Public Space in Informal Settlement

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Abstract - *Every human is badly in need of better living. The people living in informal settlement are not only responsible to serve the people of formal settlement but also they have a right to lead a better life. The inhabitant of informal settlement consider the public spaces within their settlement as their buffer space like as their living room. Living room is a room in a residence used for the common social activities of the occupants. On these public spaces in informal settlement people come together to share their feelings, and they come along with to enjoy each other. Public spaces of informal settlement can make a high quality of life by which people can draw a backdrop of their own drama.*

Key Words: **Informal settlement, Public open Space, People, Buffer Space, Social Interaction.**

1. INTRODUCTION

Public open space is an important component of informal settlement that caters to the daily life. The amount of green space in a neighborhood is significantly correlated with the health of its residents (Maas et al, 2006; Villanueva et al., 2015). Public open space promotes health by relieving mental fatigue (Kaplan, 2001), decreasing mortality rates (Mitchell & Popham, 2008), promoting physical activities (Koohsari et al., 2015), and reducing stress levels (Nielsen & Hansen, 2007). Therefore, urban planning must aim to provide high-quality public spaces in informal settlements (Schipperijn et al, 2010). "The informal sector has emerged as a complex system of social interactions" (Ramirez 2010, 138), as informal settlements are far more than houses and streets – they are people interacting with spaces. [1] Throughout a long time these informal settlements have constituted more than half of the city of various countries as like as developing countries to developed countries. While cities offer better quality of life, one in three urban residents still lives in under-serviced areas. When the supply of serviced land and housing stock cannot keep up with the growing numbers, the low-income population resort to living in slums. Based on the Millennium Development Goals, the global attention concentrates to overcome the world poverty, starvation, lower education, gender equality, and health problems especially AIDS. Those problems mostly happen in slum areas and squatter settlements, where the poor lives in the cities of developing countries. (United Nations, 2006) Since the worst environmental quality within the city is mostly in slum areas and squatter settlements, many people including the government officers and private institutions have an opinion that the slum areas and squatter settlements are the garbage of the city which makes worsening the image of the city. Therefore there are many urban planner and designer, who change the slum areas and squatter settlements into a more beautiful area according to their interpretation.

2. METHODOLOGY

This study is descriptive and extract data by reviewing some papers and articles on the topic related with public open space of informal settlement & social interaction. After reviewing five published article and one book 'Public space in Informal settlement: The Barriors of Bogota' by Jaime Hernandez-Gercia [1]. This study is focusing on public open spaces in informal settlements.

3. IMPORTANT CHARACTERISTICS OF PUBLIC OPEN SPACE IN INFORMAL SETTLEMENT

There exist different studies that are identified some important characteristics of public open space (POS), such as park facilities and features, park maintenance, distance, size, and perceived safety (Bedimo-Rung, Mowen, & Cohen, 2005; Giles-Corti et al., 2005; Van Herzele & Wiedemann, 2003). Although these characteristics were found to be important factors influencing the use of POS, some studies disagree (Schipperijn, Bentsen, Troelsen, Toftager, & Stigsdotter, 2013). For example, Lo and Jim (2010) found that the quality of POS was not correlated with the frequency with which individuals visited them; Schipperijn, Stigsdotter, Randrup, and Troelsen (2010) found no reliable socioeconomic, size, or travel distance predictors of visitation frequency to the most often used POS. These inconsistent results may be due to cultural differences among cities. Wang et al, (2015) suggest adopting behavioral theories to better understand users' attitudes and behavioral intentions in using POS. [2]

From the study of Wan et al, 2015, four important factors are identified that affect to use POS. the first factor are about aspects of design, facilities, and the management of POS, and that factor was termed 'Features'. Features in this study are defined as a

user's evaluation of how well the POS are provisioned and managed. The second factor included items such as scenic view, green features, air quality, and sufficient space. This factor is termed 'Naturalness' and it signifies the extent of the respondents' beliefs about the extent of natural settings with vegetation and other natural elements in POS. The third factor, 'Accessibility,' consists of items regarding hours of operation (access), location. Conceptually, Accessibility refers the extent to which the respondents perceive the use of POS as personally convenient, appropriately located for their personal use, and reasonably priced. The fourth factor was termed 'Variety of Facilities' because its items are about the range of facilities under various weather conditions and ancillary facilities. The Variety of Facilities factor concerns the extent to which a respondent believes that POS provide different types of facilities for different purposes and conditions.

4. ACTIVITY IN PUBLIC SPACE

Previous section we discuss about important factors that are related with use of public open space, but there remain unequal users activity distribution within all spaces of POS. There are some factors that affect activity distribution within public open space. The supply of hardware and supporting facilities is a key factor that affects user behavior and activity density. The spatial characteristics of open space, including the provision and distribution of enough facilities, the meticulous division of space, the various and colorful edges, the moderate coverage ratio of vegetation, and the presence of shadow, are important factors that influence user behavior. (Yiyong Chen, Tao Liu, Weibin Liu, 2016). [3]

4.1 Spatial Pattern of Activity

From the research of Yiyong Chen , Tao Liu & Weibin Liu, 2016, Spatial pattern of activity depends on –

- Involved population scale for example activities involving more than three person increase level of social interaction than one person involving activities.

- Proportion of male & female.

- Different age group for example elderly people involve in relaxing activity such as sitting, sightseeing when children involve in playing.

4.2 Factors influencing activity distribution

Yiyong Chen, Tao Liu & Weibin Liu, 2016, are identified the following key spatial factors that influence activity distribution by focusing on several significant spatial characteristics.

4.2.1 Facility effects

Facilities in space may include seating facility (seats, benches, auxiliary seats including steps, stone edges of planting etc.), pathways, foods, adjacent commercial facilities, outdoor playing equipment etc. In public open space these services and facilities encourage users to stay in a area and thus people come in contact and increase social interaction.
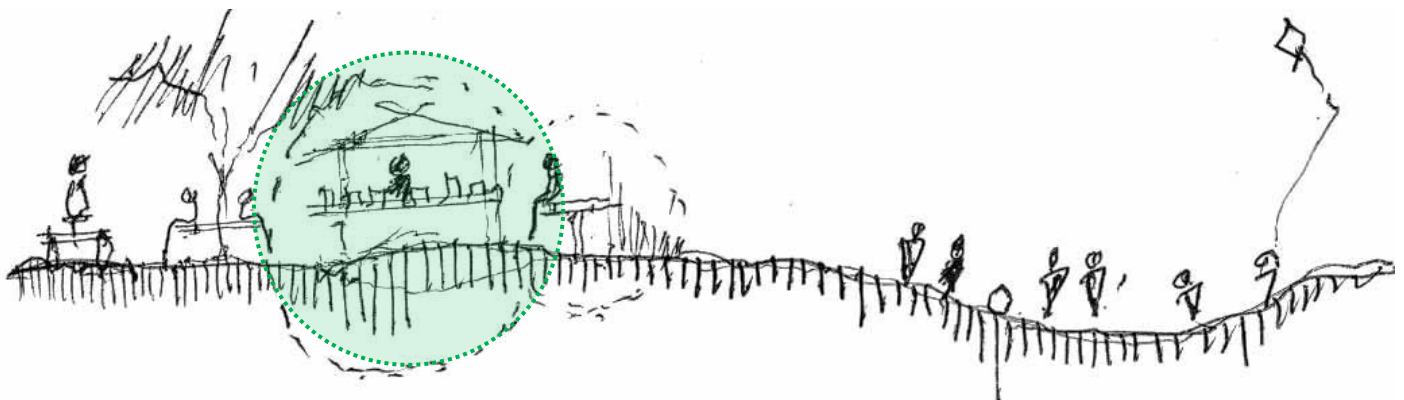

Fig -1: Section representing facility effects.

4.2.2 Edge Effects

Users prefer to stay at the edges to enjoy a nice open view and to rest their backs on a protective barrier. Specifically, many people prefer to sit in such areas because they feel safe and comfortable. The edges of the playground can provide additional auxiliary seats.
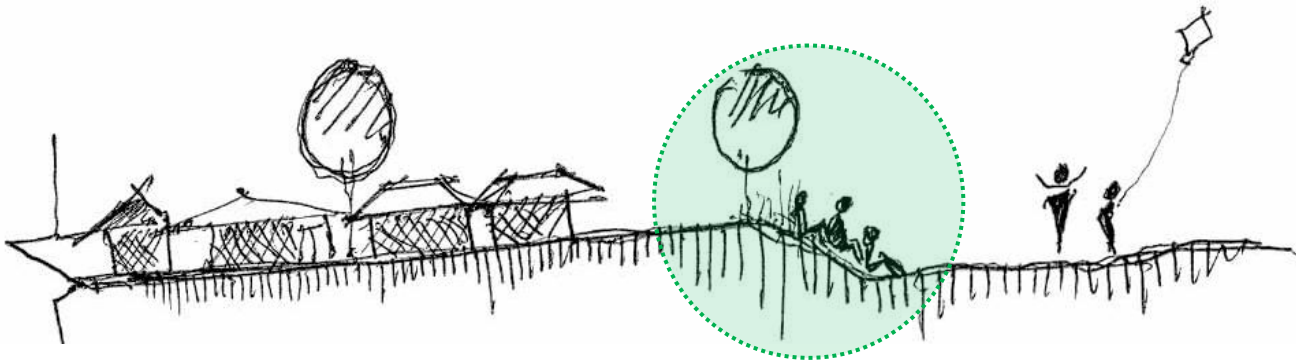

Fig -2: Section representing edge effects.

4.2.3 Size Effects

The size of the site is also an important factor that affect public space usage. The analysis results show that activity density is negatively correlated to unit area. In other words, a larger playing cards, are mainly distributed in large-scale spaces.
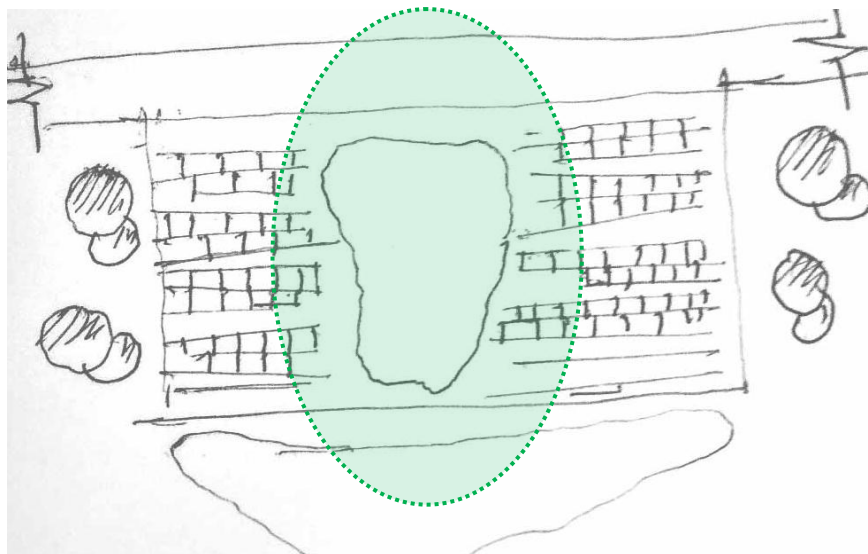

Fig -3: Plan of an informal settlement representing size effects.

5. SIGNIFICANT USE OF PUBLIC SPACE IN INFORMAL SETTLEMENTS

There are two significant use of public space in informal settlement:

5.1 Community Resource Centers

Having a physical space to convene, as a community is an important asset towards creating the mental, emotional and physical space supports community mobilizing. These spaces allow communities especially women to talk about their individual and collective problems and find solutions to these problems. These spaces allow women to collectively-actualize and build their

skills and capacities to take on projects beyond their individual needs. In Bolivia, Zambia, Malawi and Kenya, community centers were designed and constructed by local communities with the support of their NGO partners. Today there are over 772 such centers that have been designed, constructed and supported within SDI. [4]

5.2 Informal Settlement Markets

These markets are located within the settlement and benefit both the buyers and sellers who are mostly from the same community. More recently, discussions around planning and designing for these informal community markets, among the different country affiliates is opening the space for a more nuanced understanding of how to mobilize other categories of the urban poor like street vendors, home-based workers and waste pickers linking the habitat and livelihood agenda. For example: Market place at informal settlement of Kinawataka, Uganda. [4]

6. INTERACTION BETWEEN PUBLIC SPACE AND INFORMAL SETTLEMENT

The open space in informal settlements has been formed spontaneously, because the houses are developed without any planning. The spaces do not have certain patterns and form, but the inhabitants use the open spaces very effectively. They use the open space within the settlements with time sharing or they use the open spaces by turns. [5]
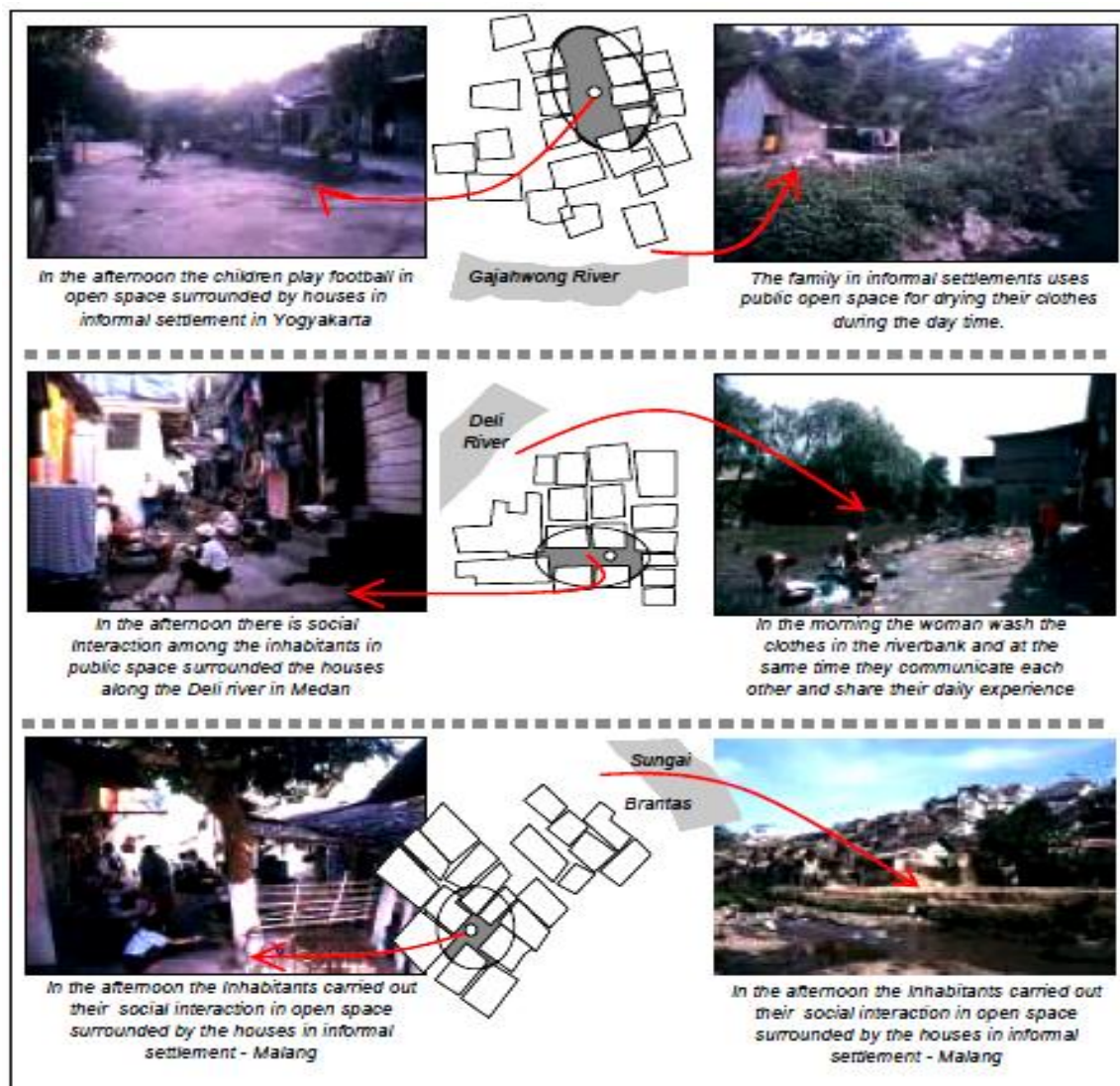

Fig -4: Several Houses Have an Orientation into One Open Space (Comprehensive Exploration of Public Space in Informal Settlement as a Tool for Sustainable Development Strategies by Dr. –Ing. Ir. Paulus Bawole, MIP, Page-8, Figure-3)

3. CONCLUSION

As a consequence we can say that public space within informal settlement gives the settlement an extra dimension. These spaces make the informal settlement more informal what act as a mitochondria of the total settlement.

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BIOGRAPHIES

S. M. Arafat Hossain has completed his B. Arch from Architecture Discipline of Khulna University. Right now he is acting as Lecturer at Department of Architecture of Ahsanullah University of Science and Technology, Dhaka, Bangladesh. He is also pursuing his M. Arch at Department of Architecture of Bangladesh University of Science and Technology(BUET). Beside Teaching he thinks and writes on various issues correlated with architecture, environment, social issues etc.