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# Assessing the Publicness of Recently Developed Public Spaces in Sylhet City Corporation Area

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## Abstract

Public spaces are considered to be one of the major components of cities, having vital impacts on the social, political, and physical sphere of resident's life; therefore, critical assessment and evaluation are essential to understand the factors that affect the success of urban public spaces. Recently, Sylhet City Corporation (SCC) has taken several development projects to react to the scarcity of quality civic spaces in the urban area. Jollar Par Walkway and Dhopadighir Par Walkway are among these development projects, which have been transformed from their previous derelict and inaccessible condition to fully active public spaces. This study attempts to shed light on the user's perception of the physical attributes and spatial quality of the above-mentioned spaces, according to the six dimensions of the publicness framework developed by Varna and Tiesdell. As the study was done from an etic approach; public interviews, which established the base for assessing publicness, surveys, questionnaires, visual observation, and documentation through photos and videos were the key tools to collect qualitative along with quantitative datasets. The findings of this study reveal significant insights regarding the perception of the varied range of users in terms of age/social class/gender and also about the factors which are having a greater impact on their satisfaction level with these public spaces. Furthermore, the research puts forth some valuable recommendations that might guide the future developments of such urban spaces to make them more public and inclusive.

*Keywords: Public Space; Publicness; Sylhet; User perception.*

## 1 Introduction

Quality public spaces are crucial for any good city, fostering spontaneous gatherings, social and political discourse, and a sense of belonging. In rapidly growing cities of Bangladesh, lacking structured planning, hasty "beautification" projects, as noted by urban scholar Kazi Khaleed Ashraf in 2023, often lack expertise and public benefit. Despite budget constraints, evaluating these projects is vital to understanding user reactions and shortcomings. Sylhet, a burgeoning metropolitan city in northeastern Bangladesh with a 3.88% population growth rate in 2023, faces similar challenges. Due to its geographical features with natural streams (choras), the city authority has developed walkways as public places along some waterbodies that are attracting people of all ages due to the scarcity of urban space. Our research focuses on two of these newly developed walkways to assess quality and public perception, aiming to:

- a. Analyze walkway usage patterns and effectiveness as public spaces.
- b. Provide actionable recommendations to enhance public acceptance.

We use George Varna and Steve Tiesdell's "Core Dimensions of Publicness" (2010) to analyze these walkways, offering insights for future urban development in metropolitan areas. The research is intended for city authorities, private developers, and urban planners.

## 2 Literature Review

Cities striving for residents' well-being, cultural vibrancy, and strong communities create inclusive public spaces for interaction and activities (Lefebvre 1968). Inclusive and diverse urban public spaces foster social tolerance and peaceful coexistence (Low, Taplin, & Scheld 2009). Defined by the Charter of Public Space (Garau &

Siragusa 2015), they are places accessible to all without profit motives. UN-Habitat recommends allocating 45-50% of urban land to streets and open public spaces, ensuring universal access by 2030, especially for marginalized groups (UN-Habitat 2018). Various academic fields explore the nature of public spaces. Kohn (2004) emphasizes ownership, accessibility, and intersubjectivity. Madanipour (1999) focuses on access, agency, and interest. Ne´meth & Schmidt (2011) measure publicness through ownership, management, and user diversity. Whyte (1980) highlights off-peak use and female participation. Varna & Tiesdell (2010) identify five dimensions of publicness, considering ownership, control, civility, configuration, and animation. Context, culture, and societal practices influence urban space use. Non-Western contexts, as noted by Qian (2014), may not align with Western norms but remain vital. Thus, cultural context must be a crucial consideration in measuring publicness.

Table 1: Descriptors of publicness for each meta-dimension (Source: Varna & Tiesdell, 2010, pp 581)

More Public (rated 5)	DIMENSIONS	Less Public (rated 1)
Many social groups regard the place as a public space (i.e. more public for more publics).	MEANING	Few social groups regard the place as a public space.
Publicly-owned space with public function and public use	OWNERSHIP	Privately owned space with private function and private use
Free use	CONTROL	Overt and oppressive control presence—human and electronic surveillance; highly visible security presence
Cared-for; well-kept; managed in the public interest; management balancing needs of different social groups	CIVILITY	Over- or under-managed
Well-connected and located within the movement system (on-the-beaten track); strong visual connection to external public realm beyond space; without obvious entrances and thresholds	PHYSICAL CONFIGURATION	Poorly connected/located within the movement system (off the beaten-track); poor visual connection with external public realm; with explicit entrances and thresholds
Wide range of supports for a wide range of potential uses and activities	ANIMATION	Dead public space: narrow range of supports for a limited range of potential uses and activities

Sylhet, a rapidly growing city in northeastern Bangladesh with around 964,000 residents in 2023, faces challenges like encroachment on public land and a significant loss of green cover (BRAC Institute of Governance and Development, 2016; Ara & Khatun, 2021). The city's built-up area has expanded dramatically, covering 67.65% of the total area in 2017, up from 43.68% in 2002 (Ara & Khatun, 2021). Sylhet desperately needs open public spaces for relaxation and recreation. The city's historic water bodies and canals have been occupied or encroached upon, but the city authorities are now revitalizing some of them with attractive walkways. Popular spots like 'Jollar Par Walkway' and 'Dhopadighir Par Walkway' in the city center draw crowds in the afternoon and evenings, offering a glimpse of hope (Daily Sun, 2022). We've chosen these spaces for our study to assess their publicness using Varna & Tiesdell's Star model of publicness.

### 3 Methodologies

The research is based on collecting data through personal interviews by questionnaire which is a category of Survey Method and also with on-field observations using time-lapse filming and photo documentation. In order to guarantee a high-quality research process and output, this process defines a rigorous strategy for research, with scientifically verified procedures outlining the representative sample and the survey strategy. The selection criteria for the two public places of Sylhet city were that both the sites are newly developed, located in the core of the urban area, designed effort by the public authority, and being actively used.

Table 2: Description of the selected public walkways

Serial No	Name of the Public Place	Effective Walkway Width (m)	Condition Before Development	Walkway Amenities	Land Use Pattern of Surroundings
01.	Jollar par Walkway	2.5-4	Insalubrious Walkway	-Sitting Areas & shops -Tea stalls and food carts -Administrative Office -Paid Areas for Sitting and Arranging Parties	-Several Residential Areas (within a 100-meter distance) -Commercial Areas -Sylhet Court Complex & School
02.	Dhopadighir par Walkway	4-4.5	Open Pond	-Open Green Areas -Open Pond with 2 Ghats -Sitting Zones -Public Toilet	-Children Amusement Park -Old Sylhet Central Jail (now vacant) -Commercial, Residential Areas

A mixed methodology (both open-ended questions and close-ended or numerically rated questions) is followed for the survey questionnaire to gather both qualitative and quantitative data to evaluate the satisfaction level and the publicness of the walkways. Likert scale is used to quantify qualitative data. The following information has also been gathered: demographic information, visitor source location, visitation pattern, accessibility, user observation on amenities and civility, overall satisfaction level, and user recommendation. The collected data has been analyzed to assess user comfort and spatial quality of the spaces in accordance with the six dimensions of the publicness framework created by Varna and Tiesdell (2010). Microsoft Excel and SPSS are used to organize and analyze demographic data and quantifiable data obtained using the Likert scale. The dependency of overall satisfaction level on the selected variables (demography, accessibility, civility, physical configuration, animation) is measured with multiple regression model analysis. As the research is based on questionnaire survey method, Random Sampling technique has been adopted with a confidence level of 90% where the margin of error is 7%. The population data of the total Sylhet City Corporation Area (according to the statistics of 2023) has been considered to calculate the sample size. The sample size consists of 139 respondents.

Table 3: Sample Size for Survey data collection

Variables	Values	Remarks
Population size of the SCC	950000	Estimated for 2023
Margin of error	7%	
Confidence level	90%	
Z-score	1.65	Z-score / Z-value = 90% Confidence level
Sample size	139	

## 4 Discussion & Findings

### 4.1 Demographic Data & Visiting Pattern

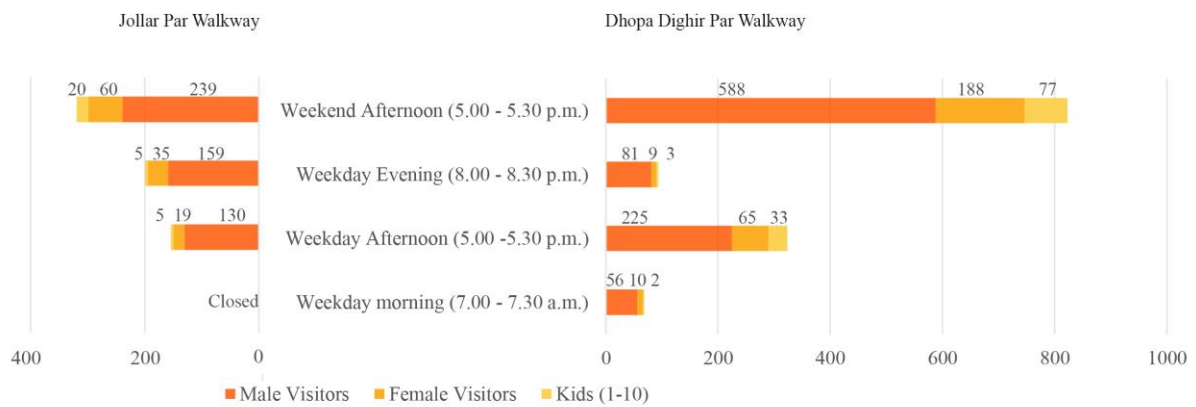


Figure 1: Average Male, female, and children visitor entry count at different times of day

Only 14 of the 139 responders from the two sites had visited the locations before development, therefore the local authority's efforts have improved the situation. 95% of the respondents expressed dissatisfaction over the lack of accessible public open areas in Sylhet City where they might have noteworthy leisure. The visiting pattern obtained from photo and video documentation makes it very evident that most individuals prefer to visit the location in the late afternoon (see Figure 1). Although it is apparent that the off-peak hour visitors are greater in Jollar Par compared to Dhopadighir. In both situations, women visitors account for about one-fourth of all visitors during peak hours and considerably less during off-peak hours. Given that it is a considerably smaller area, Jollar Par draws a far larger crowd than the Dhopadighir Par. Additionally, the proportion of children visitors is quite low in both locations, underscoring the lack of inclusion and the less alluring amenities offered to children. The majority of the visitors are young individuals (age range 11 to 30).

### 4.2 Multiple Regression Model

Regression model analysis for Jollar par walkway (see Table 4) shows visitors' distance from the space, time required to reach the destination, hygiene, security condition, seating facilities, and provision for active and

passive engagement has a direct relation with the satisfaction level of the respondents. Here, the value of  $P < 0.1$  indicates a correlation between two variables; whereas  $\beta$  indicates the positive or negative relation between them.

Table 4: Correlation among different variables and satisfaction level of users (Jollar par walkway)

Coefficients <sup>a</sup>											
Model		Unstandardized Coefficients				Standardized Coefficients		t		Sig.(p)	
		$\beta$		Std. Error		Beta					
		Site 01	Site 02	Site 01	Site 02	Site 01	Site 02	Site 01	Site 02	Site 01	Site 02
1	(Constant)	-.508 ( $\alpha$ )	.037 ( $\alpha$ )	.401	.363			-1.265	.101	.211	.920
Demography	Age of the respondents	-.080	.037	.063	.042	-.077	.080	-1.284	.881	.204	.383
	Gender of the respondents	.060	.029	.134	.111	.031	.024	.453	.265	.652	.792
Accessibility	Distance of Public Space from Origin	.176	.014	.069	.064	.255	.035	2.563	.219	.013	.828
	Time required to reach the destination	-.111	.001	.057	.055	-.194	.002	-1.960	.013	.055	.990
Civility	Hygienic condition & waste management	.196	.047	.078	.063	.180	.080	2.523	.754	.014	.455
	Safety & security conditions	.269	.081	.062	.053	.351	.143	4.366	1.545	.001	.129
	Sanitation facilities	.066	.088	.069	.049	.066	.149	.955	1.790	.343	.080
	Adequacy and comfort of seating facilities	.234	.003	.097	.063	.212	.005	2.403	.053	.019	.958
Physical Configuration	Adequate provision of canopy and shade for protection from sun and rain.	.084	.278	.139	.122	.043	.192	.601	2.267	.550	.028
	Visual permeability or connection with the external public realm	.222	.340	.239	.096	.065	.328	.931	3.521	.356	.001
Animation	Comfort & Relaxation (Being alone)	-.009	.018	.081	.059	-.011	.036	-.109	.308	.914	.760
	Comfort & Relaxation (Being with family)	-.008	.096	.077	.072	-.009	.131	-1.110	1.343	.913	.186
	Comfort & Relaxation (Being with friends)	.066	.098	.084	.063	.067	.133	.780	1.541	.438	.130
	Opportunities for Active & Passive Engagement (Mean Value)	.227	.211	.102	.099	.229	.227	2.219	2.130	.030	.039

a. Dependent Variable: Overall Satisfaction with the public space (Site 01- Jollar par walkway & Site 02 - Dhopadighir par walkway)

On the other hand, regression model analysis for Dhopadighir par walkway presents (see Table 4) how overall satisfaction level depends on a different set of variables. Here, sanitation facilities, shed, visual permeability, sense of security, and provision for active and passive engagement are closely linked to the satisfaction level.

### 4.3 Publicness Dimensions of the Spaces

In this part of the discussion, we shall discuss and rate the features of both these places in terms of the indicators of publicness dimensions described by Varna & Tiesdell (2010, pp 590).

Meta-dimension	Indicators	Jollar Par Walkway	Dhopadighir Par Walkway
Ownership (Data Collection: Observation)	Ownership	Public Authority, Leased to Private Owner.	Public Authority, Leased to Private Owner.
	Function	Mostly Public, with private commercial shops	Public
Rating:		Less Public (2)	Moderate (3)
Control (Data Collection: Observation)	Control Ordinance	Site-specific rules for no smoking, not allowed for beggars, hawkers, school kids during school time, etc. Open from 11:00 am -11:00 pm.	Site-specific rules for no smoking, not allowed for beggars, hawkers, etc.
	Control Presence	No visible security guards	No visible security guards
	Control Technology	Many CCTV cameras are evident.	Some CCTV cameras are evident.
Rating:		Less Public (2)	Moderate (3)

<b>Civility</b> (Data Collection: Observation & Questionnaire Survey)	Physical Maintenance	Provision of dustbins, and waste management system. Still the hygiene condition is not up to the mark. Lack of public awareness. - Mean user rating for hygiene is <b>3.09</b> (from questionnaire survey)	-Users have complaints about the cleansing regime, overall hygiene condition, and waste management. Lack of public awareness. - Mean user rating for hygiene is <b>2.92</b> (from questionnaire survey)
	Amenities	-Lack of public shade for rain and heat. - A few seats provided, seatings are uncomfortable, and have no diversity. -No public toilet. -Food vendors/shops built and rented by the private authority. These shops occupy much of the space of the walkway making it narrower and more dedicated to consumption-based activities. -Mean user rating for physical amenities is <b>2.43</b> (from questionnaire survey)	-No shade for rain and heat. -Number of seats provided, seatings lack diversity in design. -One public toilet, less maintained. -No food vendors/shops (Have future plans to provide some) - Mean user rating for physical amenities is <b>2.72</b> (from questionnaire survey)
<b>Rating:</b>		Moderate (3)	Less Public (2)
<b>Physical Configuration</b> (Data Collection: Observation)	Centrality & Connectedness	-The place is well-connected to other parts of the city. - Movement through the space is not interesting.	-The place is well-connected to other parts of city. - Movement through the space is not interesting.
	Visual Permeability	Very poor visual permeability.	Very poor visual permeability.
	Threshold & Gateways	-Gates with guards. - A small green space with seating amenities and party arrangement space is ticketed. -Steps and level changes do not support aged people and differently able persons.	-Gates and boundary walls create threshold. -No visible threshold inside, although women and families reported unwillingness to go to distant-most corners (from the gate) of the area.
<b>Rating:</b>		Less Public (1)	Moderate (3)
<b>Animation</b> (Data Collection: Observation & Questionnaire Survey)	Opportunities for Active/Passive engagement	-Opportunities for active engagement are provided, although activities are very homogenous. Unnecessary number of shops prohibit free action and promote (sometimes force) consumption-based activities. The mean user rating for active and passive engagement opportunities is <b>3.18</b> . - Opportunities for passive engagement are very low. - Significant difference in user rating is noticeable in terms of comfort and relaxation with friends and with family. ( <b>Alone 3.00, with family 2.65 &amp; with friends 4.01</b> )	-Opportunities for active engagement are evident, although seatings, and sheds are not well-designed, activities and events are moderately diverse. The mean user rating on active and passive engagement opportunities is <b>3.23</b> - The entire space is well visible offering passive engagement. -Significant difference in user rating is noticeable in terms of comfort and relaxation with friends and with family. ( <b>Alone 3.51, with family 3.2 &amp; with friends 4.1</b> ) (from questionnaire survey)
	Discovery & Display	No loose space is provided, and shops dominate the area. No provision for variety of functions, the only green space is gated and ticketed.	A large green space beside walkway on one side which is a loose space supporting variety of functions. Rest of the spaces is rather tight.
<b>Rating:</b>		Less Public (2)	Moderate (3)

## 5 Recommendations & Conclusion

The study reveals some major concerns about the existing design and planning issues including poor management, private ownership, lack of inclusivity, freedom, and diversity in activities as well as unplanned landscaping and physical amenities, etc. Major recommendations are listed below:

- a. Management: Public authority (SCC) should manage or lease spaces with clear rules, protecting public interests.
- b. Visual Integration: Improve visual connections with streets by redesigning boundaries.
- c. Hygiene and Awareness: Addressing cleanliness through proper management and awareness campaigns.
- d. Revive Waterbodies: Experts (architects, urban planners, and landscape designers) need to be involved in redevelopment planning and design of these waterbodies including surrounding walkways, landscapes, and amenities for sustainable development.
- e. Inclusivity: Create diverse activity zones, seating, sheds, and amenities for all age groups.

The initiatives taken by SCC to develop such spaces should be appreciated but they need to immediately develop different scales and types of public spaces in the city including parks, playfields, gardens, etc. as the city is direly in need of quality public places for various social groups.

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