URBAN-INFORMALITY: ANALYSING THE PRESENT SCENARIO OF DHAKA CITY AND APPROACHES TOWARDS THE CONTROL AND BETTERMENT

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Abstract

The metamorphosis of urban informality challenges the formalization of the traditional design and planning processes of a city. This paper discusses the rapidly changing variation of informal uses of open urban spaces and its impact on urban life in the context of Dhaka, Bangladesh. In Bangladesh, a significant percentage of urban population resides below poverty line which is quantified as 21.3%. A portion of these urban poor is identified in official planning process as spatially delineated slums, industrial zones, riverbanks etc.; whereas a considerable part is found to be living beneath open sky within rail stations, on footpaths, foot-over bridges, parks and below fly-overs, denoted as floating people. These urban poor are trying to earn their livelihood often occupying the urban public spaces through various informal practices and consequentially this informal nature begins to co-exist with formal urban system. The study undertakes a reconnaissance survey and comprehensive analysis of two different categories of urban spaces in Dhaka. Within this context, the paper investigates the dynamic informal growth as well as the push factors behind the emergence of this situation. This paper attempts to delineate the present scenario of urban informality and the impact of that on the formal uses of those urban spaces. It shows that the informal uses either equal or outnumber the formal and designed uses. It is high time to make urban planning and design inclusive of these volatile factors and initiate a comprehensive strategy to mitigate the chaos of the current situation of Dhaka. The informal users are now a vital part of this city who cannot be neglected and deserve an alternative perspective of humanitarian approach. However, for long term planning, it is crucial to ensure less congestion of informal users in urban spaces since this organic and rapid growth pattern may arise immense planning related problem for the capital city in the future. Finally, an attempt has been made to provide some direct and indirect approaches to cope with these situations encouraging to control the issues responsible behind the negative impact.

Keywords: Urban informality, Dhaka, Floating people, Public space, Planning strategy

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Introduction

Dhaka, the capital city of Bangladesh is facing rapid urban growth both in formal and informal sectors for the last few decades. This growth has occurred largely due to ongoing rural-urban migration, which is often triggered by environmental change (Benjamin Etzold & Markus Keck, 2009). The urban planners and designers are trying to cope up with this swiftly changing flow by formalized planning and development of various infrastructures. However, the informal growth of urban areas received less importance compared to the formal sector. Because of that both the formal and informal sectors are being hindered since they are growing simultaneously as a single entity. The informal urbanism entitles both commercial activities like selling food or small products beside roads, upon pedestrian walkways or on the over bridges and noncommercial activities such as sleeping and cooking. These informal sectors comprising the user and usages directly or indirectly influence the formal sectors. Both of these criteria play their own role to build up the fabric of this city. At first the paper discusses why and how urban informality has become an important aspect of city planning. It will help to understand and deal with the "unplannable" or organic flow of the informal growth. The literature study and reconnaissance survey illustrate the reasons behind the flow of migration, usage pattern of urban space regarding formal and informal uses. Four sites had been selected and studied to understand and visualize different types of uses and to investigate the reason behind the growth of those activities.

At the end of this paper, some indirect approaches which will help to ameliorate the rapid growth of urban informality for the future and some direct approaches to cope up with the current scenario have been suggested. The understanding of the push factors behind this situation and the reconnaissance survey of the sites and sample group outlines these approaches for working towards the control and management of the volatile and rapidly growing urban informality with an intention of organizing that into a flexible but somewhat systematic framework.

Literature review:

A. Urban Informality:

Informality is often associated with procedures and phenomena that take place outside formal processes or planned and regulated zones (Roy, 2005). A very wide range of situations may be included, like spontaneous processes of occupation of the territory, absence of property titles, self-building of houses, illegal inhabiting in contexts with rapid urbanization, temporary uses of space, forms of self-organization and development of urban areas at city edges, etc. (Lutzoni, 2016). Informality in a city is developed and shaped by the city and its policies.

In most of the developing countries, a major part of the state's economy depends on this informal economy which may shape the bulk of new urbanization of these areas. So, Informality is no more confined with illegal settlements (as slums or squatters), rather it has become an integral part for the development of the city.

Informality is an organizing logic (Alsayyad, 2004) that can develop only in so far as there is a rule or formal structure that will favor its success. Hence the relation between formal and informal shows itself through interaction: their affinities and differences are in a state of equilibrium which is reflected in an irresolvable tension (Mehrotra, 2010).

Laura Lutzoni, 2016: 10

The informal spectrum of any city is no more in dichotomous relationship with the formal aspects; rather they have developed a dialectical relationship over the time which has become an essential part for the development of a city. It can be argued that the more fundamental issue at stake in informality is that of wealth distribution and unequal property ownership, of what sorts of markets are at work in our cities and how they shape or limit affordability (Roy, 2005). A central challenge for urban planners will be how to devise ways of supporting, protecting and including this informality in development.

B. Global Trends in Urban Informality Expansion

- a) Informality in developed and many transitional countries has been associated with competitive pressures arising from economic crisis, privatization, economic liberalization and global competition.
- b) In developing countries, the expansion of the urban labor force is more rapid than formal wage employment and the lack of state-provided social safety nets or the limited growth of formal enterprises. This leads urban residents to seek wage employment in informal enterprises.
- c) Governments are often unable to enforce laws and regulations governing enterprise, land and housing development. Plan proposals are over-ridden because of a desperate need for housing and income.
- d) Procedures for registration and obtaining approval are often time-consuming and costly which increases housing costs and prices by limiting supply, fueling a vicious circle of informality.
- e) Public sector agencies are often inefficient and ineffective providers of utilities and services. Thus, much service delivery depends on small-scale private sector and informal operators.

Global Reports on human Settlement, 2009¹

C. Informality in urban public spaces:

Urban public space helps shape and make cities but is also shaped and produced by the politics of the city. It is generally thought to be open and accessible to all residents. But it is a scarce resource and there are competing users and uses of it. Thus, how urban public space is organized reflects social realities and relations (Henri Lefebvre 1968, 1972). ² In the developing countries these urban public spaces have become the center of many informal activities, which includes both dwelling and earning their livelihood. Urban public spaces are like arcades of public buildings, road medians, footpaths, parks, rail lines & stations, bus stops, foot over bridges, land under bridges or flyovers are essential productive asset for urban informal users.

¹ Global Reports on human Settlement, 2009 by 'UN Habitat: For a better urban future'

² Inclusive Public Spaces for Informal Livelihoods: A Discussion Paper for Urban Planners and Policy Makers, By Martha Chen with Jenna Harvey, Caroline Wanjiku Kihato and Caroline Skinner, Prepared by WIEGO for the Cities Alliance Joint Work Program for Equitable Economic Growth in Cities. August 2018. pp 5

Situating informality research in Dhaka city:

Despite the growth of formal industrial sector and other employment, Dhaka is dominated by the presence of huge economic activities of informal sector. A large number of people migrated to the city in past decades seeking employment opportunities. The migration to Dhaka from other parts of the country is taking place at a rate of 6.0 percent a year. It has been estimated that about 65% of all employment in the city is in the informal sector.³ Work in the informal sector has a potential role in influencing further rural-urban migration also.

Thousands of people are migrating to the already crowded Dhaka city every year from rural areas in search of employment and a better life. Many of these people are living in the streets without proper shelters. The table below shows that the growth rate in Dhaka city is much higher than rest of Bangladesh. Also, the growth due to migration is also higher than the growth due to natural increases.

Year	Population	Growth Rate in Dhaka City (% per year)	National Growth Rate (% per year)	In-Migration Rate (% per year)	Growth Due to In-Migration (in %)	Growth Due to Natural Increase (%)	
1941	2,39,728	4.14	-	-	-	-	
1951	4,11,279	1.28	-	-	-	-	
1961	7,18,766	5.18	-	-	-	-	
1974	20,68,353	9.32	2.5	6.62	73	27	
1981	34,40,147	9.94	2.32	7.62	77	23	
1991	71,24,730	7.55	2.01	5.54	73	27	
2001	1,02,53,992	3.71	1.58	2.13	57	43	
2011	1.51.23.293	3.96	1.47	2.49	63	37	

Table 1: Population and In-Migration trend in Dhaka city from 1941 to 2011

Source: Bangladesh Bureau of Statistics, Bangladesh National Population Census report-1974 (Dhaka: Ministry of Planning, 1977); Bangladesh Population Census 1981 & 1991 Urban Area Report (Dhaka: Ministry of Planning, 1997); Population census 2001 & 2011.

The high rate of migration for such a long duration and extensive urban concentration has initiated several challenges demanding flexible adaptation from the policies concerning urban development in the formal urban spaces of Dhaka city.

Methodology:

The particular study is basically an exploratory one which aims to document and analyze the informal usage of various spaces of Dhaka city and root reasons of this type of informality. On the basis of this, the paper suggests some ways forward to control it after analyzing the root reason of growth. The study employed qualitative methods appropriate for this goal; which includes primary observation, open-ended interviewing and case studies in form of descriptive method emphasizing subjective experiences of respondents. The information gathered were based on oral history and all the discussions were noted as well as recorded. The study undertakes a reconnaissance survey and comprehensive analysis of two different categories related to

³ Dhaka Structure Plan 2016—2035 | Chapter 02, pp. 38

pedestrian activities of urban spaces in Dhaka. Respondents were selected purposively and in most cases were identified and contacted according to the location. The major criterion for selection was that the respondents have frequently used the pedestrian walkways and foot over bridge on daily basis for living purpose.

Observation and mapping of the activity of the spaces were under taken for weekdays and weekends as well as day and night. The study conducted total of 53 persons from all the sites. Among them 18 women, 26 men, 9 children (list shown in table):

Table 2: The sample size of the surveys; Source: Author

No.	Site	Sample size	Type of use/ user
01	Pedwstrian walkways and over bridge at Kalabagan bus stand, Dhaka	8	Floating People
02	Foot over Bridge at New Market, Dhaka	15	Hawker
03	Pedesprian walkkways at Zahir Rayhan Road, Polashi, Dhaka	18	Floating People
04	Road no. 10, Dhanmondi, Dhaka	12	Floating People

Respondants were asked various open ende questions about their livelihood; which includes their daily activities, income source, reasoon for coming to dhaka city, reason behind living in that particular site etc.

<u>Limitation of the study:</u>

- The study depended solely on qualitative method and thus analysis lacks in quantification.
- It was not conducted with all the informal users in the study area.
- This study cannot guarantee the fact that all the public spaces of Dhaka of the described category have the same usage pattern. It can vary from site to site.

Site Selection:

The field survey was conducted on some particular sites comprising two main categories of pedestrian walkway and foot over-bridge. The overall study and survey of several areas provided some insights upon the holistic picture of the coexistence of urban formality and informality. However, for in-depth study, four particular sites were selected which are-

- I. Pedestrian walkway and foot over-bridge alongside Kalabagan Bus stand, Dhaka.
- II. Newmarket foot over bridge, Dhaka.
- III. Pedestrian walkway at Zahir Rayhan Road, Polashi, Dhaka
- IV. Road 10, Dhanmondi Lake, Dhaka

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Foot over Bridge at New Market, Dhaka



Pedestrian walkway and overbridge at Kalabagan Bus stand, Dhaka



The 07

Pedestrian walkway at Zahir Rayhan Road, Polashi, Dhaka



Road No.10, Dhanmondi Lake, Dhaka



Figure 1: Sites for field survey on Public Spaces of Dhaka city and their informal use pattern Source: Google maps

These selected types of urban spaces are the most frequently used public space in Dhaka city, both for formal and informal sectors. The particular sites have been selected as prototypes of those selected types of public spaces.

Survey & Findings:

Among all type of urban public spaces in Dhaka city, those with pedestrian activities are more vulnerable with informality. This study investigates on the types of users and use pattern of these described public spaces by doing survey on the user group and by observing the formal and informal activities. Formal activities include regular pedestrian movements; whereas informal activities include hawkers, dwellings of floating people, beggars etc. The survey shows that, in many cases the informal activities dominates the use pattern of the space. From the charts illustrated below, the comparison between the formal and informal uses of four surveyed sites can be understood.

Table 3: The user pattern of public spaces (related with pedestrian activities) including both formal and informal activities

TYPES OF PUBLIC SPACE TYPES OF USERS · Pedestrian Site FOOT OVER BRIDGE AT NEW # Hawkers MARKET, DHAKA 01 Floating people Type Others 01 ■ Pedestrian Site FOOT OVER BRIDGE AT Hawkers 02 KALABAGAN BUS STAND = Floating people Others Pedestrian Site PEDESTRIAN WALKWAY AT Hawkers ZAHIR RAYHAN ROAD, POLASHI 01 Type Floating people 02 Others Pedestrian PEDESTRIAN WALKWAY AT Site ROAD NO 10, DHANMONDI Hawkers 02 LAKE, DHAKA Floating people

Source: Author

Site 01: Foot over bridge, Newmarket, Dhaka

This foot over bridge is located near the three busiest markets of Dhaka; New market, Nilkhet Book market, Gawsia market. It serves as a connection between these markets as well as serving the nearby residential areas. As a result huge numbers of pedestrian cross this foot over bridge every day.



Others

Figure 2: New Market Foot Over Bridge and its surroundings, Dhaka. Source: GIS map 2016, Dhaka & Author

An informal settlement of hawkers has developed here, as well as at the neighboring foot over bridges. The market has extended up to these over bridges through these informal sectors. People have to cross the over bridge for either reaching or leaving the market. On the way they can actually buy some small things that they might have forgot to buy in market or are not available in the market. This is the advantage that this hawker groups are taking of this particular site. In fact, there are some beggars there as well taking the advantage of the busy pedestrian flow of this place.

The hawkers sprawl the two third portions of the elevated walkways. Thus it is creating an aisle of informal shops along the edge of the bridge. The pedestrians flow is molded according to these informal activities, often creating uncomfortable situation for the pedestrians.

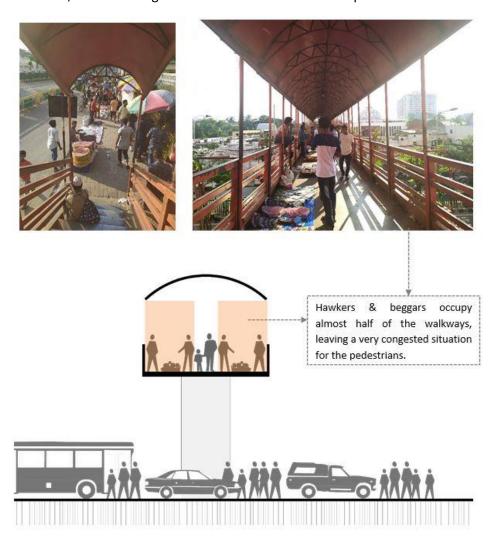


Figure 3: Hawkers and Beggars sprawling over the pedestrian movements. Example: New Market Foot Over Bridge, Dhaka.; Source: Author

Site 02: Foot over bridge, Kalabagan Bus stop, Dhaka

This foot over bridge is located near the Kalabagan Bus Stop beside the Dhanmondi Lake and Kalabagan Field. There are some commercial buildings on the other side of the road.

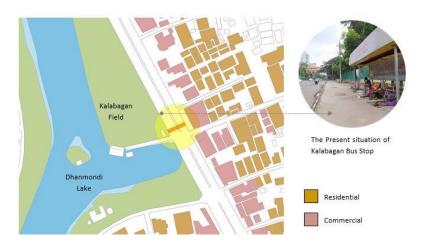


Figure 4: Kalabagan Foot Over Bridge, bus stop and its surroundings, Dhaka. Source: GIS map 2016, Dhaka & Author





Figure 5: Informal living of floating people under the foot over bridge at Kalabagan Bus Stand, Dhaka Source: Author

The scenario of this over bridge is completely different from the previous one. As this place is not as crowded as new market, in this area more floating people are seen than vendors. Few of these people are living here for years under the shade of this over bridge. Though recently authority had taken some measures to remove these floating people from this place for making this more accessible for pedestrian use, but due to poor law enforcement of Dhaka city this prohibition has been soon ignored and those floating people are getting back to this place.

The survey finding is quite interesting here. The pedestrians were asked why they do not use the over bridge. Most of the answers indicated towards the lack of security the pedestrians felt because of the inhabiting floating people. On the other hand, when the floating people were asked about the reason of residing in this particular site, they replied there is hardly any pedestrian using the over bridge which makes it comfortable to live.

Site 03: Pedestrian Walkways, Zahir Rayhan Road, Polashi Node, Dhaka

This is the pedestrian way alongside the long unbroken wall of Eden Woman's College. This foot path is near the Campus and Students accommodations of Bangladesh University of Engineering & Technology. The Polashi Bazar is within 200 m diameter which has public toilet facilities. The

informal dwellings of the floating people have been developed here over time. Those dwellings cover portions of the footpath making it almost impossible for the pedestrians to use it for walking

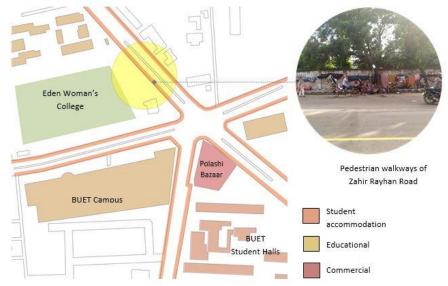


Figure 6: Zahir Rayhan Road, Polashi Node, Dhaka.; Source: GIS map 2016, Dhaka & Author

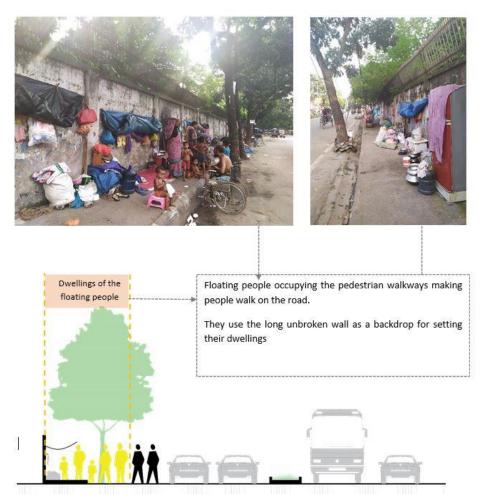


Figure 7: Floating people occupying the pedestrian walkways. ;Example: Zahir Rayhan Road, Polashi Node, Dhaka.; Source: Author

These floating people who are living here use the public toilets Polashi Bazaar as well as BUET student halls for washing and defecating facilities. Though they sleep and cook on the streets, it is more convenient for them to stay there, as they could get access to these free services nearby. Most of them live there with their family. Often, they send their children begging while they themselves have some kind of jobs like rickshaw pulling, house maids etc. Another important finding is that they are using the wall as the support for setting their dwellings. The long unbroken wall automatically serves as the permanent side of their dwellings. They are using mostly plastic wraps and ropes to build their dwellings.

Site 04: Pedestrian Walkways, Road No. 10, Dhanmondi, Dhaka

This is the pedestrian way alongside the Dhanmondi Lake and Dhanmondi Park. An Informal settlement of dwelling of the floating people has developed there which forces the pedestrian to walk on the vehicular road. Most of these people are beggars; few of them have temporary jobs. The Baitul Aman mosque is within 100 m diameter of the spot. The mosque often facilitates them with foods and other amenities. Especially on religiously important events like Juma prayer and Eids, people coming to the mosque give them food, cloths, money etc.



Figure 8: Road 10, Dhanmondi, Dhaka. Source: GIS map 2016, Dhaka & Author

Beside they use the Dhanmondi Park's toilet for washing and defecating facilities. They are mostly beggars, and it makes easier for them to beg in the nearby park beside Dhanmondi Lake. They are using the boundary of the park as the back drop for setting their dwellings.



Figure 9: Floating people occupying the pedestrian walkways.; Example: Road No. 10, Dhanmondi Lake, Dhaka.

Re-conceptualizing informality: Some way forward to control it:

In the present scenario of Dhaka city, from the field survey and study of secondary data; it is discernible that the growth of informality is presenting ever transforming challenges towards the urban designers and city planners. To cope up with this situation some pragmatic approaches are required which will address the key reasons behind this rapid growth. Addressing the push factors behind the emergence and the meteoric growth of urban informality demands some indirect approaches to control and manage it in the long run. But similarly, the existing challenges are also vital and should be dealt with. The betterment of the existing situation by taking some direct approaches concerning the informal users will help to mitigate the unfavorable impact of urban informality on the systematic framework of the city.

This paper suggests two approaches which will assist to deal with informality, they are -

- a) Direct approach, to cope up with the growth of informality in urban cities
- b) Indirect approach, to control the growth of informality in urban cities

The direct approach

The direct approach of urban design and planning is for the betterment of the existing situation of the informal livelihood. This approach may include small or big innovative design ideas as well as policies and strategies to cope up with the existing scenario of informality in Dhaka city.

Participatory approach is needed from all the sectors of society, starting from government at policy level to private NGO and community organizations for implementation of the acts. The strategies could be as follows:

A. Different approaches to urban space design-

From survey it is seen that informality grows in a city as a byproduct of the design of formal urban spaces. For example, surveying the selected sites it is found that informal settlements of the floating people are developed alongside a long unbroken boundary wall. In this case, while designing the boundary wall the possibility of development of this type of informality was not considered. In the long run it impacts the overall urban condition of the locality.

Also it is found from the survey that, often time the informal growth has directly influenced by the formal zoning and use pattern of that particular area. For example, the growth of informal hawkers in the New market over bridge has the direct influence of the nearby markets. Similarly, the settlements of floating people of Zahir Rayhan Road and beside Dhanmondi Lake are dependent on the nearby public toilets of the public market and park. Also the nearby mosque of the Dhanmondi Lake, has a great impact upon the growth because it provides food and other supplies for the floating people.

Therefore it is crucial to make the contextual, cultural and socio-economic facts of the city inclusive in the design process of the urban planners and designers. Urban designs may include some flexible intermediate spaces in between the formal and informal spheres of the city which can adapt to the urban reality of continuous change.

Alternative design process and perspectives must be appreciated which will embrace flexibility and be inclusive of human behavior pattern rather than design ideology. Similar urban issues may require different design approaches in different contexts responding to the corresponding user groups. As L. Lutzoni (2016) says,

"It is a case of addressing design that, based on the awareness of the value taken on by the territory and its relations, develops as a structuring element from which to depart with the purpose of creating different perspectives in conceiving urban space. This plural approach, in contrast with a homogeneous view of the city, favors the success of diversity and alternative points of view."

Laura Lutzoni, 2016: 12

A thorough knowledge about informality existing in the city is a crucial element of urban design. Urban designers can use micro processes as a tool for addressing the diversified issues of urban informality to achieve adaptability. Human behavior, socio-economic culture and contextual variation are some crucial factors which should work as catalysts in the design process of urban spaces. This inclusive design procedure would contribute to transform the present city and render a better future

B. Urban development policies-

The complex phenomenon of urban informality cannot be controlled and ameliorated without the comprehensive and integrated cooperation among different strata of the society.

Understanding urban informality requires a differentiated analysis of actors operating within and across domains. (Nicola Banks, Melanie Lombard & Diana Mitlin, 2019). A comprehensive strategy, comprising government, policy makers, urban planners, urban designers and last but not the least people involving in the informal sector; is crucial for the present scenario.

At macro level, government and policy makers may introduce some policies that would include the opinions of urban planners as well as the people involving in the informal sectors. The method of inclusion and to address the changing patterns of informality may work as the primary step towards a better understanding to cope up with this situation. The process of formalization is never as straightforward as simply converting informal documentation into formal titles (Roy, 2005). A flexible approach to planning for regularization and upgrading is an essential tool for improving the livability of informal settlements and also to upgrade the economic stability. The formalization process or involving legal authority may arise more problems for the informal inhabitants. Often they are unable to make regular payments for the new services and facilities provided through formalization which consequently leads to their displacement. Applying the state of exception where needed, especially for the most vulnerable people can be a way of making the approach of regularization more flexible. According to Roy (2005), there are two forms of exception that could be considered while making policies for the informality; they are regulatory exception and regularity exception. For example, incrementalism is a way of exception of housing policy for the informal people where payment of regular increment is confined in a system but failure to make regular payments would not cause eviction. The timing of the installments, the taxation can be different for them to ease their difficulties and lessen their burden.

In the existing socio-economic context of Dhaka city, severely strict and uptight laws or regularization process in informal sectors are probable to face failures because of its dynamic and rapidly changing characters. The informal sectors, either commercial or noncommercial have to be brought under an adaptable but authorized process under a formalized body such as City Corporation.

However, the community level integration is obligatory to implement these policies properly. Any humanitarian organization, NGOs, community level groups may work as a connecting bridge between legal authority and the people living or working in informal sectors. Furthermore, any organization based on entrepreneurship may also work as a catalyst here. Small scale investment to involve those people in a process can be seen as a starting point. Small and Medium enterprises are particularly suitable for the densely populated countries like Bangladesh where SME sector can provide huge employment opportunity with much lower investment. They are expected to create jobs, reduce poverty, and drive a resilient national economy.

The community level organizations, who are involved in monitoring the informal activities, can provide some facilities to these people in exchange of social services. For example, these informal inhabitants provide services like cleaning the road and footpaths, maintain the plantation beside the walkways etc.; in exchange of which the community level organizations will provide them economic support to start small scale business like selling flowers, toys household things on the streets. Thus in long run this process may enhance the quality of living condition of these people as well as it will be beneficial for the city.

The Indirect approach

The indirect approaches may include some policies and planning strategies that won't affect the informal growth pattern immediately but can help to control & mitigate the growth of informality as well as the imbalanced growth of the Dhaka city in the long run.

Through the survey conducted on the user groups of the particular sites, this paper investigates on the reasons behind this growth of informal livelihood in Dhaka city. The data collected from these sites are accumulated in the chart below. Survey shows that more than 80% people of this group are actually migrated from outside of Dhaka city. They have migrated either alone or with their family. The reasons for their migration are mostly because of two major reasons:

i) Lack of work opportunity and ii) Natural Disaster

Table 4: The reasons for migration of the people who are using the public spaces informally in Dhaka Source: Author

REASONS FOR MIGRATION TO DHAKA	Foot over Bridge at Kalabagan Bus stand	Foot over Bridge at New Market, Dhaka	Pedestrian walkway at Road 10, Dhanmondi Lake, Dhaka	Pedestrian walkway at Zahir Rayhan Road, Polashi
NATURAL DISASTER	30%	10%	60%	50%
LACK OF WORK OPPORTUNITY	70%	90%	40%	50%

On the basis of the survey result, the paper suggests some indirect approaches which may include policies & planning strategies to manage the rural-urban migration, address disaster managements and develop rural areas & other urban centers mitigating the growth of informal activities in urban cities. The strategies could be as follows:

A. Comprehensive Disaster Management Policy-

From the survey, it is found that the major number of this floating people came in Dhaka city due to their loss of everything in any disaster. Asia and Asia Pacific is the most disaster-prone region of the world. The amount of environmental disaster related risk is 4 times higher for a person living in this region than those in Africa and 25 times than in Europe or North America. Bangladesh stands as one of the most climatically vulnerable country and ranked 5th in the World Risk Index in 2012. About 68% of the country is vulnerable to flood. 25% to 30% area is inundated during normal flood. 35.8 million (28% of total population) people are vulnerable to cyclone and salinity in coastal area. Among them over 3 million people are extremely vulnerable. Bangladesh loses 10,000 hectares land annually during last 30 years due to riverbank erosion. The most alarming statistics is that the displacement rate is near about 68,000 Population/Year

due to various disasters. The maximum portion of this huge population comes in Dhaka city and grows informal settlement.

Government should take more effective steps for reducing losses of the disaster every year and should remember that real development is not possible without the integration of disaster mitigation programs. Our planning thrust is therefore should be diverted towards disaster management as a major consideration in regional development planning.

B. Revitalization of Rural areas-

The rural area of Bangladesh, as in many developing countries are faced with different challenges like poverty, natural disasters, limited economic opportunities, poor infrastructures, lack of proper educational and health facilities, lack of job opportunities for growing young population etc. These factors are the reasons for the increasing rate of rural-urban migration, which consequentially increases the rate of informal development in urban cities. To overcome these challenges these rural areas are needed to be revitalized by making policies, building infrastructures and making investments on rural area development.

A report on the Daily Sun (19 April 2019, p.1) covers the recent published "The Global Food Policy Report-2019" by The International Food Policy Research Institute (IFPRI) which recommends revitalization of rural area through a focus on five building blocks: (1) creating farm and non-farm rural employment opportunities; (2) achieving gender equality; (3) addressing environmental challenges; (4) improving access to energy; and (5) investing in good governance. Revitalizing rural areas can stimulate economic growth and begin to address the crises in developing countries.

C. Increasing the Competitiveness of other urban centers:

In a study about the urbanization and competitiveness of Dhaka city by Bangladesh Economic Association (Ahmed, 2017) it is found that,

"About 55% of the national urban population concentrated in 4 Metropolitan cities- Dhaka, Chittagong, Rajshahi and Khulna. Economic opportunities are concentrated in the largest four cities of Bangladesh which are the concentrated urban areas in Bangladesh. Major industrial activities and auxiliary business services are concentrated in the largest cities. Dhaka alone account for 80% of the garments industries. Workers employment density in Dhaka City Corporation is above 60% higher than in Chittagong City Corporation. Employment density of workers per sq. km in Dhaka was 4241 which was 2835 in Chittgaong in 2009 (WB-2012). Besides garment industries, several government universities and 50% private universities & thousands of schools, colleges, hospitals and clinics are concentrated in Dhaka. Administrative headquarters are located in Dhaka. Manufacturing & services often located close to urban areas to capture the productivity advantages generated by agglomeration

⁴ 'Protecting Development Gains, Reducing Disaster Vulnerability and Building Resilience in Asia and the Pacific', The Asia Pacific Disaster Report 2010 by United Nations ESCAP

economics that is access to market, knowledge spill over and the proximity to a large poll of labor."

Sarder Syed Ahmed & Muntasir Ahmed, 2017: p. 01

Besides that, a lot of people are migrated from rural areas to Dhaka city due to natural disasters or lack of work opportunity. Most of this people live their livelihood here through informal practices. In the informal sector 1.6 million hawkers, Rickshaw pullers and domestic helpers are engaged. The number of hawkers are .03 million, Rickshaw pullers .08 million & domestic helpers .05 million (Islam, 2005, as cited in Ahmed, 2017).

So, it is quite evident that excessive concentration of economic and political activity has been occurred in one city Dhaka. As a result, more and more people are migrating to Dhaka each year for various reasons. A major portion of this migrated people is forming the informal sectors of Dhaka city.

In this context, it is highly needed to reduce the urban concentration of Dhaka city by increasing the "Competitiveness" of other urban centers of Bangladesh. City Competitiveness describes a city's comparative advantage in attracting mobile production factors and its ability to leverage these advantages to sustain growth in a rapidly changing global environment. City Competitiveness depends on innovation, livability and connectivity in a global economy. Empirical evidence suggests that cities with high innovation levels, a livable and high-quality environment and internally and globally connected are more economically successful, as they are attractive location for firms and workers (World Bank, 2012, as cited in Ahmed 2017).

Urban Competitiveness = ∫(economic determinants + strategic determinants)

Where:

Economic determinants = factors of production + location + infrastructure + economic structure + urban amenities

Strategic determinants = governmental effectiveness + urban strategy + public-private sector cooperation; + institutional flexibility

Figure 10: The Primary Determinants of Urban Competitiveness

Source: The Global Urban Economic Dialogue Series 'The Competitiveness of Cities' by United

Nations Human Settlements Program, Nairobi, 2013, pp. 13)

Conclusion

This paper is an attempt to analyze the versatile factors concerning urban informality in the domain of formal urban spaces and make a systematic exposition of its impact on urban spaces of Dhaka city. The rapidly changing issues concerning the urban growth have posed a significant challenge for the urban planners and designers. The planners, designers and policy makers are facing the paradoxical situation where designing in a systematic and conventional approach for the formal use of urban space is introducing informal use while those informal uses are creating a chaos in the urban life.

To forestall the hindrance caused to the formal use of public spaces, proper understanding of the key factors governing the imbalanced growth of informality as well as Dhaka city is required. A flexible urban planning and adaptable regulations are crucial for a balanced growth of the cities of developing countries like Bangladesh. Innovative urban design ideas and comprehensive strategies which include the involvement of different strata of society could be helpful to improve the existing situation.

Within the limitation of the survey extent of this paper, the analysis and recommendations can lead to further research including the opinions of the floating people, urban population and policy makers.

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