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Gender-Responsive Urban Planning and Design of Public Open Spaces for Social and Economic Equity: Challenges and Opportunities in Dhaka City, Bangladesh

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Gender-Responsive Urban Planning and Design of Public Open Spaces for Social and Economic Equity: Challenges and Opportunities in Dhaka City, Bangladesh

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Abstract- The gendered built environment contributes directly to social and economic inequities. The economic prosperity of Dhaka city is yet to translate into a desirable urban life, especially for its female citizens. Public open spaces - where active urban life flourishes - are populated by men and boys in the city. Nevertheless, these spaces are in a constant state of becoming, radically departing from the earlier ideas of static due to increased engagement of women in urban productivity, politics, and governance. Space is a neglected dimension both in gender and urban studies. The paper examines the urban system of Dhaka that consists of both physical and social systems, interdependent and interlinked in a way that maintains a dynamic balance between forces or exhibits a capacity to grow and change. The findings illustrate that access to and mobility in public open spaces influenced by a range of pragmatic, ideological, socio-cultural, and spatial factors underpinned by prevailing gender inequalities and asymmetries contribute to both social and economic inequities in the city. Thus, the paper recommends gender-specific, planning gender-sensitive and gender-transformative approaches for meaningful occupancy of public open spaces by both women and men.

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I. INTRODUCTION

A prosperous city requires equitable access to urban systems such as housing, livelihood, infrastructure, and services along with means to engage its citizens in governance to ensure social and economic equity. These physical and social systems, interdependent and interlinked in a way that maintains a dynamic balance between forces or exhibits a capacity to grow and change (Condon, 2019). Dhaka – the capital city of Bangladesh – is the most important economic center of the country. The economic opportunities have attracted almost 21 percent of the country's total urban population (BBS, 2014) to live and work in this city. However, economic prosperity is yet to translate into a desirable urban life for its citizens. Urban life flourishes in public spaces – the non-private areas of urban settlements in which individuals in co-presence tend to be personally unknown (Lofland, 1989). Public spaces, traced through the spatial transformation of the city over the years, demonstrate a diminishing pattern. Moreover, the usage pattern of these 'open' and 'accessible' spaces used without any payment illustrates social and economic inequity between its female and male citizens based on gender norms, roles, and power dynamics.

Gender is one of the structural factors that highlight the societal aspects of urban systems. It can demonstrate the ways how inequities based on the relationship between women and men intersect with urban planning and design, often bringing out the negative impacts for women and girls (Terraza et al., 2020). Gender research, as globally and in Bangladesh, focuses on different issues; for example, women's gender role and cultural patterns (e.g., violence against women), sex-related factors (e.g., reproductive health), gender division of labor (e.g., livelihood choices), gender differences in income and assets (e.g., inequality in wage), and gender bias in decision-making (e.g., access to education). In most instances, the discussions remain limited to the explorations of cultural, social, economic contexts; rarely, they include spatial analysis of these interrelated forces. Space is a neglected dimension in gender studies and urban studies suffer from a lack of gender theory (Molina, 2018). Alternatively, when planning adopts a gender lens the world looks different, people feel safer on the streets, and homes function better for families and communities (Fainstein and Lisa, 2005).

The paper aims to identify challenges and opportunities for urban planning and design genderresponsive public open spaces that can address social and economic inequity. Dhaka is chosen as the case study for the exploration considering public open spaces in the city are in a constant state of becoming, radically departing from the earlier ideas of static due to increased engagement of women in urban productivity, politics, and governance. The paper has six sections. After this introduction, section two narrates the 2020

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conceptual framework summarized from discourses on public open space and gender-responsiveness. Section three describes the present condition of public open spaces in Dhaka and their gendered access. After a brief narrative of the methodology, section five describes findings and analysis. The spatial characters and space usage patterns, users' experience, and perception of public open spaces are analyzed considering gender norms, roles, and relations for women and men and how they affect access to and control over resources for strategies to take advantage of urban life and economic prosperity. The recommendations and conclusions in section six argue for urban planning and designing gender-sensitive gender-specific, and gendertransformative development to ensure accessible, active, comfortable, and sociable public open spaces for all.

II. Public Open Space and Gender-Responsiveness: Theories and Concepts

a) The nexus between public open space and urban life

Public spaces in urban areas are regions 'open' and 'accessible' to different groups of the population. The conception of being open is associated with the notion that these physic al locations (whatever their ownership) may be occupied by anyone who chooses to be present, may go into, pass through, or depart from as they wish (May and Buford, 2014). Normative expectations do not govern the freedom of anyone making choices to be in public spaces. Moreover, accessibility to public spaces is not restricted to specific groups or reflects the desires of the dominant groups who exert control over those spaces (ibid). It is argued that urban life unfolds in public spaces as it is not about the economic and political life broadly conceived, rather refers only to the interaction, to the sociality or sociability which may, of course, be of an economic or political character of the urban area (Lofland, 1989). Gender biases in accessing urban spaces contributes directly to gendered social and economic inequities limiting gainful employment and education, achieving economic independence, providing fewer freedoms to build social networks to cope with risks and stress, and exercise agency in public decision-making that shape the built environment (Terraza et al., 2020).

Urban sociology theories suggest that, although sound similar, the concepts 'public space' and 'public realm' are not synonymous (Lofland, 1998). Public spaces are physical spaces while public realms are social territories, not geographically or physically rooted to pieces of space. The public realm is marked by the co-presence of individuals personally unknown or known only in terms of occupational or other nonpersonal identity categories (for example, street vendors and customers). Yet, the public realm's full-blown existence is what makes urban areas different from other types of settlement. To encourage an active public realm, urban facilities and services are essential. A good public open space needs to have four different types of ingredients: accessible, comfortable, sociable, and with options of activities (Francis, 2003). Of those four, accessibility depends on linkages, walk ability, connectedness, and convenience; safety, places to sit, attractiveness, cleanliness are criteria for comfort; friendliness, interactivity, and diversity ensure sociability, while usefulness and celebration encourage activities (ibid).

Any urban area is defined as 'public' based on the portion of the 'life space' of its citizens spent in the public realm. Private life centers around ties of close intimacy and personal connection among individuals secluded with the privacy and security of private space. Interpersonal networks around a sense of commonality may take the individual to parochial spaces where they identify their 'life space' with the others based on the rhythms and protocols that govern activities in those spaces. The life there, thus, may be perceived as public or private based on occupancy type and experience by users. Accordingly, the same space and the 'life space' may interchange between private and public. Public space, on the other hand, introduces the flexibility of spending more 'life space' moving away from the networks of personal connection or sense of commonality.

The spatial and organizational aspects of the urban area affect men and women differently (UN-Habitat, 2008); consequently, the experience of urban life by women and men vary in public open spaces. Accessibility to public open spaces can be both spatial and aspatial - spatial denotes physical access by which an individual can reach or use the open spaces. In contrast, the aspatial refers to the socio-economic and cultural constraints and characteristics of the users that either obstruct or facilitate access to those spaces (Penchansky and Thomas. 1981). Traditionally associating women's and girls' roles in a society with the notions of the feminine, inside, residence, and consumption as opposed to the masculine, outside, workplace, and production has been one of the most limiting aspects of urban life (Molina, 2018). The analysis of gender provides a better understanding of such disparities.

b) Gender in cities of the global South

The definition of gender transcends from the narrow concept of addressing the need and experience of women as a group to a broader perspective of the social construct that allows women's social roles and positions to become more visible in relation to men's and the relationship with men (Dankelman, 2010). Structured gender relations affect all aspects of an individual's life, including their rights and access to and control over resources, levels of decision-making power as well as cultural aspects and identities (Moser, 1995; Kabeer, 1999). The definition of gender demands to include additional attributes and considerations in megacities of the global South like Dhaka because of "the struggles between, on the one hand, the rhetoric of modernity and modernization together with the logic of coloniality and domination, and, on the other, the struggle for independent thought and decolonial freedom" (Levander and Mignolo, 2011:4).

Traditionally, urban planning and design analyzed from gender perspectives adopt the reductionist approach of women as a subject of fear (Molina, 2018). Similarly, the discussion around gender often seem to emphasize women's curtailed choices and power; however, Demetriades and Esplen (2008) argue that discounting men as 'somehow no-gendered' misunderstands how gender-related constraints play out in particular contexts and undermine the positive contributions that men can and are making towards gender equity. Taking an unbiased gender analysis, rather than a narrow focus on women can facilitate identifying separate, complementary and conflicting interests that avoid exacerbating gender inequalities and promote gender equity (Denton, 2002; Nelson et al., 2002; Momsen, 2010).

III. UNDERSTANDING PUBLIC OPEN SPACE AND GENDERED EQUITY IN DHAKA

Public space in the context of Dhaka is defined as places generally open and accessible to all. These include roads and sidewalks; parks and playgrounds; water-front development and plaza; government-owned and maintained recreational buildings where no fees or paid tickets are required for entry, thus mostly open to sky spaces. Non-government-owned shopping centers or malls are not included as public space as they are 'private space' with the appearance of being 'public space.' Also, like many cities of the global South, public spaces in the city are not principally used for leisure like having a coffee, socializing or relaxing as they are in the North; they include sites that accommodate local informal retail activities and where people seek refuge from small or precarious housing, for example, tea-stalls at street corners. Streets and paths are converted as space for mobility as well as space for recreation and socialization.

Dhaka is one of the world's top ten megacities (population-wise), also among the world's least livable cities (EIU, 2019). With five percent annual urbanization rate and 42 million urban population living in only six percent of the country's land area (BBS, 2014), Bangladesh is in the world's top ten fastest urbanizing countries. Extremely poor infrastructure and low level of services characterize the country's urban areas. The capital city remains the most productive location in the country, contributing 36 percent of the GDP owing to its better access to skilled labor and power supply, suppliers, sub-contractors, technicians, and support (Ellis and Roberts, 2016). Despite the limitations of infrastructure and services, urbanization is seen as a promising pathway for the country to accelerate shared growth and end extreme poverty. Improving livability in the cities, like Dhaka, is expected to lead to enhanced attractiveness of urban centers for increased economic activity.

The spatial transformation of Dhaka contributed to the poor livable conditions. An analysis of urbanization and green space dynamics between 1975 and 2005 showed that percentage of green areas reduced from 44.8 to 24.1 during this time, while the built-up area expanded from 13.4 to 49.4 (Byomkesh, Nakagoshi and Dewan, 2012:53). Another study reported that the Dhaka metropolitan region densified rapidly between 2003 and 2016 (Bird et al., 2018). The land surface characterized by high and medium built-up density grew by 4.8 percent a year while low built-up density declined by 9.6 percent against a backdrop of the urban area expansion rate of only 1.5 percent a year (ibid). Thus, the city is left with 8.5 percent of treecovered lands (Rahman and Zhang, 2018) and 14.5 percent of the 127 sq.km of the city corporation area are open spaces (Byomkesh, Nakagoshi, and Dewan, 2012). Dhaka Structure Plan 2016-2035 identified only 0.30 percent of land of the city can be used for recreational activities (RAJUK, 2015).

Various agencies and institutions own and are responsible for maintaining the existing public open spaces including the Public Works Department (PWD), Dhaka North and South City Corporations (DNCC & DSCC). DSCC and DNCC supervise and maintain around 16 playgrounds and 40 parks covering approximately 0.76 sg.km area (Ahmed and Sohail, 2008) while PWD is responsible for another 1.22 sq.km area. The total of 1.98 sq.km area of parks and playgrounds that are public open spaces forms only 1.5 percent of the city's land. This amount does not include the right-of-way, landing space, road- side island, median, round-about, etc. (Nilufar, 2000). Some of the other open spaces are not accessible to the citizens for use without any payment, for example, the zoo and botanical gardens. Many public open spaces were encroached by the public, private agencies, and political parties in the name of social cause. Both the city corporations have recently taken up initiatives to improve the conditions of some of those parks and playgrounds with new amenities and infrastructure. Nevertheless, with a population density of more than 55,000 persons per square kilometers (BBS, 2014), Dhaka lacks designated public open spaces where citizens can socialize even being strangers to one another.

One of the reasons for such lacking is related to urban area expansion patterns in the city, which has been predominantly shaped by the private sector. Individual land-owners or the real-estate companies mediated 70 per cent of the physical development (i.e., housing and land development) in Dhaka with little control by the government (World Bank, 2007). Individual land-owners developed the built environment to accommodate the private realm. Real-estate developers followed a similar path of development, leaving almost no space for public usage (Jabeen, 2014). Alternately, neighborhood development initiatives by the public sector, inspired by urban planning theories of the global North, made efforts to create parks and playgrounds (for mostly supervised neighborhood centered recreation), community halls (for neighborhood gatherings), and markets (for controlled consumerism of the community). In the absence of comprehensive city development planning with spaces for public life, for example, city center or squares, water-fronts, etc., some isolated developments were initiated; however, those are not adequate to accommodate the urban life of the city's almost 1.6 million citizens.

A series of interrelated crises (poverty, increases in male unemployment, changes in the nuclear family system, and rural-urban migration), as well as opportunities (increased employment in the export- oriented garment sector, government welfare policies, NGOs, etc.) due to structural adjustment policies and neoliberal governance, have resulted in an increased presence of women in Dhaka city (Habib, Heyen and Meulder, 2014). In such circumstances, spatially 'woman's place' have become simultaneously both in the home and in the city (Rendell, 2000). Nevertheless, patriarchy remained deeply rooted in Bangladeshi society. Despite women playing a significant role in contributing to the prosperity of the city through economic contribution, providing essential services, and enhancing the quality of life in their homes and communities (Chant and McIlwaine, 2016), the 'prosperity' that Dhaka offers - success, wealth, thriving conditions, well-being or good fortune that are perceived almost as a positive term for all - can be argued to be marked by extreme and often mounting social and economic inequalities.

Theoretical discussions and an inventory of public open spaces and gender in the city encouraged to re-examine urban planning and design theory and approaches for Dhaka that may address social and economic equity. The following section briefly narrates the methodology of the study.

IV. METHODOLOGY

The qualitative inquiry for the exploration adopted a gendered approach as opposed to traditional versions of masculinity and femininity. The approach seeks to understand how spaces and places are produced and co-constructed through everyday use combined with presence in the imagination (Roberts, 2018). The study also agreed with the need of women and girls to exist as subjects of experience and expression in theorizing space, in the absence of which they may not have the power to determine questions or establish answers to the problems (Staub, 2018; Terraza et al., 2020).

The findings shared in this paper are gathered from a series of exploration activities. In early 2018, a gender assessment was conducted for a donor-funded urban upgrading project. The assessment aimed to inform project design to improve livability and public participation of both women and men in the selected areas of Dhaka city. The objectives included to understand: a) accessibility to public open spaces (e.g., accessibility to and usage pattern of public spaces by both female and male citizens; b) mobility using roads and sidewalks (e.g., the means and options to go from one place to another for work and leisure); c) safety in public spaces (e.g., perception and experience of safety in neighborhoods and the city), and d) participation in decision-making (e.g., involvement of women and men in the decision-making of physical improvement of neighborhoods and the city). The assessment reviewed literature and data; conducted field visits as well as consultations and focus group discussion (FGD) with beneficiary communities, specialized NGOs, officials from public organizations, and agencies.

The city-level professional assessment was then shared with the civil society and experts from diversified disciplines to learn from their expertise, experience, and observations. A symposium 'Gender and Public space' was organized in July 2018. The participants included members from NGOs, Think Tanks, civil society, private sector, professional bodies, and academics. There were two themes for panel discussions: 'Public space: A reflection of the urban society' and 'Public space: A backdrop for the social life of the city.' The key personnel presented to initiate discussions on conceptualizing gender in the city, safety and legal harassment in public space, gender in urban planning and urban design, accessibility to public space, and mobility in the city. Other participants responded to the opinions presented and shared their perspectives as well.

Later, some limited primary data collection was initiated in three representative neighborhoods of Dhaka - Gulshan, Mohammadpur, and Lalbag - in 2019 to learn from the users, triangulate some of the findings, and examine the spatial aspects. The neighborhoods were selected based on density, predominant economic status of households, and planning approach (see Figure 1). Two representative issues – usage of parks and pavements – were selected to examine the differential experience in using public open spaces by

both female and male respondents. A total of fifty users were interviewed. The survey included semi-structured interviews; visual documentation questions captured information on the usage patterns, experience, and opinions about the quality of parks and pavements. Photographs and mapping formed the basis of spatial analysis. Responses from the interviews were compiled and analyzed using Microsoft Office Excel. The following section describes the findings from the three different exploration activities; and analyses them in relation to the theoretical discourses.

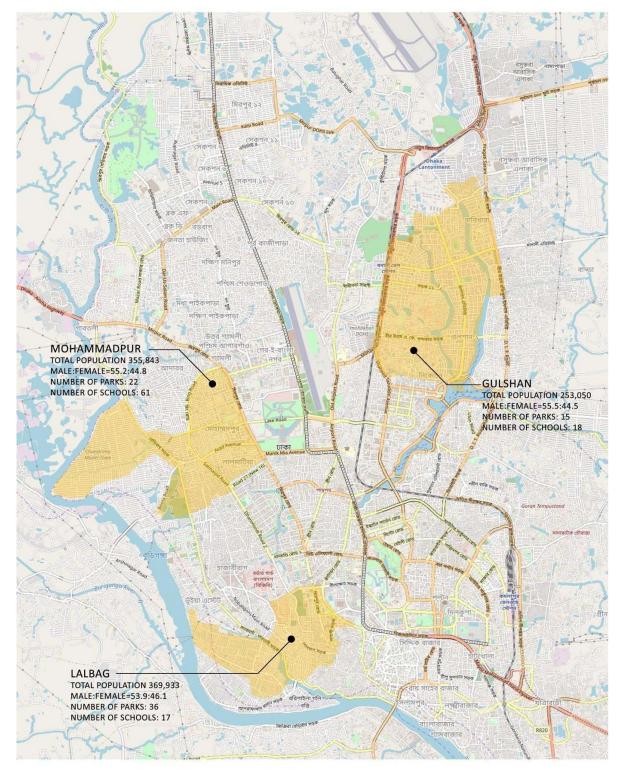


Figure 1: Map of the surveyed neighborhoods

V. FINDINGS AND ANALYSIS

a) Perception and experience of insecurity exacerbate social inequity by restricting access to public open spaces

Actual experiences of insecurity from crime and lack of safety in mobility within the city formulate perception about security and safety in Dhaka. Bangladesh has a high prevalence of gender-based violence (GBV) and violence against women (VAW) with certain specificities in the urban context. A study on public transport and women brought out some alarming figures about feeling safe in the city: 42 percent think that city's parks are not safe for them, 25 percent respondents reported lack of safety on the city roads; 28.5 percent tend to return home before dusk; 22.5 percent brought allegations of harassment by copassengers, drivers and their helpers; they avoid public transport in fear of suffering and sexual harassment (ActionAid, 2015). Another survey reports 9.4 percent respondents to experience physical violence, twice the proportion (18.3 percent) experienced sexual violence, and 9.3 percent experienced emotional violence in public spaces that is in vehicles, roads, and streets (BBS, 2016). The rates are higher in city corporation areas.

As in many other cities of the world, men experience Dhaka with a far greater sense of security and freedom in comparison to women. They navigate public spaces without the same kind of bodily discipline and emotional restraint that women have to endure. Female members of focus group discussion in a lowerincome neighborhood, Lalbag, middle echoed moderately conservative social norms to remain within porda even though they recognized the need to participate in social and economic life. None of them expressed feeling safe to send their girl child to play in parks or streets in front of their house. Adolescent girls are either chaperoned or accompanied by a male relative of a female peer or adult, or in many instances, adopt dress codes that signal invisibility, anonymity, and personal restraints. The production of respectability is closely connected to manufacturing safety for themselves to them. The uses of hijab or burkha that have significantly gained popularity in Dhaka in general in recent years may be indicative of the perception of personal insecurity in the city.

A lawyer and academic explained the possible root cause of this attitude in the symposium; the law about harassment in public space dates back to 1860, and the amendment has not been approved yet (Khan, 2018). Citizens prefer to accept harassment as something 'normal'; shame prevents them from taking legal actions against harassment, tolerance encourages more harassment – a vicious cycle – that discourages citizens, especially women and girls, to use public open spaces.

During the survey, both female and male respondents of the park in Gulshan suggested feeling of safety as the main reason for using that park regularly for exercise. The park is enclosed by a visibly permeable enclosure, has tree canopy and paved walkways, benches with shading, children's play area, toilets, amphitheater, entry gate with parking facilities, and guard rooms. Most of the users of the high- or uppermiddle income households walk alone, mix with others they were acquainted with, read books, and spend time with children. A regular user of the park said cat-calling was common earlier; the situation significantly improved when a local community-based organization took over management of the park from the city corporation and imposed different restrictions considering the users' demand. Now the park is accessible to only 'regular users' as stated by the care-taker of the park. Alternatively, the perception of security in both the open spaces in Mohammadpur and Lalbag was poor. Poor management as well as the absence of physical features such as lights, toilets, defined enclosure, etc. attributed to the poor perception in those locations (see Figure 2).

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Gulshan Walkway Seating

Toilet

Children's Play Area



Mohammadpur

Entrance

Play Ground



Lalbag Seating Play Ground

Walk Way

Figure 2: Physical features in the parks in Gulshan, Mohammadpur, and Lalbag

These findings on the perception of security in Dhaka agrees with the global phenomenon that the "social-spatial division of public from private contributes to the violent "policing" of women, girls, and sexual and gender minorities in the public realm" (Terraza et al., 2020:38). Although social norms drive the phenomenon giving rise to social inequity; nevertheless, the socially advantaged populations have advantageous spatial access to urban facilities in Dhaka (Ashik, Mim and Neema, 2020). The examples of physical features and management of facilities of public open spaces illustrate the potentials to address safety and freedom from violence through urban planning and design.

b) Unsafe and inadequate infrastructure are more problematic for female citizens limiting their economic opportunities

Similarly, perception and experience of physical safety in public open spaces, for example, streets and pavements, are associated with layout and condition of urban infrastructure and availability of services. Different studies claim pedestrians to be the most vulnerable in Dhaka city - up to 50 percent of road accident deaths are pedestrians, 61 percent of all pedestrian accidents occur during crossing roads at their will (Ahsan and Rahman, 2015). Although about 60 percent of trips in Dhaka are made on foot, the insecurity associated with pedestrian safety encourages people to use slowmoving non- motorized and motorized personalized vehicles, adding volume to the traffic. Pedestrian safety from vehicular traffic is relevant to public space since it facilitates mobility and pedestrian movement, therefore, increases street activity. Furthermore, limited mobility is directly related to curtailed economic opportunities and economic independence.

Streets in Gulshan and Mohammadpur, as identified by respondents of the survey, were safer for newly constructed pavements with defined width and non-slippery textured surface. Respondents identified discontinued paths and uneven surfaces associated with steep slopes, frequent ups and downs, damaged parts, and potholes to make the pavements unsafe; elderly persons and women with children suffered most for those difficulties. Although street activities are argued to be essential to accentuate natural surveillance and increase the likelihood of people feeling secure, users especially, in Lalbag, complained about too many vendors while some shop-owners extend their activities over the pavement. People gather in front of those vendors and shop fronts, hence make walking difficult for pedestrians. Women preferred to avoid pavements from the 'feeling of discomfort' of walking pass them (see Figure 3). Women and girls felt unsafe to walk

alone in narrow streets without light and visual access to houses in Lalbag. Thus, most working women preferred to look for economic opportunities within the neighborhood, which in the long run, limited their choices and income.







Figure 3: Conditions of streets and pavements in Gulshan, Mohammadpur, and Lalbag

) Gendered access limit mobility but can create new opportunities

A man usually chooses to walk a path where he can see the most, thus engage with the street and the city (Das, 2015). On the other hand, women strategize their movement, walk a route where they can either become invisible (by pretending to be purposeful with a destination), cross roads multiple times to avoid situations in which they might find themselves uncomfortable/unsafe (Ranade, 2007). A similar trend is seen in Dhaka city as women and girls are stared at, pushed, followed by men, or become subject to whistling or indecent comments while walking in streets in the city (Habib, Heyen, and Meulder, 2014). In the process, women usually choose the safest and most comfortable route even though it may be not the shortest route from one point to another. Consequently, their movement through public space becomes a

reproduction of the hegemonic discourses of femininity, particularly that of respectable femininity connected to the notion of what good women should/should not do in public.

However, mobility pattern influenced by traffic congestion is resulting in a unique condition in Dhaka. Grownups accompany most children in the city out of safety concerns; mostly, the mothers remain responsible for taking them to school. Considering the time and cost to travel back and forth, many prefer to wait in schools or on roads and open spaces near schools. To make the most out of their time and manage reproductive roles, they prefer to buy everyday food items, household essentials, even clothing on their way or while waiting. Thus, many of the streets near schools in Dhaka are now popular with time-based mobile vendors whose customers are mostly women. This trend is opposing the predominant patriarchal society's norm. Waiting in streets and parks near the school for their children with others has become a recreation for some mothers (see Figure 4). These mothers form social

groups, run small-scale businesses while their community roles remain concentrated on their children's education and school.



Figure 4: Mothers waiting on pavements in front of a school

d) Aspatial forces form the spatial inequity in access to public open spaces

A lack of facilities, for example, public toilets, is one of the reasons for the limited use of public spaces by women and girls. Sufficient public and wellmaintained toilets provide opportunities for women to spend more time walking or moving within the city, which is almost non-existent in Dhaka. The lack of places to sit and gathering points, inaccessible spaces, poor entrances, blank walls, or dead zones around the parks and domination of vehicular traffic results in limited use of parks in Mohammadpur and Lalbag by women and girls. There was no useful infrastructure to organize or celebrate events, the existing park furniture and grounds were not clean and attractive to feel comfortable, a similar type of users did not encourage diversity - the presence of which are essential for a good public open space according to Francis (2003).

However, accessibility to public open space in Dhaka illustrates a much more convoluted relation of females to those spaces. Public space for women is regarded as transit - from one private space to another. The idea of 'enjoying' in the park or spending time with girl friends on the streets seems very difficult for females unless they negotiate their presence by adapting to a specific dressing code (arms, shoulders, and legs covered, using the hijab) and by making sure they have a functional reason to be there (education or errands) (Habib, Heyen, and Meulder, 2014). Previous studies on spaces for leisure illustrate an unappealing scenario: 23 percent of park users are female (Work for a Better Bangladesh, 2015); boys use 97 percent of playgrounds and 85 percent of parks, almost totally excluding girls from using those facilities (Ahmed and Sohail, 2008).

Discussion with women and girls about the reasons for not using public open spaces brings up the issue of 'feeling discomfort' for being in those spaces. Studies in similar contexts suggest that while security is associated with actual physical violence, discomfort is a sense of feeling that one is in the wrong place/time (Ranade, 2007). Verbal assaults (cat-calls), being looked at, and even through self- policing by women themselves create those sense of discomforts (ibid). Women in the survey and focused group discussions reported feeling or experiencing discomfort when they deviated from expected behaviors established by longstanding patterns of conventional gendered use of spaces from the fear of not being appreciated. The reason has been explained by an academic and gender specialist who suggested that although Dhaka's urban society has accepted more women and girls in public open spaces, yet the culturally perceived image of the 70s determined by the patriarchal system and religious beliefs influence their presence (Islam, 2018).

Usage patterns of public open spaces in the study varied based on the socio-economic characteristics of the neighborhoods. Half or more respondents in the park in Gulshan (higher-income neighborhood) came daily or twice a week; the park is used all day long. The middle-aged or elderly male members came more frequently at any time of the day, mostly out of health concerns while female members came towards evening; some came during day time while children were away in school or got a break from their household chores. On the other hand, open spaces in Mohammadpur (middle-income neighborhood) were used more during the afternoon (1-5 pm) when younger men came to meet friends and play; very few or almost no women and girls used these spaces. Some park users there were the guardians of nearby school or coaching centers who waited there for their children to save the cost of travel twice. Often the park is used by the neighboring school girls for their annual sports events. However, they are not regular users even being residents. Although there are few open fields in the high-density Lalbag area (lower-income neighborhood), mothers do not send their daughters as boys play there.

e) Growing demands for access to public open spaces for economic and social equity

The rate of female participation in labor force in urban areas increased from 20.5 percent in 1995 to 34.5 percent in 2010 (Rahman and Islam, 2013), which is credited for the economic prosperity of Dhaka city. The process of economic diversification substantially increased opportunities for women in manufacturing, construction and service sectors like finance, telecommunication, etc. (ibid) demanding them to spend more time for travel and work. However, when freedoms of women and girls are curtailed at the microlevel of their personal or domestic spaces, as in the case of Lalbag, this often impacts, as well as impacted by, gendered restrictions or exclusions in more macrolevel arenas, such as in neighborhood (Chant and Mcllwaine, 2016) as was evident in Mohammadpur. Thus, the constraints in mobility arising from a range of spatial and a spatial factors impede women's potential to benefit from the economic opportunities that cities offer and participate in 'urban life' in public.

The demand increases from considering other factors as well, for example, concern for physical and mental well-being. A study on obesity and overweight among school children found 20 to 28 percent of girls were obese or overweight which was associate with less active urban life among other reasons (Rahman et al., 2015). Similarly, weight gain resulting from lack of physical activities in urban areas is a significant predictor of diabetes among Bangladeshi populations and a higher prevalence of diabetes among women (11.2%) compared to men (Chowdhury et al., 2015). As was evident from the survey, more female residents used the park in Gulshan out of health concerns. A development practitioner working towards better urban life suggested that there is a demand for leisure activities in outdoor spaces in Dhaka. Yet, people are not using the already existing ones for lack of management and infrastructure in those spaces (Efroymson, 2018). More women are seen and are socially acceptable to use public open spaces, especially during morning hours in Dhaka for physical well-being. However, some of them adhere to conservative attire (see Figure 5).



Figure 5: Women walking in groups with conservative attire during morning hours

f) Participation in decision-making at the institutional level

The participation of female citizens in urban politics and governance plays a crucial part in securing gender-specific, gender-sensitive, genderor transformative development. The same social norms stereotypes that restrict women's and aender opportunities at the household or neighborhood levels pose challenges to their ability to participate in political processes at the city level. Hence, often women's engagement becomes either a tokenism or entrapped in the unpaid and fundamentally altruistic work of building better cities. In the process, the 'automatic trickle-down' benefits are not materialized to create a more equitable share of urban wealth and well-being. Bangladesh has made progress in women's access to power and decision-making; however, their participation in urban area planning and designing is inadequate. Bangladesh constitution suggests equal rights to women and men in public employment, rights of life and personal liberty, freedom of movement, rights to property, among others. The case of female commissioners is a useful case to discuss in this regard. A female commissioner is responsible for every three wards within a city corporation whereas their male counter-part is responsible for one. Interviewing the female commissioners illustrate limitations in making decisions as their work area covers three wards. A limited allocation of resources are divided among three wards, which are not enough to initiate anything independently. Most male commissioners only seek their advice on planning and applying funds for development interventions. Usually, female commissioners' activities remain concentrated on improving the well-being of women and girls in their areas, for example, operating schools for drop-out children, organizing immunization programs. Female members in the Ward Level Coordination Committee to improve urban governance have ensured some representation, but often making their voices heard is a struggle. Women and girls often lack the skills to negotiate either in the dominant patriarchal policy and decision-making environment.

VI. CONCLUSIONS AND RECOMMENDATIONS

Dhaka city is embracing the 'all-encompassing global urban reality.' On the other hand, the city is exposed to challenges for achieving the efficiency of infrastructure within a short period to address the needs for the prosperity of the increasing urban population. Public open spaces in Dhaka city are gendered; women and girls lack equitable rights for a range of pragmatic, ideological, and socio- cultural reasons. The approach adopted for the study of comparing women with men of the same class and community reflects better accessibility of men to public open spaces and urban services over women. The comparison also illustrates that any new intervention needs to include components specifically to address both the strategic and practical gender needs of women. Therein, the focus should be not on increasing the sheer number of female users of public open space and services, rather find out ways in which women and men will meaningfully occupy public spaces. Accordingly, three planning approaches may be considered:

a) Planning for gender-specificity

There is an acute shortage of public open spaces in Dhaka; of them, very few are accessible to women and girls. A lack of gendered planning of public open spaces create somewhat ambiguous situations for women of Dhaka. The city, on one hand, is coded as a space dangerous for women and, on the other hand, is insisting them to become career-oriented and selfdependent emerging out of their private and supposedly protected spaces. Therefore, some public open spaces like parks, water-fronts, playgrounds, plazas, squares, green areas may be designed to give enhanced access to girls and women. Female-focused urban services need to include components that address the root causes of obstructions for women to work professionally, such as female public toilets, skill and career development centers, day-care centers for children of working mothers, health-care and well-being centers for women, 'safe-place' for adolescent girls, clubs and community spaces for entertainment and leisure to get out of the monotony of everyday life.

The design of public buildings will require considerations of both practical and strategic gender needs. For example, not simply having bus stops but the lighting at and better visibility of bus stops that are likely to be more important for women; libraries not only with dedicated space for silent reading and individual activities but also with visible spaces that can encourage group activity among boys and girls redefining their attitudes towards each other. Changing attitude can be a strategic entry point for reducing sexual harassment and gender-based violence affecting the mobility and accessibility of public spaces for women and girls in Dhaka.

b) Planning for gender-sensitivity

Disproportionate fear of urban crime is an oppressive, informal social control of women in Dhaka. Given the fact that a great concern of women and girls in the city is the risk of being sexually assaulted which they confront day in and day out in vehicles, streets, and roads, interventions may invest towards creating equality of risks, i.e., "not that woman should never be attacked, but that when they are, they should receive a citizen's right to redress and their right to be in that space is unquestioned" (Das, 2015:). Interventions aiming to reduce causes of fear and possibilities of violence restricting accessibility may be incorporated in the design of development interventions. Layout and design of roads, streets, and sidewalks need to include urban design features that reduce crime and anti-social behavior. These may include better lighting and signage, visual linkages, clear sightlines, and surveillance, help-seeking points and mapping hotspot of crime, mixes of land use and activities, suggestions for location and design of fences and walls for better legibility.

Public open spaces need to create networks rather than becoming isolated developments. The network can encourage pedestrians to use them all, not some specific ones. The existing parks, lakes, and riverfronts can be linked with new development, for example, linking major isolated parks to one another, connecting greenway network to transit network, and encouraging city authorities to negotiate with concerned agencies to reserve their green, vacant areas and water bodies as part of the green network. Communities can be involved in the planning and design of neighborhoods so that the sense of ownership and interaction are enhanced and, thus, surveillance by residents. Gender- sensitive planning and design, however, should not run the risk of reinforcing stereotypes, rather explore through gender assessment and encourage different groups of people to coexist and fully participate in public life.

c) Planning for gender-transformation

One can argue that planning for public open space in Dhaka continues to be male-centric; therefore, there is a need to adopt gender-transformative planning and design approaches. Public open space acts as a neutral passive backdrop against which the social life of a city is played out; alternatively, a reflection of urban society. Everyday experiences of social life are often nealected in examining rights and belonging to the city. New interventions can be recognized as processes of negotiation, challenge, or appropriation that mediate everyday spatial practices. Through creating debates about design interventions, possible usage of and movements through public spaces can reinvigorate and reclaim urban life as a source of the political site of claiming inhabitation and rights. Such interventions have possibilities to transform hegemonic gendered use of public open spaces.

Development needs to involve residents, especially female members in planning, operationalizing, and maintaining public open spaces. The success of any urban interventions depends on good governance and the engagement of men and women as equitable partners and agents for change. Giving access to public open spaces is a political approach to planning for creating gender equity that encourages individuals to be in spaces where, previously, they did not exist or felt the right to be. However, relative freedom for women to negotiate should not decline another social 'groups' participation or change the outcome of a project or program. The process may develop a better understanding of the multiple users who may either be in conflict or are the creators of gendered patterns of exclusion. There are significant gaps in the capacity of female representatives and residents to participate in decisionmaking in both the neighborhood and the city level. Any new intervention needs to include capacity building activities for employees of different organizations, elected officials, and staff to better comprehend practical gender needs and strategic goals.

A way forward

GBV and VAW constitute a 'new dominant global agenda' as their rates are escalating everywhere due to increasing poverty, inequality, drug use, access to firearms and political and civil conflicts (Chant and McIlwaine, 2016). The tendency to make the insecurity 'normal' into the functional reality of urban life, as argued by Moser (2004), is particularly problematic for any city. The challenges and opportunities present in Dhaka are not unique, they are representative of many cities of the global South. Urbanization processes can either heighten risk factors for women or may create economic and social opportunities. Globally good urban design practices are encouraging academics and practitioners to seek context-specific solutions from what seems to be very generic challenges. Future research can compare exploration like this in other cities of the global South, as well as the North. Because gender-responsive urban planning and design can ensure social and economic inclusion of all citizens with their equitable contributions to accelerate the progress of cities.

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