

Urban Maestro

New governance strategies
for Urban Design

Participatory design for child-friendly space improvement in Dhaka, Bangladesh

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UN HABITAT
UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n° 831704



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GENERAL INFORMATION

Location: Rayer Bazar and Mirpur in Dhaka North City Corporation

Key stakeholders: Dhaka North City Corporation (DNCC), Work for Better Bangladesh trust (WBBT); UN-Habitat; local residents of Ward 2,4,5,9 and 34 of DNCC

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INTRODUCTION

Urban design governance tools are key in creating better quality and sustainable urban development for all. In addition to formal tools, the use of informal tools can activate soft power for better urban design governance and allow different marginalized groups to take part in decision-making process with a greater flexibility.

The current paper explains how the informal quality delivery tool “Minecraft” was used to support “Participatory design for child-friendly space improvement in Dhaka, Bangladesh” initiative. With the examples of two public spaces, Rayerbazar and Mirpur in Dhaka North City Corporation, the paper shows how using the Block by Block methodology helped to change the mind-set of policymakers to realize the value of soft power of urban design governance for built environment interventions. This paper highlights the successes, impacts, innovative approaches, transferability, challenges and lessons learned from this project.

This example provides a model for how formal regulatory mechanisms can support priorities derived from the community through informal governance tools.

1. BACKGROUND

Launched in 2012, the UN-Habitat Global Public Space Programme aims to improve the quality of public spaces worldwide and has implemented projects in more than 30 cities globally, including several physical transformations. The programme provides technical and advisory support to improve safe, accessible and inclusive public spaces through an integrated approach that allows citizens to take part in design, development and decision-making processes.

The “Child-friendly space improvement in Dhaka” initiative is a tri-party collaboration between Work for Better Bangladesh Trust (WBBT), UN-Habitat and Dhaka North City Corporation (DNCC). The project introduced the “Block by Block” methodology that uses Minecraft as a soft governance tool to enable communities to identify and prioritize their needs for designing and improving their very own public spaces. The initiative facilitated improvements in six child-friendly spaces in Rayer Bazar and Mirpur areas. It contributed to change the mindset of local users through innovative participatory processes, as well as of the DNCC, in adopting soft governance tools public space planning development and management practices.

2. THE TOOL – PROCESS AND PURPOSE

Globally, a wide range of tools is available to support the process and outcomes of urban design governance to improve the quality of the built environment in urban centers. These tools help both public and private actors to take part in decision-making and development processes. Some tools are formal and mandatory to use while others are informal and use soft power to encourage actors to participate and provide their inputs for quality design and developments for specific projects. All tools aim to be adaptable, evidence driven, participatory and self-evaluative, however certain tools are more useful at different stages of the planning process and in diverse spatial, political, legislative and social contexts.

In 2012, UN-Habitat entered into an innovative partnership with the Swedish computer game company Mojang AB, the makers of the popular computer game Minecraft. Through the partnership, named Block by Block (BbB), Minecraft is used as a community participation and engagement tool in the design and implementation of public space projects.

According to the classification provided by Urban Maestro, Minecraft falls under the informal exploration tool within the broader category of the quality delivery tool. Minecraft engages grassroots communities and hard to reach groups directly in the design process through mechanisms that investigate, test out and involve them in particular public space improvement projects. The Block by Block methodology emphasizes how community participation has been considered as a key driver for the implementation of the public space programme at different spatial scales.

Minecraft 3D models visualize the actual project site and therefore facilitate the participants to visualize and develop improvement proposals based on the project site and its challenges. It also provides opportunities to discuss debate, argue on issues, and build a common consensus for a more unified vision for the site. The tool is particularly interesting to children and youth groups who are often neglected in the conventional planning process but have important roles in sustainable urban development. Moreover, the tool has immense potential to empower the community as it allows them to present their development proposals to policymakers, to validate and prioritize them based on their needs.

This tool also contributes to a sense of ownership among the public space users. The Block by Block workshop usually takes 2-3 days and involves multiple participants using Minecraft to design interventions on a single model and to construct different proposals, which is more similar to real-life construction projects with multiple workers carrying out different roles simultaneously, than traditional digital 3D model-making with only one designer. This approach helps to give them a sense of ownership, responsibility, and management for a long-term project.

3. THE INITIATIVE – PARTICIPATORY DESIGN, PRIORITIZATION AND FINANCING

For the “Child-friendly spaces in Dhaka” project, Minecraft had been used as an informal exploration tool to ensure quality public space design where the actual users could contribute to their own spaces based on community needs. The process specially prioritized children, youth and women as they are mostly neglected from design and development processes in formal planning practices. In the case of Dhaka, the tool helped to explore the needs, demands and vision for child-friendly spaces in the selected areas (Rayer bazar and Miprur). The participatory workshop

took place in Dhaka and was hands-on and exploratory in nature. The process allowed participants to collaborate on issues and solutions for the space.



Community consultation to identify challenges and solutions for Boishakhi Playground in Rayer Bazar © UN-Habitat

Once the models were built by the community representatives in Minecraft, the proposals were validated through community consultations for a wider stakeholder validation. As well as the participatory design process and workshop, another tool was critically important - the cost estimation exercise and prioritization of initiatives. The prioritization of different proposals helped to understand the number of proposals that would be implemented by this project, what proposals would require additional sources of funding, and how to be most efficient with the design ideas and practical limitations of the project.



Users presenting their ideas and solutions through Minecraft tool to revitalize Boshakhi Playground in Rayer Bazar © UN-Habitat

In particular, the experience of Rayer bazar and Miprur in Dhaka revealed that the participatory workshop helped to enable intrinsically motivated users to work on urban projects by devoting their enthusiasm, competence, and creativity, in a voluntary manner, and therefore act as tools that imply an efficient allocation of talents and resources for projects with a public interest. Moreover, this collective approach on which this participatory tool is based enabled soft powers of negotiation and persuasion to be exercised.

4. RELATIONSHIP WITH FORMAL REGULATORY TOOLS

Upon prioritization of the proposals by the community, the site-specific Minecraft models were used to develop implementation drawings and designs by the urban designers and architects of DNCC. The process and the designs were also documented as a manual for future use for similar interventions to develop child-friendly spaces. The success of this process motivated DNCC to allocate additional resources from its annual budget for child-friendly spaces improvement in densely

populated neighborhoods. The example provided a model for how formal regulatory mechanisms can support priorities derived from the community through informal governance tools.

5. EXAMPLES OF IMPLEMENTATION

The project was implemented between 2018-2019 under the joint collaboration mechanism, where UN-Habitat provided overall advisory and technical support as well as funding; WBBT worked as key implementing partner on the ground; and DNCC performed key supervision, quality control and management-related tasks. Over two years, 6 spaces were improved as child-friendly public spaces through the active participation of the communities in the DNCC area:



Completed children zone in use at Boshakhi Playground © UN-Habitat

Boishakhi playground in Rayer Bazar: The playground is the only public space in Ward 34 with a population of 250,000. Before implementation, the site was considered unsafe and unusable from users' perspectives. The project used "Minecraft" as a participatory design tool to receive the community's inputs in design and development process. In total, 14 improvements were proposed which later on implemented over 7 days of intervention through the active participation of the community. The community helped to clean the playground and children helped to paint the murals. In total 320 hours of volunteer time was contributed to the project by the community. Since implementation, the project attracted a significant number of

users especially girls, toddler, and women; and the number has increased more than double.

Child-friendly spaces in Mirpur: Mirpur is one of the most densely populated areas in Dhaka and lacks quality public spaces for women, children, and elderly people. Based on the success of the previous project in Rayer Bazar (Ward 34), UN-Habitat collaborated again with WBBT and DNCC to revitalize 5 children friendly spaces in Ward 2 (Pallabi Mini Park in Road 5-6, Pallabi Mini Park in Road 17) ,4 (Mirpur 13 Mini park),5 (Bauniabadh Chilren's Zone) and 9 (Gloratek Playground)in Mirpur area. Upon the success of Phase-1, this initiative also used Minecraft as a soft governance tool to ensure the community's engagement in the process. The initiative accommodated 134 proposals made directly by the user communities of those sites. On each improved site, the number of users (especially for girls, toddlers and woman) has doubled. During a post-implementation survey, the users have mentioned that they feel more safe and comfortable using these sites now for the availability of different facilities and better management. The initiative also supported to develop and institutionalize of a community-led public space management mechanism that engaged community elders, youth, and children leaders from the user groups. A management guideline was also developed and adopted by the communities in all these 5 sites, which will be monitored and supported by the respective Ward Councilors and DNCC team.



Child friendly spaces created in Bauniabadh in Mirpur © UN-Habitat

6. ALLIED FINANCIAL MECHANISMS

The “community-led child-friendly space” initiative was funded by “block by block” foundation through UN-Habitat’s Global Public Space Programme. The national NGO WBBT received the funding for project implementation through a global open call for proposal. One of the key elements of the financial model used was to inaugurate the strength of soft governance tool that prioritizes community’s needs and encourage DNCC to invest its’ own budget to implement similar investment in public space. For the entire initiative, UN-Habitat made a contribution of 95,750 USD. In both phases, WBBT and DNCC provided in-kind and cash contributions to implement the initiative. However, the lengthy and bureaucratic budgeting and project implementation procedures of DNCC delayed the co-funding model for project implementation.

The participatory design, prioritization, validation and cost estimation exercise helped DNCC to realize how to allocate resources for long-term sustainability on built environment interventions. Despite the direct engagement of DNCC in the process, it had been realized that the participatory financial model for such small projects is cumbersome, as it depends on political will and overall development priorities placed by the policymakers. However, based on the success of the initiative DNCC allocated additional 240,000 USD to complete unfinished tasks of the 5 sites under phase-2 in Mirpur area. DNCC also replicated 2 similar spaces in Noyatola and Mirpur with a total budget of 285,000 USD.

7. CHALLENGES, BARRIERS AND MAIN ISSUES

In the case of Dhaka, the “block by block” participatory method contributed positively to transform 8 child-friendly spaces (six directly and 2 indirectly). It also helped to change the mind-set of the policymakers in using soft governance and design tool to engage the community into decision-making and development process. However, the approach also imposed a few important challenges and constraints during the implementation process. First, this initiative was implemented with the direct support of DNCC, which is in charge of service delivery and maintenance, whereas RAJUK is responsible for the overall development control and planning of Dhaka City. The project approach, method and tools used were highly appreciated, adopted and replicated for few other similar projects by the DNCC. However, it was not integrated

into Dhaka Master Plan, which could have played significant roles in resource mobilization and citywide public spaces improvement. Secondly, political will and interest also played vital roles during project implementation. In one site, implementation was delayed due to conflicting political interests. The issue was resolved through the direct support of the Mayor and multiple community consultation meetings. Thirdly, due to resource constraints the initiative could not implement the whole list of proposals made by the community in all these 6 sites. However, after a series of negotiation and mediation meetings, DNCC allocated extra resources from their annual budget to complete the unfinished tasks. Fourthly, DNCC's annual budget is mostly linked with specific donor and government funded development projects. Therefore, they are hard to link with small-scale community-led projects. Lastly, there is a big gap in the demand and supply system of public spaces in Dhaka City as multiple government agencies are involved in the process. The existing system enables parallel agencies to plan, design and implement public spaces and they fall under different ministries. A big strategic change and shift of higher-level governance system is needed to adopt a holistic approach to work public space issue at citywide scale, which was not covered within the scope of this project.

8. KEY INNOVATIONS, SUCCESSES, AND IMPACTS

The key innovation of this specific initiative was to introduce a digital participation tool that allowed communities to engage in design and development processes. It explored the community's potentials to design and implement their own public spaces based on challenges and needs that they face on daily basis.



Local kids taking part in painting the site at Boishakhi Playground © UN-Habitat

The tool was attractive to children and youth groups and proved successful in encouraging them to propose solutions based on their needs. The digital tool has proved to be more appealing for youth groups than traditional tools (site planning, community mapping etc.) where they could visualize solutions, prioritize, and finally validate through discussion and debate, which also heightened their collaborative and leadership skills, giving them engagement and ownership over improving their environment.

The overall impacts of this initiative were very encouraging and opened windows for discussion on quality public spaces in Dhaka City. Some of the key results/successes derived from this initiative are:

- The project in Rayerbazar Boishakhi Playground inspired DNCC to re-think the need and demand for child-friendly public spaces in densely populated and congested neighborhoods in Dhaka. DNCC replicated 2 similar playgrounds/pocket parks for children in Nayatola and Mirpur by following the participatory methods launched by UN-Habitat.
- Based on the acceptance of the “Block by Block” methodology, using Minecraft, DNCC adopted and demonstrated this approach to revitalize 2 major parks/playgrounds (1 park in Banani and 1 Playground in Moghbazar) through their ongoing efforts to upgrade 32 parks and playgrounds under urban Resilience Programme in DNCC area.
- The project in Mirpur where 5 child-friendly spaces were developed, motivated the city authority to realize the needs and importance of pocket parks and the benefits of children’s recreation facilities. The Mayor has

allocated additional 240,000 USD to finish the unfinished proposals that came out through the participatory design workshop from the community people.

- The initiative also contributed to enhance the capacities and skills of 80 experts from different agencies on participatory public space planning and management.
- The community workshop contributed to the learning of more than 80 children and youth who received collaborating and design skills. In total, 94 community consultations and validation meeting were held which were attended by 350 community members at different stages of the project.
- The project developed a design manual to improve child-friendly spaces in congested neighborhoods, which provides practical design guidelines for implementation. The guidelines provide solutions on different services based on the local contexts and available local materials. It also outlines the integrated approach for child-friendly spaces creation, improvement, and management.
- The project also helped to develop a community-led management guide of the completed sites. The guide provides guidelines and policies on the management and maintenance of the spaces with clear roles and responsibilities.
- The participatory method followed for this initiative also attracted multiple public and private actors working on urban development issues in Dhaka. It enhanced their understanding of how public space can lead to sustainable urban development and how voices of the unheard can contribute positively to the design and development process for greater community interest as well as sustainable urban development. Based on that success, a network of public spaces for Dhaka City was formed in 2020. The network provided a set of recommendations on “child-friendly cities” to the 8th Five Year Plan for implementation at the national level.

9. KEY LESSONS AND TRANSFERABILITY

The case of “Child-friendly space for Dhaka” initiative offers multiple positive lessons to be learned from. The active engagement of the community including a wide variety of experts played pivotal roles in creating child-friendly spaces in selected neighbourhoods some of the less served neighbourhoods in Dhaka city. This community-led design and implementation approach brought together a broad array of specialists from the government, academia, community, political and other organizations to collaborate across sectors and build consensus. The result of public space design and implementation related interventions that are not only technically robust, but also take into account the requirements of a broad range of stakeholders, including agencies involved in service delivery and sustainable urban development.



Community meeting to create sustainable management of improved spaces in Mirpur © UN-Habitat

Consensus building through multi-stakeholder engagement is a long-term process that allows the collaborative and effective distribution of roles and responsibilities. Given the diversity of individuals and agencies involved in the process, regular communication and discussions were critical for decision-making. The project facilitated more than 35 field visits and 94 community meetings to assess the community needs as well as for implementation.

In addition to informal tools, the project also used formal tools to finalize the design and implement the sites at the City corporation level. The soft governance tool (informal and experimental) helped to capture the needs and demands of the community whereas the formal governance approach helped to institutionalize the findings from the informal and experimental one. Therefore, the experience of Dhaka suggests that a formal framework that institutionalizes temporary and incremental participatory design process can be replicated in similar and favorable conditions for built environment intervention, in this case quality public space promotion.

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This paper was drafted as an external contribution to the Coordination and Support Action “URBAN DESIGN GOVERNANCE - Exploring formal and informal means of improving spatial quality in cities across Europe and beyond”, also known as “Urban Maestro”. The Action was funded by European Union’s Horizon 2020 research and innovation programme under grant agreement No. 831704 and implemented from 2019 to 2021 by a consortium comprising the University College London, Brussels Bouwmeester Maître Architecte and UN-Habitat.

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ACKNOWLEDGEMENTS

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Design and layout: Kidnap Your Designer, Brussels
Bouwmeester Maître Architecte (BMA)

