving urban infrastructure. The loss of green space in Bengaluru and the critical ways in which it impacts children's quality of life underscores a particular need for policymakers to incorporate green space into urban plans and to ensure provisions to protect that space are implemented. Opening up data on issues like the number of parks in Bengaluru can help to facilitate this. If citizens have more information about what parks are meant to be available to them, they can voice their concerns when those spaces are encroached upon or mismanaged.

Policymakers can also draw inspiration from and support the initiatives of private organizations that are already engaging children with issues related to urban planning and green space. Civic education programs like Bala-Janaagraha provide an invaluable opportunity to teach kids about environmental issues and the role they can play in helping to tackle them. Other examples include Eco Kids, a Mumbai-based NGO that teaches children about gardening, recycling and living sustainably, and Disney India's "Friends for Change" campaign, which works with a Delhi-based think tank to bring school children together with their communities to redevelop parks and open space.⁸⁰

In sum, an integrated solution involving various members of society is necessary, but the government must play a key role. As one of the students said: "If we are the change, we can bring the change in India. India can be improved."⁸¹

78 Ramachandra & Kumar, 2008.

79 PK, 2011; Manjusainath, 2016.

80 Pereira, 2014; Disney India, n.d.

81 School 10, student 2.





6. BIBLIOGRAPHY

- ❖ Aggarwal, M. (2015, February 2). Govt charts plan to manage green spaces in smart cities. Retrieved from Live Mint: <http://www.livemint.com/Politics/LinY7QCxTPuYADNSz8OrK/Govt-charts-plan-to-manage-green-spaces-in-smart-cities.html>.
- ❖ Arvind, A. (2014, July 17). Delhi's 'death trap' parks: High Court claims city's green spaces violate children's 'human rights'. Retrieved from Daily Mail: <http://www.dailymail.co.uk/indiahome/indianews/article-2694903/Delhis-death-trap-parks-High-Court-claims-citys-green-spaces-violate-childrens-human-rights.html>.
- ❖ Bertorelli, E., Dharssi, A., Heller, P., Pyle, K., Swaminathan, S., & Varshney, A. (2014). Citizenship in Bangalore: A Practitioner's View. Bangalore: Janaagraha Centre for Citizenship and Democracy.
- ❖ Child Friendly News. (2014, February 28). Showing the way. Retrieved from Child Friendly News: <http://childfriendlynews.com/showing-the-way>.
- ❖ Child Line India. (2005). National Plan of Action 2005. Retrieved from: <http://www.childlineindia.org.in/National-Plan-of-Action-2005.htm>.
- ❖ Coulter, D. (2011, April 27). Children map their community using innovative technology in India. Retrieved from UNICEF: http://www.unicef.org/statistics/india_58382.html.
- ❖ Day, L., Sutton, L., & Jenkins, S. (2011). Children and Young People's Participation in Planning and Regeneration. Ecorys. Retrieved from: http://www.northernarchitecture.com/geisha/assets/images/children_planning_regeneration_briefings-1.pdf.
- ❖ Disney India. (n.d.). Friends for Change: Conserving Green Spaces. Retrieved August 30, 2015, from Disney India: <http://www.disney.in/ffc/index.php?c=faqs>.
- ❖ Ghosh, A., & Mukherji, A. (2014). Air Pollution and Respiratory Ailments among Children in Urban India: Exploring Causality. *Economic Development and Cultural Change*, 63(1), 191-222.
- ❖ Ghosh, S. (2012, March 2). UNESCO Pat for Disabled-Friendly Parks in Bangalore. Retrieved from DNA: <http://www.dnaindia.com/bangalore/report-unesco-pat-for-disabled-friendly-parks-in-bangalore-1657390>.
- ❖ Government of India Department of Women and Children. (2005). National Plan of Action for Children 2005. Retrieved from: <http://www.wcd.nic.in/NAPAug16A.pdf>.
- ❖ Government of India Department of Women and Children. (2016). National Plan of Action for Children 2016. Retrieved from: http://wcd.nic.in/sites/default/files/National%20Plan%20of%20Action_0.pdf.
- ❖ Guerra, E. (2002). Citizenship knows no age: children's participation in the governance and municipal budget of Barra Mansa, Brazil. *Environment & Urbanization*, 71-84.

- ❖ Hart, R. A. (2011). Planning Cities with Children in Mind: A background paper for the State of the World's Children Report. The Graduate Centre of the City University of New York, Children's Environments Research Group. New York: UNICEF. Retrieved from: <http://cernyc.org/archives/1936>.
- ❖ Humara Bachpan. (2014). FAQs. Retrieved from Humara Bachpan: http://www.humarabachpan.org/aboutus_faqs.php.
- ❖ India Education Diary. (2013, June 4). Odisha: Mayor promises to make Bhubaneswar a child friendly city. Retrieved from India Education Diary: <http://indiaeducationdiary.in/Shownews.asp?newsid=22918>.
- ❖ Janaagraha Centre for Citizenship and Democracy. (2015). Annual Survey of India's City-Systems 2015. Bangalore: Janaagraha Centre for Citizenship and Democracy. Retrieved from Janaagraha: <http://www.janaagraha.org/files/publications/ASICS-2015.pdf>.
- ❖ Janaagraha Centre for Citizenship and Democracy. (2014). Annual Survey of India's City-Systems 2014. Bangalore: Janaagraha Centre for Citizenship and Democracy. Retrieved from Janaagraha: <http://www.janaagraha.org/files/publications/Annual-Survey-of-Indias-City-Systems-2014.pdf>.
- ❖ Kar, S. & Kar, S. (2015, Jan-Jun). Prevention of childhood obesity in India: Way forward. *Journal of Natural Science, Biology and Medicine*, 12-17. Retrieved from Journal of Natural Science, Biology and Medicine: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4367021/>.
- ❖ Kilikili. (2007). Annual Report 2007. Retrieved from Kilikili: http://www.kilikili.org/pdf/Ann_rpt_06_07.pdf.
- ❖ Lester, S., & Russell, W. (2010, December). Children's right to play: An examination of the importance of play in the lives of children worldwide. The Hague: Bernard van Leer Foundation. Retrieved from: <http://www.bernardvanleer.org/Childrens-right-to-play-An-examination-of-the-importance-of-play-in-the-lives-of-children-worldwide?pubnr=1274&download=1>.
- ❖ Manjusainath, G. (2016, July 2). BBMP turns a blind eye to encroachment on parks, road. Retrieved from Deccan Herald: <http://www.deccanherald.com/content/555540/bbmp-turns-blind-eye-encroachment.html>.
- ❖ National Institute of Urban Affairs. (2016). Status of Children in Urban India: Baseline Study-2016. Delhi: National Institute of Urban Affairs. Retrieved from Child Friendly Smart Cities: http://cfsc.niua.org/sites/default/files/Status_of_children_in_urban_India-Baseline_study_2016.pdf.
- ❖ Nikku, B. R., & Pokhrel, R. (2013). Crafting Child-friendly Cities: Evidence from Biratnagar Sub-metropolitan City, Eastern Nepal. *Asian Social Work and Policy Review*, 135-50.
- ❖ Pereira, A. (2014, February 5). Moulding the young as change agents. Retrieved from India Together: <http://indiatogether.org/ecokids-climate-environment>.
- ❖ PK, N. (2011, February 1). Lying unwatched: Bengaluru's 1067 parks and playgrounds. Retrieved from Bangalore Citizen Matters: <http://bangalore.citizenmatters.in/articles/2734-parks-playgrounds-bbmp>.

- ❖ Prada, P. (2015, March 2). The campaign to include India's children in urban planning. Retrieved from South Asia @ LSE: <http://blogs.lse.ac.uk/southasia/2015/03/02/the-campaign-to-include-indias-children-in-urban-planning/>.
- ❖ Prakash, P. (2013). Towards a Youth Agenda in Policy and Practice. In I. K. Foundation, *State of the Urban Youth, India 2012: Employment, Livelihood, Skills* (pp. 1-6). Mumbai: IRIS Knowledge Foundation. Retrieved from: http://www.esocialsciences.org/general/a201341118517_19.pdf.
- ❖ Press Trust of India. (2014, November 28). Urban planners asked to develop child-friendly infrastructure. Retrieved from Economic Times: http://articles.economictimes.indiatimes.com/2014-11-28/news/56540236_1_naidu-infrastructure-development-high-risk.
- ❖ Press Trust of India. (2015, May 5). 35 Per Cent Children in India Suffer from Poor Lung Health: Survey. Retrieved from NDTV: <http://www.ndtv.com/india-news/35-per-cent-children-in-india-suffer-from-poor-lung-health-survey-760553>.
- ❖ Ramachandra, T., & Kumar, U. (2008). Wetlands of Greater Bangalore, India: Automatic Delineation through Pattern Classifiers. *Electronic Green Journal* (26). Retrieved from: <https://escholarship.org/uc/item/3dp0q8f2>.
- ❖ Ramezani, S., & Said, I. (2013). Children's nomination of friendly places in an urban neighbourhood in Shiraz, Iran. *Children's Geographies*, 11, 7-27.
- ❖ Riggio, E., & Kilbane, T. (2000, October). The international secretariat for child-friendly cities: a global network for urban children. *Environment and Urbanization*, 12(2), 201-5. Retrieved from: http://www.ucl.ac.uk/dpu-projects/drivers_urb_change/urb_society/pdf_health_educ/IIED_Riggio_child_friendly_cities.pdf.
- ❖ Smart, P. (2015, September 11). New Grace School Students Act as the Perfect Citizens. Retrieved from Pune Mirror: <http://www.punemirror.in/pune/civic/New-Grace-School-students-act-as-the-perfect-citizens/articleshow/48904671.cms>.
- ❖ Sturgis, S. (2015, February 19). Kids in India are Sparking Urban Planning Changes by Mapping Slums. Retrieved from City Lab: <http://www.citylab.com/tech/2015/02/kids-are-sparking-urban-planning-changes-by-mapping-their-slums/385636/>.
- ❖ Tetali, S., Edwards, P., Murthy, G., & Roberts, I. (2015). Road traffic injuries to children during the school commute in Hyderabad, India: cross-sectional survey. *Injury Prevention*. Retrieved from: <http://injuryprevention.bmj.com/content/early/2015/12/23/injuryprev-2015-041854#BIBL>.
- ❖ Times News Network. (2016, February 6). NATIONAL CIVIC FEST - Students and their ideas steer change at civic level. Retrieved from The Times of India (Bangalore): <http://epaperbeta.timesofindia.com/Article.aspx?eid=31806&articlexml=NATIONAL-CIVIC-FEST-Students-and-their-ideas-steer-06022016002056>.
- ❖ UN Department of Social and Economic Affairs. (2014). World Urbanization Prospects - Highlights. New York: United Nations.

- ❖ United Nations Children's Fund. (2012). The State of the World's Children 2012: Children in an Urban World. New York: United Nations Children's Fund. Retrieved from: <http://www.unicef.org/sowc2012/>.
- ❖ World Bank. (2000). Beyond Economic Growth: Meeting the Challenges of Global Development. Washington D.C.: World Bank. Retrieved from: <http://www.worldbank.org/depweb/beyond/global/contents.html>.
- ❖ World Health Organization. (2015a). Global Status Report on Road Safety 2015. Italy: World Health Organization. Retrieved from http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/.
- ❖ World Health Organization. (2015b). Ten Strategies for Keeping Children Safe on the Road. Retrieved from http://www.who.int/roadsafety/week/2015/Ten_Strategies_For_Keeping_Children_Safe_on_the_Road.pdf.

7. APPENDICES

Appendix A: Invitation letters

Invitation letters for schools that had participated in Bala-Janaagraha

February 17, 2015

Dear [Insert name of Principal],

My name is Valli Narasimha and I am a Manager for Bala-Janaagraha. I am writing this letter to introduce you to Alia Dharssi, a researcher at the Janaagraha Centre for Citizenship and Democracy. As you might be aware, Janaagraha is a not-for-profit organization based in Bangalore which works with citizens and government to improve the 'Quality of Life' in Indian cities and towns. Janaagraha sees 'Quality of Life' as comprising two distinct, but inter-related aspects – 'quality of urban infrastructure and services' (the quality of urban amenities such as roads, drains, traffic, transport, water supply, etc.) and 'quality of citizenship' (the role that urban citizens play by participating in their local communities).

I am writing to invite your school to participate in a photography and research project that will follow-up on the issues your 8th standard students study in Bala-Janaagraha, our practical civic education program aimed at transforming today's children of urban India into active citizens of tomorrow.

Janaagraha would like to attain a better understanding of how urban infrastructure problems impact children, while also giving students an opportunity to study the problems in the neighbourhood around their school and learn about photography. They will also have a chance to learn about urban development challenges.

In order to participate in the project, we ask that you select five 8th standard students who are free for two hours in February or March. With the help of a teacher from your school, Janaagraha staff would like to take the students on a photography walk around the school. The children will receive a photography lesson and be given a camera to use during the walk. They will also have a chance to learn about urban development challenges.

We will ask them to take pictures of the urban challenges in the area around the school in terms of roads, electricity, water, garbage, etc, as well as things that they feel function well. After the photography session, we will briefly interview the students to understand the significance of the objects they have photographed. The information we gather will be used in a report that discusses how urban infrastructure problems affect children in Bangalore. These findings will help us to advocate for better urban policy. We will also organize an event and/or a picture book that gives the students a chance to showcase their work. If you have any questions about the project, you can contact Alia at 95 385 33777 or at alia.dharssi@janaagraha.org.

We look forward to hearing from you and hope your school will participate in this socially significant project.

Best wishes,
Valli Narasimha
Manager, Bala-Janaagraha-South and West zones,
Janaagraha Centre for Citizenship and Democracy

ಫೆಬ್ರವರಿ 17, 2015

ಮಾನ್ಯರೆ.....

ಬಾಲ ಜನಾಗ್ರಹದ ಕಾರ್ಯಕ್ರಮದ ವ್ಯವಸ್ಥಾಪಕಿ ವಲ್ಲಿ ನರಸಿಂಹ ಆದ ನಾನು ಈ ಪತ್ರದ ಮೂಲಕ ಆಲಿಯ ದರ್ಸಿ ಎಂಬ ಜನಾಗ್ರಹ ಸಂಸ್ಥೆಯ ಸಂಶೋಧಕರನ್ನು ಪರಿಚಯಿಸುತ್ತಿದ್ದೇನೆ ನಿಮಗೆ ತಿಳಿದಿರುವಂತೆ ಜನಾಗ್ರಹ ಸೆಂಟರ್ ಫಾರ್ ಸಿಟಿಜನ್ ಶಿಪ್ ಅಂಡ್ ಡೆಮಾಕ್ರಸಿ ಬೆಂಗಳೂರು ಮೂಲದ ಸರ್ಕಾರೇತರ ಲಾಭರಹಿತ ಸಂಸ್ಥೆಯಾಗಿದ್ದು ಈ ಸಂಸ್ಥೆಯು ಭಾರತದ ನಗರಗಳಲ್ಲಿನ ಜನರ ಜೀವನ ಗುಣಮಟ್ಟವನ್ನು ಉತ್ತಮಗೊಳಿಸುವ ಸಲುವಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿದೆ. ಜನಾಗ್ರಹದ ದೃಷ್ಟಿಯಲ್ಲಿ ಜೀವನದ ಗುಣಮಟ್ಟವು ಎರಡು ಬಗೆಯ ಪರಸ್ಪರ ವಿಶಿಷ್ಟ ಅಂಶಗಳನ್ನು ಒಳಗೊಂಡಿದೆ ಮೊದಲನೆಯದು ನಗರದ ಮೂಲಸೌಕರ್ಯ ಮತ್ತು ಸೇವೆಗಳ ಗುಣಮಟ್ಟ (ರಸ್ತೆಗಳು, ಚರಂಡಿಗಳು, ಸಂಚಾರ ಮತ್ತು ಸಾರಿಗೆ, ನೀರು ಸರಬರಾಜು, ಮುಂತಾದವುಗಳ ಗುಣಮಟ್ಟ) ಮತ್ತು ಎರಡನೆಯದು ಪೌರತ್ವದ ಗುಣಮಟ್ಟ (ಸ್ಥಳೀಯ ಸಮುದಾಯಗಳಲ್ಲಿ ನಗರದ ನಾಗರಿಕರ ಭಾಗವಹಿಸುವಿಕೆ).

ನಾನು ಈ ಪತ್ರದ ಮೂಲಕ ಬಾಲಜನಾಗ್ರಹದ ಛಾಯಾಗ್ರಹಣ ಮತ್ತು ಸಂಶೋಧನಾ ಯೋಜನೆಗಾಗಿ ನಿಮ್ಮ ಶಾಲೆಯು ಭಾಗವಹಿಸಲೆಂದು ಆಮಂತ್ರಿಸುತ್ತಿದ್ದೇನೆ. ಇದು ನಿಮ್ಮ ಶಾಲೆಯ 8ನೇ ತರಗತಿಯ ವಿದ್ಯಾರ್ಥಿಗಳ ಬಾಲಜನಾಗ್ರಹ ಅಧ್ಯಯನದ ವಿಷಯಗಳ ಬಗ್ಗೆ ತಿಳಿಸುತ್ತದೆ ನಮ್ಮ ಪ್ರಯೋಗಿಕ ನಾಗರಿಕ ಶಿಕ್ಷಣ ಕಾರ್ಯಕ್ರಮದ ಉದ್ದೇಶ ಇಂದಿನ ಮಕ್ಕಳನ್ನು ಭಾರತದ ನಾಳೆಯ ಸಕ್ರಿಯ ನಾಗರಿಕರಾಗಿ ಪರಿವರ್ತಿಸುವುದಾಗಿದೆ.

ಜನಾಗ್ರಹವು ನಗರದ ಮೂಲಸೌಕರ್ಯದ ಸಮಸ್ಯೆಗಳು ಹೇಗೆ ಮಕ್ಕಳ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರುತ್ತದೆ ಎಂದು ತಿಳಿಯಲು ಇಚ್ಛಿಸುತ್ತದೆ ಹಾಗೂ ಮಕ್ಕಳಿಗೂ ಕೂಡ ಶಾಲೆಯ ಸುತ್ತಮುತ್ತಲಿನ ಸಮಸ್ಯೆಗಳನ್ನು ಅಧ್ಯಯನ ಮಾಡಲು ಮತ್ತು ಛಾಯಾಗ್ರಹಣ ಹಾಗೂ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ನಗರಗಳ ಅಭಿವೃದ್ಧಿಯಲ್ಲಿ ಇರುವ ಸವಾಲುಗಳ ಬಗ್ಗೆ ತಿಳಿಯಲು ಇದು ಒಂದು ಉತ್ತಮ ಅವಕಾಶ. ಈ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನಾವು ಶಾಲೆಯ ಕಡೆಯಿಂದ 8ನೇ ತರಗತಿಯ ಮಕ್ಕಳನ್ನು ಆಯ್ಕೆಮಾಡಿ ಫೆಬ್ರವರಿ ಅಥವಾ ಮಾರ್ಚ್ ತಿಂಗಳಲ್ಲಿ 2 ತಾಸು ಬಿಡುವಿನ ವೇಳೆಯಲ್ಲಿ ಅಧ್ಯಾಪಕರ ಸಹಕಾರದೊಂದಿಗೆ ಜನಾಗ್ರಹದ ಸಿಬ್ಬಂದಿಯೊಂದಿಗೆ ಛಾಯಾಗ್ರಹಣಕ್ಕೋಸ್ಕರ ಭಾಗವಹಿಸಲು ವಿನಂತಿಸುತ್ತೇನೆ. ಮಕ್ಕಳಿಗೆ ಛಾಯಾಗ್ರಹಣದ ಪಾಠವು ಹಾಗೂ ಕ್ಯಾಮೆರಾವನ್ನು ಉಪಯೋಗಿಸಲು ಕೊಡಲಾಗುತ್ತದೆ ನಗರಾಭಿವೃದ್ಧಿ ಸವಾಲುಗಳನ್ನು ಕಲಿಯಲು ಅವಕಾಶ ಕಲ್ಪಿಸಲಾಗುತ್ತದೆ.

ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿರುವ ಮಕ್ಕಳಿಗೆ ಶಾಲೆಯ ಸುತ್ತಮುತ್ತಲಿನ ಪ್ರದೇಶದಲ್ಲಿರುವ ಚೆನ್ನಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿರುವ ವಿದ್ಯುತ್, ನೀರು, ಕಸ ಇತ್ಯಾದಿ ಸಮಸ್ಯೆಗಳ ಛಾಯಾಚಿತ್ರಗಳನ್ನು ತೆಗೆಯಲೆಂದು ಹೇಳಲಾಗುವುದು. ಈ ಛಾಯಾಗ್ರಹಣದ ಅಧಿವೇಶನದ ನಂತರ ವಿದ್ಯಾರ್ಥಿಗಳ ಈ ಛಾಯಾಚಿತ್ರದ ವಸ್ತುಗಳ ಮಹತ್ವವನ್ನು ಗ್ರಹಿಸುವ ಸಾಮರ್ಥ್ಯವನ್ನು ಸಂಕ್ಷಿಪ್ತವಾಗಿ ಸಂದರ್ಶಿಸಲಾಗುವುದು. ಭಾಗವಹಿಸುತ್ತಿರುವ ಶಾಲೆಗಳಿಂದ ಪಡೆಯುವ ಈ ಮಾಹಿತಿಯನ್ನು ನಗರದ ಮೂಲ ಸೌಕರ್ಯ ಸಮಸ್ಯೆಗಳು ಹೇಗೆ ಮಕ್ಕಳ ಮೇಲೆ ಪ್ರಭಾವ ಬೀರುತ್ತದೆ ಎಂದು ಚರ್ಚಿಸುವ ವರದಿಯಲ್ಲಿ ಉಪಯೋಗಿಸಲಾಗುವುದು. ಈ ಮಾಹಿತಿಯು ಉತ್ತಮ ನಗರದ ನಿಯಮಾವಳಿಯನ್ನು ಪ್ರತಿಪಾದಿಸುವುದಕ್ಕಾಗಿ ಸಹಾಯ ಮಾಡುತ್ತದೆ. ವಿದ್ಯಾರ್ಥಿಗಳು ತಮ್ಮ ಕೆಲಸ ತೋರಿಸಲು ನಾವು ಒಂದು ಕಾರ್ಯಕ್ರಮವನ್ನು ಆಯೋಜಿಸುತ್ತೇವೆ ಅಥವಾ (ಚಿತ್ರ ಪುಸ್ತಕವನ್ನು) ಇದರ ಬಗ್ಗೆ ಪ್ರಶ್ನೆಗಳು ಅಥವಾ ವಿವರಣೆಗಾಗಿ ಸಂಪರ್ಕಿಸಿ ಆಲಿಯಾ ದರ್ಸಿ- 9538533771

ಈ ಪ್ರಮುಖ ಸಾಮಾಜಿಕ ಯೋಜನೆಯಲ್ಲಿ ನಿಮ್ಮ ಶಾಲೆಯು ಭಾಗವಹಿಸುತ್ತದೆ ಎಂದು ಆಶಿಸುತ್ತೇವೆ.

ಶುಭಾಶಯಗಳೊಂದಿಗೆ

ವಲ್ಲಿ ನರಸಿಂಹ

ವ್ಯವಸ್ಥಾಪಕಿ, ಬಾಲ ಜನಾಗ್ರಹ-ದಕ್ಷಿಣ ಮತ್ತು ಪಶ್ಚಿಮ ವಲಯ
ಜನಾಗ್ರಹ ಸೆಂಟರ್ ಫಾರ್ ಸಿಟಿಜನ್ ಶಿಪ್ ಅಂಡ್ ಡೆಮಾಕ್ರಸಿ

Invitation letters for schools that had not participated in Bala-Janaagraha

February 17, 2015

Dear [Insert name of Principal],

My name is Valli Narasimha and I am a Manager at the Janaagraha Centre for Citizenship and Democracy (JCCD), a not-for-profit organization based in Bangalore which works with citizens and government to improve the 'Quality of Life' in Indian cities and towns. I am writing this letter to introduce you to Alia Dharssi, a researcher at Janaagraha.

Janaagraha sees 'Quality of Life' as comprising two distinct, but inter-related aspects – 'quality of urban infrastructure and services' (the quality of urban amenities such as roads, drains, traffic, transport, water supply, etc.) and 'quality of citizenship' (the role that urban citizens play by participating in their local communities). Towards this objective, Janaagraha runs ten programs. Of these ten programs, Bala-Janaagraha is a practical civic education program aimed at transforming today's children of urban India into active citizens of tomorrow.

I am writing to invite your school to participate in a Bala-Janaagraha photography and research project. Janaagraha would like to attain a better understanding of how urban infrastructure problems impact children, while also giving students an opportunity to study the problems in the neighbourhood around their school and learn about photography.

In order to participate in the project, we ask that you select five 8th standard students who are free for two hours in February or March. With the help of a teacher from your school, Janaagraha staff would like to take the students on a photography walk around the school. The children will receive a photography lesson and be given a camera to use for the duration of the walk. They will also have a chance to learn about urban development challenges.

We will ask them to take pictures of the urban challenges in the area around the school in terms of roads, electricity, water, garbage, etc, as well as things that they feel function well. After the photography session, we will briefly interview the students to understand the significance of the things in the photos. The information we gather from participating schools will be used in a report that discusses how urban infrastructure problems affect children in Bangalore. These findings will help us to advocate for better urban policy. We will also organize an event and/or a picture book that gives the students a chance to showcase their work.

If you have any questions about the project, you can contact Alia at 95 385 33777 or at alia.dharssi@janaagra.org.

We look forward to hearing from you and hope your school will participate in this socially significant project.

Best wishes,

Valli Narasimha
Manager, Bala-Janaagraha-South and West zones,
Janaagraha Centre for Citizenship and Democracy

ಫೆಬ್ರವರಿ 17, 2015

ಮಾನ್ಯರೆ.....

ವಲ್ಲಿ ನರಸಿಂಹ ಆದ ನಾನು ಬೆಂಗಳೂರಿನ ಜನಾಗ್ರಹ ಸೆಂಟರ್ ಫಾರ್ ಸಿಟಿಜನ್ ಶಿಪ್ ಅಂಡ್ ಡೆಮಾಕ್ರಸಿ ಎಂಬ ಸರ್ಕಾರೇತರ ಲಾಭರಹಿತ ಸಂಸ್ಥೆಯಲ್ಲಿ ಬಾಲಜನಾಗ್ರಹ ಎಂಬ ಕಾರ್ಯಕ್ರಮದ ವ್ಯವಸ್ಥಾಪಕಿಯಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿದ್ದು ಜನಾಗ್ರಹ ಸಂಸ್ಥೆಯು ಭಾರತದ ನಗರಗಳಲ್ಲಿನ ಜನರ ಜೀವನ ಗುಣಮಟ್ಟವನ್ನು ಉತ್ತಮಗೊಳಿಸುವ ಸಲುವಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿದ್ದು, ಜನಾಗ್ರಹ ಸಂಸ್ಥೆಯ ಈ ಕಾರ್ಯಕ್ರಮದ ಸಂಶೋಧನೆಯ ಸಲುವಾಗಿ ಆಲಿಯ ದರ್ಶಿ ಎಂಬುವ ಸಂಶೋಧಕರನ್ನು ಪರಿಚಯಿಸುತ್ತಿದ್ದೇನೆ.

ಜನಾಗ್ರಹದ ದೃಷ್ಟಿಯಲ್ಲಿ ಜೀವನದ ಗುಣಮಟ್ಟವು ಎರಡು ಬಗೆಯ ಪರಸ್ಪರ ವಿಶಿಷ್ಟ ಅಂಶಗಳನ್ನು ಒಳಗೊಂಡಿದೆ ಮೊದಲನೆಯದು ನಗರದ ಮೂಲಸೌಕರ್ಯ ಮತ್ತು ಸೇವೆಗಳ ಗುಣಮಟ್ಟ (ರಸ್ತೆಗಳು, ಚರಂಡಿಗಳು, ಸಂಚಾರ ಮತ್ತು ಸಾರಿಗೆ, ನೀರು ಸರಬರಾಜು, ಮುಂತಾದವುಗಳ ಗುಣಮಟ್ಟ) ಮತ್ತು ಎರಡನೆಯದು ಪೌರತ್ವದ ಗುಣಮಟ್ಟ (ಸ್ಥಳೀಯ ಸಮುದಾಯಗಳಲ್ಲಿ ನಗರದ ನಾಗರಿಕರ ಭಾಗವಹಿಸುವಿಕೆ) ಈ ಉದ್ದೇಶಕ್ಕಾಗಿ ಜನಾಗ್ರಹ 10 ಬಗೆಯ ಕಾರ್ಯಕ್ರಮಗಳನ್ನು ರೂಪಗೊಳಿಸಿದೆ ಇವುಗಳಲ್ಲಿ ಬಾಲಜನಾಗ್ರಹ ಒಂದು ಪ್ರಾಯೋಗಿಕ ನಾಗರಿಕ ಶಿಕ್ಷಣ ಕಾರ್ಯಕ್ರಮ ಹಾಗೂ ಇದರ ಗುರಿಯು ಇಂದಿನ ನಗರದ ಮಕ್ಕಳನ್ನು ನಾಳಿನ ಸಕ್ರಿಯ ನಾಗರಿಕರಾಗಿ ರೂಪಿಸುವುದು.

ನಾನು ಈ ಪತ್ರದ ಮೂಲಕ ಬಾಲಜನಾಗ್ರಹ ಛಾಯಾಗ್ರಹಣ ಮತ್ತು ಸಂಶೋಧನಾ ಯೋಜನೆಗಾಗಿ ನಿಮ್ಮ ಶಾಲೆಯು ಭಾಗವಹಿಸಲೆಂದು ಆಮಂತ್ರಿಸುತ್ತಿದ್ದೇನೆ. ಜನಾಗ್ರಹವು ನಗರದ ಮೂಲಸೌಕರ್ಯದ ಸಮಸ್ಯೆಗಳು ಹೇಗೆ ಮಕ್ಕಳ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರುತ್ತದೆ ಎಂದು ತಿಳಿಯಲು ಇಚ್ಛಿಸುತ್ತದೆ ಹಾಗೂ ಮಕ್ಕಳಿಗೂ ಕೂಡ ಶಾಲೆಯ ಸುತ್ತಮುತ್ತಲಿನ ಸಮಸ್ಯೆಗಳನ್ನು ಅಧ್ಯಯನ ಮಾಡಲು ಮತ್ತು ಛಾಯಾಗ್ರಹಣ ಕಲಿಯಲು ಅವಕಾಶ ಕಲ್ಪಿಸುತ್ತದೆ.

ಈ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನಾವು ಶಾಲೆಯ ಕಡೆಯಿಂದ 8ನೇ ತರಗತಿಯ ಮಕ್ಕಳನ್ನು ಆಯ್ಕೆಮಾಡಿ ಫೆಬ್ರವರಿ ಅಥವಾ ಮಾರ್ಚ್ ತಿಂಗಳಲ್ಲಿ 2 ತಾಸು ಬಿಡುವಿನ ವೇಳೆಯಲ್ಲಿ ಅಧ್ಯಾಪಕರ ಸಹಕಾರದೊಂದಿಗೆ ಜನಾಗ್ರಹದ ಸಿಬ್ಬಂದಿಯೊಂದಿಗೆ ಛಾಯಾಗ್ರಹಣಕ್ಕೊಸ್ಕರ ಭಾಗವಹಿಸಲು ವಿನಂತಿಸುತ್ತೇನೆ. ಮಕ್ಕಳಿಗೆ ಛಾಯಾಗ್ರಹಣದ ಪಾಠವು ಹಾಗೂ ಕ್ಯಾಮೆರಾವನ್ನು ಉಪಯೋಗಿಸಲು ಕೊಡಲಾಗುತ್ತದೆ ನಗರಾಭಿವೃದ್ಧಿ ಸವಾಲುಗಳನ್ನು ಕಲಿಯಲು ಅವಕಾಶ ಕಲ್ಪಿಸಲಾಗುತ್ತದೆ.

ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿರುವ ಮಕ್ಕಳಿಗೆ ಶಾಲೆಯ ಸುತ್ತಮುತ್ತಲಿನ ಪ್ರದೇಶದಲ್ಲಿರುವ ಚೆನ್ನಾಗಿ ಕಾರ್ಯನಿರ್ವಹಿಸುತ್ತಿರುವ ವಿದ್ಯುತ್, ನೀರು, ಕಸ ಇತ್ಯಾದಿ ಸಮಸ್ಯೆಗಳ ಛಾಯಾಚಿತ್ರಗಳನ್ನು ತೆಗೆಯಲೆಂದು ಹೇಳಲಾಗುವುದು.

ಈ ಛಾಯಾಗ್ರಹಣದ ಅಧಿವೇಶನದ ನಂತರ ವಿದ್ಯಾರ್ಥಿಗಳ ಈ ಛಾಯಾಚಿತ್ರದ ವಸ್ತುಗಳ ಮಹತ್ವವನ್ನು ಗ್ರಹಿಸುವ ಸಾಮರ್ಥ್ಯವನ್ನು ಸಂಕ್ಷಿಪ್ತವಾಗಿ ಸಂದರ್ಶಿಸಲಾಗುವುದು. ಭಾಗವಹಿಸುತ್ತಿರುವ ಶಾಲೆಗಳಿಂದ ಪಡೆಯುವ ಈ ಮಾಹಿತಿಯನ್ನು ನಗರದ ಮೂಲ ಸೌಕರ್ಯ ಸಮಸ್ಯೆಗಳು ಹೇಗೆ ಮಕ್ಕಳ ಮೇಲೆ ಪ್ರಭಾವ ಬೀರುತ್ತದೆ ಎಂದು ಚರ್ಚಿಸುವ ವರದಿಯಲ್ಲಿ ಉಪಯೋಗಿಸಲಾಗುವುದು. ಈ ಮಾಹಿತಿಯು ಉತ್ತಮ ನಗರದ ನಿಯಮಾವಳಿಯನ್ನು ಪ್ರತಿಪಾದಿಸುವುದಕ್ಕಾಗಿ ಸಹಾಯ ಮಾಡುತ್ತದೆ. ವಿದ್ಯಾರ್ಥಿಗಳು ತಮ್ಮ ಕೆಲಸ ತೋರಿಸಲು ನಾವು ಒಂದು ಕಾರ್ಯಕ್ರಮವನ್ನು ಆಯೋಜಿಸುತ್ತೇವೆ ಅಥವಾ (ಚಿತ್ರ ಪುಸ್ತಕವನ್ನು) ಇದರ ಬಗ್ಗೆ ಪ್ರಶ್ನೆಗಳು ಅಥವಾ ವಿವರಣೆಗಾಗಿ ಸಂಪರ್ಕಿಸಿ ಆಲಿಯಾ ದರ್ಶಿ- 9538533771

ಈ ಪ್ರಮುಖ ಸಾಮಾಜಿಕ ಯೋಜನೆಯಲ್ಲಿ ನಿಮ್ಮ ಶಾಲೆಯು ಭಾಗವಹಿಸುತ್ತದೆ ಎಂದು ಆಶಿಸುತ್ತೇವೆ.

ಶುಭಾಶಯಗಳೊಂದಿಗೆ

ವಲ್ಲಿ ನರಸಿಂಹ

ವ್ಯವಸ್ಥಾಪಕಿ, ಬಾಲ ಜನಾಗ್ರಹ-ದಕ್ಷಿಣ ಮತ್ತು ಪಶ್ಚಿಮ ವಲಯ
ಜನಾಗ್ರಹ ಸೆಂಟರ್ ಫಾರ್ ಸಿಟಿಜನ್ ಶಿಪ್ ಅಂಡ್ ಡೆಮಾಕ್ರಸಿ

Appendix B: Student worksheet

Name: _____ School: _____

PICTURE 1 NAME: _____

What's in the picture and why did you take it?

PICTURE 2 NAME: _____

What's in the picture and why did you take it?

PICTURE 3 NAME: _____

What's in the picture and why did you take it?

PICTURE 4 NAME: _____

What's in the picture and why did you take it?

PICTURE 5 NAME: _____

What's in the picture and why did you take it?

PICTURE 6 NAME: _____

What's in the picture and why did you take it?

PICTURE 7 NAME: _____

What's in the picture and why did you take it?

PICTURE 8 NAME: _____

What's in the picture and why did you take it?

PICTURE 9 NAME: _____

What's in the picture and why did you take it?

PICTURE 10 NAME: _____

What's in the picture and why did you take it?

Appendix C: Interview questionnaire

Name: _____

Age: _____

School: _____

Father's occupation: _____

Gender: (circle)

Male

Female

Mother's Occupation: _____

1. What were the main things that you noticed during the photo walk? Follow-up: Why did you notice these things?

2. Can you tell me about your pictures? Browse through pictures with child and get them to explain why they photographed those things, how they affect them and what they can do to improve things that seem to be problems/bother them.

3. What do you like about the area around your school? Follow-ups (ask one question at a time): Why? What about in the city? Why?

4. What issues in the city bother you or could be improved? Follow-up: Why?

5. How do you think you can play a role in making the city a better place?

6. FOR BALAJANAAGRAHA STUDENTS ONLY: Do you think studying Bala-Janaagraha influenced what you noticed during the walk? Follow-up: How?

7. Is there anything else you'd like to add?





BalaJanaagraha
TODAY'S CHILDREN. TOMORROW'S ACTIVE CITIZENS.

Janaagraha Centre for Citizenship and Democracy

4th Floor, UNI Building, Thimmaiah Road, Vasanth Nagar, Bengaluru-560052

Phone: 080-40790400, Fax: 080-41277104

Email: info@janaagraha.org

www.janaagraha.org | www.balajanaagraha.org | www.ipaidabribe.com | www.ichangemycity.com | www.janausp.org