

Assessing the Social and Recreational Impact of Dhupkhola Playground on the Residents of Old Dhaka

Tanjina Rahman¹; G. M. A. Balayet Hossain²;
Sharmila Sutradhar³; D. M. A. Sufian Reza⁴

¹Postgraduate Scholar, Department of Architecture Ahsanullah University of Science and Technology (AUST), Dhaka, Bangladesh

²Professor, Department of Architecture Ahsanullah University of Science and Technology (AUST), Dhaka, Bangladesh

³Lecturer, Department of Architecture Daffodil Polytechnic Institute, Dhaka, Bangladesh

⁴Instructor, Department of Architecture AITVET, Dhaka, Bangladesh

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Abstract: Playgrounds are essential components of urban environments, providing spaces for recreation, social interaction, and cultural continuity. Dhupkhola Playground, commonly known as Dhupkhola Maath, is located in Dhupkhola, Gandaria, Old Dhaka and is one of the few remaining large-scale open spaces in the historic core of the city. For generations, this playground has played a significant role in the daily lives of Old Dhaka residents, serving as a center for recreation, community gatherings, and cultural activities. The site holds strong historical and emotional value, as many families have long-standing memories associated with it across generations. In particular, it reflects the lived experiences of older generations, making it an important part of urban cultural heritage. However, in recent years, the playground has faced environmental degradation, pollution, and insufficient maintenance, which have reduced its usability and overall condition. This study aims to identify the social impact of Dhupkhola Playground on local residents, children, and users, as well as to assess its current physical condition. The research methodology is structured in three phases: literature review, questionnaire survey, and interviews with local users and residents. Finally, the study proposes recommendations for improving and preserving the playground as a sustainable urban open space in Old Dhaka.

Keywords: Urban Open Space, Playground, Social Impact, Recreation, Community Interaction, Old Dhaka, Dhupkhola Playground.

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I. INTRODUCTION

Old Dhaka suffers from a severe shortage of accessible public open spaces due to rapid urbanization, unplanned development, and increasing population density. Urbanization has become a dominant global trend, with approximately 68% of the world's population expected to live in urban areas by 2050 [1]. In developing countries, rapid urban growth often occurs at the expense of public open spaces, resulting in environmental degradation and declining opportunities for recreation and social interaction [2]. Urban open spaces are increasingly recognized as essential components of sustainable cities because they improve environmental quality, enhance public health, and strengthen social cohesion [3,4]. Public open spaces provide multiple benefits to urban residents, including opportunities

for physical activity, psychological restoration, social interaction, and community engagement [5]. Research has shown that accessible recreational spaces contribute significantly to improving quality of life and promoting healthier lifestyles among urban populations [6]. These benefits are particularly important in highly dense urban environments where residents have limited access to natural and recreational resources [7]. Dhupkhola Playground, commonly known as Dhupkhola Maath, is located in Gandaria within the historic urban fabric of Old Dhaka. It is one of the few remaining large-scale public open spaces in the area and serves as an important recreational, social, and cultural hub for local residents. Due to the severe scarcity of open spaces in Old Dhaka, the playground plays a vital role in meeting the recreational and social needs of surrounding communities [8]. The field accommodates a variety of

activities including sports, physical exercise, community gatherings, cultural programs, and informal social interaction. Historically, Dhupkhola has been associated with community-oriented land use and public welfare functions. Over time, the playground evolved into one of the most important public gathering spaces in Old Dhaka. Its long-standing presence has contributed to the cultural identity and collective memory of local residents. Public spaces that possess historical and cultural significance often strengthen place attachment and foster stronger community relationships [9]. At present, Dhupkhola Playground serves people of different age groups and social backgrounds. Children use the field for recreation and play, youths participate in sports and social activities, and elderly residents utilize the space for walking, exercise, and relaxation. Such multifunctional use reflects the broader role of urban open spaces in promoting inclusive and livable cities [4,5]. Despite its significance, Dhupkhola Playground faces several challenges including inadequate maintenance, environmental degradation, temporary encroachment, and increasing development pressure. Similar challenges have been observed in many rapidly urbanizing cities where public open spaces are threatened by competing land-use demands [10]. Ensuring the sustainable management and preservation of such spaces is therefore essential for maintaining their social, environmental, and cultural functions. Against this background, the present study aims to investigate the social impact of Dhupkhola Playground on local residents and users while assessing its physical condition and functionality. The study also explores the historical, cultural, and emotional significance of the playground within the community. Through field observations, questionnaire surveys, and user interviews, the research seeks to identify existing challenges and propose recommendations for the sustainable management and improvement of this important urban open space in Old Dhaka.

➤ *Aim and Objectives*

This study aims to analyze the existing condition and social impact of Dhupkhola Playground (Dhupkhola Maath) in Gandaria, Old Dhaka, with particular emphasis on how this urban open space influences the social life, recreational activities, and community interaction of local residents. The objective of the research is to identify the present physical condition of the playground and to understand how this space contributes to the social well-being, daily activities, and cultural experiences of children and users, as well as to explore the need for its future improvement and sustainable development.

II. METHODOLOGY

This study employs a mixed-method research approach through a field-based analytical investigation of Dhupkhola Playground (Dhupkhola Maath) in Gandaria, Old Dhaka. The research aims to evaluate the social impact, existing condition, and usage patterns of the playground, with particular emphasis on its role in community interaction, recreational activities, and cultural events. Quantitative data were collected through structured questionnaire surveys conducted among 100 respondents, including local

residents, children, youths, elderly people, and regular users of the playground. The surveys gathered information regarding usage frequency, user satisfaction, accessibility, and perceived problems associated with the playground environment. In addition, qualitative data were obtained through semi-structured interviews with local residents, shopkeepers, elderly community members, and frequent users of the site. These interviews helped to understand users' experiences, memories, perceptions, and opinions regarding the historical significance, social value, and current challenges of Dhupkhola Playground. The study also incorporated on-site observation surveys to assess the physical condition of the playground. Observations focused on land-use patterns, maintenance conditions, environmental quality, accessibility, and the variety of activities taking place within different areas of the field. To better understand the spatial utilization of the playground, different functional zones, including the public field area, institutional use zones, and informal activity spaces, were examined and analyzed. This analysis helped identify variations in usage patterns and their influence on the overall condition and functionality of the playground. The 100 respondents were selected through convenience sampling, considering users from different age groups and occupations who regularly visit the playground. The collected data were analyzed using descriptive statistical methods and qualitative interpretation techniques to identify major usage patterns, user perceptions, and existing challenges. By integrating questionnaire surveys, interviews, and field observations, the study provides a comprehensive understanding of both the social and physical dimensions of Dhupkhola Playground. This mixed-method approach enables an assessment of how the playground functions as an important social and recreational space and how its current physical and environmental condition affects the experiences of its users.

III. RESULTS AND DISCUSSIONS

Dhupkhola Playground, located in Gandaria, Old Dhaka, is one of the most significant urban open spaces in the area and serves as an important recreational and social hub for local residents. The findings of this study indicate that the playground plays a vital role in supporting the daily social, recreational, and physical activities of the surrounding community. The total area of the playground is approximately seven acres. However, field observations reveal that parts of the site are not fully suitable for regular sports and recreational activities due to inadequate maintenance, uneven ground conditions, poor drainage, and various informal uses. Despite these limitations, the playground remains highly active and widely used by the local population. According to field observations and questionnaire surveys conducted among 100 respondents, approximately 400–500 children and youths use the playground daily for activities such as football, cricket, walking, physical exercise, and informal social gatherings. This demonstrates the strong dependence of local residents on the playground, particularly in the context of Old Dhaka, where accessible open recreational spaces are limited. The study further indicates that Dhupkhola Playground is one of

the largest and most important public recreational spaces in Old Dhaka. However, increasing population pressure, multiple land-use demands, and inadequate management have gradually reduced its functional efficiency. The playground is currently divided into three main sections: the East-End Club playground, the area used by Jagannath University, and the portion accessible to the general public. This spatial division creates mixed patterns of use and occasionally restricts open access and organized recreational activities for local residents. Overall, the findings suggest that Dhupkhola Playground continues to function as a crucial social and recreational space for the residents of Old Dhaka. Nevertheless, its physical deterioration, fragmented management structure, and increasing pressure from diverse activities limit its full potential. Therefore, proper planning, regular maintenance, and coordinated management strategies are essential to improve the usability, accessibility, and long-term sustainability of this important urban open space.



Fig 1 Dhupkhola Maath Google Map Location.



Fig 2 Children Engaged in Recreational Activities at Dhupkhola Playground.
Source: Authors' Field Survey.



Fig 3 Perspective View of Dhupkhola Playground, Gandaria, Old Dhaka.

Source: Authors' Field Survey.



Fig 4 Youth Playing at Dhupkhola Playground.
Source: Authors' Field Survey.



Fig 5 Youth Playing at Dhupkhola Playground in the Evening.
Source: Authors' Field Survey.



Fig 6 Dhupkhola Playground Showing Present Physical Condition with Inadequate Maintenance.
Source: Authors' Field Survey.



Fig 7 Night-Time Condition of Dhupkhola Playground Showing Inadequate Lighting and Visibility.
Source: Authors' Field Survey.



Fig 8 Lack of Proper Drainage System Causing Accumulation of Rainwater.
Source: Authors' Field Survey.

A part of Dhupkhola Playground in the northern zone is currently being used by Jagannath University, where a physical education center is also located. The eastern portion of the playground is managed as the East-End Club playground, while the southern portion is mainly used by local residents for morning walks, exercise, and breathing space activities. Over time, the remaining area has gradually become accessible to the general public for various recreational and informal uses. This spatial division indicates a mixed pattern of land use within the playground, where different institutions and community groups share the same open space. Although this shared usage increases overall activity in the field, it also creates pressure on the available open space and sometimes limits organized recreational functions. In addition, the south-eastern corner of the playground was previously developed as a children's park, intended specifically for younger users. However, due to unauthorized occupation and encroachment, this children's park area has been lost over time. Similar to other urban children's parks in the city, this portion has been gradually taken over by illegal users, and it no longer functions as a dedicated play space for children. As a result, many local residents and even older generations have gradually forgotten that a children's park once existed in this location. This reflects a broader issue of loss of designated children-friendly spaces in rapidly urbanizing areas like Old Dhaka. The disappearance of such spaces has reduced safe and dedicated play opportunities for children, which is a significant concern for urban livability and community well-being. Overall, these findings suggest that while Dhupkhola Playground continues to function as a major public open space, its internal fragmentation and loss of designated functional zones have negatively affected its original planning purpose and long-term usability. Dhupkhola Playground (Dhupkhola Maath) serves as a multifunctional urban open space that supports a wide range of activities for different user groups in Old Dhaka. Due to the scarcity of open recreational areas in the city, the playground has developed into an important hub for daily physical, social, and cultural activities.

Local youths regularly use the playground for playing cricket, football, and other outdoor games in both the morning and evening. Over time, this field has also functioned as a practice ground for many talented young players, some of whom have later progressed to represent national-level sports teams. The playground has also been used as a temporary cattle market during Eid-ul-Azha, reflecting its flexible use during major religious festivals. In addition, senior citizens frequently use the field for morning and evening walks, physical exercise, and maintaining a healthy lifestyle. Dhupkhola Playground is also a well-known venue for cultural events such as Pahela Baishakh fairs and Eid Ananda Mela, which attract large gatherings from the local community. These events highlight its importance as a cultural and social interaction space. Furthermore, parts of the playground are occasionally used for political and religious programs, as well as various community-based events. It also hosts different types of training programs, such as earthquake preparedness training and other public awareness activities. Several school-based

events, including annual sports and cultural programs, are also organized in this playground, making it an important institutional activity space for educational institutions in the surrounding area. However, it is also observed that some portions of the playground are affected by informal and unauthorized uses, such as illegal van parking or temporary garages, which impact the proper utilization of the open space. Overall, Dhupkhola Playground functions as a dynamic and multifunctional urban space, supporting recreational, cultural, educational, and informal economic activities despite various challenges.

➤ *Analysis of Dhupkhola Playground Activity:*

Dhupkhola Playground is a highly active and multifunctional urban open space that supports a wide range of recreational, social, cultural, and informal activities throughout the day. The field remains occupied from early morning to evening and serves as one of the most important public spaces in Old Dhaka for different age groups. The playground is heavily used during early morning and evening hours by children, youths, and local residents. According to field observations and questionnaire surveys conducted among 100 respondents, approximately 400–500 children and youths use the field daily for various outdoor games such as cricket, football, and other informal sports activities. This highlights the strong dependency of the local community on this playground as a primary recreational space in a densely populated urban area.

Local youths regularly use the playground for sports practice. According to local residents and users, several talented players who practiced in the playground later participated in higher-level competitive sports... This indicates the playground's role as an informal training ground that contributes to the development of sporting talent within the community. Dhupkhola Playground also plays an important role in promoting child development and outdoor activity. It provides children with opportunities for freedom, exploration, physical movement, and social interaction. The open environment allows children to run, play, jump, and engage in various forms of unstructured play, which is

essential for physical and mental development. In the evening, the playground becomes a major recreational space for families and local residents. It is widely used for walking, relaxation, and social interaction. The field also supports health-conscious individuals, where approximately 110 to 140 people regularly participate in morning exercise activities. Many individuals aged between 55 and 74 years use the space for daily walking and physical exercise, which contributes to improved health and social engagement. The playground is generally active from around 5:00 AM to 7:30 PM, indicating its continuous use throughout the day. In addition to recreational use, the playground also supports various cultural and economic activities, particularly during festivals. Every year, events such as Eid Ananda Mela and Pahela Baishakh Mela are held here. These fairs include traditional products such as handmade sweets, seasonal fruits, handloom sarees, bangles, bamboo flutes, clay dolls, and various local handicrafts. Cultural performances such as putul nach and nagordola (Ferris wheel) further enhance the festive environment, making the playground a major cultural attraction in Old Dhaka.

The fairs typically run from Pahela Baishakh (14 April) to around the 10th of Boishakh (24 April), and remain open daily from 10:00 AM to 10:00 PM. These events also provide opportunities for local entrepreneurs and artisans to showcase and sell traditional goods, contributing to the local economy and preserving cultural heritage. However, the analysis also indicates the presence of informal and unregulated uses within the playground. In some cases, vendors, beggars, and homeless individuals use parts of the field for resting or sleeping, which reflects broader urban social issues and the lack of alternative public support spaces. Overall, Dhupkhola Playground functions as a dynamic and continuously active urban space that supports sports, recreation, cultural heritage, social interaction, and informal livelihoods. Despite its high level of usage and social importance, the lack of proper management and zoning creates challenges in maintaining its original function as a dedicated and organized public open space.

Table 1 User Distribution by Time Period at Dhupkhola Playground (Questionnaire Data)

Time of visitor	Visitor	Percentage	Activity
Time	Visitor	Percentage	Activity
Early morning (5.00 am to 7:30 am)	110 Users	17.6%	Male and female participants regularly use the playground for exercise and walking.
Morning (8:00 am to 10:00am)	40 Children	6.4%	Children use the playground for playing football and cricket.
Evening (4:00 pm to 6:30pm) (Peak Hour)	400 to 500 children	72%	Youths use the playground for playing football, cricket, and other outdoor games.
Night (7:30 to 10:00)	25 male users	4.0%	Participants use the playground to spend leisure time with friends.

➤ *Distribution of Playground Users by Time of Day:*

Observed user distribution at Dhupkhola Playground based on field observation survey.

➤ *Findings from Playground User Perception:*

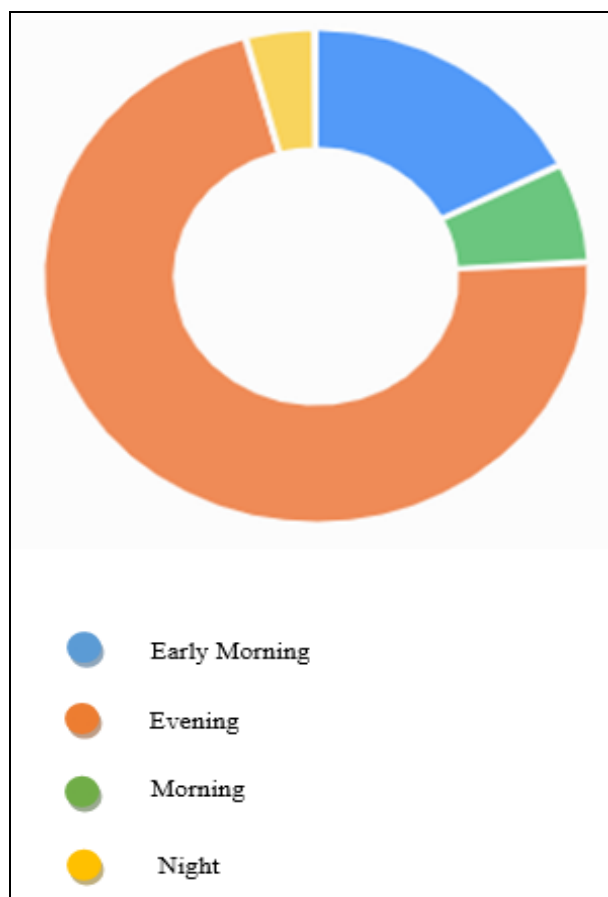


Fig 9 Distribution of Playground Users by Time of Day.
Source: Field Observation Survey, Dhupkhola Playground.

Figure 9 illustrates the distribution of playground users according to different time periods of the day. The field observation survey indicates that the highest concentration of users occurs during the evening period (4:00 PM–6:30 PM), accounting for approximately 72.0% of the total observed users. Early morning users represent about 17.6%, while morning and night users account for approximately 6.4% and 4.0%, respectively. The findings suggest that the evening period is the peak recreational time at Dhupkhola Playground, mainly due to the active participation of children and youths in outdoor sports such as football and cricket. This usage pattern demonstrates the playground's importance as a major recreational and social gathering space for the local community. The findings indicate that children are generally satisfied with the shape, size, and openness of Dhupkhola Playground. The availability of a large open field provides adequate space for various outdoor activities, which contributes positively to user satisfaction, especially among younger users. It is also observed that there is no entry fee, and the playground remains open and accessible to all users, making it an inclusive public space for different socio-economic groups in Old Dhaka. This open-access nature significantly increases its daily usage

and social value. Regarding activity patterns, most children were seen engaging in outdoor sports such as cricket, football, and badminton. Among these, cricket and football are the most dominant games, widely played by boys across different socio-economic backgrounds, indicating a strong cultural preference for these sports in the community. The field observation survey indicates that the highest concentration of users occurs during the evening period (4:00 PM–6:30 PM), accounting for approximately 72% of the total observed users, suggesting that these time periods are the most active in terms of recreational use. This reflects both environmental comfort and the daily routine patterns of local residents. Overall, the playground is perceived as a highly accessible and socially inclusive recreational space, with strong engagement from children and youths, particularly for popular outdoor sports activities.

IV. CONCLUSION

The study concludes that Dhupkhola Playground is one of the most important urban open spaces in Old Dhaka, contributing significantly to recreation, social interaction, cultural activities, and community well-being. The findings reveal that the playground is widely used by children, youths, and elderly residents for sports, exercise, leisure, and social engagement. However, inadequate maintenance, poor drainage, encroachment, and insufficient facilities have reduced its overall usability and user comfort. Based on the study findings, improvements in landscape design, environmental quality, accessibility, and civic amenities are necessary to enhance the functionality of the playground. The provision of greenery, seating areas, walkways, proper drainage, waste management facilities, and inclusive design features can improve user experience and environmental sustainability. The study recommends regular maintenance, improved drainage facilities, enhanced lighting systems, increased greenery, and stricter management policies to ensure the long-term sustainability of the playground. Furthermore, effective coordination among local authorities, educational institutions, and community stakeholders is essential for protecting the playground from encroachment and unauthorized activities. With appropriate planning, management, and community participation, Dhupkhola Playground can be preserved and developed as a sustainable, inclusive, and user-friendly recreational space while maintaining its cultural, historical, and social significance for the residents of Old Dhaka.

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