Samarawickrama, Sumanthri, et al (eds), 2019, "Re-evaluating Space across disciplines": Proceedings of the 12<sup>th</sup> International Conference of Faculty of Architecture Research Unit (FARU), University of Moratuwa, Sri Lanka, December 03, 2019 Colombo pp. 377–384. ©

#### **RE-EVALUATING PUBLIC SPACE IN URBAN SLUM: A CASE OF KORAIL BASTI**

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#### Abstract

Slums are the undeniable truth in the urban fabric of developing counties. As per UN Habitat 30 percent of world's population live in slums and the vast majority of slums are located in and around urban centres. As reference, Korail Basti is Dhaka's biggest slum with a total area of around 110 acres of land. Due to spontaneous growth and density there is no viable public space for the intangible growth of the slum dwellers. But most often this crisis of such huge community is overlooked by providing bare necessities like- infrastructure for water, power, sanitation etc. with over-simplified, short term cheap schemes. However, on the deeper end it always fails to address the intangible needs of this community where cultural, recreational and social interaction can happen. This paper tries to re-evaluate the needs of viable public space in this type of dense urban slums, understand their present features from the existing public usage and analyses the constraints and scopes to incorporate public spaces addressing the challenge of swarming density. This research has been carried out through diagram preparation from GIS mappings, field survey, photographic survey, one to one interview with the locals and questionnaire survey from the slum dwellers. The findings suggest us a clearer vision about the present public domain in Korail, its dependence on slum infrastructure and the local's aspiration for a better living condition. This paper focuses on the sequential process of understanding public integration, public usage and spatial inclusion of infrastructure and public domain within slums to transform it into consolidated neighbourhoods for the betterment of the city.

Keywords: Slum, Urban, Public space, Infrastructure, Korail

#### 1. Introduction

Due to rapid growth of population and intensified urbanization most of the developing countries in the world are facing accrued pressure of housing in case of poor and marginalized citizen. According to UN-Habitat, over 30 percent or roughly estimated over 1 billion people of the world's population live in informal housing settlements otherwise known as slums, barrios or favelas. Whereas most importance of this huge population living in such consolidated settlement are mostly provided on dwellings and houses themselves, the need of public or open spaces between the settlements where the socio-cultural development and humanistic growth can take place is hugely overlooked.

In developing countries like Bangladesh, cities are booming with urban sprawl and slums are consistently augmented with heavy densities. Dhaka, capital of Bangladesh with 16 million people, has 60 percent of its resident living in slums or squatters. Korail, one of the biggest slums located in the centre of Dhaka exemplifies one of such meagre yet compact urban marginalized settlement. Millions of people here are leading life on bare minimum with little to no scope to flourish and nurture their public life which can help developing their social, cultural and overall humanistic dimensions.

With the new agenda by UN-Habitat, Claudio Acioly (former chief Housing Policy of UN-Habitat and coordinator of the United Nations Housing Rights Programme) proposes –" streets as the natural conduits that connect slums spatially and physically with the city and treats streets not only as a physical entity for mobility and accessibility — through which water and sewerage pipes, power lines, and drainage systems are laid – but also as the common good and the public domain where social, cultural and economic activities are articulated, reinforced and facilitated." (UN-Habitat official web site)

In such a situation of global attention to public domain in slums, this paper aims to investigate the present condition of public space in Korail slum, highlight the pattern of public activity and analyses the critical condition and constraints of the public spaces of this overcrowded settlement.



Figure 1, Location of Korail slum (Source: Google earth)

## 2. Literature Review

# 2.1. THE CONCEPT OF SLUM AND ITS NEGETIVE ASSOCITION

UN-Habitat Global Report 2003 chooses to describe *-The term 'slum' … in a general context to describe a wide range of low-income settlements and/or poor human living conditions.'* (UN-Habitat,2003). The Merriam-Webster Dictionary (1994) defines slum as- *'a heavily populated urban area charterized by substandard housing and squalor'*. Which further elaborated in UN-Habitat Global Report 2003 as- *'this definition encapsulates the essential characteristics of slums: high densities and low standards of housing (structure and services), and 'squalor'*. The first two criteria are physical and spatial, while the third is social and behavioural.' (UN-Habitat,2003).

Flood (2002) tried to portray the negative association of slums as- 'Slums were identified as containing the poorest quality housing, the most unsanitary conditions, the poorest people: a refuge for marginal activities including crime, 'vice' and substance abuse; and a likely source for many epidemics that ravaged urban areas.' Gilbert (2007) added as –'Slums were dangerous to the people who lived there but, perhaps even more importantly, might launch an epidemic that would endanger everyone in the city.'

But despite its negative association total expunges of slum is a mere dream which is rightly understood by UN-Habitat and it pledges the policy of upgrading projects rather than slum clearance.

## 2.2. THE DEFINITION OF PUBLIC SPACE AND ITS IMPACT IN SLUM

"Public space is the stage upon which the drama of communal life unfolds. The streets, squares, and parks of a city give form to the ebb and flow of human exchange. These dynamic spaces are an essential counterpart to the more settled places and routines of work and home life, providing the channels of movement." (Carr, Francis, Rivlin, & Stone, 1992) "Public space concerns not only the physical but also the social and psychological dimensions with a significant overlap among them. The physical dimension refers to the physical environment or "provision" of public space which provides a setting for social interaction, whereas the social dimension refers to the "use" or activities occurring in the space." (Carmona, Tiesdell, Heath & Oc, 2010).

Public space at slum plays a significant role in people's everyday life who resides there. It is interwoven in the day to day functioning of the community and directly affecting the socialising and sociability aspects of slum dwellers

## 2.3. THE EVOLUTION OF KORAIL SLUM

Korail is one of the largest slums in Bangladesh and is located in Dhaka adjacent to Gulshan-Banani Lake. In addition to the main Korail slum area, Beltola, Ershadnagar, Bhangawall and Godown Bosti are also part of Korail. The slums are gradually expanding across the lake by illegal encroachment and through waste and soil dumping. In 1961, the area was under the authority of Telephone and Telegraph (T&T), now Bangladesh Telecommunication Company Limited (BTCL). With increasing urbanization and rural urban migration the demand for urban poor housing increased. Under this demand,

unplanned and informal slum grew organically over the period of time which is still not recognized by the government. It is constantly expanding at an alarming rate without any viable public spaces for the huge population residing here.

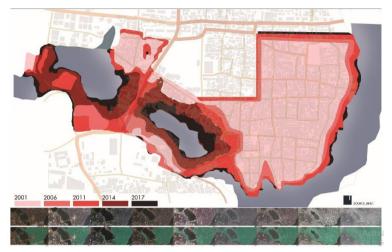


Figure 2, Expansion of Korail slum over the time period (Source: Studio project of 12 Batch of Department of Architecture, BUET)

# 3. Objectives

The objective of this paper is to re-evaluate the present availability of viable public space in dense urban slums, understand their condition and pattern from the existing public usage along with analysing the present critical conditions. And to conclude providing means to incorporate viable public spaces addressing the challenge of swarming density.

## 4. Methodology

This research study was arranged to develop a brief study of public space and activities in those public space in Korail slum. The total research has been carried out through some different study techniques; mapping, field survey, interview, photographic data collection and questionnaire survey.

Firstly, GIS map is used to prepare open space and land use mapping for identifying existing public space and availability of potential public space in Korail slum. The comparison of open space vs. build form ratio from Nolis's diagram provides clear perspective from this step. Field survey and interview of the slum people is done to portray the features of existing public activity and these identified features are categorised in a tabular form in step two. From on-site photographic survey, the mal-condition of existing public activity arenas and their close association to slum infrastructure is presented in step three. Lastly, in step four, with the help of a questionnaire survey the perception of slum dwellers towards viable public space helps to draw conclusion presented in this paper.

## 5. Analysis and Outcomes

## 5.1. EXISTING LANDUSE AND OPEN SPACE MAPPING IN KORAIL

Korail is one of the most dense urban slums in Dhaka. In an area of 90 acre the only dedicated open field is "Baromath" which is 1.5 per cent of the whole area. From Nolis diagram it is observed that about 95 percent is built structure with only 5 percent of open space which includes the roads, alleyways, infrastructure provision. Except "Baromath" no other public space is available for the Korail slum dwellers because of the scarcity of land and huge density of population which is clearly evident in the following maps.



Figure 3, Noli's Diagram of Korail slum (left), Land use Diagram of Korail slum (Source: Studio project of 12 Batch of Department of Architecture, BUET)

## 5.2. EXISTING PUBLIC ACTIVITY IN KORAIL

Korail slum has a unique feature of bazars and markets intricate with its public settings. There is a huge density and excessive scarcity of land which made public space insufficient and inadequate for this large number of population. With an area of 90 acre only one open public playing field named as 'Baromath' is the only available dedicated public scape in Korail. From field survey the public activities are identified and interviewing the slum dwellers, major features of the public activities are noted.

Category of Activity	Features in Korail
Social	Social interaction for males mostly happens in bazaars and small shops like-tea stalls, repair shops, grocery shops etc.
	Female interaction and socialization happens in the courtyards, alleyways, water collection points like-
	tube-well or shared kitchen of the clustered house. Children socialize with one another and play in the
	alleyways, small courtyards of the clustered houses, beside drainage, garbage disposal, even on the lid of
	septic tanks in slums as there is a huge scarcity of open space.
	Only one play ground named as "Boromath" is present in this whole slum where children play in the leisure time.
Economic	The economic and commercial activities happen in the Bazaar areas of Korail like- Bou Bazar, Jamai
	Bazar etc.
	Besides there are different types of shops, tea stalls, chotpoti –fuchka(Bengali street food) shops spread throughout the slum.
	There are many mixed use household with shops as
	ground floor and living area on the first floor. Many women are also involved in the economic and
	commercial activities as shop-keeper, owner etc. and run the economic activities in the public domain of Korail
Cultural	Many concerts are arranged during festivals and celebration purpose in "Baromath".
	People from different background settled here which itself created a unique and versatile cultural setting. Public performances were organized in spaces
	where more people gathered for their daily activities
	(like Bazaar) or nearby tea-stalls where community
	members spend most of their leisure period and enjoy the evening.
Recreational	Television and Satellite channels are a major form of public recreation in Korail. People gathers in the bazaar and shop areas and watch Bangla cinemas, cricket, news etc.

Table 1, Features of different category of public activity in Korail slum.

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Religious	Mazar culture is popular in Korail and there are two
	famous 'Mazar' in these two parts. In the 'Jamai
	bazar' there is 'Shah Ali Mazar' and in 'Bou bazar'
	it's known as 'Latalisha Mazar'. Every Thursday, the
	Mazar committee arranges spiritual songs. It starts
	from 6:00p.m. and ends as late as 3:00a.m.
	Eid prayers are offered in Boromath.

From the table above, it is clearly evident that majority of informal public gathering for social interaction occurs on the infrastructure lines and pocket spaces in between two houses. The infrastructure conduits like-streets, alleyways, drainage, swerage, water supply lines etc makes an indespensible part in the live and living of people in Korail slum. Scarcity of viable public space has bound then to use these provisions as a buffer to mingle among each other. Beside "Baromath" a mojor portion of public interaction happens in the Bazaars. Bazaars have crossed the perimeter of commercial finelines and spreadout as an intricate mixed use zone to support social, recreational public activites also.

5.3. PUBLIC ACTIVITY IN KORAIL AND THEIR ASSOCIATION WITH SLUM INFRASTRUCTURE In Korail, roads, alleways even small setbacks for drainage also works as a place for people to mingle with their neighbours. Table 1 suggest us how infrastructure layout is presently used by slum people as public space in this dense condition of living.



Figure 4, Road networking map (left) and drainage map (right) (Source: Studio project of 12 Batch of Department of Architecture, BUET)

The roads and alleyways are narrow varying from 10 feet to even 3 feet. People use these spaces as public spaces in their day to day life in Korail slum. The houses use them as an extension of domestic arena, bazaar and commercial zone use roads and alleys as a part to accommodate their outdoor public accommodation. Fuchka, halim, tea-stall and other street food shops are directly on infrastructure lines like-drainage, roads.



Figure 5: Slum children playing in the alleyways of Korail (left), Domestic activates are performed in group alongside the infrastructure lines (middle) (*Source: Author*), Children playing along an abundant infrastructure pole (right) (*Source: Internet*)

The present condition of slum infrastructure is very precarious. Inadequate and illegal provision of infrastructure is affecting the lives of slum dwellers. As per recent The Daily Star report on July 20, 2017, "at least 20 utilities "syndicates" are operating in Korail slum. The local police and several

government bodies are also involved in the distribution scheme. For those not familiar with Dhaka's informal settlements, the details are alarming. The syndicates are associations of local residents who take on roles such as "lineman, rent collector, and manager," providing utilities in negotiated turf areas. Police officers and government utility employees take bribes to help establish and run the "unauthorised services."

The lack of formalization from government and public sectors is causing ill management and malcondition of infrastructure in Korail. It is creating an adverse effect on the nearby Banani Lake which is one of the main two water channel running through Dhaka city. Water clogging is a huge crisis in Korail. Inadequate drainage, sewerage, waste management is creating unhealthy living condition which has direct effect on the social development of the slum dwellers.



Figure 6, Condition of waste dumping and encroachment of Banani lake. (Source: Author)



Figure 7, Poor, unhealthy and unhygienic condition of drainage and infrastructure in alleyways and roads. *(Source: Author)* 

The people of Korail slums are left with only 5 per cent of open space among which lies roads, alleyways, infrastructure provision. The immediate solution only incorporates short term relief works providing the basics of living but it always overlooks how this minimum open space can still be incorporated as efficient public spaces to address the social, cultural, recreational as well as overall growth of the Korail slum dwellers.

## 5.4. RESPONDENTS FEEDBACK OF EXISTING PUBLIC ZONES

There are six questions asked to the people living in Korail slum to understand the existing satisfaction level and need for public space for their social and communal life. At first the general information of the respondents are noted. Then their perception of social and public life is evaluated through questions. Next two questions involved the major arena of existing public activity i.e. alleyways, streets and sideways of houses. Last two questions involved infrastructural condition and their perception about it.

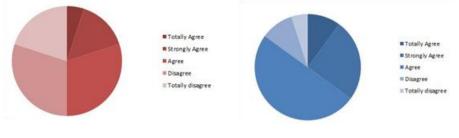
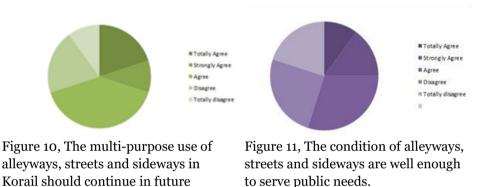


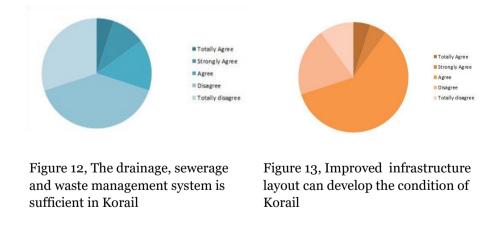
Figure 8, There is need for public space in Korail

Figure 9, Public space like "Baro math" is needed in Korail.

It is evident that people are hesitant when the need of public space is asked. 50% people falls under disagree and totally disagree. Whereas, 75% respondents mostly agree with the need of "Baromath". Their direct involvement with "Baromath" help them to realize the need of open spaces in their community but sub-standard living and over density obscure their vision for viable public spaces.



70% respondents agrees to totally agrees with the multi-purpose uses as their perception says this is the only space left for them in the community to socialize and for their children to play. 55% respondents think the conditions are well enough where rest disagrees.



While only 30% respondents agree that the infrastructure condition is sufficient in Korail, 80% of respondents believe that improved infrastructure condition can overall develop the condition of Korail and make it more liveable for them.

From the conducted survey it is clear that they understand the need of a better social and public life. Their understanding is clearly portrayed from their perception of "Baromath". They are habituated in the dense living pattern and multi-purpose use of spaces in street and infrastructure levels. They want the improvement of the infrastructural system which in their perception will help them get a better living condition in their community.

## 6. Conclusion

The people of Korail slum is habituated with shared living pattern and multi-purpose use of space. Their existing public activity pattern suggests us to adopt this multipurpose use of spaces in future design in these type of slum.

To address the problem of density and scarcity of open and public space the infrastructural layout system can act as a huge potential space. Their present activity pattern also suggest us the same. The poor condition of infrastructural layout, unplanned land use and encroachment of Banani Lake can be addressed by thoughtful intervention of public space. The ill-management of infrastructure likedrainage, sewerage, septic tank can be addressed if it can be designed through architectural solution with multi-purpose usage. The assemblage of architecture -infrastructure can address the multipurpose design solution needed in this dense situation with land scarcity. Sustainable and green solutions can be adopted to address this unhygienic condition.

Improvement of public space to address the intangible growth of slum dwellers can be achieved from observing the present living pattern and tradition solution that exists in Korail. The undeniable truth of urban slums should not be avoided rather it should be faced from various aspects. The public aspects discussed in this paper try to portray the present condition and tried to understand from the aspirations of slum dwellers.

## 7. Acknowledgements

Special thanks to 2011 and 2012 batch of Department of architecture, BUET for supplying their findings of 4<sup>th</sup> year urban studio projects and housing projects in Korail slum.

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