

# TECHNISCHE UNIVERSITÄT MÜNCHEN

Lehrstuhl für Bodenordnung und Landentwicklung  
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## **Actors and processes behind urban fringe development: Mechanism to guide urban land management. Study on Dhaka, Bangladesh**

**Fahria Masum**

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1. Univ.-Prof. Dr.-Ing. Holger Magel
2. Univ.-Prof. Sophie Wolfrum
3. O. Univ.-Prof. Dr. techn. Gerlind Weber  
(Universität für Bodenkultur Wien, Österreich)

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## Abstract

This thesis has attempted to analyze and resolve urban fringe problems in Dhaka by incorporating different roles and interests of actors in land development processes. The paper conceptualizes actors' involvement in land development systems in Dhaka in terms of 'formal' and 'informal'. The research has revealed that these different actors have different interests, norms and ideologies which are playing an active role in guiding or regulating urban land development process. This situation is deploying existing rules and regulations in form of politics and affecting urban fringe management negatively. The land development process that both public and private sector is following is not sustainable and is totally concentrated for the benefit of upper and middle income group. Therefore, there is no prospect for the poor to have an access to land in Dhaka. The research has recognized that there is a big gap between planning system and its present practice in Dhaka due to weak governing system and government's reluctance.

Research concludes that land management problems are multidisciplinary and not confined in planning problems. Therefore, this research promotes the idea that for effective land management there should have multidisciplinary approach with special focus on good governance because often land management problems are considered as interdisciplinary. Based on the analysis of three case studies the research has developed the concept and model of 'Land Management Governance' which argues that there should have proper controlling on planning and its implementation through the stakeholders participation. Based on the developed model the research finally suggests some practical solutions to increase efficiency in planning, controlling and execution phase in Dhaka.

Key words: urban fringe, actors and processes, land development, spatial planning, governance, land management, Dhaka, Bangladesh

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## Zusammenfassung

Die vorliegende Arbeit versucht urbane Randzonenprobleme in Dhaka zu analysieren und zu lösen, indem sie verschiedene Funktionen und Interessen der Akteure im Landentwicklungsprozess berücksichtigt. Die Abhandlung entwirft die Einbindung der Betroffenen in formellen und informellen Landentwicklungsprozessen in Dhaka. Die Untersuchung verdeutlicht, dass diese verschiedenen Beteiligten unterschiedliche Interessen, Normen und Ideologien besitzen, welche eine aktive Rolle in der Führung und Regulierung urbaner Landentwicklungsprozesse spielen. Diese Situation löst existierende politische Vorgaben und Regularien auf und beeinflusst urbanes Randzonenmanagement negativ. Der Landentwicklungsprozess, den sowohl der öffentliche als auch der private Sektor verfolgt, ist nicht nachhaltig und ist gänzlich konzentriert auf den Nutzen der oberen und mittleren Einkommensklasse. Daher gibt es keine Perspektive für die arme Bevölkerung in Dhaka Zugang zu Grundstücken zu erhalten. Das Forschungsprojekt führt zu der Erkenntnis, dass in Dhaka aufgrund des labilen Regierungssystems und der Zurückhaltung der Regierung eine große Lücke zwischen dem offiziellen Planungssystem und seiner derzeitigen mangelhaften Umsetzung klafft.

Die Forschung kommt zum Schluss, dass Landmanagementprobleme multidisziplinär sind und nicht allein auf Planungsprobleme beschränkt sein dürfen. Daher schlägt diese Untersuchung vor, dass für ein effektives Landmanagement multidisziplinäres Know-How mit speziellem Fokus auf Good Governance zu fördern sei, da Landmanagementprobleme interdisziplinären Charakter besitzen. Basierend auf der Analyse von drei Fallstudien entwickelt die Untersuchung das Konzept und Modell der „Land Management Governance“. Es enthält angemessenere Kontrollverfahren über die Planung und ihre Realisierung durch die Beteiligung aller Interessensgruppierungen. Bezogen auf das entwickelte Modell regt die Untersuchung einige praktische Lösungen an, um die Effizienz in der Planung, im Controlling und in der Umsetzungsphase in Dhaka zu steigern.

Schlagwörter: urbane Randzonen, Akteure und Prozesse, Landentwicklung, räumliche Planung, Good Governance, Landmanagement, Dhaka, Bangladesch

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## Abbreviation

BADC	Bangladesh Agricultural Development Cooperation
BOI	Board of Investment
BPC	Bangladesh Parjatan (Tourist) Corporation
BRTC	Bangladesh Road Transport Cooperation
BSCIC	Bangladesh Small and Cottage Industries Cooperation
BWDB	Bangladesh Water Development Board
C & B	Construction and Building (Department)
CBD	Central Business District
CLAC	Central Land Allocation Committee
DAP	Detailed Area Plan
DC	Divisional Commissioner
DCC	Dhaka City Corporation
DESCO	Dhaka Electric Supply Company
DESA	Dhaka Electric Supply Authority
DIT	Dhaka Improvement Trust
DMA	Dhaka Metropolitan Area
DMC	Dhaka Municipal Corporation
DMDP	Dhaka Metropolitan Development Plan
DMP	Dhaka Metropolitan Police
DPHE	Department of Public Health Engineering
DU	Dhaka University
DWASA	Dhaka Water and Sewerage Authority
ECNEC	Executive Committee of National Economic Council
FAO	Food and Agriculture Organization
FIAN	Food First Information and Action Network
GIS	Geographic Information System
GTZ	Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation)
GOB	Government of Bangladesh
HE	Housing Estate
HBFC	House Building Finance Corporation
HSD	Housing and Settlement Directorate
IFAD	International Fund for Agricultural Development
LGRD	Local Government and Rural Development
NEC	National Economic Council

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NHA	National Housing Authority
NGO	Non Government Organization
OECD	Organization for Economic Cooperation and Development
PHE	Public Health Engineering
PPGIS	Public Participatory Geographic Information System
PWD	Public Works Department
RAJUK	Rajdhani Unnayan Kartripakkha
R & HD	Roads and Highways Division
SSM	Soft Systems Methodology
TP	Thana Parishad
T&T	Telephone and Telegraph
UDD	Urban Development Directorate
UNCHS	United Nations Centre for Human Settlements
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UPZP	Upazila Parishad
ZP	Zila Parishad

### Equivalents

One mile	= 1.609 kms
One square mile	= 2.59 sq. kms
One square kilometer	= 0.3861 sq. mile
One hectare	= 2.4710 acres/7.4749 bighas
One bigha	= 20 kathas/0.13378 hectare
One acre	= 3 bighas/60 kathas/0.44 hectare/0.00404 sq. km
One katha	= 720 sq. feet/66.91 sq. metres
One foot	= 0.305 metre
One square foot	= 0.093 sq. metre
One metre	= 39.37 inches/ 3.03 feet
One square metre	= 9.19 sq. feet
US\$1	= Tk. 67 (the exchange rate varies)

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## Glossary

District	: Administrative unit consisting of several upazilas
Kartripakkha	: Authority (In the research it is referred to RAJUK)
Kutchra	: Construction in temporary nature
Pourashava	: Municipality/Urban local government
Thana	: Police administrative unit
Upazila	: Government (intermediate level) administrative unit
Zila	: District

# Chapter One: Introduction

*“Land, because of its unique nature it plays a crucial role in human settlements, cannot be treated as an ordinary asset, controlled by individuals and subject to the pressure and inefficiencies of the market” – UN HABITAT, 1976*

## 1.1 URBANIZATION AND URBAN FRINGE DEVELOPMENT

Urbanization refers to the process that leads a spatial concentration of households and economic activities within an interrelated network of markets in a limited area (Lupala, 2002, p. 1). It has become a worldwide phenomenon proceeding exceptionally fast. These demographic and structural changes of the city have serious implications on the quality of life in urban settlement. The process of urbanization is already well advanced in the more developed countries, where 75 percent of its population is living in urban areas in 2003 (United Nations, 2004). On the other hand, the share of urban population considerably is lower in the less developed countries, where just 42 percent of the population lives in urban areas in 2003 and expected to rise to 57 percent by 2030 (ibid). While the percentage of urban population in the less developed countries is getting closer to that of the more developed countries, the pattern and size of urban agglomerations are diverging from what can be observed in the more developed regions, and particularly in European countries (Puga, 1996, p. 1). In developed countries the urbanization process usually has resulted in a large number of urban centres scattered more or less widely throughout the country, whereas in developing countries there are less urban centres, many times only one large city which is more often the capital of the country (Katzir, 1996). Due to push and pull factors people from both rural and urban areas settle in the capital city and convert it into mega city. That is why vast majority of the mega cities are located in less developed countries. Therefore, the pattern of urbanization is not homogeneous in nature. As urbanization processes are determined by various factors these are not same in every country.

Urbanization in Bangladesh has two notable features – low urbanization level and high population density in its mega city. In Bangladesh the urbanization level is still considerably lower which is 24.2 percent of total population (United Nations, 2004) but Dhaka, the capital of Bangladesh which is presently 11<sup>th</sup> number of mega city (ibid) in the world is absorbing 40 percent of total country’s urban population. To accommodate the

growing population Dhaka has been spread over an area from 335.79 sq. km to 1530 sq. km within last 30 years (BBS, 2001). The nature and process of urban expansion in Dhaka is driven by the demographic shifts in form of rural-urban and urban-urban migration and this ongoing expansion process of Dhaka is creating unplanned settlements with inadequate services and infrastructures within the city and its fringe.

Megacities and shrinking cities, high speed urbanism and slow cities – the world's cities are changing. The differences between city and countryside are diminishing, everything is becoming the city in a variety of spatial and structural forms (Wolfrum and Nerding, Eds., 2008). Therefore, land development with different forms towards the peripheries or fringes of cities has been becoming a world-wide phenomenon. Although there is no precise definition of urban fringe, there is a common understanding that fringe is an area of transition where urban and rural land uses intermix. In Dhaka though population growth is the main driving force for fringe development lessons from different literature indicate that urban fringe development is not necessarily a consequence of overall urban population growth. For example, even when the growth rate is low, many large Latin American cities still present significant urban fringe expansion (Salas, 1994; Torres, 2007 quoted in Torres 2008, p. 10). In fact, the driven factors that determine urban fringe growth are quite complex, and involve a number of dimensions. For example, according to Carruthers and Ulfarsson (2002) population density influences the spatial extent of development of land. Brueckner (2000, p. 162) states that land conversion is guided by the economist's invisible hand which directs resources to their highest land value and best uses. Physical environment may also influence the extent and composition of fringe and planning control and land use regulations may have the same effect (Bryant et al. 1982, p. 14). According to Pental (1999 quoted in Brody et al. 2006, p. 9) land value is one of the most significant drivers of fringe development where land values are lower. Urban expansion in developed countries is driven by private development interests, globalization, deregulation and a tax system forcing municipalities into competition against each other for tax-paying residents and businesses (Wegener, 2001). Therefore, there are many different driving forces behind urban fringe development which are not unique and vary from country to country.

Urban fringe is a dynamic area which changes with span of time. It is continuously shifting outward from the city. As the development of urban fringe is closely related with the growth and expansion of a city, it is often difficult to delineate the urban fringe boundary of a fast growing city (Islam and Khan 1992, p. 59). Urban fringe development is not only a process of transition of land from its rural use to urban use, rather, it is a complex process



that involves many concerns such as change in landownership pattern, land transfer process, types of development, regulatory measures and their enforcement. The process of fringe development is not monolithic and may be taken place either by rural actors or by urban actors, may be in formal way or in informal way.

Problems of urban fringe in developing countries are quite often and very similar in nature. Most of the developing countries face the problem of spontaneous development of land in their urban fringes, even in the city core with inadequate services and facilities which is also very common in Dhaka. Perhaps the most daunting problem associated with urban fringe in developing countries as well as in Dhaka is development of land in informal way where associated land development activities take place without conforming state rules and regulations.

From literature review it appears that the term 'informality' has been emerged in urban development issues during 1960s, especially in developing countries. Informality means not registered and/or unreported activities. Especially in developing countries formal land development system has lot of problems such as delays in decision making process, expensive and bureaucratic land project approval system, corruption, high investment cost and high price of serviced land which is always beyond the means of lower income group. Due to all these reasons supply of formally developed land can not keep pace with the growing need of urban population. As a result, informal land development takes place.

Regarding the relationship between 'formal' and 'informal' Pamuk (2000) argues in different way. According to him, property relations are structured by institutions or rules that are neither strictly formal nor informal. Because borrowing across systems or rule shopping is common. As a result, relation between formal and informal actors takes variety of forms – social, economic or political. From the review of different literature it is clear that formal and informal process in land development system may be characterised by conflictual co-existence where there is a tension between formal and informal actors or may be characterised by interactive or co-existence in nature. However, there is little in-depth research on this formal-informal urban land development processes (Rakodi and Leduka 2003, p. 10).

## **1.2 LAND DEVELOPMENT AND ITS ACTORS**

Many studies on land development conceptualise actors' involvement in urban land development systems in terms of 'formal' and 'informal' or 'state' and 'societal'. According

to Kingdon (1995) the state actors are formal because their formal role is to formulate policies and the societal actors are informal because they influence policies but have no official position. Different actors – formal and informal – prefer different tools according to their interests. Among informal actors their interests, norms and ideologies also vary. Also, there may be linkage and relation among different actors and can influence each other. Their interests can be complementary or conflicting in nature leading to various alliances or conflict (Adams, 1994). Therefore, each actor can influence policy formulation and its implementation process in different manner. According to Wamsley (1985), “a key to influencing the process and devising an effective implementation strategy is knowing which actors perform key functions” (p. 34).

Box 01: Actors and interests in the process of land development

Actor	Interest in land
<b>Occupier</b>	Use value and exchange value of occupied property
<b>Tenant</b>	Use value of the property
<b>Speculator</b>	Often, capture part of the profits from land development by easing land through the market
<b>Landowner</b>	Often capture parts of the profits made through the use or development of land by virtue of ownership rights
<b>Developer</b>	Make profits through the creation of new use values through development
<b>Group</b>	Capture part of the profits made through use of land, facilitate acquisition and control of land for community services
<b>Local community</b>	Capture part of the profits made through use of land, facilitate acquisition and control of land for community services and enhance security of land
<b>Grassroots leaders</b>	Capture part of the revenues from land transactions and fines connected with land dispute arbitration
<b>Financial institutions</b>	Capture part of the profits made through the use or development of land through financing opportunities to procure or create use values
<b>The state</b>	Regulates land development with a view to minimizing use and ownership conflicts, militating hoarding, guaranteeing provision of land for public uses and addressing the question of equity

Source: Lupala 2002, p. 77

In land development processes government is a very important actor, although it appears in many different forms in different situations. Sometimes the interests and objectives of authorities do not only vary according to the roles they have as an institute, but also sometimes reflect political, individual or fractional interest (Bentinck 2000, p. 83). Therefore, politicians are another societal actor here who are influencing the decision of government authorities. Beside government, land owners, developers, investors, land speculators and property dealers are playing important role in land development processes as societal actors. These actors in form of particular individuals or organization may play dual role. For example, RAJUK, the capital development authority of Dhaka, apart from plan preparation and development control responsibility, also acts as land developer and development facilitator. On the other hand, land speculators in Dhaka also perform the role of land developers. Therefore, the focus should be on actors' 'roles they act'.

### **1.3 URBAN FRINGE IN DHAKA: NEED FOR ALTERNATIVE PATH OF LAND MANAGEMENT**

Dhaka is regarded as one of the largest growing cities in the world. Especially after independence of Bangladesh in 1971, Dhaka received more than hundred thousand people every year. In 2001, Dhaka had population of about approximately one-third of the urban population of Bangladesh within an area of 360 square kilometers (Islam 2003, p. 354). Various studies and surveys indicated that rapid growth of Dhaka's population is mainly caused by heavy influx of migrants from the vast rural area (Islam 1996, p. 125). Between 1974 and 1991, Dhaka captured 40 percent of the part of the rural population who migrated to urban area (DMDP, 1995). The preferred population forecast for Dhaka 2016 assumes that it will continue to attract 40 percent of all net rural-urban migration (ibid) and the population will be around 17.91 million by the end of 2015 (United Nations, 2004). This exploding population creates extreme shortage of serviced land for housing to meet the growing demand. As a result, urban fringe in Dhaka is experiencing now daunting population pressure.

Due to rapid pace of population growth in Dhaka, for RAJUK (Development Authority of Dhaka) with its limited capacity to manage the urban spatial growth and to meet the growing demand has been a prime task and main challenge. Though to increase the supply of developed land government as well as private sectors are taking different initiatives to form new towns in fringe area, often these initiatives are taking place in form of 'urban sprawl' and are concentrated mainly for the benefit of middle and higher income groups. Informal land development is merging this gap through providing shelter, especially for the

poor but ultimately this land is also going to the hand of middle and upper income groups. As a result, the prospect for the poor's access to land is getting bleak.

Many Asian countries began land use control system in 1970s and many countries have created master plan for long term development of the cities. But in many cases complicated land use control system that lacks transparency often results in higher cost, unplanned and unhealthy development (Kidokoro et al., 2007). In case of Dhaka the previous master plan (e.g. Master Plan 1959) was based on unrealistic population projection which also followed conventional approach. Therefore, this master plan could not bring any remarkable change and could not solve the increasing spatial problems. Due to failure of previous plan strategic approach is being following now which has more flexible planning regime and context imperial approach. Based on this new approach RAJUK has taken long term strategy for 20 years for the development of greater Dhaka sub-region in form of Dhaka Metropolitan Development Plan (DMDP). It comprises the following tiers (DMDP, 1995):

*Structure Plan (SP)* (1995-2015) as a part of the Dhaka Metropolitan Development Plan, provides a long-term strategies for 20 years for the development of the greater Dhaka sub-zone with a population target of 15 million. It identifies the order of magnitude and direction of anticipated urban growth and defines a broad set of policies considered necessary to achieve overall plan objectives.

*Urban Area Plan (UAP)* (1995-2005) provides an interim mid term strategies for 10 years covers the urban areas within metro Dhaka management areas.

*Detailed Area Plan (DAP)* provides more detailed planning proposals for specific sub-areas compliant with Structure Plan and the Urban Area Plan.

For implementation of DMDP and proper land management it requires a good coordination among different relevant agencies, institutional strength, capacity building and peoples' participation. But with the existing system and structure of land management, Dhaka is now facing daunting problems in providing shelter, urban utility services, and decent environment for the growing number of urban dwellers. It has gradually become apparent that the management structure is inefficient to meet the growing need. A number of documents and research findings have indicated that the disappointing performance of public sector and too much centralized responsibilities of central government agencies are major impediments in this respect (Supporting Urban Governance Reform, LGRDC and

ADB, 2005 quoted in PDC, 2008). Urban planning needs to become a part of the solution instead of part of problem (WHO, 1999). But for Dhaka, the present planning system has been itself a problem due to multi-dimensional reasons. Professor Nazrul Islam, Chairman of the Centre for Urban Studies has expressed the situation in the following way (Alam, 2005) -

*“Urban planning is weak and slow; the implementation is slower”.*

It has been obvious that present land management practices in Dhaka are inappropriate and inefficient. The main reasons behind this ineffective urban land management are absence of land policy, unrealistic planning procedure, lack of institutional mechanism to coordinate public and private sectors and lack of competent manpower, fund and technical supports. Moreover, now a day urban land management issue has been more complicated as many multi-stake actors and multi-sectors are getting involved with it, either formally or informally with different interests.

During a session on urban planning at the World Urban Forum in 2004, questions were raised as to whether good governance is a substitute for planning, and whether planning has any significant role at all in market-led economic development (Narang and Reutersward 2004, p. 3). Actually good governance and planning should work in parallel way. According to UN HABITAT (2001) good governance is -

*‘...the sum of the many ways individuals and institutions, public and private, plan and manage the common affairs of the city. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action can be taken. It includes formal institutions as well as informal arrangements and the social capital of citizens’ (p. 125).*

Presently Bangladesh government has neither sufficient technical and financial capacity to deal with urban fringe problems, nor has sound institutional arrangement and willingness to manage urban fringe growth. The reality is that urban fringe management problem is not a single problem which can be solved overnight through a single solution. Rather, manifold problems are integrated with that which needs interdisciplinary approach. Therefore, it is emphasized that there is a need to understand possible different paths of land management and also the importance of good governance system which can better cope with current pressure of urban development in Dhaka. This brings the rationality to analyze the processes and actors involved in land development processes as well as efficiency of

existing spatial planning system that can facilitate the way to a more effective and efficient urban land use as well as proper management of land.

#### **1.4 SUBJECT TO ANALYSIS AND OBJECTIVES OF THE RESEARCH**

Dhaka is extending spatially mainly in uncontrolled and unprecedented speed. Agricultural and low land is being converted into (peri-) urban uses without any caring for sustainable use of land. Mainly in this development activities profit is made by private sectors. They also influence /control urban land development, rather than state. Thus, the research addresses two stage analyses –

##### **a) Analysis of complex processes of land development**

All type of formal and informal actors and institutions being involved in land development in urban fringe in Dhaka (land developers, land sellers, land speculators, land buyers, brokers, public administrators, politicians etc.) and their roles/ functions and their interests.

##### **b) A focus on interactions of sub-systems**

The interaction between land development in urban fringe and existing planning system will be the primary interest of this research. Based on the above mentioned analysis the key factors will be identified which can bring into light either positive or negative effects of existing planning system on land management in urban fringe.

Therefore, the research addresses the following objectives:

- a) To analyze the roles and relations among different actors involved in decision-making and development processes of urban fringe in Dhaka;
- b) To assess the value and role of planning to guide land development processes in more transparent and sustainable way.

The research is exploratory in nature. The broad objectives can be expanded to form more specific research questions:

1. Who are the formal and informal actors guiding the fringe land development in Dhaka? What methods (processes) do they adopt? How are formal and informal regulations and actors interlinked? What are their motivations?

2. How far realistic and efficient the present planning system is? How far the current planning system has been able to guide land development in urban fringe in sustainable way?
3. How much planning is necessary? How much guidance is possible? What kind of compromises is needed in terms of planning and governance to avoid a total loss of guidance?

### 1.5 HYPOTHESIS

The following proposition is formulated in order to direct the study process:

There is a big gap between planning process and way of its implementation as prescribed and its actual practices in reality. Improper governing system is the main reason behind this gap. For effective implementation of planning, there is need to ensure good governance before bringing any change in planning process.

### 1.6 STRUCTURE OF THE THESIS AND OVERVIEW OF RESEARCH PROCESS

The structure of this thesis more or less reflects the sequence of research questions. The **current chapter** provides a general overview of the research. This includes its relevancy, its research objectives, research questions that are addressed, hypothesis and overview of research process.

**Chapter two** following the introduction provides a review of literature on 'urban fringe' on which this research is founded. The chapter theoretically discusses the relevant definitions of urban fringe and causes behind its development. Furthermore, this chapter develops a working definition of 'urban fringe' from the perspective of Dhaka based on which the case study areas have been selected.

**Chapter three** provides the theoretical discussion on urban land management and draws the importance of good governance in land management.

Development of conceptual model on which the research has been proceeded comes under **Chapter four**. For conceptual model concept of soft systems thinking has been used which is an organizational process modeling, generally used to analyze the problems and bringing solutions and changes in management.

**Chapter five** outlines the methodology used for the study. Focusing on different land development patterns by different actors and their interests the chapter discusses different sources of data including case study method, data analysis strategy and validity and reliability of collected data.

Present spatial planning system is crucial to guide land development and city growth which is another important focus of this research has been critically analyzed under **chapter six**.

**Chapter seven** discusses the role of RAJUK (Rajdhani Unnayan Kartripakkha - Capital Development Authority) in urban fringe development in Dhaka. Through a case study the chapter identifies the actors who have a stake in the expansion of urban land, the process of land development and the degree of political influence. The chapter also discusses the extent of ineffectiveness of present land management rules and regulations.

**Chapter eight** discusses the role of private sector in land development in urban fringe. Like the preceding chapter this chapter also identifies the interests of different actors involved in land development process. Simultaneously the chapter also identifies the extent of complying with the rules and regulations by private sector.

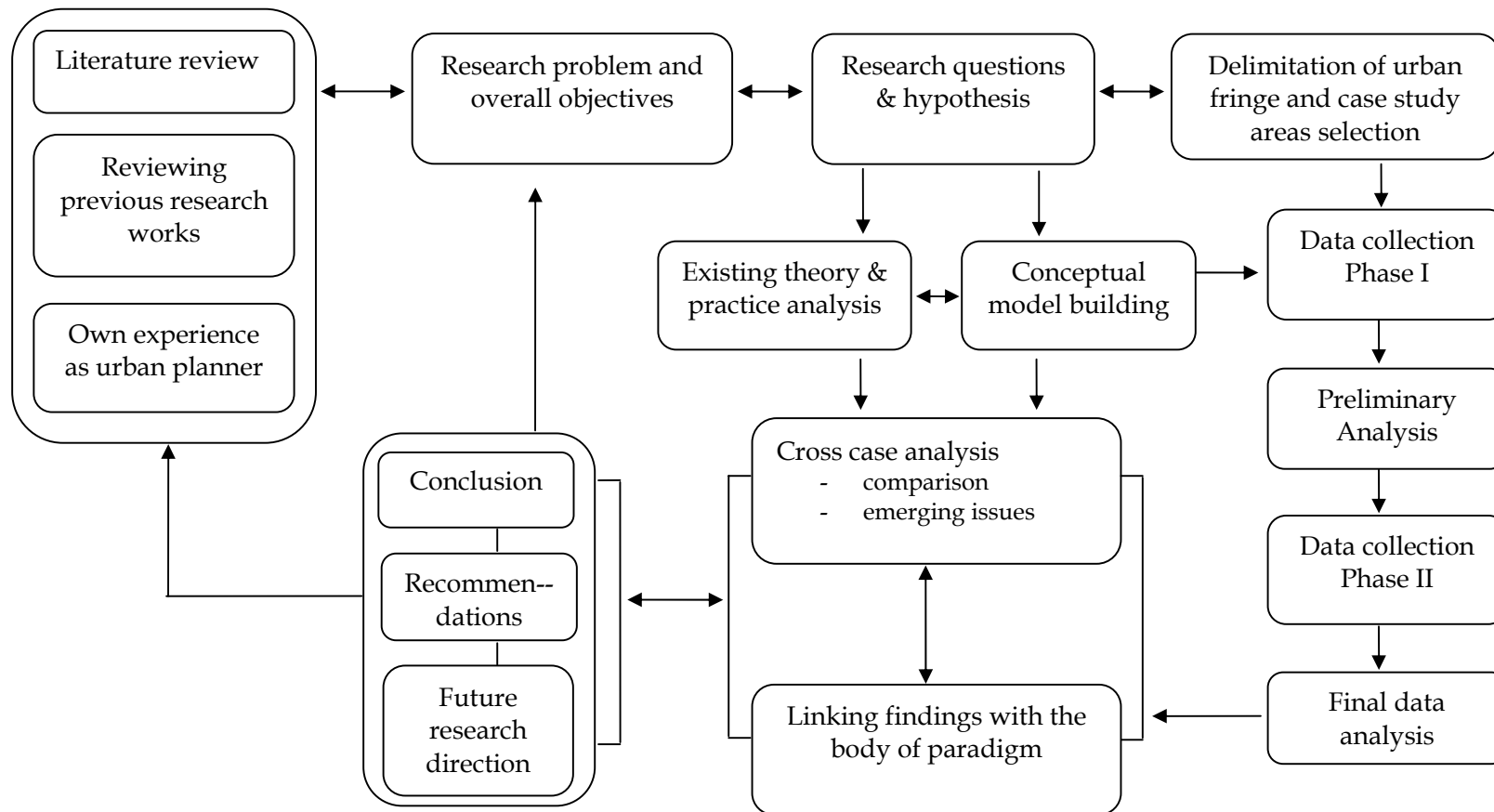
**Chapter nine** discusses the process of informal development of private land. The chapter gives an idea about poor's access to land in Dhaka and their future prospect. The chapter also draws the interrelation between formal and informal land development process.

Through **chapter ten** the research draws conclusions and suggests the way to manage land development in sustainable way. The chapter reveals the alternative path of land management through integration of good governance. The idea of directions for further research has been also mentioned at the end.

In the following page the overview of research process has been given:



Figure 01: Overview of research process



Source: Author (modified from Lupala 2002, p. 87)

## Chapter Two: Urban Fringe - Terminology and Definition

### 2.1 INTRODUCTION

The term 'urban' and 'rural' is not new in the literature. There is no confusion in their concepts and differences between these two. The sharp distinction between urban and rural settlements generally assumes that the livelihood of rural area is agriculture based whereas the urban area is manufacture and service based. But the recent research suggests that there is a 'sectoral interaction' which is neither rural nor urban fully, often called as 'fringe' (DPU, 1999). The 'sectoral interaction' is consisted of rural activities taking place in urban areas or traditionally manufacturing and services are taking place in rural areas. The area can be considered as transitional zone between city and the countryside, often described not (as) a discrete area, but rather (as) a diffuse territory identified by combinations of features and phenomena, generate largely by activities within the urban zone proper (Nottingham and Liverpool Universities, 1998).

The present chapter extensively reviews which is considered to be 'related literature' for research on urban fringe. The literature review consists basically in a thorough desk based research of available materials linked to the subject. Based on the literature review the latter part of this chapter attempts to provide a suitable definition of urban fringe in Dhaka.

### 2.2 UNDERSTANDING URBAN FRINGE

The rural-urban fringe has many different manifestations in the literature in terms of its definition, characteristics and delimitation. As far as the term can be traced, the concept of the 'rural-urban fringe' was formulated by George Wehrwein in 1942 as "*the area of transition, between well recognized urban land uses and the area devoted to agriculture*" (Bentinck, 2000, p. 17). Different terms such as *rurban fringe* (Schenk, 1997), *urban fringe* (Hill, 1986), *suburb* (Fishman, 1946), *city's countryside* (Bryant et al., 1982), *peri-urban fringe* (Swindell, 1988), *rural fringe of the city* (Leeming and Soussan, 1979), *peri-urban areas and desakota regions* (McGee, 1991), and *metropolitan fringe* (Browder et al., 1995) are used sometimes with recognised gap but usually in synonymous way overlap each other.

The earlier geographical models of cities did not recognize the concept of an urban fringe. The city met the countryside and there was no transition between them, each being

distinctive in terms of economic and social structures and culture. This approach was replaced by what might be called 'stage' and 'gradient' models. Some of these identified broad categories of area from the urban and peri-urban out to the rural and very rural. Other built on the work of von Thünen and the classic models of urban structure by Burgess and Hoyt (Clark 1999, p. 301). In these models the continuous gradient runs from the city centres to the deepest countryside with an inexorable decline from the former to the latter in land values, profit per unit area, the density of building and population (ibid).

The apparent simplicity of the phrase 'urban fringe' belies the complexity of process and actors involved in what essentially is a zone of physical interface and human-environmental interaction. Hence it is a zone of transition with all the potential for disruption, uncertainty, conflict and opportunity that transition can entail (M. Lyon 1983, p. 7). To illustrate this complexity, Troughton (1981, p. 236) defines urban fringe as

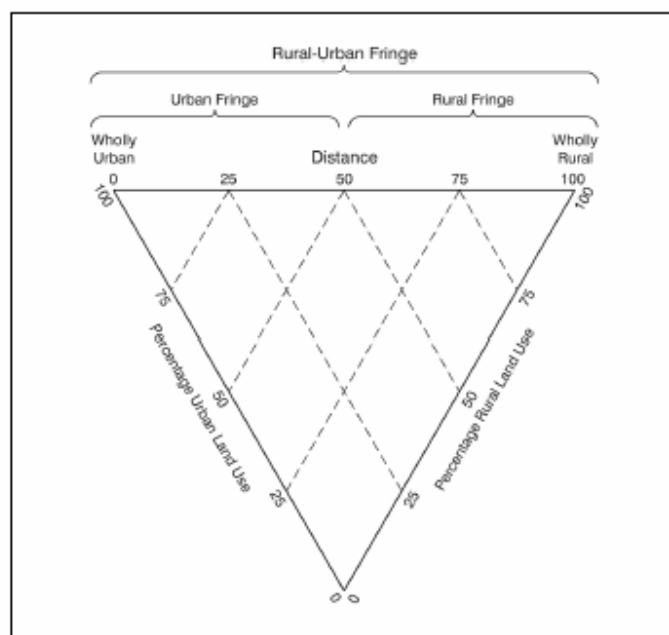
*"...an open process response system, in which the centrifugal and centripetal forces of urbanization and the contrast between economic and social accessibility and land use characteristics that collectively describe a distinct internal morphology. The boundaries of the system fluctuate over space and time reflecting the strength of fringe process and the nature of the bounding urban and countryside system"*.

Broadly speaking and following Browder et al. (1995 quoted in DPU 1999, p. 7), urban fringe areas have traditionally been seen as:

- featuring a diversity of land uses that vary in relation with their urban and rural linkages;
- 'transitional' in nature suggesting from one side 'a patterned sequence of uses that become progressively more agrarian in orientation as one recedes from the urban centre';
- and inversely, 'agricultural land uses, employment and rural linkages are seen as giving way to urban-oriented activities as distance to the city centre diminishes';
- following heterogeneous patterns of growth, such as:
  - metropolitan growth engulfing existing farmlands and villages;
  - rural migrants creating a 'transitional social space' or 'temporary holding location' in *suburbanization* processes where urban dwellers move to the fringe searching for advantages in land rent, or to capitalize opportunities for land acquisition, speculation and informal enterprise (ibid).

Though the *urban fringe* is often used as a synonym of *rural-urban fringe* Pryor (1968) distinguished 'urban fringe' from 'rural-urban fringe' by narrating 'urban fringe' as, "... that sub-zone that is in context with a contiguous to the central city. Its density of occupied dwellings is higher than the density of occupied dwellings for 'rural-urban fringe' as a whole. It has high proportion of residential, commercial, industrial and vacant land as distinct from farmland".

Figure 02: Delimitation of rural-urban fringe according to Pryor



Source: Adopted from Thomas, 1974

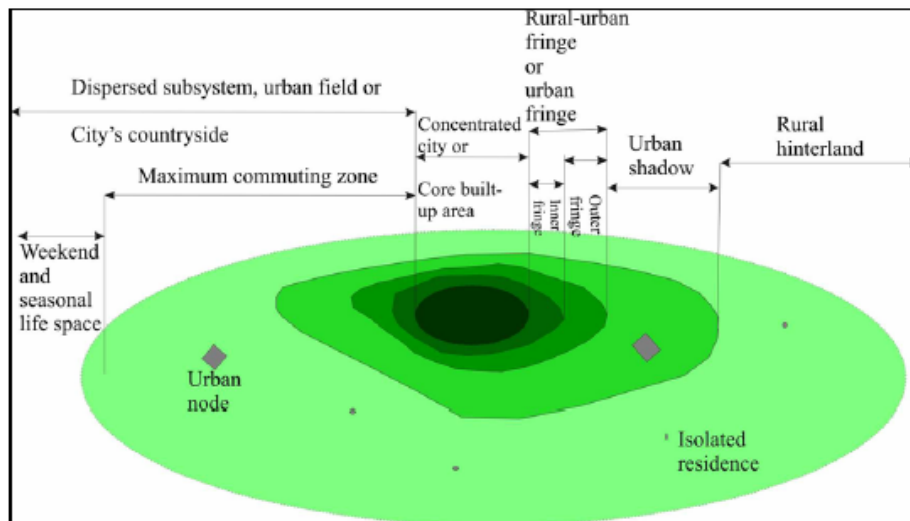
Kurtz and Eicher (1958) tried to differentiate the *urban fringe* from the *suburbs*, while Wissink (1962) went further, recognizing *pseudo-suburbs*, *satellites* and *pseudo-satellites*, and *inner* and *outer urban fringe*. Among many others, Duncan and Reiss (1956) considered the territories surrounding the city as being either *rural non farm areas* or *rural farm areas*.

Moving away from a physical definition of the fringe, Pahl (1965) defined it as a result of particular social processes, mainly the migration of middle class families to the city being dominated by urban life styles:

*"A new population is invading local communities, bringing in national values and class consciousness at the same time that a new type of community, associated with dispersed living is emerging"* (Pahl 1965, p. 79).

Bryant et al. (1982) propose a concentric spherical model and make the distinction between inner and outer fringe. The inner fringe is characterized by morphological criteria of mixed urban-rural land uses. The outer fringe is characterized by functional criteria and a rural morphology but an urban oriented functioning. The disconnection between morphology and function is also considered by H. Van der Haegen (1992, quoted in Antrop 1994, p. 502) as the most typical characteristics of this transition zone.

Figure 03: The form of regional city and urban field



Source: Redrawn from Bryant et al., 1982 (adapted from Kashem and Hafiz, 2006)

### 2.3 FACTORS CONTRIBUTING TO FRINGE DEVELOPMENT

It is evident that geographical factors (location and physical characteristics) are a key to fringe development. Such key geographical concerns include suitable land for building, hobby farming or raising animals, open space for airports, truck terminals, mobile-home parks and campgrounds, refineries, waste disposal sites, or utility facilities or sites of recreational or historical interest (M. Lyon 1983, p. 14).

But geography is not only factor behind fringe development - demographic, economic, technological, socio-cultural and public policy factors are also important. Moreover, the interaction of these trends and values over time is complex. During 1950s urban fringe has been considered as public policy element. For example, in United States, during 1950s, it was claimed that home mortgage insurance by the federal government was responsible for development of urban fringe. In some cases absence of public sector policies and activities play the key role in the pace and direction of growth in fringe areas, e.g. hidden subsidies can promote fringe areas. These include the provision of extensive and well estimated highway systems and various public utilities, the cost of which are borne by all taxpayers (M. Lyon, 1983). A wide range of explicit policy decisions also encourage or discourage fringe development. Competition among local government authorities is also a factor especially in the era of declining economic and population growth (Robinson, 1981).

Socio-cultural values generally are thought to have played a major role in the phenomena of 'exurbanites' in the 1960s and 1970s (M. Lyon 1983, p. 11). The term exurbanites refer to people living beyond the city limits but remaining part of the city in most other ways (Punter 1974 quoted in Bryant et al., 1982, p. 29). Numerous surveys pointed to a preference for life in rural, semi rural or small urban locations as opposed to larger cities (Fuguitt and Zuiches, 1975; Ilvento and Luloff 1982; Marans, 1978 quoted in M. Lyon, 1983). Studies of actual exurbanites also revealed the importance of quality of life factors rather than for example, economic factors.

In many literature pull aspects of rural life most frequently have been cited as reason of fringe development. Bunce (1981) argues that there is an element of nostalgia or mythology associated with values:

*"In general the attraction is to an idealized rather than a real environment: to a product of a mythology which has grown as genuine rural experience fades from memories. Rural sentiment is, in fact, manifestation of an underlying reverence for rural environment and culture" (p. 10).*

The push factors of urban life are crime, pollution, crowding, and the hectic pace of life. In U.S. literature crime, racial conflict and abandonment of inner cities also are major 'push' factors. For example, racial strife in the centers of cities such as Los Angeles and Detroit led to an out-migration of middle and upper class whites to the urban fringe (Daniels, 1999). This relocation of residents soon became known as 'white-flight'. Carruthers (2003)

provided similar conclusions that race has a substantial effect on the spatial pattern of urban development.

Russwurm (1980, quoted in M. Lyon 1983) emphasizes that the economic system is pivotal in the development of urban fringe.

*“Man has to make a living by exploiting natural and human resources.... The economic aspects on the concepts of location, highest use and individual action have largely determined what land use activities exist where in the urban fringe.....The economic or profit way of doing things is important; it has provided man with many benefits. Increasingly and paradoxically, however, the dominance of the economic environment is challenged and by cultural needs which can only be met because of the relative success of the operation of economic environments” (p. 11).*

The initial attraction of land at the fringe is not only its proximity to markets and services in the city but also its generally lower costs (lower tax and cheaper land) relative to those of the urban centre (Randall, 1981). Moreover, the economics of the aggregate extraction industry require the exploitation of sites relatively close to markets (Ringrose, 1979 quoted in M. Lyon, 1983). Overtime, however the competition for land reflects in rising taxes to support concomitant increases in public services. These outcomes arise from interplay of demand and supply factors, as well as interaction of farmers, individual seeking exurban acreages, speculation, public and private land banks and other economic actors involved at the fringe (Brown et al., 1981).

Land cost must be recognized as contributing to urban fringe development that was experienced by many countries in the 1970s, e.g. the UK and Canada (Bryant et al. 1982, p. 39). Brown et al. (1981) in their study on undeveloped land outside of Calgary, Toronto and four U.S. cities mentioned

*“Because of the opportunity for speculative profits from appreciation in land values, the character of both rural land and of its ownership begins to change more than twenty years before an area is actually urbanized, and long before public policy efforts to influence urban development typically take form” (p. 131).*

In the 1970s and 1980s the dominant voice was the prediction concerning the decline of city importance and the death of distance (Pascal, 1987). The automobile, extensive and well maintained highway systems and communications technology are well known contributors to development at the fringe. de Sola Pool (1982) notes that for the first time in two centuries

the trends in transportation are not parallel to those in communications. In transportation, there is the prospect of rising prices and consequent restrictions on use while in communication, the prospect are not falling prices and abundance. Rather how far the energy crunch will lead to geographical concentration of activity in urban centres may well depend on the costs of communication services that are sufficient to substitute for travel, de Solo Pool argues.

The development of electronic communication and information systems allow for an increasing disassociation between spatial proximity and the performance of everyday life's functions: works, shopping, entertainment, health care, education, public services, governance and the like (Castells 2000, p. 424). Castells describes the phenomena as space of flows represents highly dynamic system based on the development of information technology. He defines a (information) city not as a form but a process (1996, p. 394).

With the better communication technology increasing wealth further exacerbates urban expansion by allowing residents to purchase larger houses and properties (Brueckner, 2000; Carruthers and Ulfarsson, 2002). Daniels (1999) concurs stating that raising affluence of many Americans really drives the development of the fringe, because as income increases, the choices of what to spend money on expands as well. On the other hand, Browder et al. (1995) argues urban fringe is populated by poor residents recently arrived from rural areas, being engaged in multiple income generating activities, mostly informal. Actually unlike most cities in the developed countries, social class is invisibly related to distance from the center of the city. Hence the fashionable suburb is evident at the urban fringe areas in contrast to what is applicable in developing world (Adesina 2007, p. 5).

## **2.4 FORMS OF FRINGE DEVELOPMENT**

### **2.4.1 Urban sprawl**

Urban fringe is not a homogeneous type of area – its land uses and history vary from city to city and culture to culture. Nor it is wholly unique type of area (Clark 1999, p. 302). Therefore, fringe development as urban expansion takes place in substantially different forms. In a city, the urban expansion can take place with the same densities (person per square kilometer) as those prevailing in existing built up areas or with increased densities, or with reduced densities (Angel et al. 2005, p. 5). But in most of the cases it is seen that fringe development takes place in form of 'urban sprawl'. Sprawl is associated with rapid



suburban growth, but not all growth is sprawl (Goldberg 1999, p. 2). And not all urban sprawl take place in urban fringe.

The early uses of the term sprawl suggest that it consumes excessive space in an uncontrolled, disorderly manner leading to the loss and poor distribution of open spaces, excessive demand for transportation, and social separation. The essential elements of these early definitions have remained relatively unchanged through time (Hess et al. 2001, p. 4).

Sprawl development consists of three basic spatial forms: low-density continuous sprawl, ribbon sprawl, and leapfrog development sprawl (Barnes et al., 2001). According to them, *Low density sprawl* is the highly consumptive use of land for urban purposes along the margins of existing metropolitan areas. This type of development is supported by piecemeal extensions of basic urban infrastructures such as water, sewer, power, and roads (ibid). *Ribbon sprawl* is development that follows major transportation arteries outward from urban cores. Lands adjacent to corridors are developed, but those without direct access remain in rural uses/covers. Over time, these nearby 'raw' lands may be converted to urban uses as land values increase and infrastructure is extended perpendicularly from the major roads and lines (ibid). *Leapfrog development* is a discontinuous pattern of urbanization, with patches of developed lands that are widely separated from each other and from the boundaries, albeit blurred in some cases, of recognized urbanized areas. Leapfrog development sprawl is caused by various factors. Physical geography such as rugged terrain, wetlands, mineral lands, or water bodies may preclude continuous development or make it prohibitively expensive. Other factors encouraging leapfrog sprawl are not necessarily physical: restrictive land-use policies in one political jurisdiction may lead development to 'jump' to one that is favorably disposed toward development or is less able to prevent or control it (ibid).

#### **2.4.2 New towns: The antidote to sprawl**

The new town narrowly interpreted, is a phenomenon of the 20<sup>th</sup> of century and refers to a comprehensively planned urban community built from scratch with intent of becoming as self contained as possible by encouraging the development of a self sufficient economic base and a full range of urban services and facilities (Brunn and Williams 1993, p. 20).

In many respects the new town concept is the return to the original garden city of Ebenezer Howard and fundamentally different from satellite town. They are also different from

towns that have also mostly destroyed and have been rebuilt on the same site (Suquet-Bonnaud, 1953 quoted in Golany 1977, p. 26). New towns came into existence around the world to fulfill a number of functions: relieving overcrowding of large cities, providing an optimum living environment for residents, helping to control urban sprawl and preserve open land, and serving as foci, or growth poles, for the development of peripheral regions (Brunn and Williams 1993, p. 20).

The new town is not a suburb; neither is it an extension of the city. Rather, it is an independent center, and it may well be one of the solutions of controlling urban sprawl (Isenberg, 1968; Donald and Adelson, 1977). A new town has diverse land use that includes industrial, commercial and service activities. It provides employment opportunities for a wide labor market and a variety of housing for its residents. Any new town should be large enough to support a well balanced community with a variety of social, economic age and other groups to stimulate town's self familiarity and identity. Functioning either as a local urban centre as a regional one, new town is certainly the antithesis of suburb (Golany 1977, p. 28).

## 2.5 DEFINITION OF URBAN FRINGE FROM THE PERSPECTIVE OF DHAKA

### 2.5.1 Overview of Dhaka

Dhaka city, capital of Bangladesh, is a geometric centre of the country. Much of the Dhaka and its surrounding areas are prone to yearly floods. Even within the city itself, which stand relatively flood free land including the areas to the north of the city, urban development opportunity are hindered by a large number of re-entrant valley. Thus the area expansion of Dhaka has been governed by the physical configuration of the landscape in and around the city, particularly the river system and height of land in relation to the flood level (Islam 1996, pp. 62-63 quoted in Talukdar 2006, p. 53).

To manage this fast growing city different agencies are involved at different level. For example, DCC and RAJUK have more comprehensive and obvious responsibilities. DCC is a self-governing corporation that is associated with the responsibility of running the affairs of the city. The incorporated area is currently 360 sq. km divided into 10 Zones and 90 Wards. Dhaka Statistical Metropolitan Area (DSMA) is considered as Dhaka mega city. RAJUK has a strategic planning zone wise definition of Dhaka city which is known as Dhaka Metropolitan Development Plan (DMDP). It currently consists of total 26 zones of which 19 may cover Dhaka Statistical Metropolitan Area with total area is about 1528 sq. km (DMDP, 1995).

Table 01: Amount of land use for different purposes in Dhaka mega city

Land use	Area in percentage
Residential	25.32
Commercial	3.96
Industrial	2.49
Institutional	1.63
Agricultural	46.8
Recreational	0.84
Vacant land	3.09
Water bodies	9.94
Others	0.06

Source: World Bank, 2006

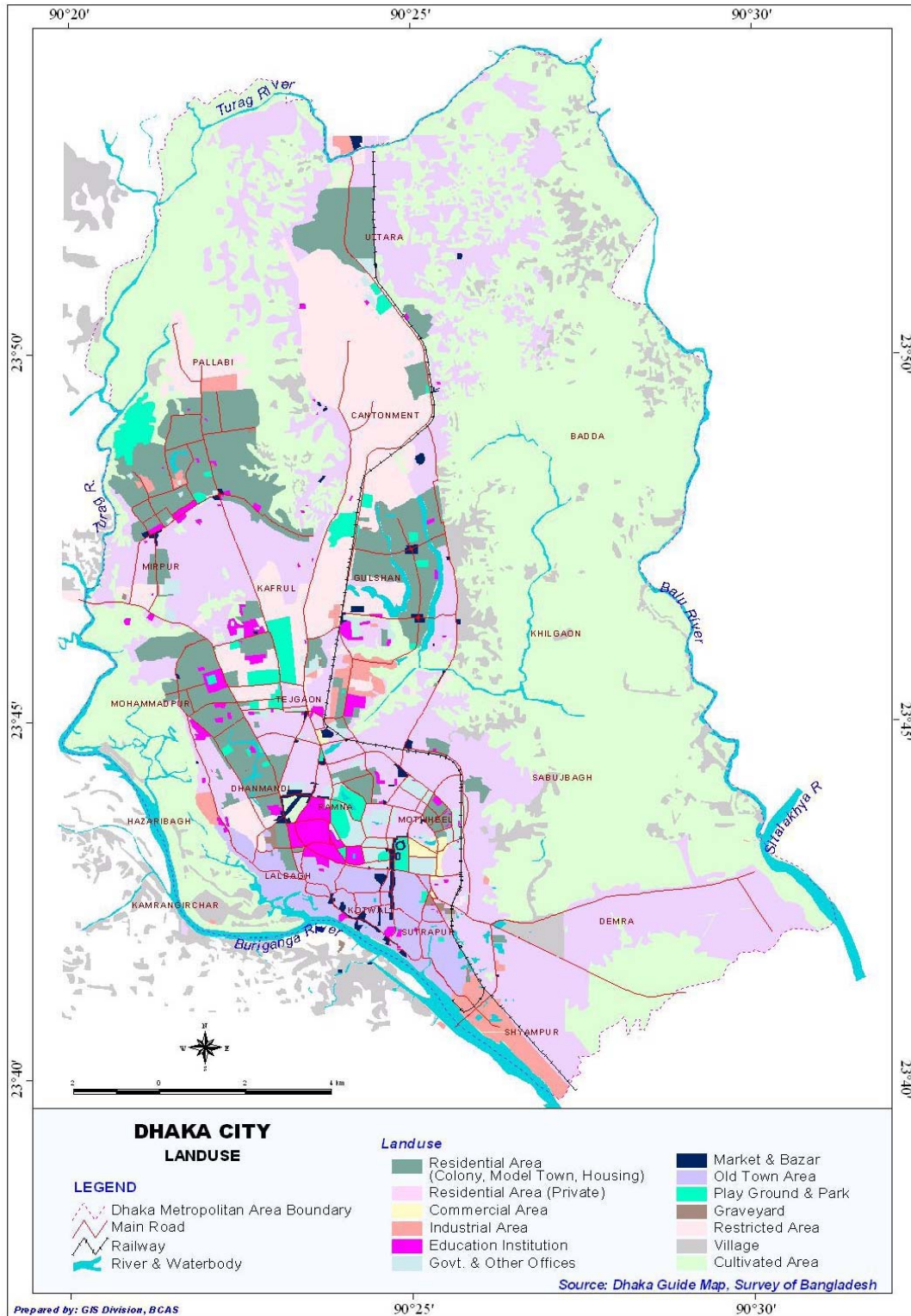
### 2.5.2 Urban growth in Dhaka

Since seventh century A.D. Dhaka has become important city. Rapid urbanization has occurred led by a 'skill transfer' from primary sector production to secondary semi skilled industries which have pulled people into the cities from the low wage agriculture sectors (Mahtab-uz-Zaman, 1999 quoted in Mahtab-uz-Zaman and Lau 1999, p. 142). Dhaka's growth picked up at a tremendous pace and private initiative also played a dominant role in its expansion. Therefore, Dhaka's growth has mainly been attributed to its regional importance what is known as its 'power and authority' (Friedmann, 1975 quoted in Mahtab-uz-Zaman and Lau 1999, p. 143). However, its role as a capital of government also played a role for dramatically expansion.

During the last four decades, metropolitan Dhaka has recorded a phenomenal growth in terms of population and area (Rahman, 2006). After the war of independence of 1971, Dhaka's provincial capital status was raised to national capital overnight and its population has been increased manifold in the subsequent decades. Within DCC boundary there are already over 7 million people with 5.5 percent annual growth rate. Gross density is 11,570-13,500 persons per sq. km. In some parts density of over 38,580 persons per sq. km. exists. But the population density is comparatively low outside DCC, but within RAJUK limits (ibid). Beyond DCC (except few areas within DCC which can be considered as urban fringe), most of the area can be considered as urban fringe where proper urban development has not been taken place yet.

To meet the land demand of city urban fringe in Dhaka is playing a role though development of urban fringe in Dhaka is following the spontaneous development nature rather than planned growth. Except few residential areas development (like Uttara Model Town) no serious effort has been given for planned urban development in Dhaka. Due to high demand of land low lying areas are also being filled up for various development purposes without considering any environmental impact. The emphasis is only on accommodating the increasing population, not to ensure better living standard. Therefore, the newly developed housing areas are seldom provided with adequate facilities.

Map 01: Land uses in Dhaka (2005)



Source: UNEP, 2005 (adopted from Dhaka Guide Map, Survey of Bangladesh)

Table 02: Area and population growth in Dhaka since 1951

Year	Area in sq. km	Population	Average Annual Growth Rate (%)
1951	85.45	411,279	1.28
1961	124.45	718,766	5.74
1974	335.79	2,068,353	8.47
1981	509.62	3,440,147	7.53
1991	1352.87	6,487,459	6.55
2001	1530	9,912,908	4.33

Source: BBS, 1997; 2001

### 2.5.3 Delimitation the area of urban fringe for Dhaka

Though the term urban fringe is used frequently in the literature on Dhaka and in policy discussions, still there is no unified understanding or criteria to delimit the area of urban fringe. Administrative boundary could be a simplest criterion for the delimitation of urban fringe. According to Pryor (1968) urban fringe signifies the “*built-up area just outside the corporate limits of the city*”. Following this definition urban fringe in Dhaka can be defined as area outside the Dhaka City Corporation but inside Dhaka Metropolitan Area which has been suggested by Islam and Khan (1990, p. 59). But this criterion is not that much effective for Dhaka as with city growth the jurisdiction of Dhaka City Corporation is changing. Moreover, the delimitation of boundary of City Corporation is political decision and is defined in a flexible manner considering the importance of the area. The City Corporation jurisdiction is intended to capture the possible future expansion of city rather than provide accurate representation of current boundary of the urban area. As a result, the area (for example Uttara) in spite of being segregated and geographically far away from city core due to its importance remains under the jurisdiction of city corporation (Annexure A). Therefore, presently no criteria are available based on which urban fringe area in Dhaka can be delimited for this research.

From the literature review it reveals that the basic factors to delimit fringe region are concerned with land use pattern and mixed rural-urban functions, interaction with main city, settlement pattern and population density, socio-economic development, availability of urban facilities, dependency on automobiles and proportion of population engaged in non-agricultural activities (Islam and Khan 1999, p. 59). But due to unavailability of data at micro level it is not possible to use the noted criteria to delimit urban fringe for Dhaka. The research recognizes that the periphery area is developing because Dhaka has failed to

accommodate the growing population within the city. As long as the periphery area has capacity to absorb population horizontally, it remains as urban fringe. When it is totally absorbed and becomes urbanized, it no longer remains as urban fringe. It becomes a part of the city and city expands further. Considering this on going phenomenon the research defines urban fringe in Dhaka as *area of low population density which horizontally absorb the growing population due to urban overspill. This is the area which lay on the edge of the built up area.* Therefore, the area of Dhaka which was mostly undeveloped 10 to 15 years before and presently is less developed part can be considered as urban fringe for Dhaka which is actually indicating the future direction of Dhaka's expansion. Obviously, this given definition of urban fringe may not be applicable for any other city as city forms and expansion patterns vary.

To know the recent spatial development in Dhaka the research divides the spatial development of Dhaka into four phases based on different period of time – Mughal Period (1606-1764), British Period (1764-1947), Pakistan Period (1947-1971) and Bangladesh Period (1971 to till now). Further, the spatial development in Dhaka after the independence of Bangladesh can be divided into 2 phases – development from 1971 to 1986 and from 1986 to till now. Development during each period if is considered as zone, then presently Dhaka has five zones and recent developed area can be considered as outer zone (Map 02). Therefore, the area which has been mainly developed during 1990s and thereafter is considering as urban fringe in Dhaka (Map 03).

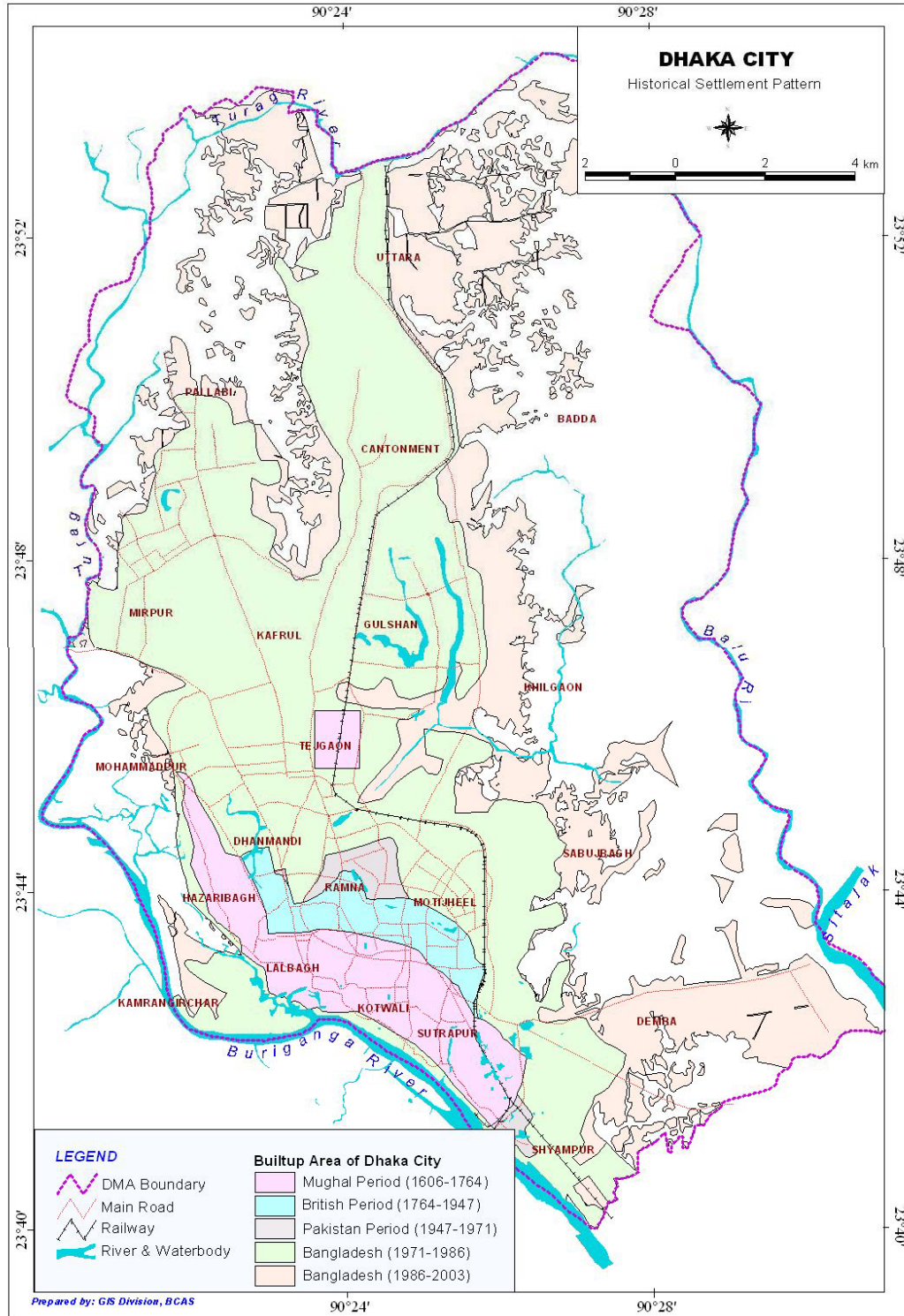
From the field survey it is seen that in the outer part of Dhaka the following characteristics are found which commensurate with urban fringe characteristics –

- Low density of population;
- Less and dispersed development; and
- Dependency on automobiles to come in inner part of the city.

The research recognized that the rate of spatial development rate in Dhaka after 1971 is much higher than before (Table 2). Because in 1971 the country received a different identity and Dhaka becomes a central part of economic, social, political and administrative activities. After the independence of Bangladesh 37 years have been passed, still all the economic, political and administrative activities are Dhaka based. Therefore, as long as the economic, political and administrative activities are not going to be decentralized population growth rate in Dhaka will remain higher. Obviously this will change the spatial pattern again and the area which is presently can be treated as urban fringe will be totally urbanized and the city will expand further.



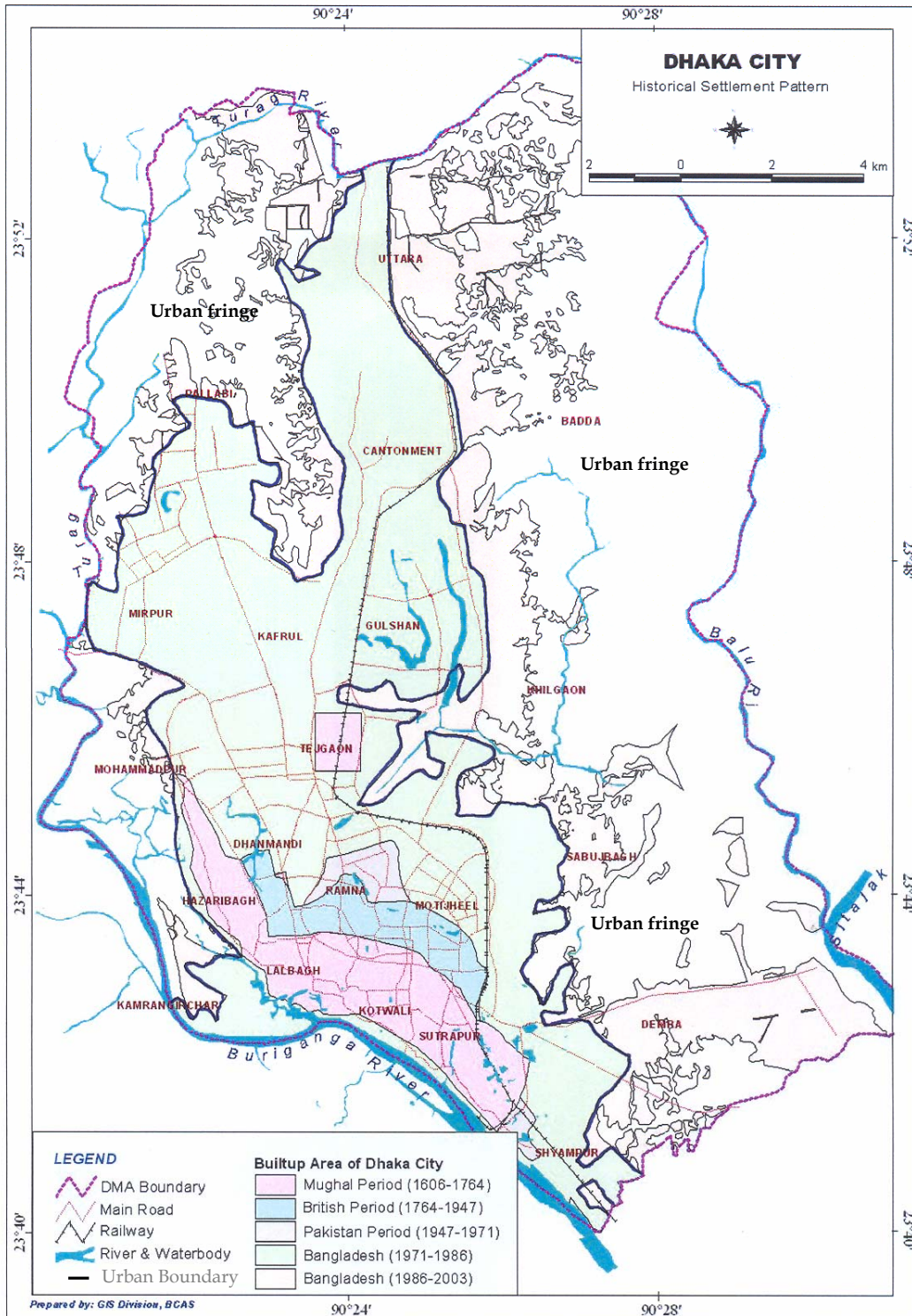
Map 02: Land development trends in Dhaka



Source: UNEP, 2005 (adopted from Dhaka Guide Map, Survey of Bangladesh)



Map 03: Delineation of urban fringe in Dhaka



Source: Author (based on UNEP, 2005)

## 2.6 CONCLUSION

A review of the literature presented in this chapter reveals that to define precisely the term urban fringe is quite problematic. This can be attributed to several factors, one of which is the transitional nature of fringe (Bryant et al., 1982). Urban fringe is a permanent element of a fast growing city and its boundary is continuously changing. Explanation of the continuous change in the characteristics of urban fringe lies in the fact that the rural- urban fringe is not a separate entity, but is one of the parts of an 'urban organism' and as such is subject to the same forces that "*operate in a variety of ways throughout the whole urban area*" (Johnson 1974, p. 4).

Definition and delimitation of fringe areas should be based on parameters that are unique and remain constant over time (Martin, 1975). However, these parameters are impossible to set because characteristics of the fringe areas constantly change, thus rendering any set parameters quickly obsolete. The approach to define and delimit the urban fringe needs a great degree of inclusiveness and flexibility. It should take into account that urban fringe "*is an abstraction of reality*" (Martin 1975, p. 30). Here it will not be irreverent to quote Wolfrum (2008) which expresses the actual reality -

*"Even in our own professional debate we are lacking theories. We have been discussing some of the related topics for decades, applying different terms like postsuburbia, urban village, megalopolis, outtown, slurb, exurb, burbs, edge city, technoburb, Metapolis, network city, Zwischenstadt, new urbanity, city a la carte, patchwork city, sprawl, spread city, nonplace urban field, polynucleated city, etc. We describe and analyze the phenomena of these spatial structures. Some hopes and dreams are resulting upon the awareness that these structures may have a potential of openness and freedom of meaning".*

Following the theoretical discussion the latter part of the chapter has developed a definition of urban fringe in the context of Dhaka. It must be noted that the purpose of defining urban fringe for Dhaka is not to geographically locate it. Rather to provide an acceptable delimitation of fringe area boundaries to choose case study areas to proceed the research further. Therefore, it may not be possible to apply this definition consistently to urban areas across Bangladesh.

## **Chapter Three:**

### **Land Management and Good Governance:**

#### **A theoretical orientation**

*“Theories can help alert us problems, point us towards strategies of response, remind us of what we care about, or prompt our practical insights into the particular cases we confront” – Forester (1989, p. 12)*

A theoretical orientation is a review of interrelated and relevant concepts and theories used in the research to get an in-depth idea. Eisenhart (1991) described a theoretical framework as *“a structure that guides research by relying on a formal theory constructed by using an established, coherent explanation of certain phenomena and relationships”* (p. 205). Lundequist (1999, p. 7) shows that development of scientific knowledge needs an interaction between theory and practice.

In this context, the review of theories not only helps in providing insights in land management, but also provides a base to compare the existing theories with present practices. The discussion in this chapter also takes a central role in understanding how good governance has been integrated in land management.

#### **3.1 LAND AND IMPORTANCE OF ITS MANAGEMENT**

Land is a basic place of human activities. Therefore, humankind has always had close association with land as a basis of food, shelter and livelihood (UN-FIG, 1999). A review of dynamic humankind-land relationship (Ting and Williamson, 1999) can be classified into broad four phases:

- Human settlements during agricultural revolution through to the feudal system which tied human being to land in a physical way. Land was the primary symbol and source of wealth.
- The industrial revolution begun a process of breaking that strong physical tie to land by turning land into more of a commodity.

- The post world war II reconstruction and the population boom show saw an awareness of land as a scarce resource that was not sufficient for the needs of the growing world population which was becoming more mobile.
- The 1980s has been seen as a different twist in the concern for the scarcity of land. The focus has turned into wider issue of environmental degradation and sustainable development as well as social equity.

This changing humankind and land relationship lies at the core of the struggle for sustainable development. From the planning perspective land also represents a mosaic that ought to be regulated to ensure conformity and balance of built environment (Ratcliff, 1976). Presently at global level land is also treating as an important element. For example, in Agenda 21, the importance of access to land and security of tenure are underlined in chapter 7 'promoting sustainable human settlements' and in chapter 14 'promoting sustainable agriculture and rural development'. The implementation of these legally binding international policy papers requires the readjustment of most institutional and organizational aspects dealing with land (Magel, 2001):

**Land tenure** as the way in which the rights, restrictions and responsibilities that people have with respect to land are held;

**Land administration** as the process of determining, recording and disseminating information about the tenure, value and use of land;

**Land management** meaning the activities associated with the management of land as an environmental, an economic and a socio-cultural resource such as land use planning.

But the general inefficiency associated with majority of the developing countries are absence of land policies, tenure insecurity, inadequate land management capacity which have been cited by Bernstein (1994), Hardoy and Satlerwaite (1989) as serious problems precipitating existing land crises in the countries (quoted in Aribigbola, 2007). Land related problems are throughout the world, or as long as there are people, land remains of essential importance (Magel and Wehrmann, 2006). Therefore, the complexity of a sustainable development process cannot be understood and implemented without the proper appreciation of land question.

## 3.2 LAND MANAGEMENT: REVIEW OF DIFFERENT CONCEPTS

### 3.2.1 Dynamic concept of land management

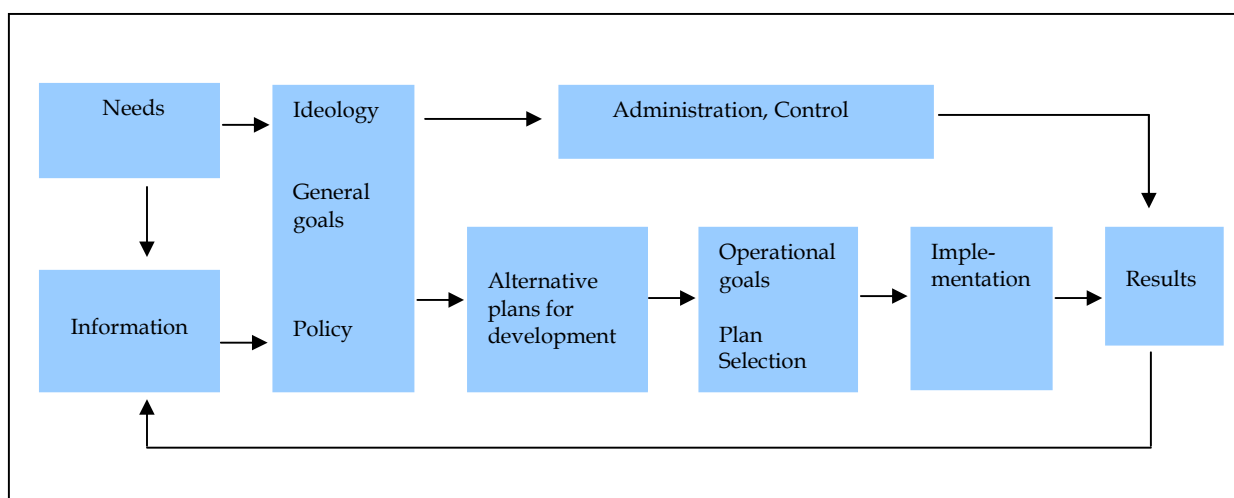
The concept of 'land management' is comprehensive and accommodates wider scope of the linkage and organisations. Land management is also interdisciplinary in nature. It has disciplinary linkage with law, economics, community, geodesy and geo-information (Thiel, 2008a). It includes positive and creative activities to fulfil established goals of land policy for the sustainable use of land resources. The objective of land management varies from country to country and in all countries, land is a basic resource with unique characteristics. Many activities, related to human settlements which have been identified in the national policy statement on land management, are concerned with land (Henssen, 1988).

International Journal of Land Management (1996, quoted in Siddique 1997, p. 2) defines it as:

*“Means by which the resources of the earth with particular reference to land and all that are contained upon and below is managed. The management includes the collection of data about land, the processing, analysis and presentation, followed by the decision to its use as dictated by impose rules and regulations related to its ownership, valuation, rights, registration and its impact on environment”.*

Kombe (1994) and Larbi (1995) both indicate that land management activities can be undertaken by either market-led or state-led instruments. The mode of management is influenced by existing tenure rights and socio-economic or political goals (quoted in Obala and Kimani-Mukindia 2002, p. 163). Thus as Larsson expounded (1997, p. 9) the starting point of land management is to choose the goals and it is a well functioning system of different phases which overlap and influence each other as indicated in figure 04. The goals may have the purpose of promoting efficient land use within an existing pattern, i.e. they may be mainly of a monitoring, administrative and controlling nature. Alternatively, they may have the main aim of developing land by making substantial investment in the land and /or changing existing land usage (ibid).

Figure 04: Land management process



Source: Larsson, 1997

Thiel (2008b) described it in different way. In his opinion the integrated approach of land management is not fixed procedure, rather a continuous, imperative process of planning, implementation, monitoring and evaluation that strives to meet as many of the multiple economic, social and environmental needs of society as possible.

### 3.2.2 Land management is not land administration

In some jurisdiction land management and land administration are synonymous and in others are treated as different (Nkwae 2006, p. 7). Henssen (1994, p. 3) interprets land management as being almost equivalent to land administration as defined by others, with only planning added. In distinguishing land administration from land management, O'Riordan defines land management as,

*... the processes of decision-making whereby resources are allocated over space and time according to the aspirations and desires of man within the framework of his technological inventiveness, his political and social institutions, and his legal and administrative arrangement (quoted in Dale and McLaughlin 1988, p. 4).*

Dale and McLaughlin argue:

*Land management includes the formulation of land policy, the preparation of land development and land use plans, and the administration of a variety of land related programmes.... Land administration includes the functions involved in regulating the development and use of land, gathering revenue from the land...[and] resolving conflicts concerning ownership and use of the land* (quoted in Dale and McLaughlin 1988, p. 6).

According to UN-FIG (1999) land administration is the process of determining, recording and disseminating information about the ownership, value and use of land when implementing land management policies.

Therefore, land management can be seen to play a coordinating role between land policy and land administration (Steudler and Williamson, 2002). Its objectives are to fulfill the environmental, economic, and social goals of land policy by planning, promoting and controlling efficient land use through the process of land administration. The point is that land management without proper land administration operates without any connection to reality which is often common in developing countries. The foundation is weak, thus making land management a kind of abstract art (Törhönen, 2004).

### **3.2.3 Land management and sustainability**

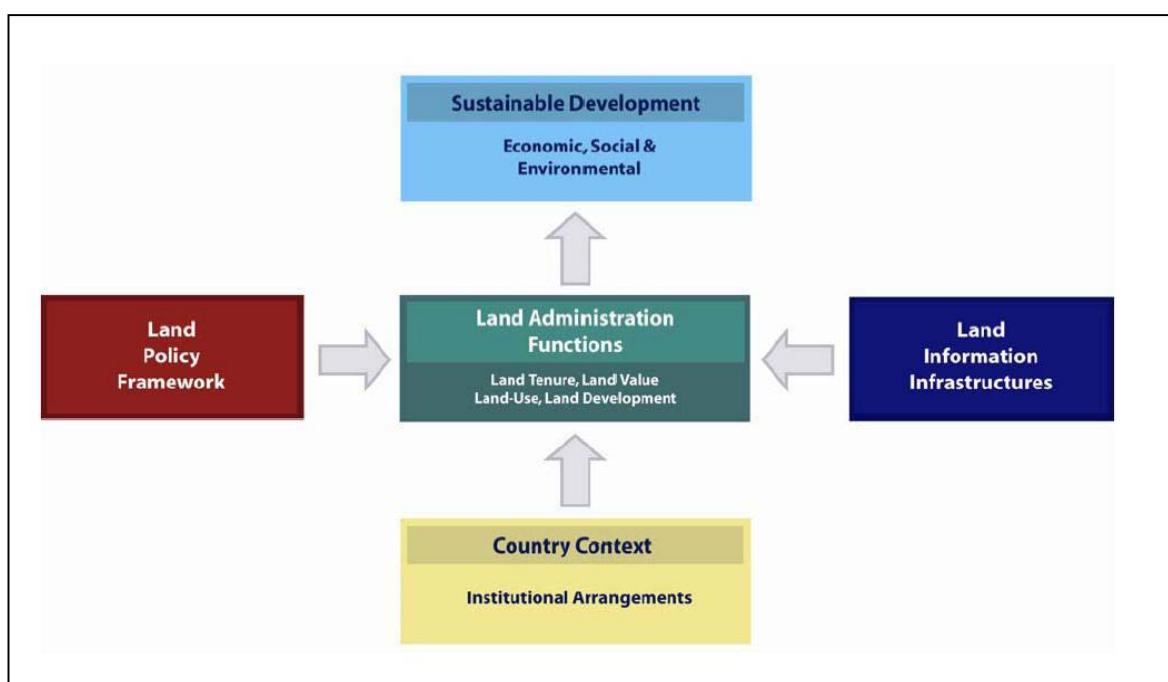
The term 'sustainability' becomes a significant item after the release of *Our Common Future* by the World Commission on Environment and Development in 1987. Though the term sustainability is appeared in policy measures at national and international level and a prime issue for research, still the debate on it regarding its specific definition and identifying the method of its implementation is still continuing. Sustainability effectively incorporates economic, social, political, conservation and resource management factors in decision-making for development. In other words, sustainability paradigm relies on the view to the preservation of natural features with the reorientation of the interaction among nature, society and economy (cf. Weber, 2000). It varies according to the perspective and therefore, when it is applied in the field of land management the social and economic aspects come and the concept of land management becomes more complex.

According Smyth and Dumanski (1993) sustainable land management is the use of land to meet changing human needs (agriculture, forestry, conservation) by ensuring long-term socio-economic and ecological functions of the land. Therefore, the objective of sustainable land management is to harmonize the complimentary goals of providing environmental,

economic, and social opportunities for the benefit of present and future generations by maintaining and enhancing the quality of the land (soil, water and air) resource (ibid).

According to Enemark et al. (2005) within different country context, the land management activities may be described by the three components: land policies, land information infrastructures, and land administration functions in support of sustainable development.

Figure 05: Land management paradigm



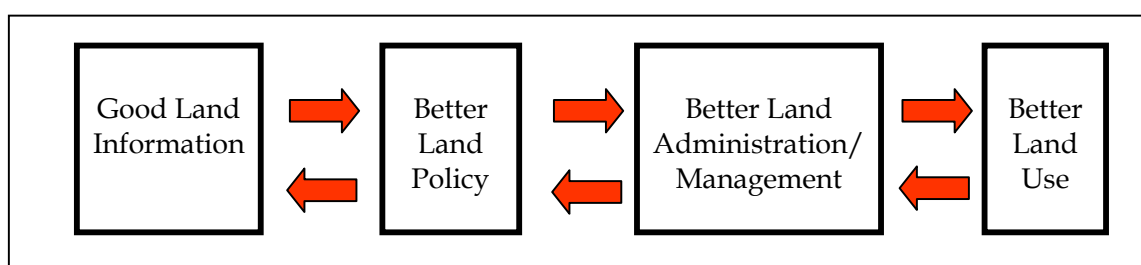
Source: Enemark et al., 2005

Enemark et al. (2005) argue that land policy is a part of the national policy on promoting objectives including economic development, social justice and equity, and political stability. Land policies may be associated with: security of tenure; land markets (particularly land transactions and access to credit); real property taxation; sustainable management and control of land use, natural resources and the environment; the provision of land for the poor, ethnic minorities and women; and measures to prevent land speculation and to manage land disputes. The land administration functions are based on and are facilitated by appropriate land information infrastructures that include cadastral and topographic datasets and provide access to complete and up-to-date information about the built and natural environment (ibid).



According to UN-FIG (1999) sustainable development is not attainable without sound spatial planning, land policy, land administration and comprehensive land management. It has been confirmed that there is a powerful link between appropriate land administration and management and sustainable development.

Figure 06: Sustainable development and land management



Source: UN-FIG, 1999

Land management is the existing day-to-day and routine state interventions and regulations in the existing land system of a country/state/province. In other words, it tries to improve the existing land related practices and process within overall relations existing between the population, the land and the state (Siddiqui 1997, p. 3). The organizational structure of land management differs from country to country as it reflects cultural, social, political and judicial setting. Therefore, land management is used as a generic term, meaning all activities associated with the management of land as an environmental, an economic and socio-cultural resource, therefore, including land tenure, the implementation of land policy, land administration, land use planning and land readjustment (Magel and Wehrmann, 2001).

### 3.3 LAND MANAGEMENT: NEED FOR EFFECTIVE PLANNING

The rapid urban population growth and urbanization is taking place in developing countries which is one of the reasons of spatial, economic, social, and administrative structure changes in cities and countries as well. In most of the cases it is seen that existing formal planning practices<sup>1</sup> of the countries cannot keep pace with rapid city growth. As a result, urban expansion takes place without any proper guidance. Moreover, most of the developing countries follow the planning tools whose characteristics have been developed in European countries which are not at all applicable for developing countries considering socio-economic, political and technical aspects.

According to CITYNET (1995) the most commonly used planning tools include comprehensive general plans, master plans, strategic plans and structure plans. The broad objective of these plans is to guide the development of the city for a specified time period and to promote the land use pattern which most efficiently fulfills the objectives for the government. However, experiences have shown that general and master plans tend to be static or assume slow growing cities. These two plans also tend to be time consuming, detailed and costly as well as failing to consider the full consequence of economic demand for space. Taylor and Williams (1982, p. 337) expresses the similar idea: the traditional master planning approach is irrelevant to accommodate growth and solving problems of urban areas. The approach is too inflexible, cumbersome and static to cope with the

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<sup>1</sup> According to Lupala (2002, p. 15) formal planning practices refer to:

- Urban master plan is a blue print and a reference framework charting the overall configuration and direction of future urban growth based on forecast and assumptions about population growth, economic dynamics, social factors etc. The objective is to guide the development of city for specific time period and to promote the land use pattern which most efficiently fulfills the objectives of the government.

- Zoning divides and categories urban space following an ordinance and establishes regulations to govern the use of zoned land. It also includes the general rules of location, bulk, height, plot ratio, shape, and coverage of structure within each zone. Zoning limits the overcrowding / overbuilding relative to public services and facilities, stabilizes neighborhood and segregates incompatible uses.

- Subdivision regulations govern the development of raw land for its zoned purpose in much more detail. The regulation defines standards for layout and lot sizes, street improvements and procedures for assigning private land for public purposes. Subdivision provides the essential characteristics of land uses, street patterns and public utilities.

- Building code and regulation spell out how new structures are to be erected and which materials are to be used, specific standards for infrastructure provision such as water, sanitation, drainage, road etc.

dynamic growth and change taking place in the typical least developed countries. On the other hand, structure plans are intended to be a framework of strategic plans and policies to guide the social, economic and physical development of urban areas (UNCHS 1996, p. 296). The structure plans are based on more substantial participation, adopt a more managerial approach with continuous review and adaptation and give far more emphasis to the written communication of planning concepts and strategies, as opposed to the more previously more prominent role of the plan-map in Master Planning (Bracken 1981, p. 99).

According to Courtney (1983 quoted in CITYNET 1995) physical planning in developing countries is most often regarded as essentially static in nature, lacking effective land-use control mechanisms and investment priorities. Planning is restricted by the lack of feasible means to ensure implementation, anticipate market reactions, as well as means to consider the cost implications for various government agencies and the economic impact on various income groups. Falade (2003 quoted in Aribigbola 2007, p. 5) argued that land use plans for most cities often seek to make life better for the masses living in cities as a major goal, but the reality of the case is that these lofty and laudable goals are never achieved. Thus, people in urban areas wallow not only in abject poverty, but they also do not live in planned urban areas, which are orderly safe, convenient and healthy living environment' that is promised as the gains of land use planning (ibid).

On land use planning and controls Levy (2003 quoted in Aribibbola 2007, p. 4) identified two major ways in which a municipality may shape its pattern of land use. According to him, these are the public capital investment and legal controls over the use of privately owned property. In this context, public capital investment creates specific facilities which make up part of the total land use pattern; while land use control embraces subdivision regulations which essentially control the manner in which new land is subdivided and placed on the market for development and zoning ordinance.

Archer (1984) proposes that governments should adopt a land policy approach and define their objectives and priorities on land ownership and use; and then formulate measures to marshal and coordinate their various activities in urban development and land use towards achieving these objectives. To assist municipalities in achieving their objectives an appropriate land-use planning system could be introduced. Such an appropriate system may consider the following (CITYNET 1995, p. 27):

- Formulation of appropriate, affordable and implementable land use regulations and minimum standards for land and housing development in the fast growing cities of developing countries;
- Formulation of flexible planning tools for future metropolitan growth which take into account the economic, social and physical dynamics of rapid urban growth;
- Implementation of 'proactive' land development tools which encourage cooperation between the public and private sectors, for example through joint ventures and infrastructure-led strategies;
- Adoption of planning strategies, regulations and standards which consider the administrative, political and economical framework of governments;
- Recognition of self-help housing and understanding of other issues characterizing low-income areas including squatter settlements; and
- Promotion of productive land use including methods which aim at limiting land speculation and provide access to land for all income groups.

### 3.4 APPLICATION OF GOOD GOVERNANCE IN LAND MANAGEMENT

#### 3.4.1 Good governance and its characteristics

'Governance' has become a popular topic, and so risks becoming a point of false rhetorical convergence, a term that means all things to all people, perhaps as often used to obscure as to enlighten (Bevir and Rhodes 2003, p. 41). There are many contemporary definitions of governance which refers it as 'the management of the course of events in the social system' (Burriss, Drahos and Shearing 2005, p. 30). It is ultimately concerned with creating the conditions for ordered rule and collective action (Stoker, 1998; Peters and Pierre, 1998). Governance is a broader and more inclusive term than government, as it encompasses the activities of a range of groups – political, social, and governmental - as well as their interrelationships (UNCHS, 1996). This is the process of decision making and the process by which decisions are implemented (or not implemented) (UNDP, 1997).

Governance is the ultimate source of power. The definition given by Stoker (1998) is most relevant here. According to him:

*"Governance refers to the development of governing styles in which boundaries between and within public and private sectors have become blurred. The essence of governance is its focus on mechanisms that do not rest on recourse to the authority and sanctions of government....Governance for (some) is*

*about the potential for contracting, franchising and new forms of regulation. In short, it is about what (some) refer to as the new public management. However, governance ...is more than a new set of managerial tools. It is also about more than achieving greater efficiency in the production of public services" (p. 17-18).*

Since the 1990s, the concept of 'good governance' has taken center stage in development thinking and practice (Resnik and Birner, 2006). UN HABITAT governance campaign defines good governance as characterized by sustainability, subsidiarity, equity, efficiency, transparency and accountability, civic engagement and citizenship and security. It recognizes that the quality of urban governance is the single most important factor for the eradication of poverty and for prosperous cities (2002, p. 11).

According to World Bank (1994, p. vii),

*Good governance is epitomized by predictable, open, and enlightened policy making (i.e. transparent processes); a bureaucracy imbued with a professional ethos; an executive arm accountable for its actions; a strong civil society participating in public affairs; and all behaving under the rule of law.*

According to UNDP (1997),

*Good governance is, among other things, participatory, transparent and accountable. It is also effective and equitable. And it promotes the rule of law. Good governance ensures that political, social and economic priorities are based on broad consensus in society and that the voices of the poorest and the most vulnerable are heard in decision-making over the allocation of development resources.*

From the above definitions the major characteristics of good governance can be summarized as follows which have been also confirmed by UNESCAP:

- **Participation** which could be either direct or through legitimate intermediate institutions or representatives. It is important to point out that representative democracy does not necessarily mean that the concerns of the most vulnerable in society would be taken into consideration in decision making. Participation needs to be informed and organized. This means freedom of association and expression on the one hand and an organized civil society on the other hand.
- **Rule of law** which means fair legal frameworks that are enforced impartially. It also requires full protection of human rights, particularly those of minorities.

Impartial enforcement of laws requires an independent judiciary and an impartial and incorruptible police force.

- **Transparency** refers that decisions taken and their enforcement are done in a manner that follows rules and regulations. It also means that information is freely available and directly accessible to those who will be affected by such decisions and their enforcement. It also means that enough information is provided and that it is provided in easily understandable forms and media.
- **Responsiveness** refers institutions and processes try to serve all stakeholders within a reasonable timeframe.
- **Consensus orientated** means mediation of the different interests in society to reach a broad consensus in society on what is in the best interest of the whole community and how this can be achieved. It also requires a broad and long-term perspective on what is needed for sustainable human development and how to achieve the goals of such development. This can only result from an understanding of the historical, cultural and social contexts of a given society or community.
- **Equity and inclusiveness** ensures that all its members feel that they have a stake in it and do not feel excluded from the mainstream of society. This requires all groups, but particularly the most vulnerable, have opportunities to improve or maintain their well being.
- **Effectiveness and efficiency** means that processes and institutions produce results that meet the needs of society while making the best use of resources at their disposal. The concept of efficiency in the context of good governance also covers the sustainable use of natural resources and the protection of the environment.
- **Accountability** refers that not only governmental institutions but also the private sector and civil society organizations must be accountable.

UNDP has also emphasized **strategic vision** as one of the additional characteristics. According to Governance for Sustainable Development (1997) leaders and the public should have a broad and long-term perspective on good governance and human development, along with a sense of what is needed for such development. There is also an understanding of the historical, cultural and social complexities in which that perspective is grounded. In the context of development and democracy promotion good governance also includes the

principles of active civil society, justice and reliability and credibility (cf. Magel and Franke, 2007).

Good governance is essential for sustainable development; that sound economic policies, solid democratic institutions responsive to the needs of the people and improved infrastructure are the basis for sustained economic growth, poverty eradication and employment creation; and that freedom, peace and security, domestic stability, respect for human rights, including the right to development, the rule of law, gender equality and market-oriented policies and an overall commitment to just and democratic societies are also essential and mutually reinforcing (United Nations 2002, p. 3).

### **3.4.2 Why is good governance necessary in land sector?**

*If you take a walk through the countryside, from Indonesia to Peru, and you walk by field after field-- in each field a different dog is going to bark at you. Even dogs know what private property is all about. The only one who does not know it is the government.*

This is how de Soto (1999) has expressed in excellent way the reality in the property right systems in developing countries in few sentences and this is the answer of the question why good governance is needed in land sector.

FAO argues that weak governance is often associated with two principal types of corruption, *state capture* and *administrative corruption*. State capture is corruption on a grand scale. It illegally or inappropriately transfers economic resources from the state to private interests. The state can be captured by individuals, families, clans or commercial companies. On the other hand, administrative corruption is about the abuse of office by individual officials who use their power for self-enrichment rather than to execute the task for which they are appointed. Officials in the regime of administrative corruption seek bribes to evade or speed up procedures to produce results that favor the bribers (FAO 2007, pp. 13-14).

Administrative corruption is now a day very common in land sector. For example, high profile corruption cases are found in land sector in Kenya, Indonesia, China, Tanzania and Cambodia. TI survey in South Asia in 2002 reveals that land is the 2<sup>nd</sup> corruption prone sector in Pakistan, 3<sup>rd</sup> in India, Bangladesh and Srilanka. Also it is 4<sup>th</sup> most corrupted sector in Thailand. Actually weak governing system not only is widening the way of corruption in land sector but also bringing the following potential impacts:

- Poverty and social exclusion
- Negative social behavior
- Environmental degradation
- Constraints on economic development
- Reduced public revenues
- Tenure insecurity
- Weak land and credit markets
- Abuse of compulsory purchase (ibid, pp. 20-23)

### **3.4.3 Good governance in land administration and land management: Present response**

According to the FAO's recent draft 'good practice' guidelines on *Good governance in land tenure and land administration*, it has been recognized only recently that a modern land administration project should include a focus on improving governance. It is therefore hardly surprising that there is comparatively little material on good governance in land tenure and land administration (FAO 2007, pp. 40-41).

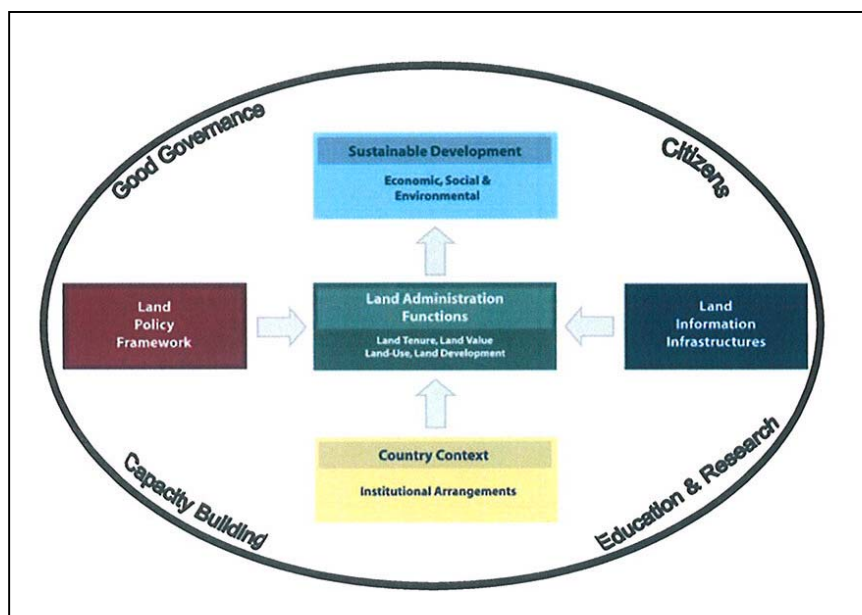
GTZ took an attempt to incorporate the elements of good governance in land administration which are as follows (GTZ, 1998; Lamba, 2005):

- Guarantee and respect of basic rights – provision, protection and enforcement of equitable and secure property rights including respect for cultural rights and local norms of tenure and indigenous/local knowledge;
- Separation of powers – non-interference of politics with the executive mandates of land administration organizations;
- Legality and legitimacy of the land administration regime – constitutionality and legality of organizational mandates and land laws;
- Independence of judges – objectivity of land law enforcement and court decisions in land disputes Appeal – the possibility and right of appeal;
- Accountability and transparency - responsiveness to the demands of the users of the system including widespread access to land information at an affordable price and
- Effectiveness and efficiency – competence of staffs in attainment of goals while meeting user needs (service levels and costs).



Though in the field of land administration there are few approaches to incorporate good governance with it, specifically in the field of land management the approach is still scanty. Expert Group Meeting (EGM) in 2005 was the last initiative to address new land management paradigm refereed essentially to good governance (Figure 07).

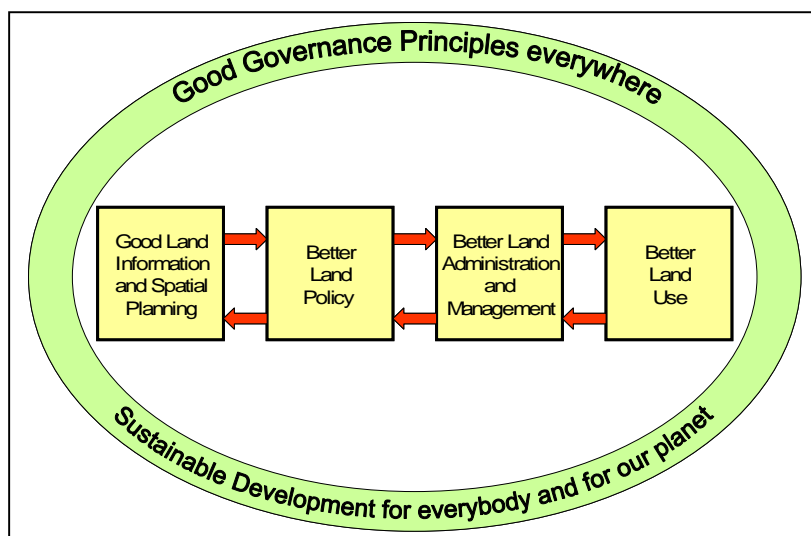
Figure 07: Good governance and land management paradigm



Source: EGM, 2005

Against EGM output is it surprising that the 1999 Bathurst FIG-UN workshop, particularly its declaration on 'Land Administration for Sustainable Development' mentioned good governance only briefly and did not include good governance as a pre-condition or an overall umbrella of its findings (Magel and Franke, 2007). Therefore, considering the importance of good governance Magel and Franke (2007) argue that sustainable development is not attainable without land administration and good governance (Figure 08).

Figure 08: Good governance in sustainable development



Source: Magel and Franke, 2007

### 3.5 FORMAL APPROACHES TO PROVIDE POOR'S ACCESS TO LAND

Rapid urbanization has outstripped the capacity to provide and maintain adequate supply of land in cities (Kombe and Kreibich, 1999). Though it is the prime task of government to provide land and housing for low income group, in developing countries very few initiatives are found taken by government have been successful. Because, for adoption of any policy it should consider the traditional land management practices which are often ignored. Therefore, most of the programmes are not being succeeded. Different options that could be adopted considering the socio-economic and political situation of the respective country have been briefly summarized as follows:

#### 3.5.1 Sites and Services Schemes

Sites-and-services schemes provide the target group with a plot and basic infrastructure, such as water, roads and sanitation facilities. The beneficiaries either lease or buy the allocated land. Often, they are provided access to a loan with reasonable terms as well as an additional loan for the construction of a house. Although typically not included in the project, it is expected that the plot owner would eventually build a house of reasonable

standard (CITYNET 1995, p. 82). The main objective of this scheme is to give support to the lower income people to house themselves with a little backing from government.

In the sites and services scheme two key actors are involved – target beneficiaries and the implementing authority. In most of the cases the intended beneficiaries belong to the lower income group of the urban area and government departments act as implementing agencies. The World Bank introduced two terms as general principles of sites-and-services scheme (CITYNET 1995, p. 83). First, the term ‘accessibility’ is used to indicate that the target group (low income group) should have access to the schemes. The second term ‘replicability’ refers structural and policy reforms in housing sector, institutional finance, and urban management that are necessary to make projects replicable (ibid).

It is found that in most of the cases to minimize the cost of the scheme the locations have often been too far from income-generating activities which is a reason of project failure. Turner (1980, quoted in CITYNET 1995, p. 79) recommends that three kilometres from the major employment centre is an appropriate limit when selecting the location for sites-and-services schemes although the actual distance would vary depending on availability of inexpensive transport and time needed to cover the distance.

Although sites and services approach offers many opportunities, but always it is not feasible method to provide access to land as well as housing for the poor due to huge shortage of land. In that case, settlement upgrading is based on investments already made in the existing housing stock and is therefore less costly to implement (CITYNET 1995, p. 84).

### **3.5.2 Slum Upgrading**

Slum upgrading is a programmatic response to existing slum communities that focuses on keeping the community intact while improving the quality of housing, infrastructure and services in the slum (Painter et al. 2006, p. 3). Thus the programme is aimed at providing basic infrastructure (such as access to road, water, electricity and sanitation) and social services (like schools, clinics, market) to the lower income areas. Slum upgrading is alternative programme of ‘slum clearance’ or ‘slum eradication’ that typically drives the urban poor from their homes, eradicates the structures, and makes inadequate efforts to provide alternative housing that takes into account the economic and social realities of the slum dwellers themselves (ibid). Through the slum upgrade the urban poor are enabling to improve and expand their own housing without relying on the government’s scarce resources. The result is an increase in satisfactory and affordable housing rather than a

decrease in the housing stock (p. 5). Slum upgradation gives the opportunity to shift the situation from 'exclusion to participation', 'landlessness to access to land' and 'insecurity to tenure security'. According to Painter et al. (2006, p. 5), through slum upgradation it is possible to make slum disappear without bulldozers.

With the government initiative private sector investment capital can be accessed for slum upgrading if repayment generates attractive returns – if projects are 'bankable'. Federations of urban poor savings and lending groups demonstrate excellent repayment performance and very low default, making them suitable to private investors. Municipalities are best placed to lead the planning for capital investments in land and services needed to upgrade slums. When slum dwellers, municipalities and the private sector work together, they are best placed to structure financing for and implementation and monitoring of slum upgrading efforts themselves (UN HABITAT, 2007).

Some analysts have noted that upgrading is considerably cheaper per unit than demolition and construction of new public housing (Matovu 2000, p. 6). It was suggested that when slum residents controlled their housing processes in terms of secure land tenure, amenities and location, residents were able and willing to invest both capital as well as labour resources towards housing improvements (Obudho and Mhlanga, 1987; Butcher, 1986; Kaitilla, 1991 quoted in Matovu 2000, p. 6).

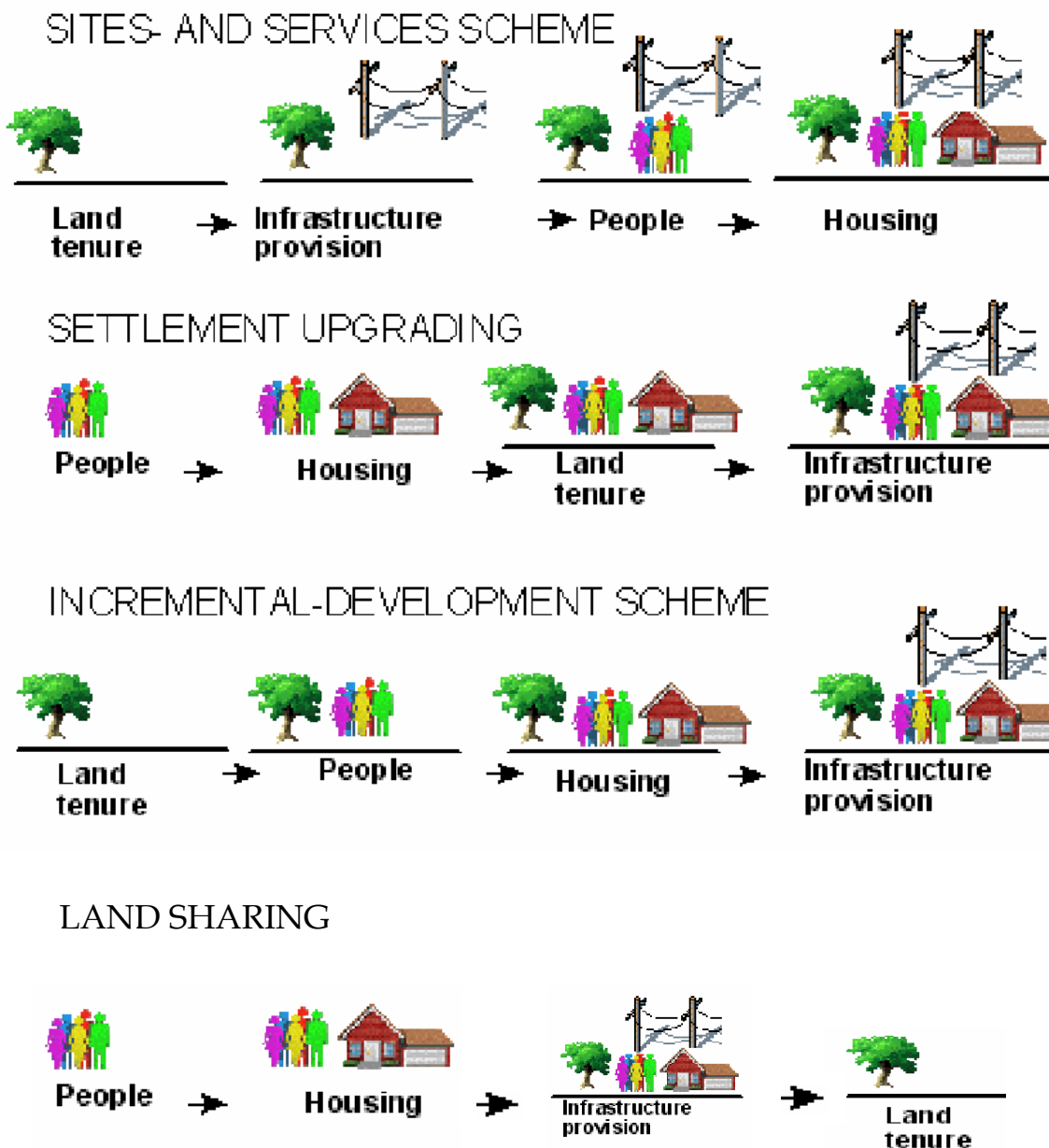
Despite of its realistic approach the programme has not been flourished as much as it was expected. For example, such programme has declined from about 42 percent of the total volume of World Bank operations in the early 1970s to less than 8 percent in late 1980s (Brennan in Kasarda, 1993 quoted in Kombe and Kreibich 2000, p. 12).

### **3.5.3 Incremental Development**

The incremental development approach has been implemented in few Asian and African countries such as Pakistan, Tanzania and Zambia (Ansari 1998, p. 86). Incremental development can be described as a sites-and-services scheme without the services. The approach includes mechanisms whereby groups of households are encouraged to organize themselves, accumulate funds and to provide infrastructure gradually. Construction begins when the target group is able to collect a certain percentage of the required funds (Peattie, 1982 quoted in CITYNET 1995, p. 87). From a study of the Hyderabad (UNCHS, 1991) it is evident that it is possible to reach the people through incremental development. Through

the process government authorities can force to save funds and infrastructure can be gradually provided.

Figure 09: Approaches to provide access to land to low income group



Source: CITYNET, 1995; Author

### 3.5.4 Land Sharing

The approach of land sharing for increasing the access of the poor to urban land have been tried in many Asian countries. It is one of them which was pioneered in Bangkok in 1982 (Ansari 1998, p. 85). Land-sharing is a method to alleviate the housing shortages for the urban poor in Third World Countries which has received considerable attention. It is an approach which has brought about considerable settlement improvement by the initiative of the people themselves. The squatter, after having organized themselves into a viable organization, have initiated negotiations with the land owner and have 'shared' the land, giving the prime locations of the land (for example, the side facing a road) to the owner and using the remaining for their housing, but in a more organized and improved manner (Srinivas, 2006).

In short, land-sharing means that the landowner and the land occupants (squatters or tenants) reach an agreement whereby the land owner develops the economically most attractive part of the plot and the dwellers build houses on the other part with full or limited land ownership. Land-sharing offers several advantages as governments are finding increasingly difficult to find land for sites-and-services and other public housing schemes in locations where there are income-generating activities nearby, and eviction is increasingly becoming an unacceptable method to clear land for development projects (CITYNET 1995, p. 88).

There are four basic characteristics of land-sharing projects include (ibid):

- **Densification:** Densification typically implies that new buildings will replace older structures. It is often necessary to build row-houses to allow higher densities;
- **Reconstruction:** The occupants will be re-housed on a smaller area as the land will partly be developed by the land owner;
- **Participation:** The transformation of the plots will require a comprehensive negotiation process whereby the community will discuss the allocation of plots and the construction modalities with the landowner, often with the help of a mediator. It is necessary to include all dwellers in the project and to be able to reach agreements within the community;

- **Cross-subsidy:** External subsidies should be avoided as much as possible. The commercial development should generate a sufficient surplus to cover a deficit resulting from the community's inability to pay for much of the cost of land, infrastructure and possibly housing.

### 3.6 CONCLUSION

Land management is a fairly process seeking effective management of land. It is to a great extent a complex process and incorporates interdependent approaches like land use planning, land administration and land policy. This is the process which can ensure poor's access to land through different innovative approaches. The literature review has recognized that land management does have neither any concrete definition nor any specific goal. It varies from country to country; therefore, the scope of land management is quite wide. Considering the nature of land management for this present research the goal of land management has been fixed to develop urban fringe in sustainable way.

The literature review reveals that irregularities in land sector take variety of forms and their extent depend on the governing system in the respective country. Therefore, though it needs to incorporate good governance criteria into land management process especially for corruption prone countries, it does not seem that there are many remarkable attempts to incorporate the good governance criteria in it. Land management process requires more than a technical style. Whether traditional land management concept is ready to serve developing countries or not is still unclear and is a question also. Therefore, more attempts in this regard would certainly be helpful.

## **Chapter Four**

### **Conceptual framework for modeling and analyzing urban fringe problems**

#### **4.1 INTRODUCTION TO CONCEPTUAL FRAMEWORK**

A conceptual framework is used in research to outline possible courses of action or to present a preferred approach to analyze. It explains either graphically, or in narrative form, the main things to be studied – the key factors, concepts or variables and the presumed relationship among them (Miles and Huberman 1994, p. 18). Conceptual model is not a concrete statement of describing something. Rather it is a guideline to organize the research or a way to show how the research will proceed.

*“Crucially, a conceptual framework is an argument that the concepts chosen for investigation or interpretation, and any anticipated relationships among them, will be appropriate and useful, given the research problem under investigation”* (Eisenhart 1991, p. 209).

In addressing urban fringe development processes and management, there is a need to develop a conceptual framework. Using this conceptual framework, the actual scenario of urban fringe development processes can be explored and made more explicit. The present chapter discusses the conceptual framework which has been developed through Soft Systems Methodology (SSM). SSM is based upon systems theory, which provides a scientific enquiry to study and understand the sub-systems under the whole system. The chapter also provides an insight into the systems thinking and soft systems theory and its relevancy with land management.

#### **4.2 SYSTEMS THINKING AND ITS RELEVANCY WITH LAND MANAGEMENT**

Systems thinking is a unique approach of solving problem. It is a framework that is based on the belief that the component parts of a system will act differently when the systems relationships are removed and it is viewed in isolation. The only way to fully understand why a problem or element occurs and persists is to understand the part in relation to the whole (Capra, 1996).

Systems ideas are employed as a means of inquiry into the problem situation and are based on the concept of cyclic learning and optimization (Checkland and Scholes, 1990). Systems



are perceptions of the real world that are modified and improved when faced with other perspectives, new experiences and by learning (Dahlbom and Mathiassen, 1993). It is important to remember that the systems idea is not a way of describing what exists but is a means of describing an interpretation of what exists or some thinking that is relevant to what exists. It enables the analyst to explicitly think about some real-world situation (Wilson, 1984).

Under this premise urban land management can be regarded as a complex socio-economic-political system. It is a game with many actors, all having different roles. Only when these roles are known and recognized can be the game function as it should be (Larsson 1997, p. 10). This system can be properly understood if the interaction among land management sub-systems can be taken into consideration. In other word, the main question is not to better understand the individual sub-systems (urban planning, land market, land administration, political intervention etc.), but to understand how they act together, how they are harmonized into a new identity (Erkut, 1997) which is called sustainable land management.

In land development and management process in urban fringe different actors are involved. Each actor has a *role* to play and simple set of *rules* to follow. These different roles and rules are the sub-systems of the total land management system which often lacks scientific rigor. Systems thinking tries to do enunciate the problem well, according to each actor's point of view. It provides an appropriate framework for comparing mutual interdependence of land use policies, accessibility to land and integrated land use management systems (Aribigbola 2007, p. 3).

Therefore, in this research to identify the better solution of urban fringe management problems systems thinking theory is using as it can provide a basis for clear understanding of urban land management system and provides perception of how different aspects of it affect each other.

#### **4.2.1 Soft systems approach**

A systems thinking approach exhibits two different kinds of systems approaches – 'hard systems thinking' and 'soft systems thinking' (Checkland and Scholes 1990; Checkland, 1981). The definitions of 'hard' and 'soft' centre around the assumption made about the 'systems' concept and how it is used to represent the real world (Checkland, 1981).

Hard systems approach is appropriate in addressing the problems that are clearly defined. In the hard systems approach it is assumed that reality is itself an ordered and stable system. The emphasis of hard systems thinking lies in making a clear, exact, true and objective representation of the world (Nkwae 2006, p. 57). On the other hand, soft systems methodology is effective to prove complex and messy problems where human behavior is irrational.

Soft Systems Methodology (SSM) was developed by Peter Checkland and his colleagues at the University of Lancaster (Checkland, 1981). It is a qualitative technique that can be used for applying systems thinking to non-system situation (ibid). It is a way of dealing problem situation in which social, political and human activity components exist (Fortune and Peters 1995).

According to Hirschheim et al. (1995)

*"SSM is a framework which does not force or lead the systems analyst to a particular 'solution', rather to an understanding" (p. 242).*

The process is potentially well suited to evaluate complex public service change initiatives (Rose and Haynes 2001, p. 10). It focuses on qualitative issues and also participative in nature. The system is suitable to deal with complex human situation and explicitly cope with differing actors' views (ibid). SSM was emerged in a form of seven-stage model which has been referred in figure 10. The stages are as follows -

Step 1: Learning and understanding the problem situation;

Step 2: Expression of problem situation;

Step 3: Define root definitions of relevant systems;

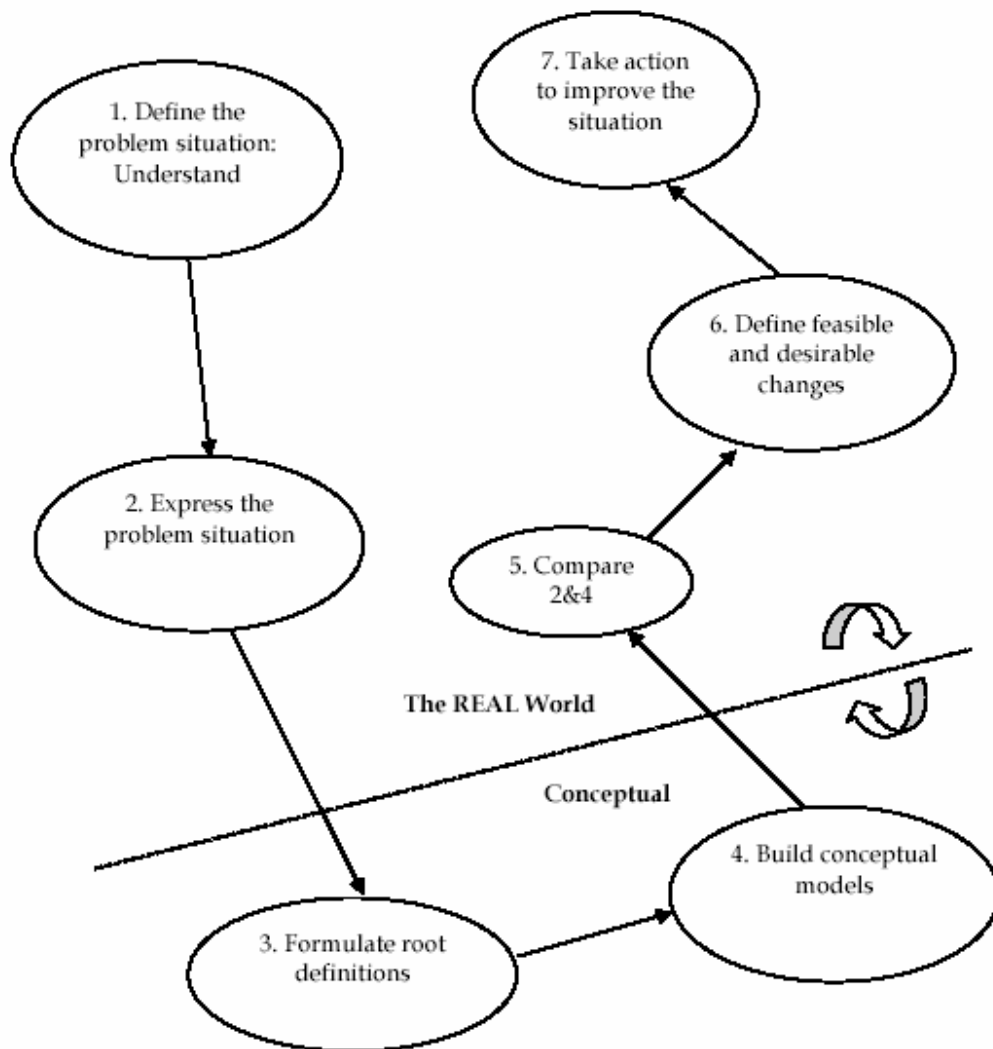
Step 4: Develop conceptual models;

Step 5: Comparison of models and real world;

Step 6: Bring systematically desirable, culturally feasible changes;

Step 7: Action to improve problem situation.

Figure 10: The seven stage process of SSM



Source: Checkland 1981, p. 163

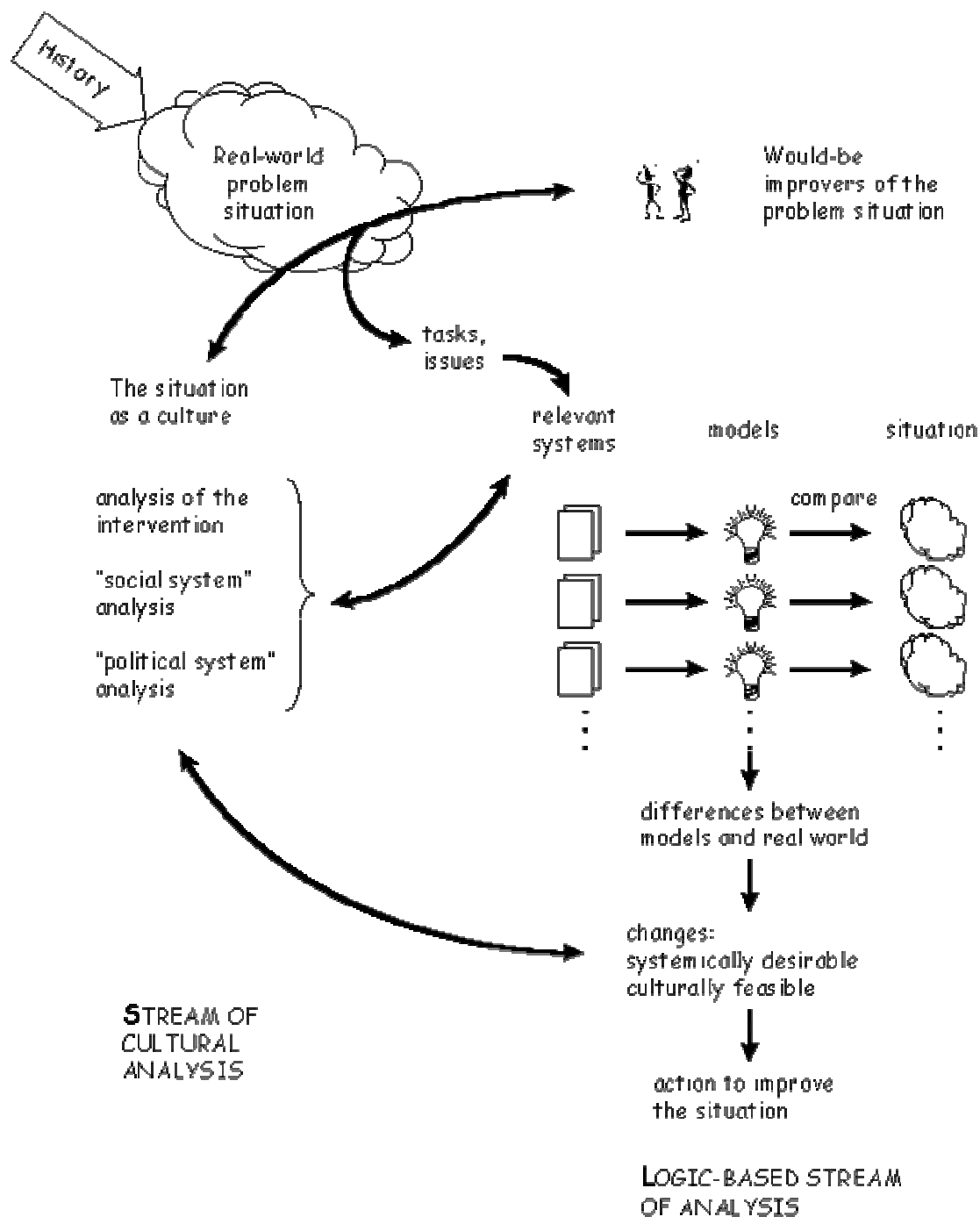
Checkland and Scholes (1990) provide an updated description of SSM based on "several hundred applications of the approach by a wide range of people and groups in many different countries" and "SSM is no longer perceived as a seven-stage problem-solving methodology" but "is now seen as one option in a more general approach" (Simonsen 1994, p. 7). The seven stage model was re-shaped into a process involving two streams of action (Checkland and Scholes 1990, p. 29) - logic based stream and cultural stream. The logic-based stream of analysis could be seen as a revised form of the seven stage SSM, described earlier, while the stream of cultural analysis could be seen as an addition to the methodology (Simonsen 1994, p. 8). In literature seven stage SSM is described as Mode 1 whereas developed form of SSM (which has two streams of action) is considered as Mode 2.

The main difference between this 'developed form of SSM' and the 'earlier classic seven stage approach of SSM', is that the step by step nature of the methodology is de-emphasized (SSM, 1998). And this developed form of SSM puts much more emphasis on the stream of cultural enquiry. The conceptual framework for this research is based on the 'developed form of SSM', since different norms, interests and roles of the actors play a very important role in the processes of urban fringe development.

The process of developed form of SSM is illustrated in figure 11. A real world problem situation is perceived to exist (SSM, 2003). This situation has a particular history, providing a richer basis for understanding the situation. Here, actors (would be improvers of the problem situation) using SSM follow two distinct, but integrated streams of analysis: a logic-based and a cultural (ibid).

Operational/logic-based approach focuses on transformation process within the system in which some entity, the 'input', is changed, or transformed, into some new form of that same entity, the 'output' (Checkland 1999, p. 33). On the other hand, the cultural stream consists of three examinations of the problem situation: analysis of intervention, socio-cultural and political systems analysis. The analysis of intervention deals with the different roles of the participants. In the social or cultural analysis roles, norms and values are determined. Finally, in the political systems analysis the political dimensions of the situation are explored (Winklhofer 2002, p. 305).

Figure 11: Two streams process of SSM



Source: SSM 2003 (adopted from Checkland and Scholes 1990, p. 29)

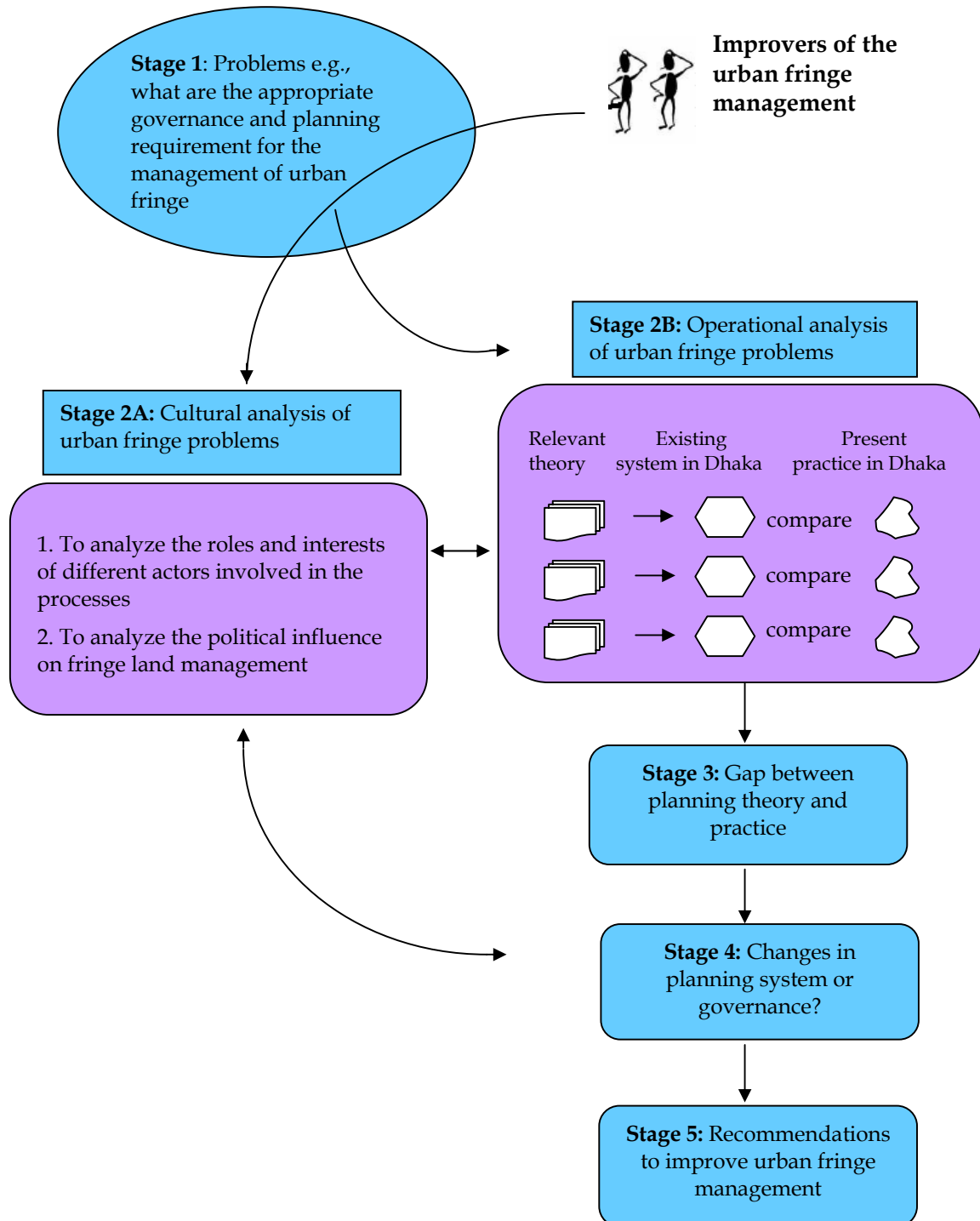
### 4.3 DEVELOPMENT OF CONCEPTUAL MODEL FOR ANALYZING URBAN FRINGE PROBLEMS

Practical experiences suggest that the problems in fringe land development and management are typically complex and multifaceted. Very few approaches could successfully address the urban fringe problems and therefore, the soft systems methodology can be considered as an important conceptual method of analyzing the aforesaid problem. The earliest attempt of using soft systems methodology has been made by McLaughlin (1971) to solve land administration problems. This was followed by Nichols (1993) on land registration case studies and Barry (1999) to analyze the extension of cadastral system in unstable informal settlements of South Africa. The recent attempts have been taken by Rakai (2005) and Nkwae (2006) for the analysis of land tenure system in Canada and customary peri-urban land problems in South Africa respectively. The soft systems methodology approach can provide a framework for exploring and understanding the urban fringe management situation as it embraces multi-level views, hierarchies, actors and variables perspective (Nkwae 2006, p. 60).

Based on soft systems approach figure 12 presents a conceptual framework for analyzing urban fringe development and management problems. In the conceptual framework little modification has been brought (from the actual soft systems theory) to make it fit for research analysis. In the figure the urban fringe development problems have been seen from two perspectives – cultural analysis stream and operational analysis stream.

- Cultural stream of analysis provides the basic of identifying the relevant issues, roles of actors and their conflicting and complementary interests in land development. The main purpose of this analysis is to reveal the current approach of land development in Dhaka and the challenging issues in the development processes. The analysis provides a wide scope to address the issues of cultural, social and political which shape social environment related to the problem situation.
- The operational stream analysis examines the gap between present spatial planning system in Dhaka and its actual practice.

Figure 12: Conceptual model based on Soft Systems Methodology



Source: Author ( adapted from Checkland and Scholes 1990, p. 29)

From the developed conceptual model therefore the research analysis can be summarized into following stages:

- **Stage 1:** To identify the present problems in urban fringe that already has been discussed in chapter one;
- **Stage 2A:** To identify the roles and interests of different actors involved in land management processes. Simultaneously also to identify how far rules and regulations and present planning system is effective in Dhaka. Influence of political decision on the development process is also an important part of the analysis;
- **Stage 2B:** To discuss the present land management theories from different points of view which can be called also theoretical orientation and to analyze present land management system in Dhaka. The rationality behind this parallel discussion is to know similarity and dissimilarity between theory and existing system in Dhaka;
- **Stage 3 & 4:** To critically evaluate the present spatial planning system in Dhaka and its actual practice. The research identifies the reasons behind the gap between present planning system and actual practice and specifies whether changes should be brought in planning system or in governing system;
- **Stage 5:** Based on analysis the research finally proposes the recommendations/options of possible changes to improve land development processes in urban fringe.

#### 4.4 CONCLUSION

In the current chapter SSM has been used to create a structured and systematic foundation to proceed the research by combining both logical based stream and stream of cultural approach. The literature review on SSM has clearly pointed out its importance in inquiring problem situation and rationale behind its application in the study of land management. This framework guides the study by helping to design not only the data collection methods, but also the subsequent analysis to help answer the research questions.



## Chapter Five: Research Methodology

*“Research is one of the ways in which the underlying code of imperialism and colonialism is both regulated and realized. It is regulated through the formal rules of individual scholarly disciplines and scientific paradigms, and the institutions that support them” - Smith (1999, p. 8)*

Research methodology is a *“structured set of guidelines or activities to assist in generating valid and reliable research results”* (Mingers 2001, p. 242). The purpose of methodology is to describe and to examine the logic of research methods and techniques, revealing their powers and limitations, generalizing successes and failures, finding domains of appropriate, and predicting possible contributions to knowledge (Krippendorff 1980, p. 11).

This chapter discusses the process and methods employed in selecting the instruments for analyzing the processes and actors behind fringe land development in Dhaka.

### 5.1 CHOICE OF RESEARCH STRATEGY AND RATIONALE

There has been an ongoing debate on the appropriateness of different approaches and methods in social research. As a matter of fact, many authors point to the heated discussions, sometimes even ‘wars’ (the so-called ‘paradigm war’), between the adherents of quantitative and qualitative research designs (Kohbacher, 2006).

Qualitative data focus on subjective experience and seek answer to questions which are not easily quantified, such as land development process. It seeks to understand the phenomena of *“real world setting [where] the researcher does not attempt to manipulate the phenomenon of interest”* (Patton 2002, p. 39). Denzin and Lincoln (1994) commented that qualitative research is difficult to define clearly, has no theory or paradigm that is distinctly its own, and does not belong to a single discipline. It consists of a set of interpretive practices and privileges, no single methodology over any other (p. 4).

*“Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry. Such researchers emphasize the value-laden nature of inquiry. They seek answers to questions that stress how social experience is created and given meaning”* (ibid).

This method is concerned with how the world is viewed, constructed and experienced by social actors. It provides access to the motives, aspirations and power relationships, existing in a societal context, that account for how people, places and events are represented (Smith 2000, p. 660). Qualitative method is used to know the geographic processes that cannot be revealed through quantitative method only (Crang, 2002).

On the other hand, quantitative research is generally characterized by a methodology of formulating hypotheses that are tested through controlled experiment or statistical analysis (Kaplan and Duchon, 1988). The underlying assumption in quantitative research is that research design should be based on the positivist approach. Positivism assumes an objective reality, which can be described by measurable properties that are independent of the researcher and research instruments (Myers, 1997).

Hopkins (2000) has defined quantitative research in different way. He states that "*quantitative research is a methodology that aims to determine the relationship between one thing (an independent variable) and another (a dependent variable) in a population*". According to Leedy et al. (2003) in the quantitative research method

- Variables are isolated and controlled;
- Standardized procedures are used to collect numerical data; and
- Statistical procedures are used to analyze and draw conclusions.

Thus, if it is compared between quantitative and qualitative method it can be said that "*qualitative research refers to the meanings, concepts, definitions, characteristics, metaphors, symbols and descriptions of things. In contrast, quantitative research refers to counts and measures of things*" (Berg 1995, p. 3).

The diversity and complexity of the study phenomenon demands an in-depth analysis of different land development processes taking place by different actors in different ways. Focusing on the subject to analysis and objectives of the research qualitative method has been selected mainly for this research but quantitative method has been also adopted to collect the supporting requirements.

## 5.2 UNIT OF ANALYSIS AND CASE SELECTION

In the process of land development in Dhaka both private and public sector are involved. Private sector, the most prominent form of institutions in the field of urban land development is divided between private individuals or households and private commercial firms though in case of fringe land development in Dhaka the private individuals/group of individuals are playing a minor role. To give the answer to the research questions the study is intended to identify the roles and interests of both public and private sector in fringe development through case study method.

Although there are numerous definitions, according to Yin (2003, p. 2) "*the distinctive need for case studies arises out of the desire to understand complex social phenomena*" because "*the case study method allows investigators to retain the holistic and meaningful characteristics of real-life events,*" such as organizational and managerial processes, for example. Given this definition it might be important to note that a case study is not a method but a research strategy (Hartley 2004, p. 323; Titscher et al. 2000, p. 43). Or, put differently, 'case study is not a methodological choice but a choice of what is to be studied' (Stake 2000, p. 435 quoted in Kohlbacher, 2006).

Key characteristics of case study research that are applicable to this research can be summarized as follows (Benbasat et al. 1987, p. 371):

- Phenomenon is examined in its natural setting;
- Data are collected by multiple means;
- One or few entities (person, group, or organization) are examined;
- No experimental control or manipulation are involved;
- The focus is on contemporary events; and
- The research addresses 'why' and 'how' questions rather than frequency or incidence.

To sum up, Hartley (2004) can be cited:

*"Case study research is a heterogeneous activity covering a range of research methods and techniques, a range of coverage (from single case study through carefully matched pairs up to multiple cases), varied levels of analysis (individuals, groups, organizations, organizational fields or*

*social policies), and differing lengths and levels of involvement in organizational functioning” (p. 332).*

Fringe land development could be considered as a real life phenomena which are being experienced everyday and regulated by different factors. Actors’ motivations and land development and management have actually cause-effect relationship. Therefore, through the case study method the specific contexts on cause-effect relationships can be analyzed and detailed investigations on the phenomenon can be carried out.

The research objectives demanded a careful selection of case study areas. In order to identify, qualify and select the case study areas from which the answers of the research questions can be drawn a reconnaissance survey was conducted. The issues under investigation during reconnaissance survey have included land use pattern, economic activities in area, presence of intervention in land management and actors behind land development. From reconnaissance survey to determine the case study areas the following selection criteria have been formulated through which the research objectives are fulfilled and also represent the actual scenario of urban fringe development in Dhaka. The main selection criteria of case study area are:

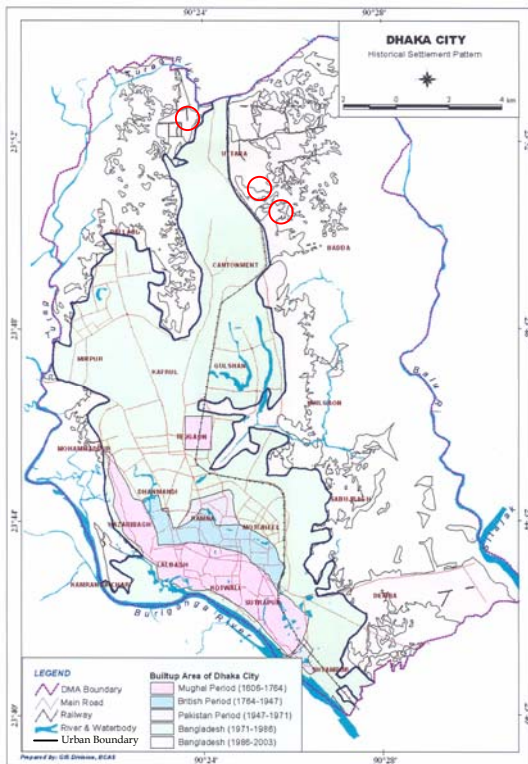
- Land development in urban fringe area (the term urban fringe in global context as well as Dhaka context has been discussed in chapter two);
- Represents large number of actors involved in development process; and
- Major functions of the area such as economic activities.

Finally, in order to gain the understanding of how land is developed by different actors and to know how far spatial planning is incorporated with the process of development the following case study areas have been selected:

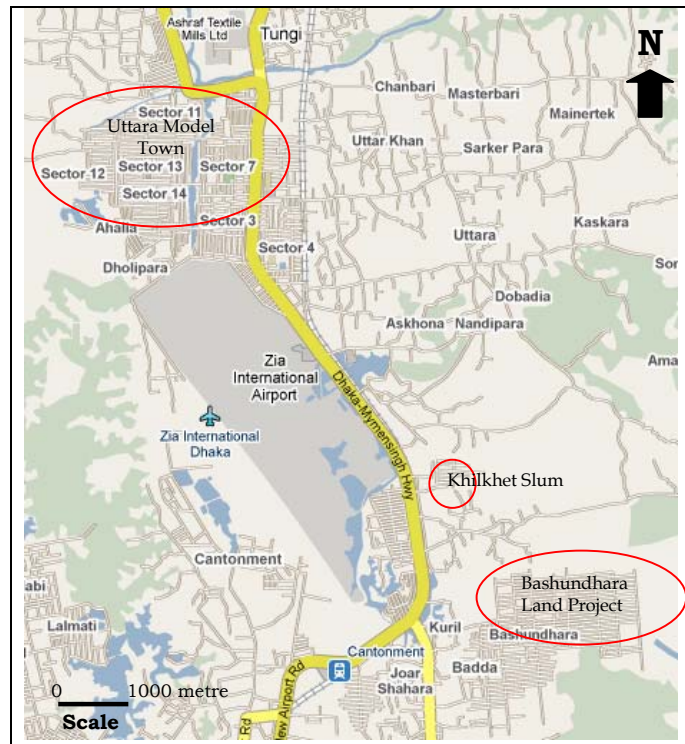
1. Land development by RAJUK, example of Uttara Model Town,
2. Land development by private commercial firm, example of Bashundhara Land Project developed by East-West Property Development (Pvt.) Limited,
3. Informal development of private land, example of Khilkhet Fakir Bari slum area.

RAJUK (Capital Development Authority) is a public body entrusted with the responsibility of planning and controlling of urban development and growth of Dhaka. Uttara Model Town is one of the successful land development and housing projects of RAJUK which has been taken as one of the case studies.

Map 04: Location of case study areas



Source: Author (based on UNEP, 2005)



Source: Google Map

The East-West Property Development (EWPD) (Pvt.) Ltd. is one of the largest real estate concerns in Bangladesh launched initially as a land developer. As a case study the research is focusing on Basundhara Land Project which is one of the biggest projects of EWPD.

Khilkheth Fakir Bari slum area is a privately owned land which has been developed informally without any government approval and following planning regulations.

Table 03: Significance of the case study areas

Name of case study area	Developer	Locational Characteristic	Land Use Regulation
Uttara Model Town	RAJUK	Centre of economic activities in urban fringe and posh residential area	Public regulations
Bashundhara Land Project	East-West Property Development Ltd.	Posh residential area in urban fringe	Private regulations
Khilkheth slum	Land owner	Area for lower income group	No regulation

Source: Author

### 5.3 DATA COLLECTION

Stake (1995) and Yin (1994) identified different sources of data in case studies. The following is the list of major sources, but not limited to that which have been reflected from their research (Tellis, 1997):

- Documents
- Interview
- Archival records
- Direct observation
- Participant-observation
- Physical artifacts

The research objectives and questions demanded a data collection strategy that combines different methods, especially for data verification. Keeping in mind the research themes, time constraint and other limitations first two (documents and interview) from the above list have been selected for data collection.

### **5.3.1 Documents**

Secondary data sources of information on land management in urban fringe in Dhaka are very scanty. Even then, the available limited number of studies on fringe development has been reviewed. This knowledge was also helpful in formulation of the research questions and to give support to a certain part of research analysis. Besides relevant previous research works secondary data sources mainly include the following:

- Official records from RAJUK related to land development in case study areas;
- Official documents regarding land development collected from private developers;
- Documents on existing spatial planning (e.g. Dhaka Metropolitan Development Plan);
- Existing rules and regulations regarding land development and urban growth such as 'Town Improvement Act 1953', 'The Dhaka Improvement Trust (Allotment of Land) Rule 1969', 'Private Housing Project Land Development Rule 2004', 'Dhaka Mohanagar Building Construction Rule 2007', 'Acquisition and Requisition of Immovable Property Ordinance 1982', 'Land Acquisition Act 1989', 'Wetland Protection Act 2000' and Housing Policy 1993; and
- Newspaper articles collected throughout the research period to keep update the research about current events and policy measures in land development sector.

Simultaneously census data, organizational records, journals and text books have been used as secondary data sources.

### **5.3.2 Interviews**

Interview is one of the most important sources of case study information. Moser and Kalton (1971, p. 271) have defined interview as a conversation between interviewer and respondents with the purpose of eliciting certain information from the respondents. There are several forms of interview that are possible: open-ended, focused, structured or semi-structured. For this research semi-structured interview has been chosen.

Semi-structured interview is suggested by Scheele and Groeben (1988, quoted in Flick 1998, p. 82) in their methods for reconstructing subjective theories. The 'subjective theory' refers to the fact that the interviewee has a complex stock of knowledge about the topic under study. This knowledge includes the assumptions that are explicit and immediate and which he or she can express spontaneously in answering an open question (ibid).

Under semi-structured interview the main informants are land buyers, land developers (public and private sector) and the present residents of the case study areas. The intension is to know the motivation and roles of different interest groups. Also, discussions with various authorities dealing with land development issues have been conducted. In both cases semi-structured interview has been chosen following the concept of qualitative analysis.

The construction of questionnaire and semi-structured interview is very much research objectives oriented and the questions are generally left open-ended. They are primarily questions of 'how' and 'why' (Annexure B). The questions are sufficiently broad to allow relevant factors that must be researched and focused to give answer of the research questions.

### **5.3.2.1 Household survey in case study areas**

Household survey provides land related information in case study areas. It includes total 96 interviews in three different case study areas. The contents of the survey include variable on the following subjects:

- Land ownership information
- Demographic structure of the households (mainly for slum dwellers)
- Income and occupational characteristics
- Quality of living standard (mainly for slum dwellers)

The survey also provides information about land purchasing process and constraints the land owners faced at the time of purchasing/taking possession of land. In Uttara Model Town and Bashundhara Land Project area the household survey was conducted only for the landowners.

From Uttara Model Town (2<sup>nd</sup> phase) 50 households, from Basundhara Land Project 35 households and from khilkheth slum area 11 households have been interviewed which



represents almost 5 percent, 10 percent and 15 percent of total households respectively. The sample size has been selected depending on resources, time, and present number and nature of households in the case study areas. In view of data collection method, these sample sizes are considered sufficiently representative. Sampling has been done in random basis with the help of map of case study areas.

### 5.3.2.2 Key informants

Key informants have provided useful and insightful information regarding land development and existing planning system. Persons in relevant positions in planning agencies and development authorities have been consulted as key informants. Interview of private developers has been also taken under this category. Here, it should be noted that though Bashundhara Land Project developed by East-West Property Development Ltd has been considered as a case study to know the process of land development by private sector, to cross check the information key informant interview has included also some other private land developers as respondents who are also working in urban fringe. The interview of private land owner (who has developed her land informally) has been also taken.

Table 04: Data sources and number of respondents

Interviewer	Number	Case study area/organization
Land owners	50	Uttara Model Town
	35	Basundhara Land Project
Slum dwellers	11	Khilkheth Fakir Bari slum
Informal land developer	1	Khilkheth Fakir Bari slum
Officials in private land development organizations	2	East-West Property Development Ltd.
	1	Eastern Housing Ltd.
	1	Sagufta N.M. Housing Ltd.
Urban planners and project director of Uttara Model Town	4	RAJUK

Source: Author

The following topics were covered in each in-dept interview:

- Strategies concerning land development;
- Intension and motivation;
- Conformation/violation of rules and regulations;
- Constraints at the time of development;
- Role and limitations of present spatial planning; and
- Role of government and political leaders.

#### **5.4 DATA RELIABILITY AND VALIDITY**

literature review did not find any pre-established standards in qualitative research to ensure the quality of the data analysis and the accuracy of the findings. But different measures can be taken to achieve this accuracy. In this respect Patton (2001) states that validity and reliability are two factors which any qualitative researcher should be concerned about while designing a study, analyzing results and judging the quality of the study.

In general, 'reliability' refers to whether a particular research technique will yield the same results each time if applied repeatedly to the same object (Babbie 1992, p. 132) whereas 'validity' is best available approximation to the truth or falsity of a given inference, proposition or conclusion (Cook and Campbell 1979, p. 37). According to Kirk and Miller (1986) validity is the degree to which the findings of survey are interpreted in a correct way and reliability is the degree to which the findings of research are independent of any accidental circumstance (p. 20).

For the purpose of improving validity and reliability of the research the strategy of triangulation has been followed. According to Yin (1984) by using multiple sources of evidence (triangulation<sup>2</sup>) researcher can address an extensive range of historical, attitudinal, and behavioral issues. To get the in-dept information about the cases, a number of data collection methods have been adopted discussed earlier in Section 5.3. Available secondary data on the same issues have been also analyzed to fulfill the criteria of

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<sup>2</sup> Traingulation is a mean of using several kinds of methods or data, including using both quantitative and qualitative approaches (Patton 2002, p. 241). According to Mathison (1988), 'Triangulation has risen an important methodological issue in naturalistic and qualitative approaches to evaluation [in order to] control bias and establishing valid propositions because traditional scientific techniques are incompatible with this alternate epistemology' (p. 13).

triangulation. To avoid the problems associated with a single-discipline focus, detailed literature review from different relevant disciplines has been done.

Besides following the strategy of triangulation during the research data collection and data analysis were conducted together to revise the data collection and data analysis processes in order to get rich insights. Yin (1998) states "*Case study investigators practice 'analysis' during data collection*" (p. 250). The research also reserved the provision of second fieldwork to overcome the gap which raised at the time of preliminary data analysis.

### 5.5 DATA ANALYSIS, CONCLUSIONS DRAWING AND RECOMMENDATIONS

Data analysis is an important stage of a research as it provides a foundation of drawing conclusions of the research and thereafter recommendations. According to Babbie (2001), "*we discover and substantiate the patterns and relationships, test our expectations and draw inferences that make our research fruitful*" (p. 397). Data analysis actually is a very complicated part and it requires to accomplish examination, categorization, tabulations and recombinations of collected data to address the objectives of the study. According to Miles and Huberman (1994, p. 10) data analysis consists of three concurrent flows of activity: data reduction, data display and conclusion drawing/verification.

**Data reduction** is the process of selecting, focusing, simplifying, abstracting, and transforming the collected data that appear in a written-up field notes or transcriptions. Data reduction continues after field work until a final report is completed (p. 10).

**Data display** is an organized, compressed assembly of information that permits conclusions drawing and action (p. 11). Generally the researcher uses matrices, graphs, charts, tables, etc to organize the data in more visible way which makes clear what is happening and what to take action.

**Conclusions drawing /varification** involves the interpretation and drawing of meaning from the analyzed data.

Miles and Huberman (1994) explain the relation between data display and analysis as mutually influential:

*'Vaid analysis is immensely aided by the data display that are focused enough to permit viewing of a full data set in more location and are systematically arranged to answer the research questions at*

*hand..... Display data and the emerging writing text of the researcher's conclusions influence each other. The display helps the writer to see patterns, the first texts make sense of the display and suggests new analytic moves in display data, a revised of extended display points to new relationships and explanations, leading to more differentiated and integrated text and so on. Display beget analysis, which then beget more powerful, suggestive display' (p. 75).*

The techniques discussed were used to guide the analysis of collected data. The findings are presented in text, tables, figures, quotes and maps. These illustrations are only to supplement the discussions. The analysis of data has mainly focused on two different issues according to conceptual framework. First, roles of different actors in land development processes and their interests. Second, gap between existing planning regulations and present practice.

In the analysis section there must first be an analytic strategy that will lead to conclusions (Tellis, 1997) and further recommendations. To fulfill this requirement the research has followed the principles that have been provided by Yin (1994) to encourage the researchers to make every effort to produce an analysis of the highest quality:

- To show that the analysis relied on all the relevant evidence;
- To include all major rival interpretations in the analysis;
- To address the most significant aspects of the case studies; and
- To use the researcher's prior, expert's knowledge to further the analysis.

Finally based on data analysis and findings the research develops a theoretical model and thereafter based on the model draws practical solutions specifically for Dhaka.

## **Chapter Six: Institutional arrangements and development plans in Dhaka**

### **6.1 INSTITUTIONAL ARRANGEMENTS FOR URBAN DEVELOPMENT**

There are various institutions belong to different ministries are responsible for planning and development of urban areas. For example, the National Economic Council (NEC), the Planning Commission (PC), the Urban Development Directorate (UDD) and the Board of Investment (BOI) are the national agencies which are concerned about urban development. NEC is the highest political authority takes decision on national economic planning issues including investment in town and cities. The PC is the central planning organization advices NEC and examines the submitted development projects from all development agencies throughout the country. The UDD prepares land use plans for all towns except for four largest cities which have their own specialized authority to undertake such plans. UDD also approves and guides local government in undertaking area plans and other land development activities. The BOI is responsible for the approval of industrial projects.

Special agencies such as Rajdhani Unnayan Kartripakkha (RAJUK) for Dhaka, Chittagong Development Authority (CDA), Khulna Development Authority (KDA) and Rajshahi Town Development Authority (RDA) are responsible for development of concerned cities and to provide essential services. Local agencies like Dhaka City Corporation (DCC) are concerned with physical development within its jurisdiction.

These multiple agencies often generate overlapping of functions due to lack of coordination among the concerned agencies. These institutions are generating plurality in the planning and development approach and this pluralism results in uncoordinated efforts which in fact create more problem than solve (Mohit 1992, p. 101). It has been argued that the present institutional framework and capacities of the institutions in the urban sector are major constraints to urban development (World Bank 1981, p. ii). Islam et al. (2000) noted that the major hindrance to good governance at the city level is lack of coordination among various agencies and elements of governance.

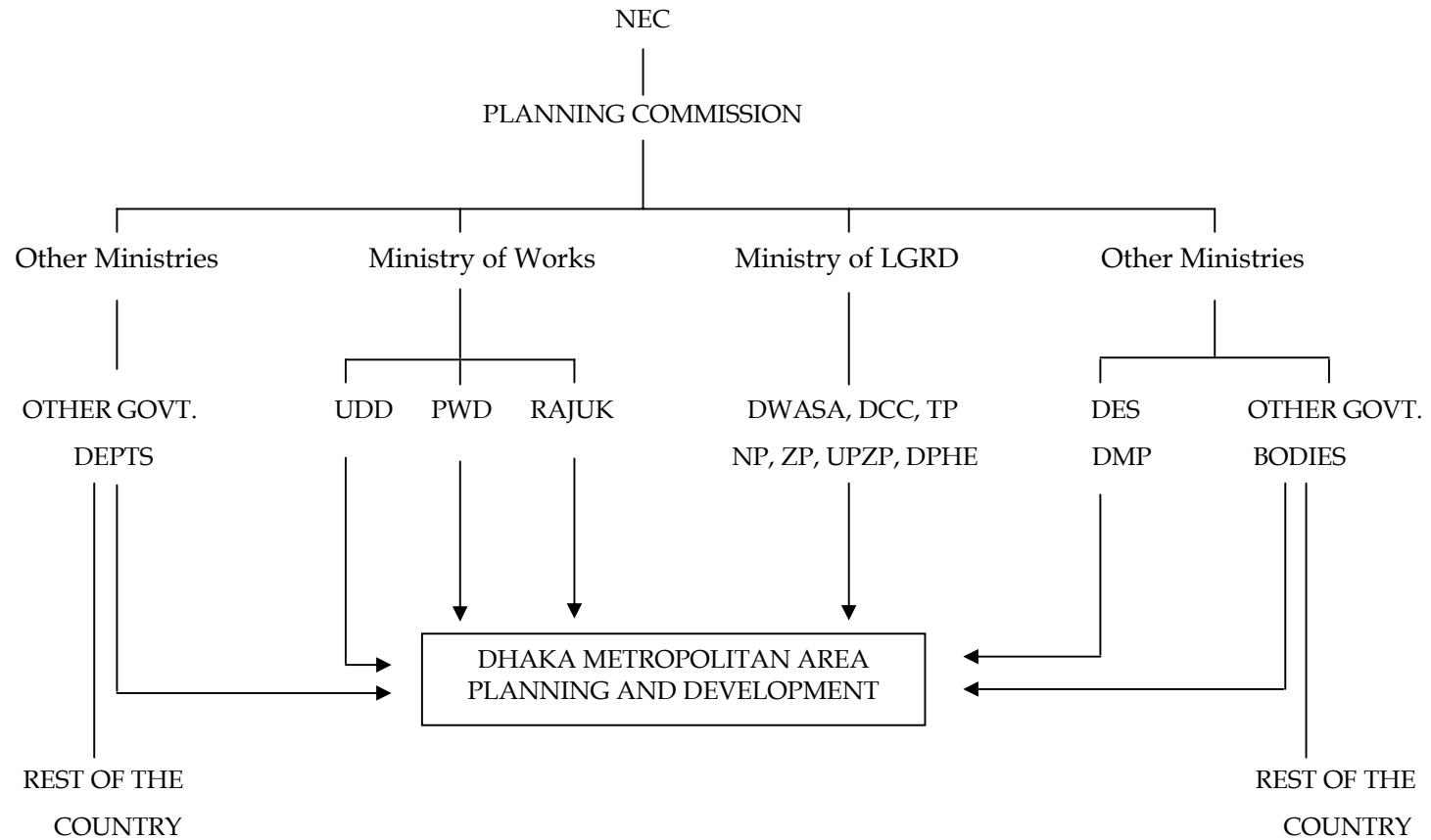
The public sector controls, uses and develops urban land through the regulatory power and compulsory purchasing power. The decision making in this sector is guided combinedly by

politics, administration, legislations and to some extent by market system. The objective of the government sector control is to benefit the community and to promote public interest but in practice it is only a part of the community who becomes benefited. The public sector hardly serves the target group (Shafi, Murshed and Nazem 1992, p. 110).

In Dhaka a number of public sector or government agencies have participated in the land development within as well as outside the city. The prominent agencies are Public Works Department (PWD), Urban Development Directorate (UDD), Housing and Settlement Directorate (HSD) and RAJUK. PWD participates in urban land management. It is a construction agency which builds public requirements. HSD is responsible for land management and provides housing for lower income group. RAJUK is playing the most important role in land development. Mohit (1992, p. 101) notes that in land development activities in Dhaka Metropolitan Area about 42 agencies are directly or indirectly involved. Among these 42 agencies, 4 are national level agencies, 28 sectoral, 5 special and another 5 operates at local level.

Institutional arrangement in Dhaka is characterized by the absence of peoples' participation, lack of internal cooperation and weak governing system. Especially RAJUK follows top down approach excluding peoples' participation in decision making process and lacks transparency. Poor human resource is another problem for most of the public institutions. Islam et al. (2000, p. 156) point out that almost all public institutions and bodies have been overwhelmed by poor human resource intake, inappropriate assessment, a fragile or no training system, poor enthusiasm of the elected legislative body, officials and employees, lack of service orientation and weak institutional support system.

Figure 13: Involvement of various agencies in planning and development of DMA



Source: Mohit, 1992

Table 05: Activity and role set matrix of functional overlapping of DMA

Activity Institutes	Land & Housing	Road Const.& Maint.	Traffic & Trans	Markets & Shops	Parks	Industry Dev.	Town Plan.	Public Utilities	Flood Prot.	Total
RAJUK	√	√		√	√	√	√			6
DMC		√		√	√				√	4
HSD	√	√		√		√	√			5
PWD	√				√		√			3
UDD							√			1
DWASA								√		1
PHE								√		1
HC	√						√			2
HE	√						√			2
DES								√		1
TITAS								√		1
T & T								√		1
ZP		√								1
UPZP		√		√		√				3
DC	√									1
R & HD		√								1
BRTC			√							1
DMP			√							1
C&B		√		√	√					3
BOI						√				1
BSCIC						√				1
BWDB									√	1
HBFC	√									1
BADC				√						1
BPC					√					1
DU	√						√			2
BUET	√						√			2
NP		√		√	√					3
TP		√		√	√					3
<b>Total</b>	9	9	2	8	7	5	8	5	2	55

Source: Mohit, 1992



## 6.2 LAND USE PLANNING IN BANGLADESH

Though land use planning and regulations are important tools for efficient land management, Dhaka as well as whole Bangladesh lacks efficient land use planning and enforcement of regulations for proper urban development. Therefore, most of the lands in big cities have been developed in spontaneous manner.

The process of land use control started with the adoption of Town Planning Act, 1953 through master plan approach. Since then, the control has been enacted in the major cities such as Dhaka, Chittagong, Khulna and Rajshahi. Pourashava (Municipality) Ordinance, 1977 empowered all other municipalities to prepare master plans for their respective towns. The broad objective of this plan is to guide the development of the city for a specific time period and to promote the land use pattern efficiently to fulfill the objectives of spatial planning. However, the approach could not bring tangible results due to the fact that city grew much faster than the master plan could foresee (Islam 1998a, p. 39).

To guide and control the city growth development plans, development permissions, zoning instruments and approval of building plans and construction are used. Section 73 of the Town Improvement Act, 1953 empowered RAJUK to make zonal plans with regard to any area under its jurisdiction. Certain area can be reserved for open spaces and industrial and residential developments under such zoning regulation. Any violation of zoning regulations imposed by RAJUK is liable to legal action. But in reality, the authority does not have clear cut zones of development nor such restrictions have been strictly enforced (Islam 1998a, p. 46). Sub-division of land is another regulatory measure which is only imposed in residential, commercial and industrial area developed by city development authority in Dhaka and Chittagong. But these authorities do not have any legal authority for imposing restrictions on land sub-division (ibid). Chowdhury (1984) has identified several reasons for such unregulated land uses (quoted in Islam 1998a, p. 39). Among them lack of updated or a second master plan, insufficient manpower to enact, lack of control and supervision on the regulations are mostly remarkable.

### 6.3 DEVELOPMENT PLANNING IN DHAKA

Spatial development plans were prepared for Dhaka Metropolitan Area in 1959, 1981 and in 1995 to ensure proper development of the city and control haphazard urban growth. But these plans were not that much effective. There was no mention of special conditions of the fringe areas in the first two development plans. In the third plan, unplanned development with deficiency of urban infrastructures and facilities were mentioned but in stead of suggesting measures to stop harmful urban sprawl, proposals were made for speedy provision of necessary infrastructures and services. The decision helped to expand the unauthorized urban sprawl further (Rahman et al., 2008). In the following the overview on above noted plans has been given (DMDP, 1995).

#### 6.3.1 Master Plan 1959

The first Master Plan of Dhaka was prepared in 1959 by a British firm – Minoprio, Spencely and Macfaraine under the technical cooperation of the Colombo International Plan Scheme. The plan covered 290 sq. miles with a target population little over 1 million assuming an average annual population growth rate of 1.75 percent in the city areas. Expansion of city was largely predicted towards the north leading Mirpur and Tongi. The plan in general suggested a broad planning principle and zoned the urban area accordingly for various activities. Although the plan was prepared for a period of 20 years (1959-79) time but it lasted almost doubled. Moreover, its all development proposals were not fully implemented for various reasons. The two major reasons for non-implementation of development proposals are:

a. Less importance of spatial planning at policy level

At policy level spatial planning never received importance which has been reflected through little fund allocation and weak institutional support. Moreover, the Town Planning Department of RAJUK always lacked manpower to undertake any plan based projects and their implementation.

b. Rigidity of the Master Plan

Master Plan is a rigid concept. Therefore, to bring any modification in the plan it requires to follow a lengthy process. For master plan 1959 though many initiatives were taken to amend the plan but at many stages it lost its continuity. As a result project could not be approved for amendment and further implementation. Therefore, the master plan lasted more than 35 years without any review though it was supposed to be reviewed in every 5 years.

### **6.3.2 Dhaka Metropolitan Area Integrated Urban Development Plan (DMAIUDP study)**

The DMAIUDP study, prepared in 1981, evolved from a series of report and missions concerned with storm water drainage and flood protection. The study was funded jointly by ADB and UNDP. The ADB strongly recommended that further flood protection investment should await the outcome of a broad multi-sectoral strategic study to evaluate metropolitan planning options.

The DMAIUDP Study argues a coherent case for a strategy of long-term northern expansion, to accommodate an urbanized population of approximately 9 million by the year 2000. The strategy has partly been undertaken by events, however, a number of DMAIUDP study assumptions have proved accurate and the study still provides a comprehensive and widely used and useful database. It remains a lucid statement of the urban development issues facing Dhaka.

### **6.3.3 Dhaka Metropolitan Development Plan (DMDP), 1995-2015**

For development of the plan, a project title 'Preparation of Structure Plan, Master Plan, and Detailed area plan - Metropolitan Development and Plans Preparation and Management in Dhaka' was implemented with joint funding from GOB and UNDP/UNCHS (HABITAT) by a Consortium of International firms- Mott Mac Donald Ltd. and Culpin Planning Ltd. in association with local firms - Engineering and Planning Consultants Ltd., Consociates Ltd. and Development Administration Group. The project address Dhaka's urban planning issue and sub-urban. The development plan (1995-2015) therefore is comprised of the three components:

- Structure Plan (1995 - 2015)
- Urban Area Plan (1995 - 2005)
- Detailed Area Plans

DMDP provides a long term strategy for 20 years for the development of the greater Dhaka sub region. The geographic boundary of the plan consists of 1528 sq. km that lies in 3 districts that is Dhaka, Narayanganj and Gazipur covering of 5 municipalities namely Savar, Narayanganj, Kadamrasul, Gazipur and Tongi and the area of Dhaka City Corporation. The plan provides planning guidelines, techniques, standard, development control procedure and provisions of physical and social services for Metro Dhaka's planning and development.

### 6.3.3.1 Structure Plan (SP)

The DMDP Structure Plan provides a long-term strategy for 20 years (1995-2015) for the development of the greater Dhaka sub-region. For the purposes of these plans and reports the term 'Metro Dhaka' refers to the 590 sq. miles administered by RAJUK under the Town Improvement Act 1953.

The DMDP Structure Plan consists of a written report and policy document with various supportive maps in appropriate scale. The report identifies the order of magnitude and direction of anticipated urban growth and defines a broad set of policies considered necessary to achieve the overall plan objectives.

The functions of DMDP structure plan are:

- Interpret national policies;
- Establish aims, policies and general proposals to guide metropolitan Dhaka's long term growth and development;
- Provide a framework and mechanisms necessary to ensure all public and private sector agencies coordination and prioritize their respective development planning and investment programmes and decisions within the metropolitan area in particular, phasing of development.

The DMDP Structure Plan both in its preparatory and implementation stages aims to provide a coordinated and consistent framework for the development of the plans and programmes of all public and private sector agencies within the metropolitan area and to:

- Bring the main planning issues of the metropolitan area to the attention of the Government, other public and private sector agencies, vested interest group and the public at large. The broad message and strategic intent of the Structure Plan will need wide dissemination;
- Provide the framework for local plans. The Structure Plan will set the context for the preparation of Detailed Area Plans and Local Plans as appropriate, including the identification of development themes and specific areas in need of immediate/short term action;
- Provide guidance for development management. The Structure Plan will provide the basis for development management at the broad metropolitan level, via management

policies for items of strategic and structural importance. The DMDP Structure Plan does not include detailed development management policies of standards.

Spatial development strategies of Dhaka Structure Plan are:

**Consolidation:** New land delivery and development mechanism coupled with flood land with secure tenure in accessible locations is encouraged.

**Community Based Development Initiatives:** It recognizes the increasing importance of community-led initiatives and participation in the land development process and commits itself to the application of community-based land delivery mechanisms which gives priority to meet the needs of the poor.

**Fringe Area Growth Acceleration:** To initiate and co-ordinate a range of measures aimed at stimulating. To accelerate the rate of development in the designated areas of urban fringe.

**Priority Satellite Town/Dhamsona:** To promote Dhamsona in the Northwest of the plan area as the priority location for dispersed satellite town development.

**Accelerated Development:** Under this strategy the targeted area would be existing fringe areas, i.e., area mainly at the periphery of the more established area where conversion from rural land occurred during 1980s.

**Long-Term Satellite Town:** It defers any decision to proceed with government-initiated development at the remaining satellite town like Gazipur, Savar, Kaliganj and Purbachal (Yusufganj).

**Planned New Area Development:** Structure Plan recognizes that new area development on a scale and at a rate which will ease pressure on the existing urban areas requires the adoption of fundamental policy changes and the adoption of new approaches, techniques and mechanism in public and private sector initiatives.

**Long Term Planned New Area Development Opportunity:** With the most growth having been focused on Dhaka's main urbanized area and directed towards new priority areas.

**Rural and Special Areas Policies:** The policies on the treatment are essentially one of conservation whereby the function performed by the area requires a degree of protection from urban impacts via policies and some basic rules and regulations.

**Infrastructure Consolidation:** At the level of the Urban Area Plan and particularly in the course of Local Plan preparation, the authority will ensure that infrastructure consolidation programmes.

### **6.3.3.2 Urban Area Plan (UAP)**

DMDP Urban Area Plan provides an interim mid term strategy for 10 years (1995-2005) covers the urban areas within metro Dhaka management areas. As an interim plan, the UAP is intended to be gradually superseded by the various Detailed Area Plans which cover specific geographic sub areas of the city. The DMDP Urban Area Plan has several parts consisting of an explanatory report, resource maps, interim management report, interim planning rules, urban area plan maps and a multi-sectoral investment programme.

### **6.3.3.3 Detailed Area Plan (DAP)**

DMDP Detailed Area Plan provides more detailed planning proposals for specific sub areas compliant with Structure Plan and the Urban Area Plan. The Metro Dhaka Structure Plan is subdivided into 26 strategic /Spatial Planning Zone (SPZ). Until the DAP is prepared for a sub area, land use magnitude functions will be exercised through the policies, guidelines and rules found in the Structure Plan and the Urban Area Plan.

These Detailed Area Plans provide more detailed planning proposals for specific sub-areas of Dhaka Metropolitan areas. Objectives of the DAP can be summarized through the following points:

- To provide a detailed analysis of the area;
- To provide a reference document for land management activities, data management and dissemination. This will provide land use maps and information at Mouza level (parcel) in a professional way;
- To provide a programme for public sector investment aiming at the implementation of the plan;
- To suggests control and guidance for private sector land use and development in the area of the plan; and
- To provide planned development to ensure sustainable environment for DAP areas with the cooperation of other development agencies.

### 6.3.4 Present situation

The Detailed Area Plan was scheduled to be completed within one year of the formulation of DMDP. But the city developed authority has failed to do it even after 11 years. RAJUK spent almost ten years to initiate DAP due to connivance between RAJUK and private developers, mistakes and suffering from indecisions to assign DAP to the consultancy firms and bureaucratic procedure. Government's reluctance also played a negative role here. In 2004 with a two years time limit RAJUK assigned four consultancy organizations to prepare the Detailed Area Plan dividing the city into five divisions. Total preparation of DAP is being working in five working phases – i) draw up the inspection report, ii) study area demarcation report, iii) physical feature survey, iv) topography survey, socio-economic survey, transport system survey and public participation and v) interim report and final report. The work was scheduled to end in July 2006. But they have totally failed to do it timely. Lack of technical feedback on time, competent manpower and coordination between RAJUK and consultancy firms are the main reasons behind this delay. Therefore, the question of success or failure of DMDP does not arise because it has been delayed for 11 years and yet to be finished.

RAJUK is now aiming to finalizing the documents shortly and the consultancy firms have submitted the draft proposals. They have set officially two months for public hearing and expert consultation though the terms of references of DMDP obliges to consult with interested parties, local communities and stakeholders at all stages of preparing Detailed Area Plan. The private consultants who have been assigned to prepare Detailed Area Plan have neglected this obligation. The consultancy firms argued that they have enough experts to draw up the plan and that's why they don't need to consult with local community. As a result, the public is unaware about Detailed Area Plan. Presently RAJUK is saying that they would try to incorporate the objection and observation from the public and experts to reasonable extent. Public consultation at this stage within this limited time how far will be effective that is still a question. Moreover, it is very normal that there will be a contradiction and anomalies in the DAP proposal being framed after 11 years of formulation of DMDP. There are many flaws in the submitted maps and survey reports. For example, DAP authorities show that the said earth filled areas as developed land and not as they originally had in the Structure Plan. 0.11 acres of land has been shown for 14 private universities while minimum requirement for a private university is one acre (Ali, 2008). Bangladesh Institute of Planners (2008) also highlighted some shortcomings. For example, according to DMDP, there are two categories of Flood Flow Zones: (i) Main Flood Flow and (ii) Sub-flood Flow Zone. But in the proposed DAP there is no category as 'sub-flood flow zone'. This change of land-use category is a gross violation of DMDP. Again,

according to DMDP Structure Plan, 'agricultural land' is classified into two categories: 'High Value Agricultural Land' and 'Agricultural land'. But DAP proposed only one category of agricultural land as 'Agriculture with Rural Homestead'. Also, DAP has failed to address the housing requirements of poor and middle income groups. Instead it has encouraged development of high income residential area of Gulshan by acquiring low-middle income area of BaddaMerul which is actually giving support to vested interested groups and land speculation. Proposed DAP has accommodated also illegal projects by changing land-use categories specified in the DMDP. In this situation if DAP is implemented with these serious flaws, it will have a terrible impacts on the city life. Considering this situation on January 01, 2009 government has formed an expert committee to review the proposed DAP with the extension of six months more to finalize DAP. Here, there is a serious doubts whether DAP will be finalized within the given period or not because the previous experiences say that the concern body never been able to complete anything within deadline.

### **6.3.5 Development control<sup>3</sup>**

#### **6.3.5.1 Zoning**

Dhaka City does not enjoy any clear zoning policy, or at least there is no proper implementation of the concept of zoning. The 1959 Master Plan had kept provisions for residential areas with some commercial and institutional uses. The residential areas were identified with income groups and density standards. Gradually most of the residential areas have become mixed use areas and also to some degree mixed income areas too. Some areas were zoned as low income group area in the 1960s, but some of these also got transformed into middle income or became mixed middle and low income group areas. Settlements or neighborhoods of the poor (slums) are not normally recognized by RAJUK and therefore are absent in their planning maps. In the absence of any strong zoning regulation or restrictions, the poor enjoy some degree of freedom in being able to locate themselves at various points in the city. DMDP plan has not been also accompanied by any zoning plan or map. It may only possible after Detailed Area Plans are completed.

#### **6.3.5.2 Subdivision**

In Dhaka, RAJUK plans and controls residential and housing development. All plans must obtain permission from RAJUK. This is applicable for both individual home builders as well as for large and small real estate and housing developers. 'residential estates', 'model towns', 'new

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<sup>3</sup> This part has been adapted from World Bank (2007).



towns' or individual buildings all come under the Building Construction Act and Town Improvement Act, Set back rules etc. and the DMDP (1995- 2015). RAJUK rules stipulate that all residential estates should develop only up to 65 percent of the land for housing purpose and the rest would be used for roads, open space, community purpose and other uses. However, in reality the private developers hardly comply with the rules and RAJUK is not able to fully monitor these. For individual home builders obtaining building permission from RAJUK is a tedious and often unpleasant experience, because of red tape and corruption.

### **6.3.5.3 Density control**

The 1959 Dhaka Master Plan had introduced density control in residential areas. However, the new plan (1995-2015) has no such control. As a matter of fact, RAJUK itself keeps or changing or revising density standards even in its own planned areas every few years, disregarding capacity of utility services, roads, and social or community needs. Government planned squatter resettlement projects have implemented with the density of 600 persons per acre in Dhaka. Environmental Pollution Control of Bangladesh Government has approved the Environment Conservation Act in 1995 and Water-Bodies and Wetlands Protection Act in 1999. Both these legal instruments have implications for housing development. But RAJUK itself flouts its rules from time to time by filling in water bodies to build houses for the influential people. Other government agencies are also seen to be disregarding rules and legal obligations. Private real estate companies violate the act unscrupulously. All major housing or residential development projects are obligated to obtain 'No Objection Certificates' from the Department Environment before getting permission from RAJUK. They normally manage such permission without much problem.

## **6.4 CONCLUSION**

Though the importance of spatial planning cannot be ignored as this is the essential part of sustainable land management, this sector in Dhaka has not received that much attention till now. The development plans in Dhaka are always remain inappropriate and ineffective because of inefficiency of RAJUK, coordination problem among concern agencies, inadequate resources and manpower, government reluctance, corruption and bureaucracy. 'Extension of time' has been a common phenomenon in preparation and implementation of any plan. Therefore, till now Dhaka City has neither any clear zoning policy nor any concrete master plan. This situation leads to develop the city in sprawl manner with low services and facilities, some times without having any service and facility.

## **Chapter Seven: Fringe development – Role of RAJUK**

### **7.1 OVERVIEW OF RAJUK**

RAJUK is an autonomous body under the Ministry of Housing and Public Works. It is the successor organization to Dhaka Improvement Trust (DIT) which came into existence in the year of 1956 under the Town Improvement Act, 1953.

DIT was composed of a board of trustees comprising 13 members to enable DIT to function under a institutional structure. Trustees were not given full time employment and as they were busy with their own jobs, they could not devote enough time to DIT. As a result, structural limitations hindered the daily functional performance of DIT and implementation of decisions regarding development plans (Talukder 2006, p. 185). Under these circumstances the Town Improvement (amendment) Act was revised in 1987 and RAJUK was established on April 30, 1987.

The jurisdiction of RAJUK covers 1528 square kilometres comprising Dhaka city, Narayanganj thana including the municipal area, Sidhirganj and Fatullah thanas, port thana Kadam Rasul including the municipal area, Gazipur Sadar thana including the municipality and Tongi thana including the municipality. RAJUK is the only agency entrusted with clear responsibility for planning and management at metropolitan scale. It is entrusted with the responsibility of controlling the construction of houses and buildings in accordance with a master plan. RAJUK has occupied this central position by virtue of its powers of master planning, development and building control, and development through land estate development, area improvement and major road improvement. Therefore, RAJUK's functions cover the following areas:

- i) Preparation, implementation and monitoring of master plan for Dhaka city;
- ii) Creation of planned township/areas including related to physical infrastructures, such as roads, parks, playgrounds, shopping areas, etc., and
- iii) Development control, including scrutiny and approval of plans submitted by individuals/ organizations regarding use of land within the RAJUK area.

There are five departments in RAJUK, namely, Administration, Development and Engineering, Estate and Land, Planning and Architecture and Finance, Budget and Accounts.

- **Administration:** The administrative wing is consisted of two branches: one looks after personnel matter and other is responsible for keeping records and for procurement.
- **Development and Engineering:** This department is responsible for project implementation and transport.
- **Estate and Land:** This division acquires land for new schemes and allots RAJUK plots among the applicants.
- **Planning and Architecture:** This wing is vested with responsibility of preparing RAJUK plans and approving individual plans submitted to RAJUK for land use and construction by different organizations and individuals. There are five sections under planning and architecture department. The *survey section* is responsible for providing necessary data and information. The *structure and master plan section* studies and analyses the environmental aspects of planning. The *research section* analyses survey data from socio-economic perspective. The *zonal plan section* modifies the development plans from area perspective. Finally the *project planning section* prepares project proforma. This is submitted to the Ministry of Housing and Public Works for scrutiny.
- **Finance, Budget and Accounts:** This department prepares budget, controls expenditure, maintains accounts and deals with pays and allowance of employees.

RAJUK's development activities are multi-dimensional and these require internal coordination. But in many cases RAJUK has not been succeeded to maintain coordination with other agencies which ultimately has affected its functions negatively. Moreover, as RAJUK is under the Ministry of Housing and Public Works, the concern minister has substantial influence and power always over the activities and decisions of RAJUK. This is one of the reasons which sometimes compels RAJUK to take bias decision.

### 7.1.1 Major completed projects of RAJUK

#### Housing Projects

- Gulshan Residential Model Town
- Banani Residential Model Town
- Uttara Residential Model Town (1<sup>st</sup> and 2<sup>nd</sup> phase)
- Nikunja Residential Area (South)
- Baridhara Residential Model Town

#### Industrial Projects

- Tongi Industrial Area
- Postogola Industrial Area
- Shyampur-Kadamtali Industrial Area

#### Commercial Projects

- Dilkusha Commercial Area
- Kawranbazar Commercial Area
- Mohakhli Commercial Area
- Gulshan Circle I and II Commercial Area
- Zoarshahara Commercial Area
- Nawab Yousuf Market Commercial Area
- North South Road Commercial Area
- Nawab Siraj-ud-doula Commercial Area (Narayganj)
- Chashara, Boatkhal and Khanpur Commercial Area (Narayanganj)

#### Rehabilitation Projects

- Badda Rehabilitation Project
- Gandaria Rehabilitation Project
- Jurain Rehabilitation Project
- Zoarshahara Rehabilitation Project (Nikunja North)

## 7.2 LAND DEVELOPMENT PROJECT: EXAMPLE OF UTTARA MODEL TOWN

DIT and related bodies during the early 1960s faced the problems of high density, haphazardness of land uses and non-availability of land around Dhaka. Moreover, a rough estimate for dwelling unit shortage for Dhaka was made, which showed a backlog of about 34,000 dwelling units in 1965 (Rashid 2002, p. 7). The township project was launched with the intention that it will solve the housing problem by encouraging the process of decentralization of some of the functions. The project was called as **Dhaka North Satellite Township** but was changed to **Uttara Model Town** by DIT in 1980. No government money will be required to establish the town. The remarkable portion of development expenditure may be recovered from the interested purchasers by advertisement in the newspaper (ibid).

Total development of Uttara Model Town project was planned to be completed in three phases. The first phase of Uttara Model Town was started in 1966 and completed around 1992. The second phase of the project started immediately after the completion of the first phase and its implementation was completed around 1998. The project is now in its third phase encompassing the area of 2000 acres (= 8.09 sq. km).

### **The provision in the master plan of the project:**

- i) It aims to at serving a population of about 124,000 with an average net density of 95 persons per acre for low height residential sectors, i.e. residence up to 2 storeys high, at a density of up 135 persons per acre (= 33358 persons per sq. km) for the multi-storied walk up apartment sectors.
- ii) Areas of the residential sectors are 1,041 acres (= 4.21 sq. km) for class I employees and 54 acres (= 0.22 sq. km) for class III and IV communities of the total 2,344 acres (= 9.49 sq. km). The rest are the civic administration, light industries and workshops, recreation, playfield, schools, parks, square, lakes, roads etc.

### 7.2.1 Uttara Model Town Project (completed)

The first phase of Uttara Model Town of 950 acres (= 3.84 sq. km) is situated within the North Satellite Town on the site of about 2344 (suggested) acres (= 9.49 sq. km). According to the proposals the model town should accommodate the community of all income groups. But this was never materialized fully by government. It deviated from initial concept to “.....*have in practice been completely abandoned in favor of providing subsidized housing opportunity exclusively for the upper income group*” (Cox and Partners, quoted in Rashid 2002, p. 8). Moreover, initially though the area was planned to provide 4,302 housing plots of different sizes, later there was a shift from the initial planning of plots and the present number is in total 6000.

For second phase RAJUK acquired 438 acres of land and allotted 5315 plots.

#### Previous land uses

Buildings	:	3 %
Vegetable cultivation (high land)	:	1.5 %
Fishing	:	3 %
Seasonal paddy cultivation (low land)	:	92.5 %

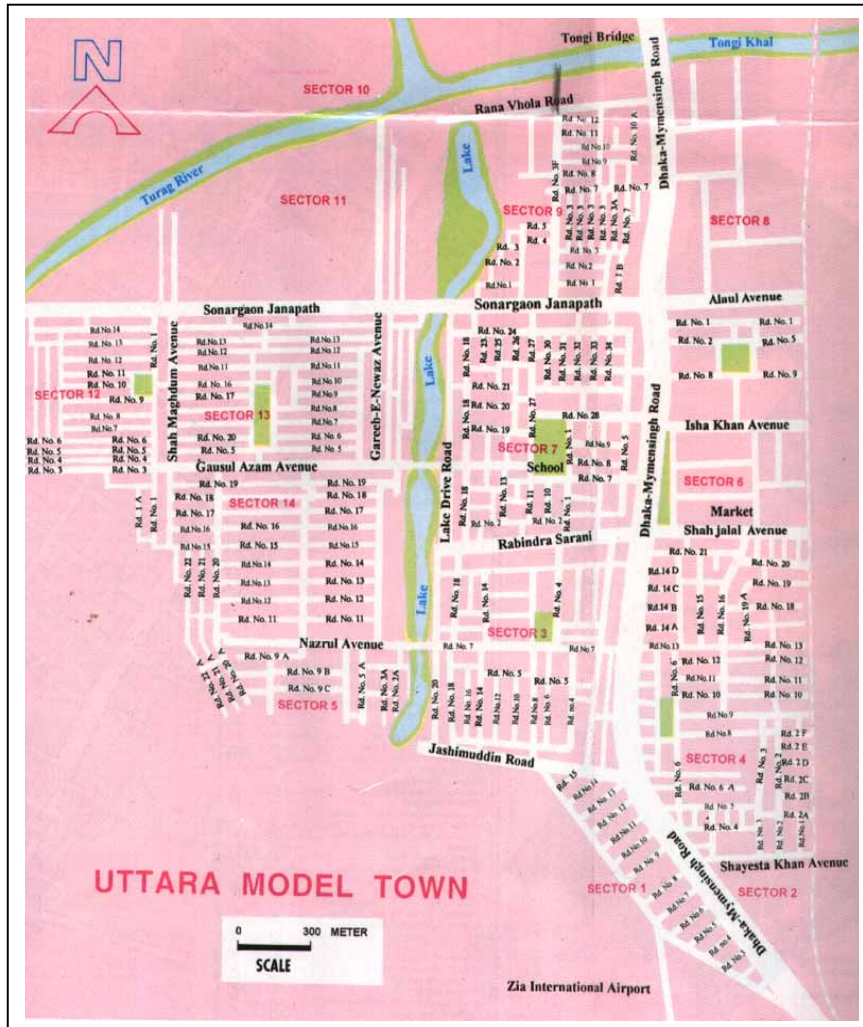
Source: RAJUK

#### Present land uses

Residential Plots	:	68%
Services (playground, school, market etc)	:	12%
Road network	:	15 %
Green space	:	05%

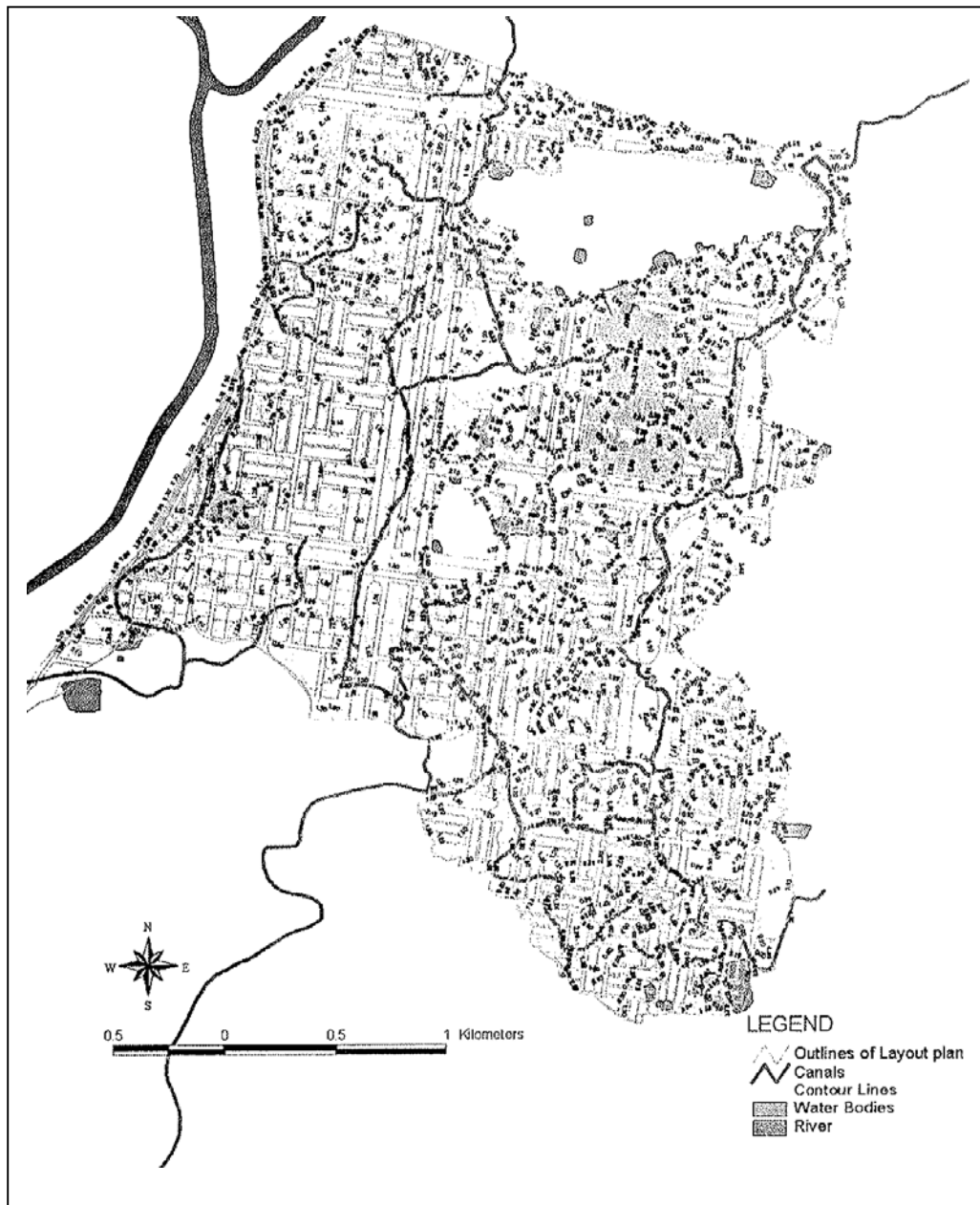
Source: RAJUK

Map 05: Master Plan of Uttara Model Town (1<sup>st</sup> and 2<sup>nd</sup> phase)



Source: RAJUK

Map 06: Master Plan of Uttara Model Town (3<sup>rd</sup> phase)



Source: RAJUK



### 7.2.2 Uttara Model Town Project (ongoing)

The ongoing project of Uttara Model Town (3<sup>rd</sup> phase) is located at the north-western corner of the Dhaka City Corporation (DCC) area, with the Uttara Residential Model Town (2<sup>nd</sup> phase) to the east and Mirpur to south of the project area. The total project area is 2001.8831 acres (= 8.10 sq. km) and is located entirely within and adjacent to the western Dhaka flood protection embankment constructed on the east bank of the Turag river. The area is low lying and not suitable for agriculture. The master plan of the area of the 3<sup>rd</sup> phase divides the whole areas into 40 neighborhoods under 4 sectors. The project is expected to accommodate more than six hundred thousands people within its area.

#### The Objectives of the project

- To reduce the pressure of population in Dhaka city by creating opportunity of residence for the city dwellers in the close by extended area;
- To maintain the balance of environment by proper urbanization;
- To reduce the existing acute problem of housing;
- To expand civic facilities by urbanization of the area between Mirpur and Tongii gradually;
- Development of new township and expansion of economic facilities; and
- To solve future housing demand.

#### Proposed Land uses

Residential Plots	:	24%
High-rise apartments	:	11%
Road Network	:	30.92%
Physical & Social infrastructure	:	3.04%
Lake, Open space & Park	:	13%
Commercial Plots	:	5.89%
CBD	:	0.92%
Utility Services	:	2%
Education & Institution	:	1.67%
Neighborhood/Play field	:	3%
Others	:	4.56%

Source: RAJUK



Photo 1, 2 & 3: Apartment houses in  
Uttara Model Town



### 7.2.3 Landowners' information in Uttara Model Town<sup>4</sup>

#### 7.2.3.1 Occupation and income pattern<sup>5</sup>

The households owning the land and houses in the study area are predominantly (55 percent) fixed income earning government officials while rest 45 percent belongs to businessmen group, whose monthly income varies. Household income ranges between Tk. 50,000 (=apx. US\$746) to Tk. 2,00,000 (=apx. US\$ 2985). The households are mainly in Lower Upper Income Group (with monthly income range from Tk. 50,000 to less than Tk. 1,00,000) covers around 64 percent whereas the rest of the percentage goes for Upper Upper Income Group (with monthly income of over Tk. 1,00,000).

#### 7.2.3.2 Land/flat acquisition: Time and cost

The survey reveals that 72.73 percent respondents purchased land and built houses by themselves whereas the rest of the respondents purchased the ready-made flat. Except for few plots, which were inherited (only 9 percent), the other households were able to access to land through purchase. Only 20 percent respondents paid the price of land through installments. The rest had to be paid in cash at once. The survey reveals that to get the possession of the land it took from 2 to 6 years depending on the progress of land development/ construction of building.

It is difficult to give a fair idea of the price of land since the households have brought lands in the study area over the last 25 years and prices stated by them referred to different years. But it has been tried to get an idea about the present price of land and flat. The finding reveals that during 1977 to 1987 price range of land in Uttara Model Town was from Tk. 7500 to Tk. 60000 per katha. Present price of land is Tk. 1.2 million per katha (= apx. US\$ 26.78 per sq. metre). The price of flat varies also from location to location. In case of flat, the price range is almost Tk. 1200 per square feet (= apx. US\$ 192.58 per sq. metre).

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<sup>4</sup> Information on land owners' in Uttara Model Town have been collected from the field survey, 2007. Data collection methods have been discussed in chapter five.

<sup>5</sup> Based on Islam and Shafi (2008) income groups have been categorized. The detail income group categories have been given in annexure.

### **7.2.3.3 Financing the land/ flat**

For financing the purchase of land, institutional loans are generally not available. However, the nationalized banks and some government offices provide limited loans or advances to their employees only. Therefore, financing from own sources is still the most important feature. In case of 45.5 percent landowners, full financing came from personal savings, while the same source provided part financing (with loan and selling property) for 27.5 percent households. In case of only 9 percent landowners selling property (land in home district) provided full financing in land cost. Loan from nationalized banks and government offices (only for the officials) was another source for financing for 22 percent landowners.

### **7.2.3.4 Land ownership pattern**

The survey reveals that 9 percent respondents have plots in another posh residential area like Dhanmondi and Baridhara. For rest 91 percent respondents the plot in the Uttara Model Town is the only resort in this land scared mega city. It has been mentioned earlier that in case of 9 percent landowners selling property (land in home district) provided full financing in land cost. This fact is mainly applicable for the families who came to the capital either for job or business purposes and settled down by purchasing land.

## **7.3 LAND DEVELOPMENT PROCESS: AN OVERVIEW**

### **7.3.1 Land development process**

In housing sector RAJUK mainly supplied serviced plots to the middle and high income groups. Gulshan Model Town, Banani, Uttara, Baridhara and Niuknja are examples of such development (Chowdhury, I. U., 2003 quoted in Islam, 2005). Currently RAJUK is in process of planning and developing very large new towns, namely, Purbachal and Jhilmil in fringe in Dhaka. There is also plan for another two residential suburbs namely Rimjhim and Dhamsona.

The public sector financing in development follows two ways. First, the authority receives money from the prospective land buyers in advance and with that money the authority develops land and provides infrastructures to facilitate the construction of houses. Secondly, the government and various autonomous bodies develop land and build housing for their employees with their own finance (Shafi, Murshed and Nazem 1992, p. 111).

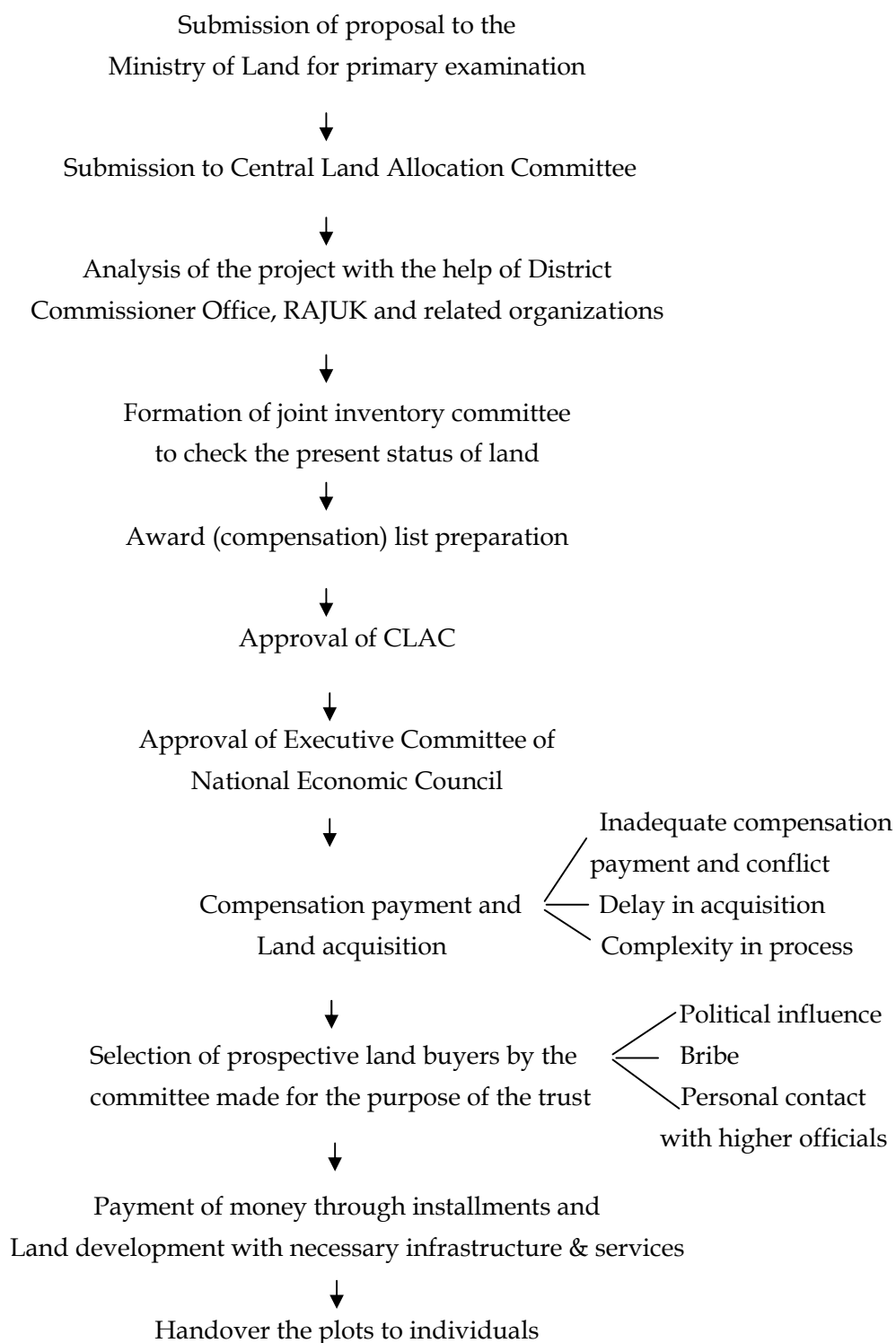
For land development project RAJUK follows the first way of financing mentioned. In this process RAJUK submits project proposal to the Ministry of Land for primary examination and after that to Central and Allocation Committee (CLAC). After approval of project land is acquired through compensation payment. Through lottery system RAJUK selects plot winners from invited applications. Since the demand for plots far exceeds the number available, lobbying and bribing is not at all uncommon in the selection of prospective plot owners (Islam 1987, p. 16).

As most of the projects are self financing, the plot winners are to pay money through installments (generally two installments - first installment is 60 percent of total price and second installment is rest 40 percent. For Uttara third phase RAJUK kept provision of three installments) and with that money RAJUK carries out the land development with the help of concern authorities. Generally RAJUK is supposed to finish the land development works before the payment of last installment of land price and with that payment the plot winners are to take possession of land. But in most of the cases RAJUK fails to complete land development work within their given time. For example, RAJUK has totally failed to give possession of land in the third phase of Uttara Model Town six years ago. It will take more than two years to complete all the procedure for handing over plots to the owners, said a RAJUK source during interview.

Sometimes, RAJUK has totally failed to give possession of land even after completion of project and RAJUK tries to minimize this problem in different way. For example, plot winners in the project of Gulshan, Banani, Baridhara, Uttara (1<sup>st</sup> and 2<sup>nd</sup> phase) and Nikunja who have not received the possession of land are requested by RAJUK to apply for a plot in Uttara third phase (RAJUK notice published on April 1<sup>st</sup>, 2008).

Any physical plan of any project is supposed to be sent before implementation to the concern agencies like DWASA, DESA etc for their feedback and approval. But in practice RAJUK just informs them for providing utilities and service facilities, some times even after implementation of the project. RAJUK has also coordination problem with divisional commissioner office which is responsible for land acquisition for RAJUK's land project. This coordination problem often hampers the total land development process.

Figure 14: Chronological steps in the process of land development by RAJUK



Source: Author (based on information from RAJUK)

### 7.3.2 Allegation in compensation payment and land acquisition process

According to Town Improvement Act 1953, Section 79 (2),

*“The acquisition of any land or interest in land for the Kartripakkha under this section, or for any scheme under this Act, shall be deemed to be an acquisition for a public purpose within the meaning of the Acquisition and Requisition of Immovable Property Ordinance, 1982 ( II of 1982), and the provisions of the said Ordinance shall apply to all such proceedings”.*

The Land Acquisition Act, 1989 contains the detail procedure of land acquisition systematically and by stages. The land acquisition law is administered by the Ministry of Land through the Divisional Commissioner (DC) at the divisional level and the District Commissioner at the district level. Considering the importance of land acquisition cases in Dhaka and in divisional headquarters, the DCs in the districts are assisted by the additional Deputy Commissioners (revenue).

#### **Rate of compensation**

The market value of the property, the damage caused to the standing crops, serving of the property, effects on other properties and earnings, change of residences and loss of profits from the property are to be taken into considerations in determining the compensation. 20 percent is to be added to the market value in calculating the compensation. At present an additional 50 percent is paid over and above the determined value to give adequate compensation (Siddique 1997, p. 372). But often it is claimed that the compensation generally paid is not enough to resettle in a new place. Therefore, it is required to pay not only the prevailing market value of the land, but also the resettlement cost which in total is always higher than the given compensation.

Though there is clear-cut rule and regulation for land acquisition and compensation payment some anomalies have been alleged in land acquisition and compensation payment in the project of third phase of Uttara Model Town. RAJUK has paid about Tk. 400 crore (= Tk. 4 billion) in compensation which landowners called too adequate. A senior official of RAJUK, seeking anonymity said, *“The classification of land was controversial. Because of shady transaction, a section of RAJUK officials showed low land and ditches as plain land. And the real plain land owners were deprived”* (The Daily Star 2003, October 29). Providing compensation based on false information is not also uncommon. In Uttara Model Town expansion project the owners of marshy land have been compensated as per the rate of plain lands (The Daily Star 2003, August 05).

Although Tk. 73,08,845 (= apx. US\$ 1,09,087) was the real compensation amount landowners were supposed to get, the officials showed the amount to be Tk. 6,30,91,513 (= apx. US\$ 9,41,664) (ibid).

Box 02: Residents evicted without compensation or rehabilitation

The government had acquired 10.5 decimals of land of the family of Mr. Sultan Mahmud through LA caseno-2 in 1988 for development of Uttara Model Town. Though the family received the partial compensation, they were yet to receive compensation for the acquired land and a rehabilitation plot. The 2<sup>nd</sup> court of Senior Assistant Judge in Dhaka on November 5, 2006 directed in a decree that the Chairman of RAJUK, Deputy Commissioner (DC) of Dhaka and the land acquisition officer are to ensure compensation for the acquired land and allotment of plot for rehabilitation of the affected within 40 days. *“Following the decree, we immediately appealed to the Chairman of RAJUK and the land acquisition officer to pay the compensation and allot a plot to us in compliance with the decree”*, said Mr. Abdullah Al Masud, son of Mr. Sultan Mahmud. *“Neither RAJUK authorities nor the district administration paid any heed to the appeal”*. Here, it should mention that according to Town Improvement Act 1953, Section 55(5)

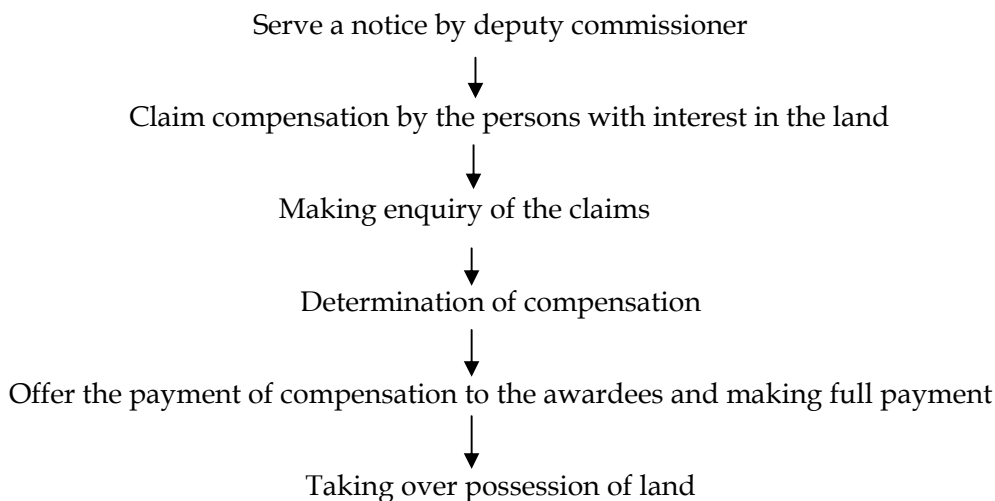
*“If any question or dispute arises whether compensation is payable under any of the sub-sections (3) and (4), or as to the amount of the compensation paid or proposed to be paid under sub-section (3) or sub-section (4), or whether any building or street, or square or other land, or any part thereof is required for the purposes of the scheme, the matter shall be referred to the Government whose decision shall be final”*.

The eviction was launched suddenly, though it was not in the order of the day's eviction drive. *“Influential present owners of the plot managed the RAJUK officials with high amount of bribe to expedite the process”*, alleged Masud. Police used to such a brutal force on the family members while the RAJUK authority flattened their house to the ground. The chairman of RAJUK Mr. K.A.M Haroon said that there is no hard-and-fast rule that the government has to allot a rehabilitation plot to the affected family. About the compensation for the acquired land, Haroon said *“the DC is supposed to pay the compensation for the acquired land, it is not our concern”*.

Source: Ali, T., 2007



Figure 15: The steps in land acquisition process



Source: Author (based on information from the office of Divisional Commissioner)

### 7.3.3 Allocation of plots: Who are ultimate owners?

Generally by the Executive Committee formed by RAJUK the plot winners are selected through lottery, RAJUK claims. Before that RAJUK invites application from people of different categories, for example, for third phase of Uttara Model Town the authority considers total nine categories: ministers, state ministers, deputy ministers, lawmakers and people of similar status, judges, freedom fighters, journalists, civil servants, service holders of autonomous organizations, service holders in defense, artistes, litterateurs and sports personalities. After getting all applications the allotment of plots to the deserving and genuine applicants are made by a Committee constituted for the purpose by the Trust. According to "Dhaka Improvement Trust (Allotment of Land) Rules, 1969" no one who has already been allotted a plot for residential purpose, in his/her name or in the name of his/her, wife/husband or in the name of dependent children or any other dependent, by the Trust or the Government in any housing estate or by the Board of Revenue of any khas land<sup>6</sup> or any person who has already a house

<sup>6</sup> The land, originally belonged to different title, but later vested to State through legal procedure and managed by Government.

within the jurisdiction of Dhaka and Narayanganj Municipal Committee or suburb of these Municipal areas within the jurisdiction of the Trust, will be allotted a plot.

Though RAJUK is claiming that they select the plot winners through lottery and follows the 'Dhaka Improvement Trust (Allotment of Land) Rules, 1969', most lands are allegedly set aside for ruling coalition men. Some people even accuse RAJUK, the most prominent government organization involved in land development, for being a center of corruption and an organization that serves only the interests of the rich and powerful (Islam, 1996).

Regarding application and plots allocation procedure a top RAJUK official requesting anonymity said, *"These application procedures are nothing but a whitewash to justify allocation to the chosen politicians. It is already decided who are going to get the land"* (The Independent 2005, January 11).

For Uttara third phase project total 6 percent land has been reserved for lower income group and poor<sup>7</sup>. This phase has not been started yet. The project director of Uttara third phase said that the phase for poor and lower income group will be started after the completion of present ongoing project. Though RAJUK is saying that they are keeping a certain percentage of land of their project for lower income group and poor, there is no clear definition about this term 'lower income' and 'poor'. Moreover, the project will be also a self financing project. Naturally the question arises how far it is possible for this group to pay the total price of land in two or three installments. The project director of Uttara third phase said, *'After receiving the applications we will make a sort based on monthly income. The applicants having the low income will be considered for the plots'*. From the previous experiences it reveals that this land will also go to hands of upper middle and higher income group. To keep the provision of land for lower income group and poor is nothing but to a way to whitewash the government to get the approval of the project.

### **7.3.4 Actors involved in land development**

#### **7.3.4.1 Formal actors**

There are six key actors play vital role in decision making process of land development in urban fringe. The development process does not necessitate the presence of all actors at once and at the same stage. Therefore, some key actors play temporary role and perform specific duties.

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<sup>7</sup> According to Islam and Shafi (2008) the income group having monthly income less than US\$ 74.63 is considered as poor whereas monthly income less than US\$149.25 but more than US\$ 74.63 goes under lower income category.

**Government**

Responsible for project evaluation and approval, policy, programme and overall decisions.

**The City Development Authority, RAJUK**

RAJUK is responsible for physical plan preparation, land development, distribution of plots, regulations and control on private land development and building permission.

**Divisional Commissioner**

Acquisition of land and compensation payment is done by the office of divisional commissioner.

**Intervening agencies (like DESA, DWASA)**

Intervening agencies are responsible for providing services and facilities. Before project starts it is supposed to take approval from intervening agencies also though very rare this is followed.

**Land sellers**

The former owner of the land whose land is acquired through compensation payment. They are mainly farmers in profession. Though officially it is expressed that the landowners willingly handover the land to government in return for compensation, in most of the cases it is seen that they are compelled under the force of political pressure. They are the weak and victim actors in the total development process.

**Land buyers (new land owners)**

The financiers of the project also as most of the project of RAJUK is self finance project. The owners pay the price of land through installments. Some present land owners are former land owners also whose land was acquired and they got the land back as rehabilitation. But such type of case is very few. Because only who has the strong political influence or contact with higher officials can get this privilege.

**7.3.4.2 Informal actors**

Beside these formal actors there are some informal actors who are playing unrecognized but parallel role with the formal actors and influencing the total land development process.

**Political leaders** influence the total process of development from the beginning to the end. Now a day ECNEC is no more interested to give approval of RAJUK project as in most of the cases RAJUK has failed to fulfill the objectives of the master plan due to corruption. But with the influence of political leader RAJUK gets the approval any how. Obviously the political

leaders are being benefited from the projects also in different ways. They are also playing vital role at the time of allocation of plots.

**Officials of RAJUK** are also the informal actors in the process of land development. Either being influenced by political leaders or due the financial dealing with the applicants they take bias decision in plots allocation.

#### **7.4 LAND USE REGULATIONS: ROLE OF RAJUK**

For Uttara model town the project design was inherently flawed, with over-concentration on the physical development of the residential estate and no meaningful attempt to integrate social activities that corresponded to project objectives on the development and institutionalization of housing policies and strategies. The consequence was that the project hardly had any positive impact on national or Dhaka housing development strategies or policies and it mainly focused on high-rise developments for higher income group housing that are not accessible to the lower and middle income class (Rashid 2002, p. 16). The following are the major drawbacks of the project.

##### **7.4.1 Conversion of residential area into commercial**

From the initiation of the project the sector plans had to be reviewed which were made to accommodate more and more plots and thereby reducing area for community facilities. This led to the deteriorating of overall conditions of the sectors. The areas even though have community facilities but there is lack of open spaces in the sectors in neighborhood scale. There is also inadequacy of detailing on street level with regards to pedestrian walkways. The planning was only concerned with accommodating the plots or other functions and the vehicular accessibility. The drawback of the design was that it failed to perceive the social activities of people like walking to market, meeting peoples, children playing etc (Rashid 2002, p. 16). The household survey has revealed annoyance of residents at the increase in the use of residential land for commercial purpose. They alleged that open spaces and playground are being occupied by the powerful businessmen and political leaders under the umbrella of RAJUK. During survey the RAJUK officials argued that change in land use from residential to commercial is response to the situation demand. Therefore, if any one applies for land use change they generally give permission.

### 7.4.2 Violation of Master Plan

Development of township in the metropolitan capital is regulated by the Town Improvement Act (TI Act), 1953. Under the Act, RAJUK has been empowered to prepare Master Plan to guide future spatial development of city. According to Section 73 of the TI Act,

*“As soon as may be after the provisions of the Act comes into force, the Kartripakkha shall prepare a Master Plan for the area within its jurisdiction indicating the manner in which it proposes that land should be used (whether by carrying out thereon of development or otherwise) and the stages by which any such development should be carried out”.*

Regarding the change in master plan according to Section 74 of the TI Act,

*“The Kartripakkha may, from time to time, with the approval of the Government and the Government may at any time, amend or alter any specific provision of the Master Plan. Any such amendment or alteration shall be published in the Official Gazette”.*

According to TI Act, RAJUK cannot bring any deviation in the master plan without prior approval of Government. The same restriction is also applicable for Uttara Model Town. But in reality without any prior approval and consultation with residents of Uttara Model Town RAJUK has occupied open space and filled up lake for creating new housing plots. For example, RAJUK filled up a portion of lake on its eastern bank at sector 13 and allotted the plots, say many respondents in the study area during household survey. ‘This on going phenomena is consistently destroying residents’ life’- this is the impression of the residents that research identified during survey. During interview RAJUK officials argued it in different way. They said, without the concern of Executive Committee they did not do anything.

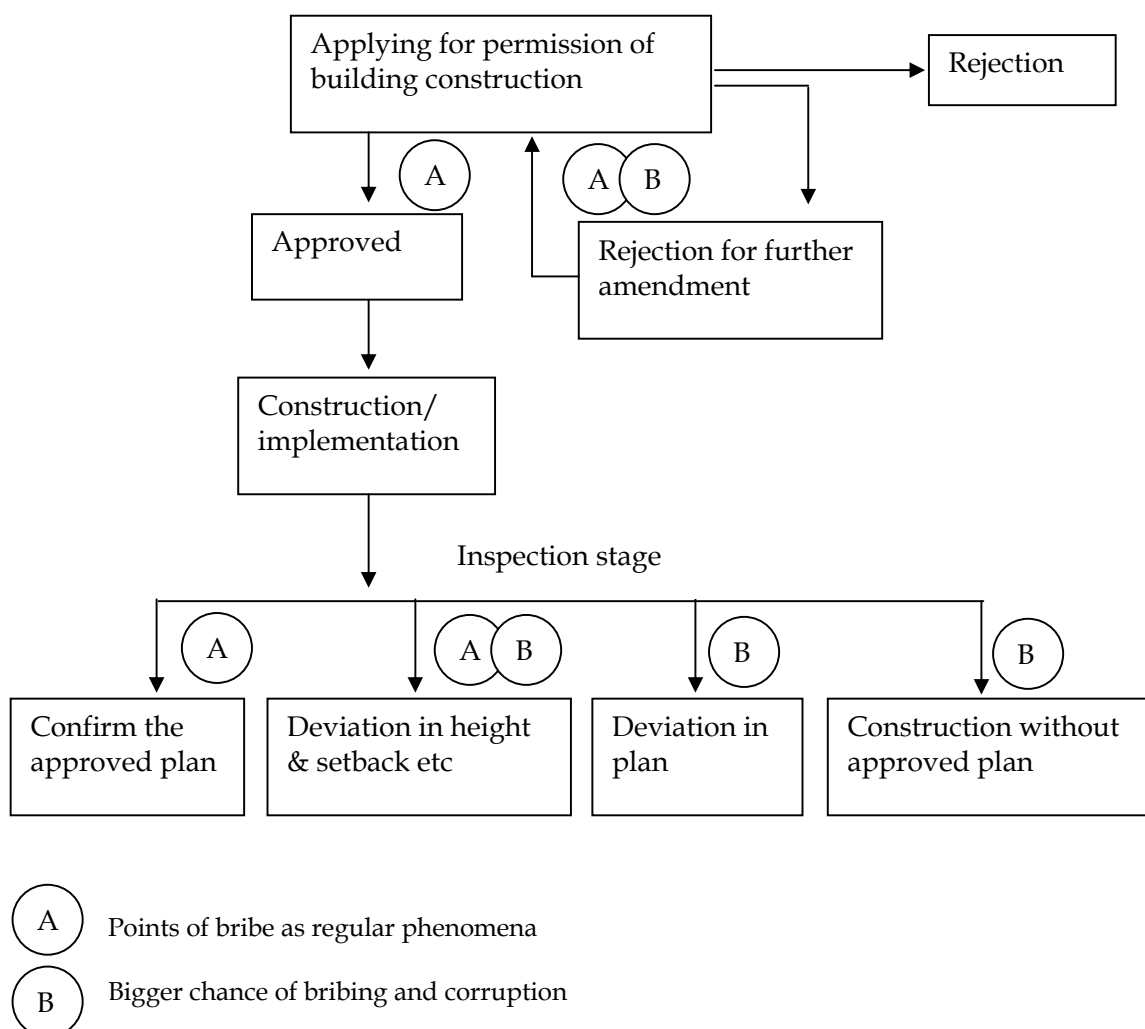
The interviewed households in Uttara Model Town accused RAJUK of filling up part of the lake in violation of the original Master Plan for creating new housing plots. They said that open space and playgrounds are necessary for the hygiene of inhabitants and civic amenities. To protect the community facilities a number of cases were filed on behalf of the residents of Uttara Model Town and the implementation of RAJUK’s revised layout plan to create further new plots has been stayed by the court.

### 7.4.3 Illegal building construction

Though RAJUK is the responsible public authority for approving and controlling of building construction, in reality it has failed to control building construction deviation. There are

innumerable buildings in Uttara Model Town that are using for commercial purpose though the design was approved initially for residential use. The main reason behind this deviation is scope of corruption. Some land owners during household interview mentioned that RAJUK do not dispose their responsibility properly. As an example they mentioned that RAJUK officials approve faulty and illegal building design in return for bribes. For many buildings in Uttara Model Town without visiting the place monitoring inspector issued clearance certificate in order to make extra money, the residents alleged during interview. Therefore, most of the buildings were constructed without following building construction rule.

Figure 16: Point of corruption in building permission process



Source: Mahmud, 2007

Unnecessary harassment and delay are also very common phenomena in the building approval process. Without pursuing the file/case file does not go forward. From a survey on client for plan permission it is revealed that to avoid unnecessary delay 53 percent, to avoid harassment 22 percent, to avoid spending time running after it 7 percent, to avoid the complex process of plan approval 13 percent and for others reasons 5 percent people deploy broker in the planning permission (Mahmood 2007, p. 4).

### 7.5 PROBLEMS IN LAND DEVELOPMENT PROCESS

- Current chapter analysis indicates that land development process from project initiation to completion takes on an average 2 to 6 years and often longer to deliver plots to land owners. This is due to complexity and various stages in land development process. Moreover, due to lack of coordination among different intervening agencies the projects are often being delayed.
- In most cases, while going for acquisition of land for development projects and other activities, the amount of land required for the purpose is not determined with austerity. Consequently, a large amount of alluvial land is being become either out of bounds or useless for cultivation. The unplanned use and misuse of the acquisitioned land is also quite common. About 25 percent of land acquired at various times for different development projects is now left either unused or is used for unproductive purposes (Ahsan and Ahmed 2000, p. 139).
- Generally the new town project is taken by RAJUK with the intension of reducing high density in the central city and to accommodate the growing population. But in most of the cases the allotment process is open to all, whether the applicant's are from Dhaka central business district or from any other area, who can afford to purchase the plot. So, in reality it happens that any one who has the intention and ability to purchase land applies for a plot and get allotted (Rashid 2002, p. 9). The allotment process is also not transparent. Political influence, contact with higher officials in RAJUK and bribes also play a role here to get allotment of plot.
- RAJUK's officials are now a day more involved with severe corruption and irregularities. Actually due to this reason RAJUK has lost public confidence. RAJUK authorities also allocated pieces of land in Uttara Model Town area to RAJUK officials' welfare association and the RAJUK officials' cooperatives association limited at the rate

of Tk. 1.80 lakh per bigha (= apx. US\$ 1 per sq. metre) through irregularities (News from Bangladesh 2005, July 06).

- One of the reasons of RAJUK's failure is payment of low compensation for which the affected people often bar the development work in the project area. Another important reason is that RAJUK itself creates complexity in tender schedule by imposing unnecessary conditions that frustrate genuine contractors (News from Bangladesh 2005, July 06). Lack of monitoring of contractors' work is another reason behind the slow pace of project implementation.

## 7.6 CONCLUSION

Discussion in the present chapter reveals that RAJUK is developing the residential projects which are still far beyond the means of lower income group, even sometimes middle income group. Such type of high cost land projects are ensuring tenure security to higher income group though simultaneously violating land rights of lower income group whose land is acquired with low compensation and sometimes without rehabilitation. Moreover, most of the projects undertaken by RAJUK are strongly influenced by political leaders. As a result, most of the plots go to their hands by different names. Therefore, considering the drawbacks of the Uttara Model Town for future projects every step from project initiation to implementation should be carefully examined. Therefore, it is necessary to ensure the followings:

- To undertake the activities which can fulfill goals and objectives specified in DMDP;
- Institutional coordination in every stage of development process, with special emphasis on land acquisition and rehabilitation process;
- A fare allocation of plots;
- Affordability of the plots for general people; and
- Provision of monitoring and evaluation of the project.



## **Chapter Eight:**

### **Urban fringe development by private sector**

*“The poor have sometimes objected to being governed badly. The rich have always objected to being governed at all” – GK Chesterton, English Essayist (1874-1936)*

#### **8.1 PRIVATE SECTOR IN URBAN FRINGE DEVELOPMENT**

Though since 1960s public sector and individual households have been playing major roles in fringe land development in Dhaka initially the role of housing companies (formal private sector) was very limited. The contribution of formal private sector becomes noticeable during 1980s. Private and most of the government agencies have been mainly engaged in land and residential area development for middle and upper income groups except the Housing and Settlement Directorate (government agency), who have looked at the interest of the low income groups or poor (Islam 1996, p. 173).

Government adopted the National Housing Policy in 1993. Through this policy government has recognized the potential role of private sector and has expressed the intention of providing various types of incentives for the rapid growth of this sector (Islam 1998a, p. 53). More specifically, the policy provides supports to the private sector as stated below:

*“The private developers and the organized sector will be encouraged to invest in various forms of housing and land development through access to finance, speedier approval of schemes and other forms of supports, removal of constraints to development of land, while they will be induced to devote a significant proportion to the investment in housing for low and middle income groups at affordable price” (Government of Bangladesh 1993, 5.13.11).*

This favorable government policy has encouraged the formal private sector to expand their range of activities though their target is still higher and middle income groups and motivation is speculative in nature. According to the experts, as speculators in the land market hold significant amounts of land especially in fringe areas it reduces the supply of land for growing population. Ownership of land is highly unequal with only 30 percent of population controlling ownership access to 80 percent of the residential land, while the other 70 percent have access to the remaining 20 percent (Islam 1998b, p. 77). Present ongoing phenomena in Dhaka reveal the power exercise and illegal activities of land grabbers to acquire any amount of land and for

performing this illegal activity they don't face any problem from government side. They are not only grabbing the private land, but the public land also. News on land grabbing circulated in The Daily Star (2005, February 03) says that the district administrations of Dhaka, Narayanganj and Gazipur have identified about 6,000 acres (24.3 sq. km) of illegally occupied government land and recovered only 306 acres (1.24 sq. km). The report said nine developers have grabbed 238 acres (0.96 sq. km) of public land in Dhaka Metropolitan Area and Savar upazila (ibid).

## **8.2 LAND DEVELOPMENT PROJECT: EXAMPLE OF BASHUNDHARA LAND PROJECT**

Bashundhara land project is an ongoing and sprawling residential complex of East West Property Development (EWPD) Ltd. EWPD is involved also in building apartments in the same project area. Bashundhara Housing Project of East West Property Development Limited got approval for 305 acres (1.23 sq. km). But the developer later placed a proposal of 1247.30 acres (5.05 sq. km) extended project which has been conditionally approved. After the enactment of new housing project development rule it has been problematic for EWPD to get approval for their extension phase though they are arguing that the extension is nothing but the part of the approved phase. On the other hand, RAJUK is saying that according to Private Housing Development Rules, 2004 any extension or continuation of a completed project has to obtain approval separately.

### **8.2.1 Land owners' information<sup>8</sup>**

#### **8.2.1.1 Income pattern<sup>9</sup>**

The households surveyed in the Basundhara Land Project area belong to mainly Lower Upper income group with monthly income range from Tk. 50,000 (=apx. US\$746) to Tk. 100,000 (=apx. US\$1493) which accounts around 57 percent whereas the Upper Upper income group with monthly income of over Tk. 1,00,000 covers the rest of the percentage.

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<sup>8</sup> Information on land owners' in Bashundhara Land Project area have been collected from the field survey, 2007. Data collection methods have been discussed in chapter five.

<sup>9</sup> Based on Islam and Shafi (2008), income groups have been categorized. The detail income group categories have been given in annexure.

### **8.2.1.2 Occupation pattern**

The respondents owning the land and houses in the study area are predominantly (57 percent) businessmen by profession whose monthly income varies. The rest 43 percent respondents belong to fixed income earning government officials group.

### **8.2.1.3 Land/ flat acquisition: Time and cost**

The survey reveals that 28.57 percent respondents purchased flats whereas the rest of the respondents purchased plots only and later they built houses by themselves. Installment payment is the main mode to purchase plots or flats. Only 14 percent respondents paid the price of land through one time payment. The rest of the respondents paid through installments. The survey reveals that to get the possession of plots/flats it took from 1 month to 5 years depending on the progress of land development / construction of building.

The price of the land and flat varies with the location, facing and existing facilities. The land price ranges from Tk. 6,50,000 per katha (US\$145.12 per sq. metre) to Tk. 22,00,000 per katha (US\$490.91 per sq. metre). On the other hand, the price of flat ranges from Tk. 15,00,000 (apx. US\$22388) to Tk. 50,00,000 (apx. US\$74626) per flat. The flats are of different sizes. It is started from 85 square metre to 223 square metre. The price per square metre varies from US\$ 241.12 to US\$ 281.31.

### **8.2.1.4 Financing the land/ flat**

For financing the purchase of land in Bashundhara land project bank loan plays an important role. 57 percent respondents received private bank loan. For getting loan from bank the developers help the buyers due to business competition. Even then, financing from own source is still the most important feature. Only 14 percent respondents sold their property (land in home district ) to provide part financing in land cost.

### **8.2.1.5 Land ownership pattern**

The survey reveals that plot in the Bashundhara Land Project area is the only plot that 72 percent respondents have. On the other hand, 28 percent landowners hold more than one plot in other posh residential area like Dhanmondi and Baridhara. It has been mentioned earlier that 14 percent landowners through selling the property (land in home district) provided part

financing in land cost. This fact is mainly applicable for the families who came to capital either for job or business purpose and settled down by purchasing land.

### **8.3 LAND DEVELOPMENT PROCESS: AN OVERVIEW**

Private sector follows a significant way of land development in Dhaka. In the method of development there is a tendency of developers to maximize profit and increase saleable land. Therefore, often they violate the land use standard and reduce amount of land for basic facilities. Now a day, private sector is playing a crucial role for rapid conversion of agricultural land in fringe into residential subdivision. In many cases the developers carry out this development activities without any prior approval of government.

Generally the private developers do not own land for development. Therefore, they buy a vast area of land in urban fringe. This purchased land can be previously zoned for housing estates or marked as agricultural/wet land in master plan. In case of buying agricultural/wet land the developer must get approval from RAJUK to use the land for residential purpose, which is called land use clearance. In most of the cases the developers purchase marshy land through the bargaining process due to low price of land. Sometimes to get the land they pressurize the land owners through political link or local leaders. The survey reveals that the private developers buy land in urban fringe in Dhaka on an average at the rate of US\$14 to US\$18 per sq. meter.

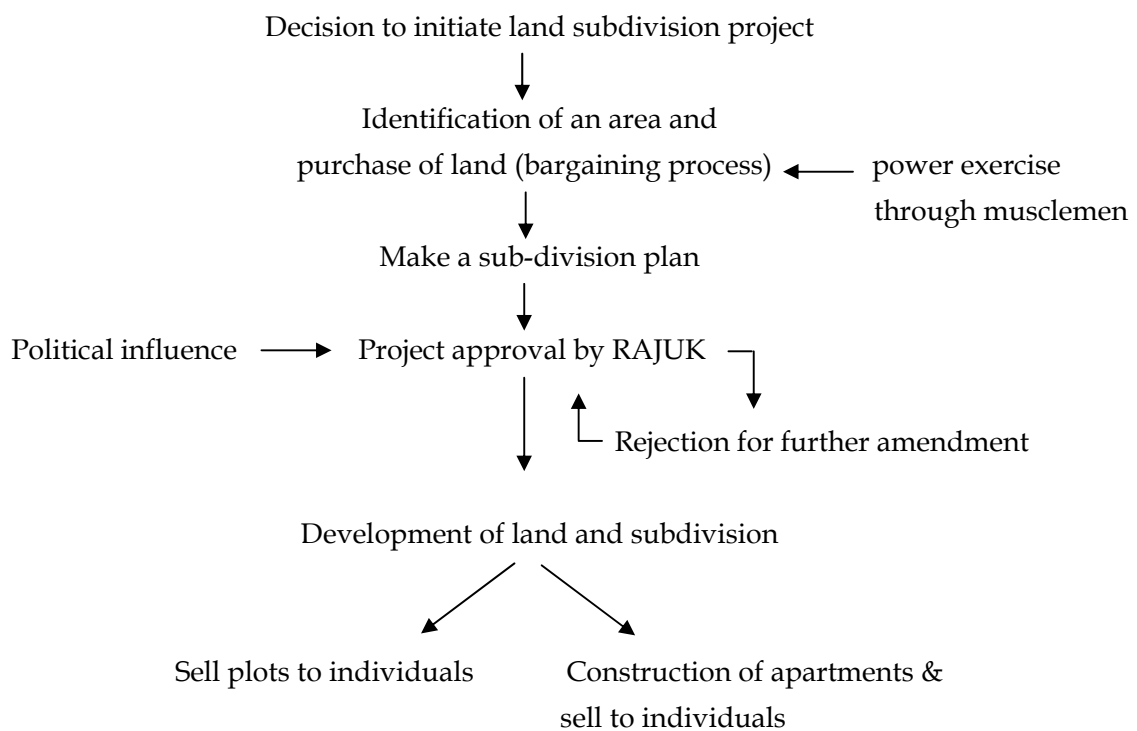
After acquiring the land private developers design project and forward the layout plan to RAJUK for necessary perusal and approval. The National Committee on Approval of Private Housing Projects of Land Rules of 2004 is mandated to approve the projects provided by the developers and the projects should comply with a number of pre-conditions including compliance with the Wet Land Protection Act, 2000 to exclude rivers, canals etc earmarked in the Dhaka Metropolitan Development Plan (DMDP). They are required to obtain clearance from at least 26 authorities including the Department of Environment, the Geological Survey, the Dhaka Transport Coordination Board and the Water Development Board. They are not allowed to advertise the construction for advance sale of apartments/plots before completing the entire process (Islam, F., 2006).

To get approval the land developers use political influence and personal contact with RAJUK employees as well as bribes. The interviewees from the private developers have also pointed out that due to bureaucracy and political practice at RAJUK it is very difficult to get permission for land development projects without pursuing of powerful political leaders. Therefore,

RAJUK usually gives permissions to the projects of land developers who have strong political connections. All these problems are caused due to corruption and weak administration and centralize system of RAJUK, lack of proper policy and improper implementation of policies.

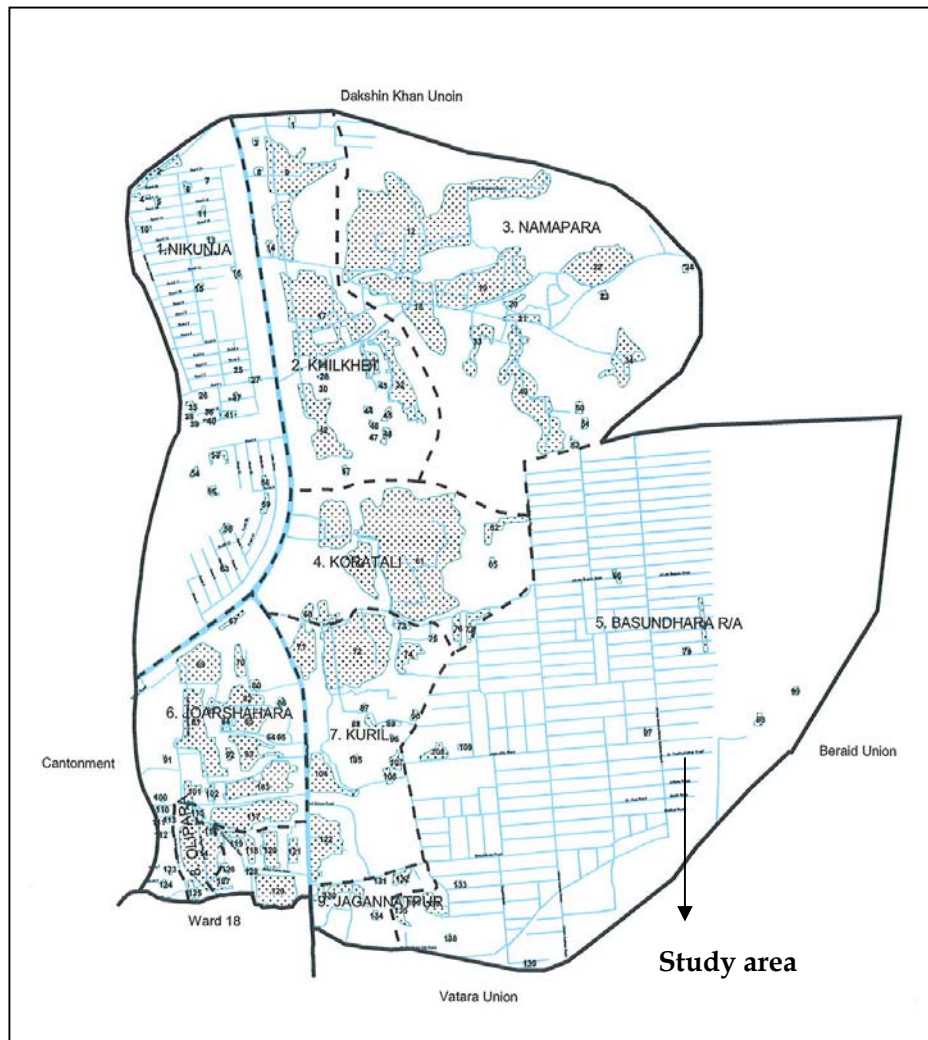
After getting approval from concerned authority, the developers subdivide the land, sometimes develop the land (with basic services) and finally sell to the private individuals. In most of the cases the infrastructures are provided by public authority. Now a day, the land developers are not confined in land development only, simultaneously they are also involved in housing development.

Figure 17: Major steps in the process of land development by private sector



Source: Author (based on information collected during survey)

Map 07: Location of Bashundhara Land Project Area



Source: CUS, 2005



Photo 4 & 5: Apartment houses in  
Bashundhara Land Project area



Photo 6 & 7: Vacant plot in  
Bashundhara Land Project area



## 8.4 ACTORS INVOLVED IN LAND DEVELOPMENT PROCESS

### **Formal actors**

There are mainly six key actors involved in land development process from its project initiation to implementation. Many of these actors' roles are interlinked and come one after another.

### **Government**

Policy maker providing rules and regulations to guide development of land by private sector.

### **Land developers (legal and illegal)**

Land developers, they are also called informally land grabbers due to their speculative motivation. Generally the land developers buy land in the vicinity which may be ripe for development. The prospects of land becoming ripe for development usually reflect increase in price that can be expected to be paid if the land is sold. To buy land in urban fringe is a source of capital gain for land developers. Often to buy this marshy or wet land they exercise their power. The land developers, in most of the cases are the elite people who have very good political linkage.

### **Land sellers**

The former owner of the land whose land is purchased through bargaining process. Often it is alleged that land developers acquire low/marshy land from owners forcefully using political linkage or with the help of musclemen.

### **Land buyers**

Buying a place in residential area reflects the lifestyle of the buyers. Generally the buyers of the plots/apartments developed by reputed real estate developers are the higher income group as the price of land/apartment is far beyond the means of lower even middle income group. The survey reveals that many land buyers consider buying plots in urban fringe as an investment as after a certain period of time they sell the land to third person which translates increased potential into cash.

### **RAJUK**

The responsible authority for the approval of land projects submitted by the private developers.

### **The intervening agencies**

Responsible for providing necessary infrastructure for housing area. For example, DWASA, DESA and TITAS are responsible for water supply, electricity and gas supply respectively.



**Informal actors**

Beside these formal actors there are some informal actors who play significant roles in total land development process. **Political leaders** who form the government have influence in the project initiation. The developers who have close linkage with political leaders have the opportunity to influence over the decision of projects approval. Certainly the political leaders receive a huge amount of money from the developers as 'token gift'. Therefore, government is playing dual role in private land development process both formally and informally.

**Officials of RAJUK** are also the informal actors in the process of land development. Often they take favorable position for the approval of the projects either being influenced by political leaders or due to financial dealing with the developers.

**Land brokers** are the middlemen who are engaged by the land owners, but in this development process mainly by the developers. They act as negotiators between land sellers and buyers. Often it is alleged, they fraudulently misrepresent the price at which the owners of the land want to sell land willingly and thus land brokers make a secret profit.

**8.5 FRINGE DEVELOPMENT: VIOLATION OF LAW**

Due to acute demand of land and its limited supply value of land in Dhaka metropolis is increasing over the years. This results the existence of two groups - one, legal land developers who are following the rules and regulations given by government and second, illegal developers with speculative motivation who are violating the rules and acquiring land. RAJUK is the only body to check the so-called developers who are developing land in illegal way and without the approval of RAJUK. But often RAJUK neglects the assigned responsibility and encourages malpractice among land developers. Moreover, these groups are slipping out of the legal action due to lack of proper laws and bias attitude of responsible authority.

According to 'Private Housing Projects Land Development Rules of 2004' the private land development projects would be approved if the developers comply with a number of pre-conditions. The pre-conditions include obtaining clearance from different agencies including the Department of Geology and clearance from Dhaka Transport Coordination Board and Bangladesh Water Development Board. The project developers will have to comply with 'Wetland Protection Act of 2000' also and exclude the river, canal, wetlands, retention pond and

flood flow zones earmarked in the Dhaka Metropolitan Development Plan (DMDP) from their project areas. But even after land filling activities in these restricted areas are going on. The rules and regulations under 'Private Housing Project and Land Development Regulations 2004' imposed on private housing sector are being considered by the private land/real estate developers as unrealistic, complicated and expensive.

*"It is impossible to develop a housing project by a private organization following such stringent rules and regulations earmarked in several clauses of the regulation",* said a veteran real estate developer (The News Today 2005, January 14).

Especially in eastern fringe area, conversion of wetland is taking place at a very fast pace (Islam, Israt 2006). Around 49 housing projects without approval have been identified to be inside the flood plain zones and plain sub-flood plain zones earmarked in the DMDP covering around 9,241 acres of land (The Daily Star 2007, February 18). In Dhaka, yearly rate of loss of wetland during 1989-1999 periods was 1.23 percent whereas during 1999-2003 periods the rate has been 5.67 percent. Dhaka is still left with 19.3 percent of wetland. If the current rate of loss of wetland continues, by the year 2037 all temporary wetlands of Dhaka will disappear (Islam, Israt 2006).

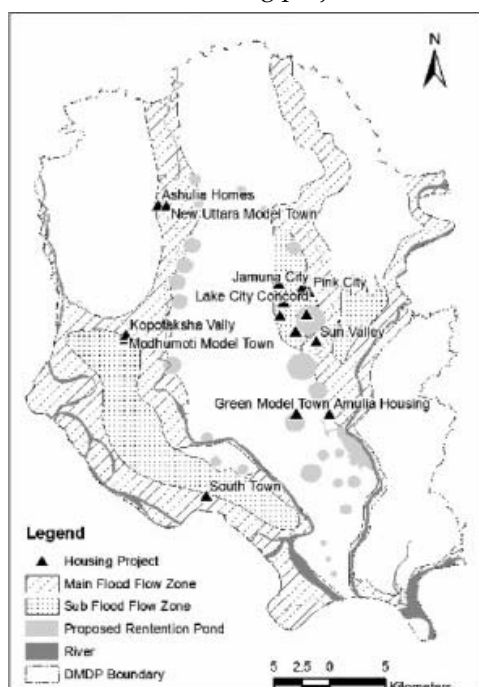
A variety of stakeholders like local wetland owners, developers, planning and legal institutes, political leaders, buyers of wetland are involved with the wetland issues with different interests. Among the stakeholders developers are the most powerful, organized and often linked with political leaders. They always maintain necessary liaison with different organizations to continue the land filling activity in uninterrupted way. In most of the cases it is seen that to acquire wetland the developers follow the way of aggression and exploitation to forcefully transfer the land from original owners to their names (Islam, Israt 2006). It is evident that concern authorities have been either failed or reluctant to protect the right of the citizen and tenure security of their property.

## Box 03: Government is approving housing projects in flood zones

The government has been alleged for considering some big housing projects of several real estate companies who are implementing the project illegally by filling up low-lying areas and flood zones. The government has even already approved such a project, Bashundhara-Baridhara project of the East West Property Development (Pvt.) Limited despite the fact that the RAJUK filed several cases and general diaries with the police on the charge of violating the 'Wetland Protection Act 2000' and the 'Rules of Land Development for Private Housing Projects 2004'. RAJUK even requested the home affairs ministry on September 17, 2006 to take steps against number of projects such Bashundhara of the East West Property Development Limited. But a high powered committee headed by the housing minister approved the 1247.30 acres Bashundhara-Baridhara project on September 25, 2006. RAJUK sources said that the project was located on the special planning zones for flood flow and water retention in RAJUK Master Plan. On the queries over violation of laws and rules by certain real estate companies Mr. Minister said that committee would give approval in the light of laws and rules concerned. The committee has given the approval conditionally as the company agreed to leave spaces for playground and garbage dumping and to dig a lake at the project site, he said.

Source: Alam, H. 2006, October 17.

Map 08: Location of housing projects in DMDP area



Source: Adapted from Islam, Israt 2006

In regard to the preservation of water bodies, a question was asked to the Minister of Water Resources, about how land speculation could be stopped. He replied, 'Here we are talking about very influential land developers who are widely known as land grabbers. There seems to be no way to stop them' (Khan 2005, December 30). 'In a country where a home minister has to file a general diary with police station for protection from land grabbers, we can do little' (ibid), he added as a reply to the question regarding environmental impacts of such indiscriminate land filling.

Photo 8: Death of wetland by sand filling in Eastern fringe in Dhaka



Photo 9: Site of housing project in the restricted flood plain zone of Ashulia



Source: Islam, Israt 2006, May 19

On the other hand, Director of East West Property Development (Pvt.) Ltd, the country's pioneer real estate developer defines the situation in different way whose land development project has been also criticized for wet land development. He said, *"It is not possible to develop a project without filling a low-lying area as most of our land of our country is actually low-lying area"*. He argued, *"Water stagnancy is created artificially. Hundreds of government organizations including RAJUK are filling up low-lying areas of the country for various development purposes. Real estate projects like Uttara, Purbachal, Nikunja were developed by RAJUK by filling low-lying areas. Flow of the rivers like Buriganga, Turag, Sitalakhya and Balu is disturbed and different canals and water bodies of Dhaka city like Dholikhal, Segunbagicha, etc were also filled by different government agencies for development purposes"* (The News Today 2005, January 14).

This is the present situation in private land development sector in Dhaka where every actor has argument in favor/against the existing rules and regulations and through their arguments they are establishing their activities legal. This is nothing but throwing the ball from one court to another which cannot ensure planned and balanced urban growth.

## 8.6 CONCLUSION

No doubt that last three decades private land/housing developers are playing significant role in providing housing for city dwellers though in maximum cases their target is higher and middle income groups. It is evident that due to complex and bureaucratic procedure public sector cannot provide plots to their customers timely whereas the private sector is providing ready made plots and apartments whenever their customers demand. Even after all the advantages it is also a fact that many private development is taking place in illegal way which is ultimately creating environmental damage. If this trend goes on, Dhaka city will no longer suitable for living. For this illegal development often RAJUK is claimed for its negligence and corrupted activities. But it should be kept in mind that all the activities are being taking place under the umbrella of government. To stop this illegal development at first the government has to be transparent in its work.

## **Chapter Nine:**

### **Informal land development in urban fringe - Poor's access to land**

*"Justice to the individual is accepted in theory as the only safe groundwork of the commonwealth.*

*When it is practiced in dealing with the slum, there will shortly be no slum" -*

Jacob Riis (1902 in Introduction: What the fight is about)

#### **9.1 CONCEPT OF INFORMAL LAND DEVELOPMENT**

In developing countries informal land development takes place due to various reasons. One of the prominent reasons is that due to scarcity of land, demand of serviced land in growing city is always higher and poor cannot afford the cost of professionally developed and designed plots of land. Therefore, such type of informal development is alternative and only resort for poor. The current chapter discusses the informal land development system in Dhaka. But before the discussion it is important to distinguish between 'informal settlement' and 'informal development'.

The clear distinction between 'informal settlement' and 'informal development' is hardly available. Often the term informal development is used as synonym of informal settlement. Spontaneous, irregular, unplanned, marginal and squatter settlements are also used as synonyms of above two terms. Some literatures have used the terms 'slums' and 'informal settlements' interchangeably (UNHSP, 2003). According to UN HABITAT informal settlements have two categories (2003 pp. 82-83):

- Squatter settlements - settlements where land and/or buildings have been occupied without the permission of the owner;
- Illegal land development - settlements where initial occupation is legal but where unauthorized land developments have been occurred (e.g. change in land use that does not follow zoning plans, building extensions without building permits, subdivisions without regard to services and infrastructure, etc.).

But keen difference has been drawn by Enemark and McLaren (2008) based on the definition of OECD. According to them 'informal settlements' are the group of housing units constructed on land where occupants have no legal claim to, or occupy illegally. On the other hand, 'informal development' areas are the unplanned settlements and areas where

housing is not in compliance with current planning and building regulations (unauthorized housing). Using this distinction the research is focusing on the informal land development in Dhaka where *informal subdivisions and illegal construction works take place without complying with planning regulations such as zoning, subdivision and building codes*. For this research this is the operational definition of informal land development.

Unauthorized land developments or informal subdivisions are widespread on the fringes of the cities, especially in first growing cities. The development is informal owing to any combination of the following: low standard of services or infrastructure, violation of zoning regulation, lack of planning and building permits, or irregular nature of land subdivision (UN HABITAT 2003, p. 83). Sometimes the development is not likely to conform to the planning and building regulations.

Informal land development in developing countries can be explained with three recent trends (Durand Lasserre, 1990). First, new migrants fail to penetrate in the land market practices as it is totally confined to the capitalist and commercial land submarkets. Second, formal private sector is unable to extend its operation towards the need of lower income groups. Sometimes they concentrate on luxury quality development schemes. Third, public authority is mainly characterized by ambitious public housing and subdivision programme (ibid). However, urban fringe has distinct advantages over more centralized and urban areas as there is a less competition for the use or control of land, especially if it is located outside the municipal boundaries (UN HABITAT 2003, p. 90).

## 9.2 PATTERN OF INFORMAL LAND DEVELOPMENT IN DHAKA

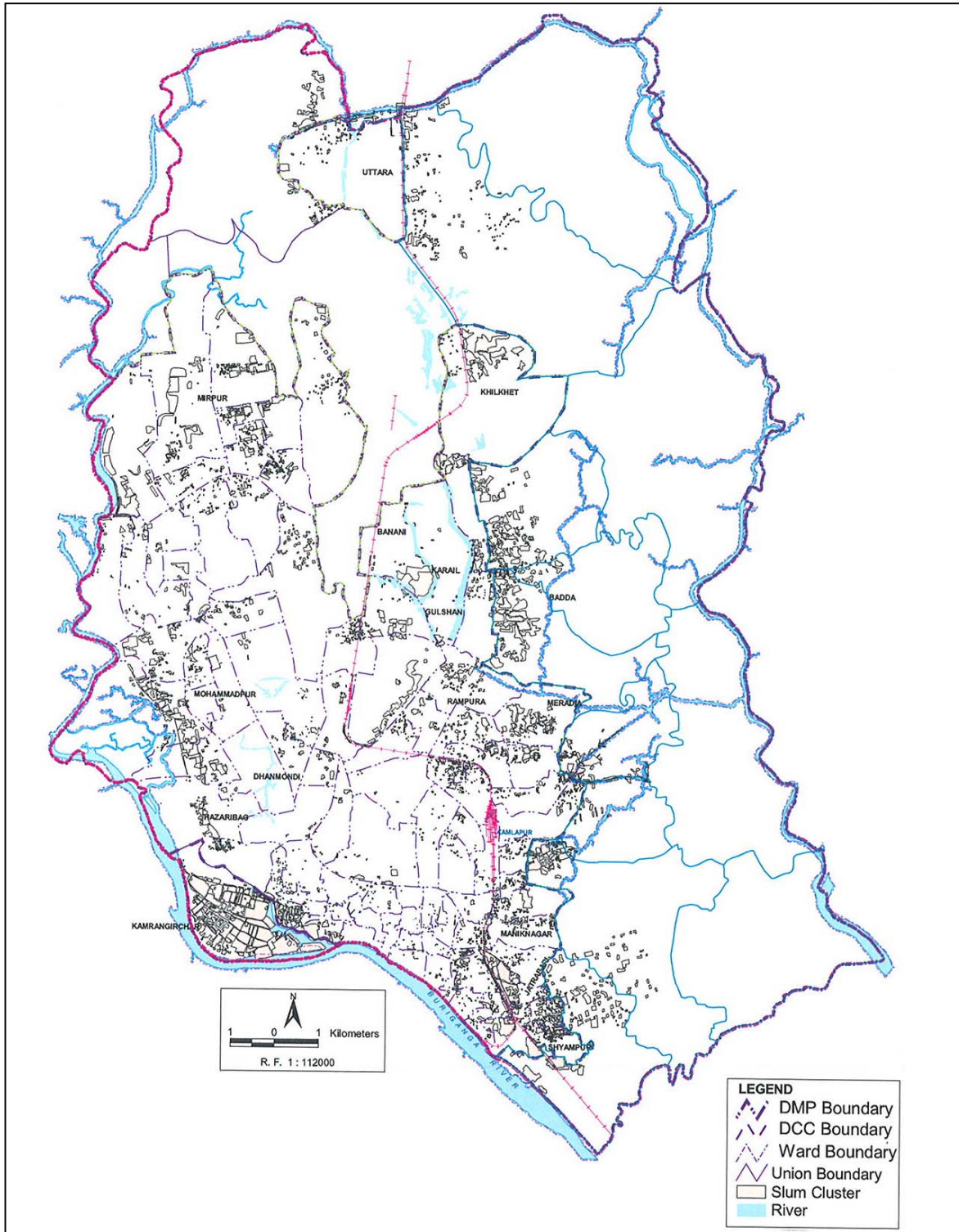
In Dhaka one of the major problems associated with its increasing population is increasing number of informal development of land in form of slum<sup>10</sup> development. Slum at its simplest, is a heavily populated urban area characterized by sub-standard housing and squalor (UN HABITAT 2003, p. 8). This definition conceptualizes three essential characteristics - high density, low standard of housing (structures and services) and squalor. The first two criteria are physical and spatial while the third one is social and behavioral (ibid).

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<sup>10</sup> The 'operational' definition for this research that describes slum as an area that combines the following characteristics:

- inadequate access to basic urban services especially water and sanitation facilities
- non-permanent structures built with non-durable building materials
- insufficient living area i.e. overcrowding
- location on hazardous land

Map 09: Slums in Dhaka City



Source: CUS, 2005



Generally the slums can be developed in many ways. First individual households buy or inherited land and develop at their own initiatives without any institutional support. If these are low land, they may develop such land by hiring manual labor directly or engage small informal contractor to supervise such works. Low land in the fringe area is generally developed slowly over a long period of time (Islam 1998a, p. 54). Under this category urban fringe land is transformed from agricultural use to urban use by the landowners who divide agricultural land into plots for housing. Through such type of development farmers find it profitable 'crop' for their land (UN HABITAT 2003, p. 83). Second, some private owners put their land to housing use for a very large number of poor in relatively small area, thus creating slum (Islam, 1998a). Third, slum type houses can be built on privately owned vacant plots with the knowledge of owner of land. In that case owner can allow one or more poor families to live on this land on temporary basis either free or against land rent. Sometimes owners even would build a structure to be occupied free, but the occupier reciprocates by acting as security guard on the land (Islam and Khan 1992, p. 65). Such type of development is rare in urban fringe of Dhaka. In above three cases the land subdivisions are done without reference of formal planning mechanism including approval from government authority.

In Dhaka the slums are characterized by temporary and semi temporary structures of single storey. However, the occasional two stories small buildings are also found but they are mainly occupied by slum owners. This type of informal development includes i) rental houses (or huts), which is most common and predominant ii) the rental mess units (or single persons' cheap lodging) and iii) the owner occupied units (Islam 1992, p. 136). The developers follow neither any plan nor the development project is being approved by the government authority. The ownership of land may be fully private, or may have multiple private ownerships, and sometimes mix with public land illegally.

In slum services and infrastructures are below the adequate or minimum level. The condition in the slum is also dilapidated. Slum inhabitants constantly have to deal with issues such as lack of water, no sewage or solid waste facilities, pollution and insecure tenure. In Dhaka 30 to 35 per cent of population live in slum settlements (Akash and Singha 2003, p. 5). Population density varies from a low of 700 persons per acre (175000 persons per sq. km) to a high of 4,210 persons per acre (1052500 persons per sq. km). The average floor space for a family in Dhaka is about 32.08 sq. ft. (ibid).

Although in Dhaka slum areas are found throughout the city, there is a relatively clear locational pattern of these settlements. Due to an acute demand for land and high land

prices especially in the central zones, the slums have been mostly concentrated in middle zone and peripheral zone of the city but adjacent to the employment sources. The inner city slums are mostly small in size and are located in scattered pattern depending on the availability of land. According to CUS (2005) in Dhaka mega city around 4460 slums with an overwhelming majority of poor communities have been developed on land owned by private individuals. They are providing 200,000 sub-standard housing units in Dhaka metropolitan area (World Bank 2007, p. 39).

### 9.3 INFORMAL LAND DEVELOPMENT IN DHAKA: EXAMPLE OF KHILKHET SLUM

In Khilkheta a cluster of slum areas have been found where 18 chunks of land have been developed separately informally. The cluster is commercial enterprise of slum entrepreneur. The case study area is one of them locally known as Khilkheta Bottala Fakir Bari slum located in the northern side of Dhaka city. The total area of the land is 0.70 acre (= 0.283 hectre) where the number of structure is 70. The sizes of residential structures vary between 1 and 2 rooms. The average occupancy rate is 4 persons per room. The highest numbers of person living in one room is recorded 6. Among these 70 structures 30 structures are occupied by the eight inheritors of landowners. Rest 40 structures have been rented out. The settlements have residential density 578 persons per acre (142826 persons per sq. km) which is fortunately lower than average population density in slum. Physically the area is characterized by permanent and semi permanent structures of single storey only. The housing condition is superior to the normal squatter settlements. One of the important physical characteristics of this slum area is that it is very near to Nikunja and Joar Shahara - the planned residential areas developed by RAJUK.

#### Previous land use

Agricultural land	:	100%
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#### Present use

Dwelling units	:	76.43%
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Katcha bazaar (vegetables/wet market)	:	7.14%
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Small shops	:	10%
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Vacant land	:	6.43%
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### **9.3.1 Slum dwellers' information<sup>11</sup>**

#### **9.3.1.1 Migration: Causes and context**

From the survey, more than 90 percent of the respondents in the Khilkheth slum area are found to have migrated from rural areas. The main reason for migration for the early and recent migrants is the economic reason though socio-psychological reasons have also importance which is mainly true for female heads. Apart from the economic and socio-psychological reasons mentioned by the respondents, the role of social networks is also evident. Almost 30 percent of the respondents have come from the rural area with the help of their kin and acquaintance (of the same district).

#### **9.3.1.2 Employment and income**

It has been observed that slum dwellers in most cases try to find job from the adjacent to their residence. Therefore, location is an important factor affecting economic activities of the slum dwellers. In the study area 65 percent respondents are working in the adjacent planned residential areas (i.e. Nikunja and Jower Sahara) which indicate the interdependence between slum area and nearby planned residential area for offering services and creating job opportunity. Average monthly household income in Khilkheth slum area is estimated at Tk. 3889 (Apx. US\$ 58). About 34 percent of the sample households earn more than this average.

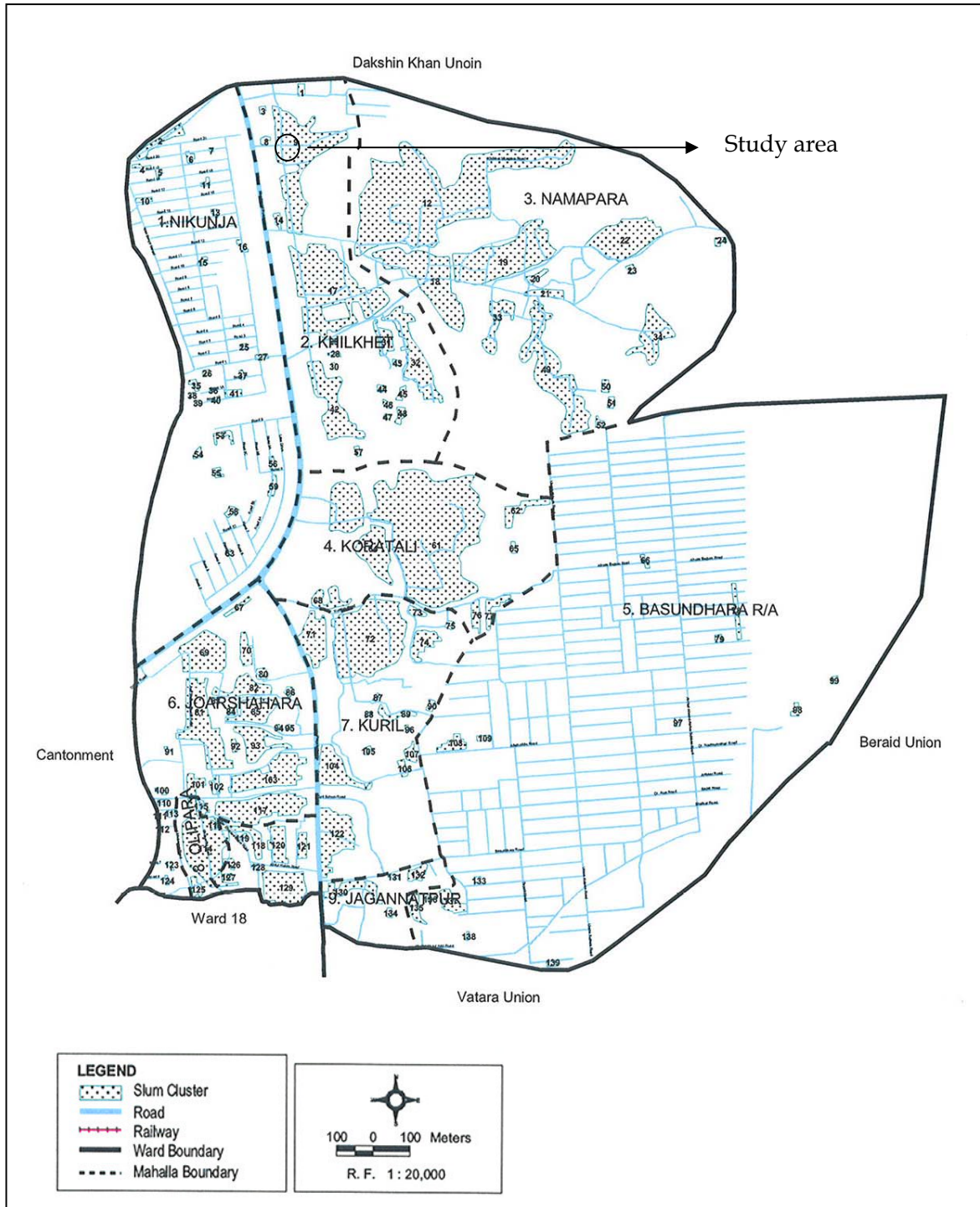
#### **9.3.1.3 Monthly rent and space occupied**

The survey reveals that on an average the space occupied by each household is 9.75 sq. meters and per capita availability of space is almost 2 sq. meters which is substantially lower than urban figure. In Dhaka, per capita available space for residential purpose is 16.1 sq. meters (CITYNET 1995, p. 31). In Khilkheth slum area average rent is Tk. 134.40 per sq. metre (apx. US\$ 2 per sq. metre). Asked how much the land owner charges per room per month, she remarked: *rents vary, I charge between Tk. 700 and Tk. 1200 per room, depending on the physical condition of the structure.* The landowner says that the demand for rental accommodation is high. Most of the structures those which were poorly accessible areas often booked out even when the structure is still under construction.

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<sup>11</sup>Information on slum dwellers have been collected from the field survey, 2008. Data collection methods have been discussed in chapter five.

Map 10: Location of Khilkhet Slum



Source: CUS, 2005

### 9.3.1.4 Life in slum: Attitude of the dwellers

The experiences of living in slum according to the slum dwellers are multi dimensional. The separation between rural and urban life is not that much absolute as the slum dwellers though. It is found that majority of respondents (around 70 percent) perceived worsening of life condition in slum as they face deterioration of security of life compare to rural areas. As 45 percent respondents have sold their property (land and/or homestead) in rural area to settle down in Dhaka, it is difficult for them now to go back to rural area and settle down again.

Photo 10 & 11: Life in slum- common source of water and common cooking place



The slum dwellers are getting water and sewage in name only. A large majority of the respondents have to depend on free water surrounding the community. Surrounding private houses are the major sources of collecting free water. The respondents do not have access to private latrine or kitchen. The number of common use latrines and kitchen are inadequate with respect to users.

The data from the study area highlights the greater access to electricity compared to other facilities. But on the whole, a large majority of the respondents are found to suffer from lack of access to drinking water. Slum dwellers' earning capacity and ability has also negative influence on their access to basic services like schools and health care centers. Banks (2006) points out in general terms: *"In comparison to services accessed legally, these informal channels involve significantly higher costs"*. The relationship between informal development of land and tenure security is not always obvious. But settlers can be a subject to continual harassment. 11 percent respondents face the threat of left out and prevalence of ground rent collection by muscle men.

#### 9.4 ACTORS IN INFORMAL LAND DEVELOPMENT: LINK WITH FORMAL SECTOR

Informal land development sector is largely shaped by social, economic and physical context, and also influenced by the formal system, but informally. The slum dwellers are not entitled to have any services like access to water and electricity from formal public sector but they are getting these facilities from the same sources but in informal way. There are very few slums that have legal connection to DWASA pipelines through NGOs. Recently DWASA in association with NGOs like Water Aid Bangladesh and Dushtha Shasthya Kendra (DSK) has provided the legal water connections to the slum dwellers. The initiative has been taken as part of a DSK-WaterAid Programme to ensure safe and hazard-free water supply for the urban poor.

Household that do not possess a legal holding number on land cannot access services from public sector. Therefore, no slum dwellers have legally official water supply pipe lines. Most of the slum residents create a network with 'muscle man' (locally known as mastaan) who acts as broker, assisting the slum dwellers to have access to basic services for a high fee. The local power structure or 'mastaans' manage to get illegal water connections with the connivance of DWASA staff in return for some form of compensation and sell water at a much higher price than charged by DWASA (Akash and Singha 2003, p. 6). The city dwellers under the service network of the DWASA pay Tk. 5.25 for 1000 litre water but these poor slum dwellers pay many times higher for same amount of water supplied through pipeline. In this market, although consumers pay a high price as dictated by the supplier of the services, DWASA is deprived of the revenue and the illegal operators make large profits (ibid). The resources generated are shared between the middlemen, bribed utility company employees, and government officials (World Bank 2007, p. 45).

Many mastaans are reported to have close links with politicians, municipal authorities, and the police in the neighborhood. Political parties rely on links with local mastaans for electoral support and re-election of particular candidates in an area. A mastaan's power base is further consolidated if the political party he belongs forms the government. Thus, patronage relationships characterize slum politics, which is extended from the slum all the way into the local authority and political parties (World Bank 2007, p. 55). Therefore, the security of property rights of the slum dwellers is often linked with local power structure.

The slum dwellers have access to electricity supply also following the same way. In general electricity supply is ensured in more than 92 percent households in slum in Dhaka but only 26 percent have legal connections from DESA and DESCO. When a middleclass family pays

around Tk. 300 as the monthly electricity bill, a slum dwelling family pays the same for using only a light, a fan and a television (Miji 2006, November 03).

In informal land development many actors have role to play. The actors in development process can not be categorized as 'formal' and 'informal' actors as the total process is itself informal. Therefore, the actors in the development process have been categorized as direct and indirect actors.

### **Direct Actors**

#### **Land developers**

The owners of the land who develop it informally, own and operate the slum business.

#### **Slum dwellers**

The poorest section in Dhaka's population who are the customers of the slum entrepreneurs.

#### **NGOs (their existence is very rare)**

Now a day some NGOs are playing a significant role to help slum dwellers in gaining access to public water and sanitation through the negotiation with public authority.

### **Indirect Actors**

#### **Local leaders (mastaans)**

They facilitate the illegal connection to essential services like water and electricity in return for a fee. Most of the informal land development has been taken place under their 'protection'.

#### **Public sector (like DESA, DESCO and DWASA)**

Services providing authorities who do not have direct relation with informal development of land but have indirect relation through local leaders as the slum dwellers have access to these services illegally.

#### **Political leaders**

Politicians do not have any link with slum developers but in many cases the local leaders organize gangs/groups and demand money from the slum developers/dwellers under the patronage of politicians.

In the land development process **government** is the key actor because of policy making authority. But till now government has not been taken any remarkable initiative for the



housing of the lower income group. The favorable policy taken by government could change the whole scenario in the land development process. The present reluctance of government could be due to negligence or incapability to tackle the situation.

### 9.5 INFORMAL DEVELOPMENT OF LAND: LACK OF PLANNING REGULATIONS

Informal land development represents an effective mechanism through which low-income people get access to land in Dhaka. Initially, the physical environment of the area developed informally is usually poor in quality since little investment is made in infrastructure. They lack adequate services and community facilities. By sparing land, settlers perform other income-generating activities in the areas that are not used for household activities. These income-generating activities represent an important contribution to the household economy. Small grocery shops, vegetable market and other services were also observed in the study area.

Photo 12 & 13: Building development without planning regulations



As observed in the study area, the land development process is totally in land developers' hands. No design standards are enforced. They follow the process whatever is convenient for them. Only the strictly required resources are invested in this structure. Very rare these dwellings are improved or maintained. Such type of development actually takes place while the household is saving money to build the more permanent one.



Table 06: Building construction procedures to be followed

Stages	Application Requirements	Requisite Fees	RAJUK's Step	Remarks
<b>Stage 1:</b> Land use clearance	10 copies of application in the prescribed form including - Land title documents - Site map into a scale of 1:5000 or 1:10000 showing location of the site	Application form Tk. 500.00	<ul style="list-style-type: none"> <li>- 30 days to approve application with or without any conditions</li> <li>- Chairman will receive application and further rejection will cause an appeal to Urban Development Committee. The committee will recommend or reject within 30 days.</li> </ul>	Validity upto 24 months from the date of approval.
<b>Stage 2:</b> Development permit	Requires an Architect and Civil Engineer to apply for the permit in a prescribed form.	Application form Tk. 500.00	<ul style="list-style-type: none"> <li>- RAJUK will either approve or reject the application within 45 days after receiving.</li> <li>- An appeal can be made with Urban Development Committee within 45 days in favour and the committee will dispose the case within 45 days.</li> </ul>	Do
<b>Stage 3:</b> Building permit	Application in a prescribed form with requisite papers and 8 sets of design sketches. Requires submission by a registered Architect.	- Tk. 5.00 per sq. m. for floor area.	<ul style="list-style-type: none"> <li>- Within 45 days a complete application will be approved.</li> <li>- For incomplete application RAJUK will allow 15 days for re-submission.</li> <li>- Failure in resubmission within 30 days will cancel the application.</li> </ul>	Such approval will be valid upto 36 months from the date of approval.
<b>Stage 4:</b> Occupancy certificate	Application in a prescribed form along with reporting about completion of the construction work.		<ul style="list-style-type: none"> <li>- RAJUK will visit the site within 15 days after receiving application and issue occupancy certificate in a prescribed form.</li> <li>- Any fault will be notified within 15 days.</li> </ul>	Renewal of occupancy is mandatory for every five years.

Source: Shafi and Payne, 2007

### 9.6 UNFAVORABLE RULES AND REGULATIONS: CAUSE OF INFORMAL DEVELOPMENT

RAJUK is responsible for monitoring the land development and building construction activities in Dhaka metropolitan areas. Without getting designs and plans approved by RAJUK, no one is allowed to build anything. But the regulatory framework which specifies the planning and building standards, regulations and administrative procedure makes constraints for low-income group to conform to official requirements. The formal process of dealing with land is complex, time-consuming and extremely expensive (Table 06). For example, to get the land clearance and building construction approval there are two regulations that are difficult to comply with for lower income group – one, application have to be submitted by the registered architect and payment of Tk. 5.00 per sq. metre charged by RAJUK for building approval (Shafi and Payne, 2007).

Total cost does not confine within this given amount by the RAJUK as bribing also costs a high amount without which the application for approval cannot be proceeded. As a result, to avoid this complexity and expenses the lower income groups are compelled to develop land and construct buildings without following the rules. Generally question arises what reflects this situation? It reflects either malpractice of lower income group or irrelevancy of the rules and regulation. Obviously under such conditions laws have no meaning or relevance to the urban majority – the urban poor (McAuslan, 2000).

### 9.7 INFORMAL LAND DEVELOPMENT: FUTURE TRENDS

According to UN HABITAT (2003, p. 9) slum can be divided into two broad classes: *slum of hope* which is in the process of development and *slum of despair* which refers declining neighborhood in which environmental conditions and domestic services are undergoing process of degeneration. In Dhaka, especially in urban fringe land development in form of slum formation goes under the first category. It has been mentioned earlier that generally the landowners build temporary structures due to shortage of capital. But with the span of time semi-permanent structures are raised which are more suitable for the lower- middle income group and no longer affordable by the poor. Finally, the land owners go for permanent buildings. Sometimes, many real estate developers buy the slum area and the slums are replaced by high rise buildings affordable for higher income group or used for commercial purpose. In this process the original households are obliged to leave the site and look for accommodation elsewhere. The land owner in the study area also has expressed the same type of attitude. She has future plan to develop permanent structures

and service facilities on this land. No doubt, at that time the present slum residents will have to find some other place as it will not be affordable for them. This situation indicates *land use succession* where the changes of land uses by different income groups take place over time.

## 9.8 CONCLUSION

The term 'illegality' is often used at policy level which brings contradiction and raise question about legal status of 'informal' or 'unplanned' settlements. It is misconception and ignorance about the process and norms underlying informal land development (Kombe and Krebich, 2001). The chapter argues that informal land development is not 'illegal', rather 'informal' which can be formalized through government initiatives.

In Dhaka the major characteristics of the informal land development that have been observed are followings:

- The informal development takes place by the land owners themselves. The houses are built which are affordable for lower income group who do not have access to formal housing systems or markets;
- Land is developed primarily through own/family savings, borrowing from friends or relatives or credit from informal institutions;
- The developers use local building materials, own/family labor (very rare they engage professional labor), own design and indigenous technology. They do not follow any planning standard or do not have approval from government;
- Dependency on broker/musclemen/middle men to have access to certain services like water and electricity; and
- With span of time the land is developed in formal way.

The most common reasons that encourage informal development in Dhaka are:

- Rapid urbanization due to centralize political, social and economic system;
- Insufficient and ineffective planning and absence of Detailed Area Plan;
- Poverty and lack of financing mechanisms and affordable housing for poor;
- Unnecessary bureaucracy, expensive, lengthy and complex procedure of land development project approval; and
- Government reluctance about poor's access to land.

The chapter reveals that informal land development in form of slum formation is not just a manifestation of demographic and structural change due to urbanization. It is also a result of absence of favorable laws for formal land delivery system, especially for lower income group and lack of political willingness. This situation will continue to emerge if favorable government policy is not being taken. Very few researches have been done on it. It would be useful to study specifically how informal land development patterns are created and how this problem can be overcome through private and public sector collaborative initiatives.

## **Chapter Ten: Immerging Issues, Conclusions and Recommendations**

The previous chapter discusses the roles and interests of actors in land development processes in Dhaka. The study helps to identify how different motivations of different actors are shaping the processes. The question becomes so significant when the role of planning in the context of land development is brought into discussion. The following section describes the immerging issues identified from the previous discussions.

### **10.1 MANIFESTATIONS OF ACTORS' ROLES**

For proper guidance of land development in urban fringe in Dhaka it requires an understanding of the perspective of actors' involvement. This includes their outlooks on the conversion of agricultural/wet land in urban fringe into urban uses and to know who are getting benefit from it and how. The preceding discussions show that there are various actors who play direct or indirect roles in land development in urban fringe. The research recognizes that in land development processes a great diversity of actors is involved with conflicting and complementary interests.

Evidences from the case study areas show that actors' weakest or strongest position depends on the economic and political strength. In this respect, private formal developers are strong from financial position and political contacts. Many of the developers are wealthy businessmen who provide external fund to support their political network and make the optimal use of the political influence. Moreover, government officials also conspire in the violation of the rules, whereby they get a share of the profit. Therefore, the activities of the private formal developers in the study area are mostly illegal.

Private informal land developers are other important actors in the land development process who fulfill the need of city's poor who cannot afford the high prices and rents resulting from inadequate land supply. Though the informal land developers start the development activities in unauthorized way with their limited financial means, with span of time the area becomes formalized when they are able to develop it in formal way. Therefore, it is no longer affordable for the poor and they are compelled to shift to some other places. The informal land developers initially often pay bribes to the musclemen who provide services illegally in return. The musclemen are often political representatives and act as middlemen between public sector and informal land developers.

Table 07: Actors and interests in land development processes in Dhaka

Actors	Interest and motivation	Roles in land development process	Nature of involvement	Influence in formal decision making
Government	Guide land development	Policy making and project approval	Formal	High
Political leaders	Political interaction with businessmen and making financial profit	Influence the decision making process	Informal	High
RAJUK as institution	Development township and development control	Developers and approval giving authority	Formal	High
Private formal developers	Profit maximization & land speculation	Land developers	Formal	High
Private informal land developers	Profit maximization	Developing land without following rules and regulations	Informal	No influence in formal level decision making
RAJUK officials	Keeping interaction with political leaders and making financial profit	Influence decision making process	Informal	Moderate Depends on the rank of the officials
DC office	Making some extra income	Land acquisition and compensation payment	Formal	Low
Intervening agencies	Making some extra income	Provide services and facilities	Formal	-
Land buyers/slum dwellers	To get ready made affordable plot/residence	Financier/tenant	Formal	For land buyers sometimes high, depends on their political link
Land sellers	To get high price of land	Selling land willingly or being forced by political pressure	Formal	Sometimes high, depends on their political link
Land brokers, middlemen	Profit maximization	Acts as middlemen in transaction process or service delivery process	Informal	-

Source: Author

The study recognizes that the former land owners whose lands are acquired or brought are the weakest group in the land development process. If the land is acquired by government it is seen that in most of the cases the land owners are deprived from reasonable amount of compensation and rehabilitation. They receive low amounts in compensation which is not sufficient enough to buy another piece of land or for a new shelter. The evidence from the study in Uttara Model Town shows that the landowners who have political link may get the plots back as rehabilitation. On the other hand, private sector often purchase land through bargaining process, sometimes forcefully using political patronage. In the transaction process between private sector and individual land owners the property dealers (land brokers) play an important role. Their function is to collect detailed information on land (ownership, legal status and prices) in the area where the private sector wants to buy land. They act as middlemen and often they are engaged by the private land developers for this information collecting purpose.

The study reveals that the government enters into the land development processes in forms of different actors and plays contradictory roles. In one hand, the government being the highest level of politics and policy maker is enforcing rules and regulations for guiding the urban growth in Dhaka which often implicit conflicting situation with private developers. On the other hand, many political leaders who are forming the government influence and manipulate government administration and decisions. Therefore, the effectiveness of the administration is poor due to individual interest of political leaders and it allows the private developers to develop the land illegally.

## **10.2 COMPARATIVE ANALYSIS OF LAND DEVELOPMENT PROCESSES**

From the preceding discussions in chapter seven, eight and nine regarding land development processes by different actors it can be concluded that both public sector and private formal sector follows a certain process which is quite similar. Both actors are giving emphasis on the middle and higher income group and ensuring high tenure security. In both cases the development cost as well as the ultimate land value is higher but simultaneously adequate services are being provided. The land development projects either taken by private formal sector (except few cases) or by public sector are officially under the provision of master plan of Dhaka though in both cases violation of laws are found. For land acquisition public sector follows government rule (Land Acquisition Act, 1989) and land is acquired through compensation payment. Inevitably, this is the most critical step in land development process which consumes long time.

Table 08: Comparative analysis of land development processes by different actors

	Public sector	Private formal sector	Private informal sector
Strategy	No loss, no profit Sometimes marginal profit	Profit maximization	Profit maximization
Legal status	Legal though violation of master plan is often claimed	Legal, some times illegal, depends on approval of project	Development on land is illegal, often does not follow planning regulations
Approval status	Approved by Govt.	Approved by Govt. through RAJUK. Political influence is very common to get approval	Not approved
Target group	Middle and higher income group	Middle and higher income group	Lower income group
Tenure security	High	High	Comparatively low
Development cost	High	High	Low
Service facilities	Adequate Sometimes violation of master plan	Adequate Sometimes below the fixed criteria	Low
Price of land	High	Comparatively higher than public sector	n/a
Principle of selling plots	Lobbying and bribing are found to get plots	First come, first serve	n/a
Land acquisition	Follow Govt. compensation rules, often anomalies are found	Follow bargaining process, involvement of land brokers and sometimes local leaders in the process	n/a
Development pattern	Planned	Planned	Unplanned
Development process	Lengthy, complex and time consuming	Faster than public sector	Simple

Source: Author



On the other hand, private formal sector follows formal land market rule. Through the bargaining process they purchase land. As a result, price of land of same quality and for same location sometimes also varies. Plots distribution process varies from public sector to private formal sector. RAJUK offers sometimes discount sale of plots for the former land owners. But lobbying and bribing is also common to get plots developed by RAJUK. For private formal sector 'first come first serve' strategy is applicable.

Private informal sector (slum developers) is developing land without any formal permission. They are following neither any plan nor the development project is being approved by government authority. The slums are generally developed without any outside intervention, using land developer's own savings for development and locally available building materials, own labors and own design. In such type of slum services and infrastructures are inadequate and below the minimum standard.

### **10.3 HOW FAR PLANNING IS SUCCESSFUL?**

Since the early 1950s RAJUK has been responsible, no plan has been fully implemented. There is always a gap between regulatory framework and its enforcement and only paper based plan without implementation has collapsed the spatial planning system in Dhaka. The first master plan was drafted by RAJUK (the then DIT) in 1959. The plan was approved and partially implemented. But it took 40 years against the stipulated 20 years. In 1980, the Planning Commission undertook a full-scale planning exercise for the Dhaka Metropolitan Area through a British consulting firm. The product was quite good, but it never received Government approval and thus was not utilized (Islam 1998b, p. 79). Therefore, there was no master plan after the master plan 1959 was dropped. But during that time development went on and buildings continued to emerge. Finally Dhaka Metropolitan Development Plan (DMDP) was approved in 1997 but has not been taken it seriously.

In chapter six it has been already mentioned that the DMDP of 1995-2015 has been divided into three parts - structure plan, urban area plan and detailed area plan. Though by December 1995, the paper work of the structure plan and urban area plan was completed and was published as a gazette in August 1997, the third phase - the detailed area plan is yet to be completed. This is the most important part without which the DMDP cannot be implemented or will receive no benefit and probably this is the most neglected part also which has not been drawn up yet.

RAJUK is the sole authority responsible for three primary separate functions for Dhaka - i) to prepare, implement and monitor a master plan for Dhaka city ii) to create planned townships including associated infrastructure and iii) to control the development and approval of plan for the city's land use. But RAJUK is more devoted on housing development as this creates a source of additional income for the RAJUK officials and paves the way to make a link with political leaders.

Problems in the plan implementation are not new in Dhaka. Non-implementation practice has been started from the first master plan 1959. Inevitably lack of institutional capacity and corruption in planning process are the main reasons. To complete only the DAP will not actually bring the solution. Because the time of adopting new structure plan is very near. If the actual constraints are not overcome, the same situation will arise even after 20 years. And that will bring more harmful effects than now because at that time the population pressure will be higher and Dhaka will no longer livable and will be a 'man made ceramic jungle'.

## 10.4 CONCLUSIONS

### 10.4.1 Uncontrolled and unplanned land development processes

The research suggests that the processes of land development in Dhaka take place in different environments being affected by different factors and motivations of actors. Regarding the variation of the process Vance (1964, p. 2 quoted in Starchenko 2005, p. 208) noted that: "... *there are certain general processes operating to create generalized structures for cities. Such an argument is valid but incomplete. There are also differences in the impact of the various processes, and occasionally there are peculiar processes not found elsewhere.*" In Dhaka the nature of land development and city growth is quite unplanned. The implication generated by the study suggests that the main reason behind this unplanned and uncontrolled growth is not that the present planning capacity in Dhaka cannot keep pace with the population growth and demand. The fact is that shrinking of effective government controlling power is hindering proper land development process. This constraint is making the land development sector arrogance, complex, and probably different.

#### **10.4.2 Different land development patterns and actors' motivations**

The variation of development processes in Dhaka follows two axes: i) land development by private formal sector (commercial business firms) and public sector theoretically following formal procedure and ii) informal land development through private individuals or group of individuals without following any rule and regulation. The research reveals that in case of private formal and public sector the efforts have been concentrated on providing housing for higher and middle income groups. It is proved that due to liquidity, qualified personnel, stability, and technical supports the established commercial firms can develop low lands more efficiently and professionally than the individual households generally can do. But due to profit making motive of these firms the ultimate price of land becomes high and it goes to the hands of higher income group. The land developed by public sector is also beyond the reach of lower income group. In both private and public sector irregularities are also found which are nothing but the responses of weak governing system.

On the other hand, informal land development process is the response of 'growing demand' of land by the migrant low income people who want to settle down in Dhaka. The deteriorating conditions in the rural areas result a considerable flow of migrants to cities. Simultaneously, slum entrepreneurs provide very low cost rental housing where living condition is very poor. As a result, lower income group with their little financial resources adopt slums as rudimentary shelter. The research recognized that informal land development has performed fairly well in providing land for lower income group. Though informal sector of land development is providing shelter to almost 35 percent of total population in Dhaka it has not been received attention from government yet. It seems that government is enjoying the existence of informal land development sector to avoid their responsibility for poor.

The research concludes that in land development processes the way public and private sector follow is not realistic and not environmentally sustainable. The private sector always hopes to receive large benefit whereas the public sector authority always cares to remain in the good book of the political leaders.

#### **10.4.3 Gap between planning and its implementation**

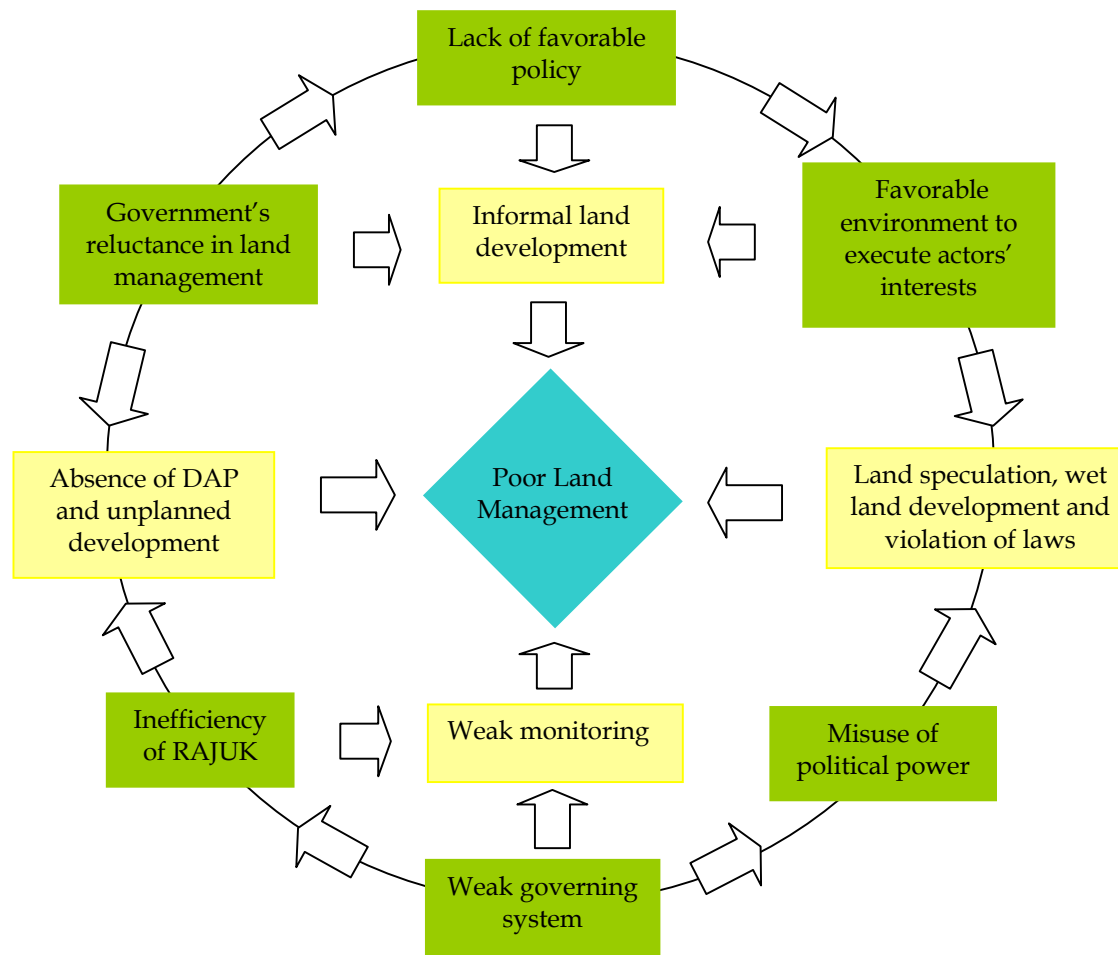
The research concludes that there is a big gap between planning and its implementation. Actually the development authority of Dhaka has never succeeded to implement any effective planning system. On the other hand, the vigorous presence of powerful and

speculative motivated private land developers is weakening the situation further. Though sometimes government tries to control the land development in urban fringe through different rules and regulations, the commercial business firms do not feel constrained by the regulations as they are receiving undue supports from governing authorities. This research argues that this undue support particularly in the land development sector is simply the reflection of political corruption.

#### **10.4.4 Confirmation of hypothesis**

Finally the research hypothesis has been confirmed. Importance of integrating the practice of good governance in urban land management has been identified in order to improve the present situation. The study recognizes that presently there is no good land management in Dhaka. The term 'land management' is still a theory which is far behind from its practical implementation. The present spatial planning has also failed to guide the city growth and development and this is the indispensable fact which is affecting urban fringe development in Dhaka in negative way.

Figure 18: Land management problems in Dhaka



Source: Author

## **10.5 RECOMMENDATIONS FOR BETTER LAND MANAGEMENT IN DHAKA**

Good land management means planned land management but obviously the planning should be flexible enough to cope with the changing situation of the country. *Flexibility is the question of creating effective standards for planning, building and servicing, which are a critical factor in determining the effectiveness of land use regulations* (UNCHS 1996, p. 297). From the previous discussion the research recognized that land management should fulfill the criteria of 3Ps – policy (favorable legal and institutional framework), planning (plan and procedure to achieve goals) and public (peoples’ participation). Therefore, good land management is the managing and running of established process which produce good results by fulfilling the criteria of policy, planning and public. When land management fails to achieve land management goals due to defective nature of its criteria or absence of given criteria, it becomes ‘bad’ or ‘defective’. Presently in Bangladesh land management criteria like land policy, spatial planning and land use planning, proper implementation of legal framework, peoples’ participation are totally absent which results in spreading of unplanned settlements development and low standard of living environment. The research argues that presently there is no land management strategy in Dhaka as well as in Bangladesh, but an improvising situation exists.

The present research develops a mean and method to introduce land management strategy in Dhaka with the objective of guiding land development in urban fringe. The research proposes two stages recommendation – first, theoretical model development and second, bringing the practical solutions based on the developed model.

### **10.5.1 Development of a new theoretical model: The base for practical solutions**

#### **10.5.1.1 Concept of Land Management: How far applicable for Dhaka?**

From the literature review it is observed that in the different concepts of land management the influence of good governance on it is almost missing. The reason is that, there is always an assumption that there will be a favorable governing system to implement the land management goals. Moreover, the concept and example of sustainable land management is always adopted from developed countries where sound governing system is a primary driver and the stakeholders work in an intergovernmental system. But in a country like Bangladesh where governing system is very weak there is a very slim chance to implement any development plan. The present research empirically demonstrates that the weakness of the planning institutions is not the only cause, rather poor controlling system on land

management activities is the main reason of failure to manage land in Dhaka. That's why it is needed to shift the focus from the *activities* (i.e. spatial planning) associated with the management of the land to *the way of controlling the activities* (i.e. rule of law) associated with management of the land. Therefore, the notion should not end with 'land management activities', but should extend to 'controlling the land management activities'.

#### **10.5.1.2 Developed Concept of Land Management Governance**

Considering the present problems in land development sector in Dhaka the research argues an alternative way which is the combination of land management and good governance, where government will ensure that land management activities are taking place properly in every level. The research defines this alternative way as '**Land Management Governance**' which is *the exercise of political authority to ensure a country's land management at all levels. It comprises planning, controlling and execution of land management activities through which interest groups can articulate their desire, achieve their legal rights and meet their obligations.*

The developed definition is giving focus on three important issues – planning, execution and controlling which comprise land management governance.

- Planning - thinking about desired objective and what to achieve and how;
- Execution of planning; and
- Controlling – government's will and control over planning and execution of activities to ensure that land management activities are taking place properly.

Based on the developed concept the research develops a Land Management Governance model (Figure 19) which has two major sides. One is responsibility of government to fulfill the objective and another is the management of the land itself.

#### **Side One: Land management**

Land management is a process of promoting and achieving the effective development of land which is environmentally, socially and economically sound and ensures controlling of city growth with well being of the people.

Land management processes are differently designed in different countries. Historic and legal tradition, land tenure systems, nature of administration, i.e. centralized or decentralized, political ideology, legal and institutional framework, private sector's involvement, extent of peoples' participation, technical and financial capability of

government and above all land management goals – all play a role to determine how land management process is to be built up. The research argues that whatever may be the background the land management process should be rational and systematic giving emphasis on the followings (Camhis 1979, p. 30):

- A general set of values expressed as goals and objectives;
- Generation and examination of all alternatives open for achieving the goals;
- The prediction of all consequences that would follow from the adoption of each alternative;
- The comparison of the consequences in relation to the agreed set of goals and objectives; and
- The selection of alternatives whose consequences correspondence to a greater degree with the goals and objectives.

Land management process should fulfill the requirement of comprehensiveness. This requirement refers to a variety of aspects in this approach. It refers to the attempt to satisfy not only one goal but all goals of the various interest groups in the society, or in other words, to an attainment of the general goals of the public interest (ibid).

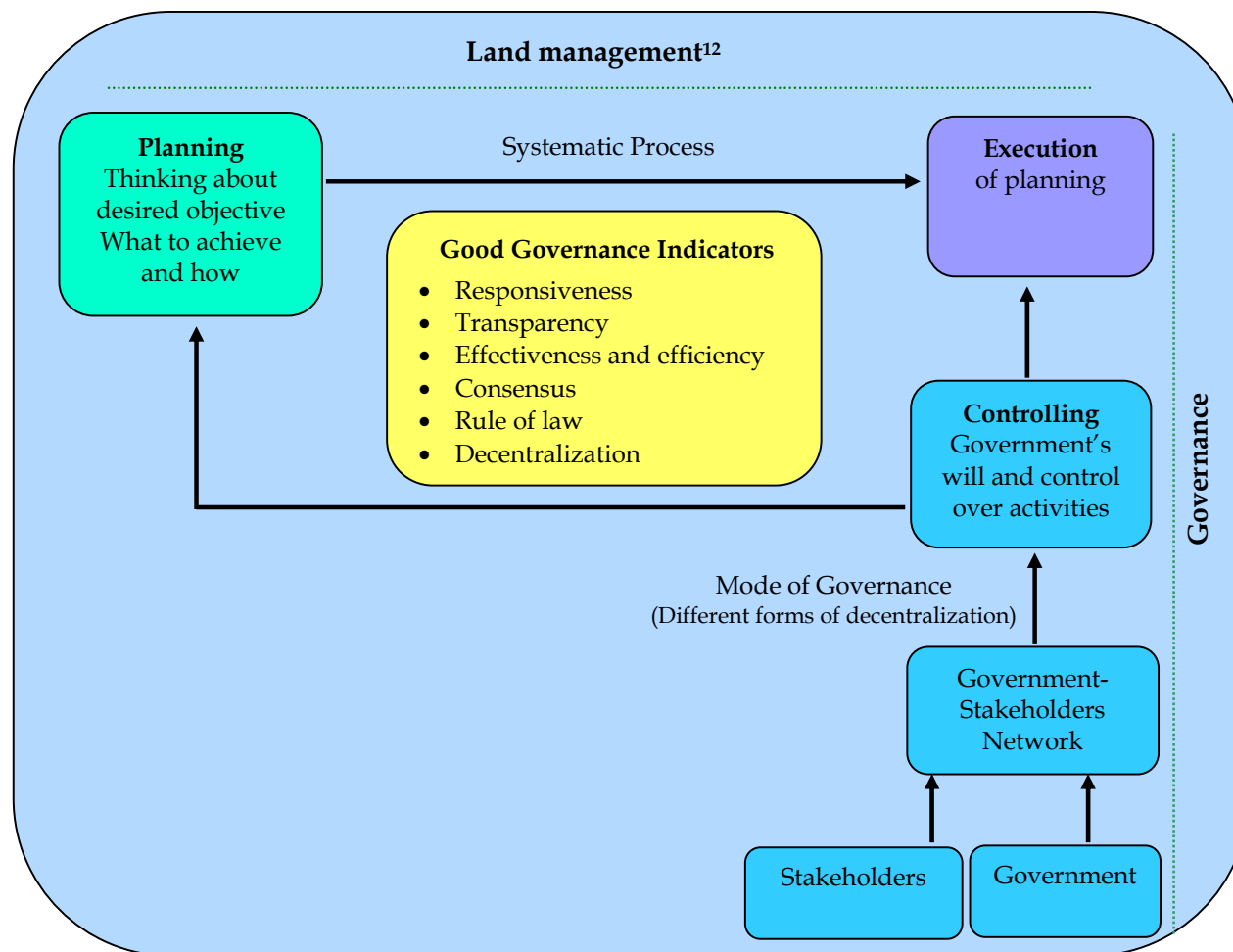
### **Side Two: Governance**

Governance in 'Land Management Governance' is a system by which land management is directed and controlled. It is the process by which land management objectives are established, achieved and monitored. Governance is concerned with the relationships and responsibilities between government and stakeholders within a legal and regulatory framework of land management.

The important decisions regarding land management start within the function of governance and continue it in the managerial process. Good governance ensures controlling of planning and executive activities through government-stakeholders network. Here, government-stakeholders network means government's relation with formal and informal organizations through collective action of stakeholders to advance efficient management of land.



Figure 19: Model of Land Management Governance



Source: Author

<sup>12</sup> The term land management has been defined in section 10.5.12

In centralized system the central government plays a strong controlling role. Therefore, the decentralized framework strengthens or creates the platforms where stakeholders can easily participate in decision making for land management at local level because local level decisions mostly directly affect them. Through decentralization government can easily communicate with citizens at local level and it establishes a clear link between participation and outcome (Johnson and Minis 1996, p. 4). The decentralization in the land management governance can take different forms<sup>13</sup> like deconcentration (transfer from central agencies to field offices of these agencies), delegation (transfer of service responsibility from central government agencies to autonomous bodies) or privatization (transfer responsibility to private sector). The research is considering 'decentralization' as one of the best solutions for addressing the present problems in land development sector in Dhaka.

Box 04: The indicators of good governance in the Land Management Governance

**Responsiveness:** All the planning and its execution (i.e. master plan) will be done within a given time framework. For example, there will not be any unnecessary delay in the implementation of master plan like present.

**Transparency:** Any decision in land development planning or execution will be done followed by rules and regulations without any biasness. For example, slum dwellers will have access to the information on decision how RAJUK is thinking about slum upgrade through master plan.

**Rule of law:** Planning and its execution activities will be controlled through legal framework. It will ensure tenure security and poor's access to land also.

**Accountability:** Government as well as private sector will be accountable for their decisions and activities in land development sector, for example, accountability of government in the approval of land development projects or in land plots allocation process of RAJUK or in the implementation of master plan.

**Consensus orientated:** Any land development law or spatial planning strategies will come into force after receiving the consent of the interest groups.

**Effectiveness and efficiency:** Land development laws, rules and regulations and spatial planning will be sound enough from social, economic, cultural and environmental perspective and it will also protect human rights.

Source: Author

<sup>13</sup> Different forms of decentralization have been provided by Rondinelli et. al (1984)

### 10.5.1.3 Land Management Governance: Is it Land Governance?

Though there is an increased literature and discussion to the concept of 'land governance', there is no clear understanding or uniform definition of the term. In fact there are very few definitions exist and still lacks the agreed definition.

In general term, land governance is about power and political economy of land (World Urban Forum 4, 2008). According to UNDP (2007) *"Land governance includes both formal and informal rules – the latter often evolving and being situation specific - which govern who gets to use which land resources, when, for how long and under what conditions"*.

Recently the term 'democratic land governance' is also using which is referred as political process that is contested by multiple state and societal actors to control the nature, pace, extent and direction of access to, control over, and use of land resources (Borras and Franko 2008, p. 4).

Borras and Franko have brought basic fundamental distinctions between 'democratic land governance' and land administration or a simple 'land governance'. According to them the former perceives the ownership, control and use of land as the result of a complex, dynamic and inherently contentious political process, the latter tends to assume that there is one 'right' form of ownership, control and use of land (i.e. usually private and individual property rights) and that this can be effected through the 'right' technical procedures (i.e. usually through privatized and decentralized approaches) (ibid).

Therefore, the term 'land governance' or 'democratic land governance', whatever, is a process of governing land through which the decisions are implemented. The concept(s) is giving emphasis on the controlling or governing process to articulate the interest in land ownership, may be for these two different terms (land governance and democratic land governance) the governing approach could be different.

The research argues that land governance is the concept of land administration where the good governance criteria have been incorporated. On the other hand, land management governance is an approach to bring all the aspects of land management and land governance. The research argues that land management governance is not only about 'Governability'. It also refers the goals of land management which government is seeking to be accomplished not only through a systematic planning process, but also through a good governing system. Therefore, it is consisting of planning, execution and controlling.

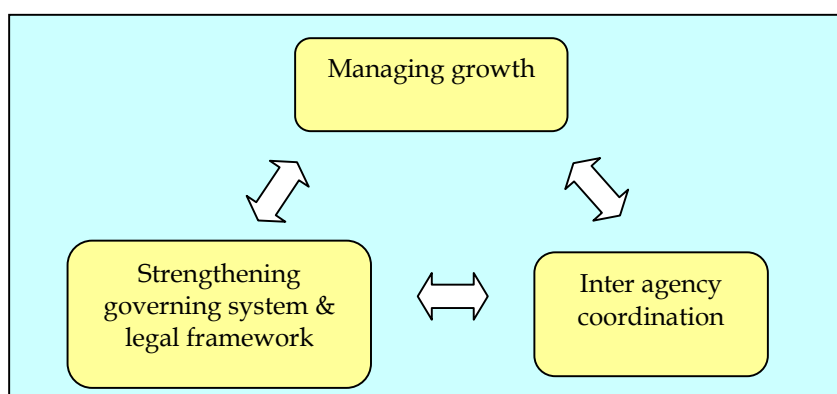
### 10.5.1.4 Expected results of Land Management Governance

The research argues that the developed model is neither a single model nor an all or nothing proposition. When good governance is applied in land management field, it does not confine only in governing system. It brings manifold solutions which are interrelated with each other. Therefore, the research recognizes it as gamut of solutions to the problems of land development sector in Dhaka. In this context it is not irrelevant to quote here German international consultant Prof. Roland Berger (quoted in Magel 2005; 2006). According to him key factors of growing economy, wealth and of innovation are -

1. Natural resources
2. Human resources
3. Technical process
4. Capital
5. Knowledge and its marketing
6. Institutional and political framework
7. Values, ethics, paradigm of commitment

If the developed model is compared with the noted factors it is seen that it ensures the above seven factors either directly or indirectly. For example, institutional and political framework, values, ethics and paradigm of commitment are the direct outcome whereas the rest would be affected indirectly but positively.

Figure 20: The expected outcome of Land Management Governance



Source: Author

Table 09: Dimension of Land Management Governance

Managing urban growth	Strengthening governing system & legal framework	Inter agency coordination
<ul style="list-style-type: none"> <li>• Effective spatial planning framework</li> <li>• Poor's access to land and tenure security</li> <li>• Improvement in quality of built environment</li> </ul>	<ul style="list-style-type: none"> <li>• Transparent, accountable and responsive planning system</li> <li>• Public participation in planning system</li> <li>• Capacity building</li> </ul>	<ul style="list-style-type: none"> <li>• Inter-departmental coordination</li> <li>• Coordination among public institutions and between public and private sector</li> <li>• Coordination with state</li> </ul>

Source: Author

#### 10.5.1.5 Public Participation GIS: Prospective tool of Land Management Governance

Land management governance is the concept of keeping the state, private sector and civil society together with the common interest to manage the land. 'Keeping together' concept can only exist if the private sector and civil society have i) access to the information relevant to the decision making process, more specifically on the criteria used for decision making and ii) opportunity to give their opinions on developed proposal. Recently Central Government of UK is championing e-planning system as means of improving public access to the planning system as a means of speeding up planning decision (DTLR, 2001) where PPGIS is considering as tool of that.

The term Public Participation Geographic Information System (PPGIS) came into light in the workshop of National Centre for Geographic Information and Analysis (NCGIA), Orono, Maine, United States, 10-13 July, 1996. The idea behind PPGIS is empowerment and inclusion of marginalized population who have little voice in public arena. It is a broad research agenda that seeks to encourage new layers of capability within GIS and new connection to technologies and processes outside the present GIS practice (Schroeder, 1997 quoted in Harrison and Haklay 2002, p. 2). This goal includes the use of GIS by grassroots communities to improve their purchase on public debate about future development (ibid). The present research suggests that PPGIS can be also an effective tool for the implementation of Land Management Governance. The study argues that GIS as a tool can lie on the public participation setting in two ways by incorporating the information on

management and relevant decision making in land sector - i) provides peoples' access to information and ii) fulfills the monitoring role of the people. Therefore, GIS as Land Management Governance tool can bring openness and transparency in decision making process.

Application of PPGIS in Land Management Governance is a proposal which needs further research because its effectiveness depends on the context of the country. For example, due to lack of technical knowledge, capital and trained personnel the tool cannot be used initially in a country like Bangladesh. But considering it as a long term target government can start taking initiative to adopt PPGIS.

#### **10.5.1.6 Application of Land Management Governance in different fields**

Based on the analysis of three case studies the research has developed the concept of 'Land Management Governance' whose application is not limited to urban fringe land problems only or in Bangladesh only. The model is therefore potentially suited for overcoming the problems of urban land management and rural land management as well in any jurisdiction. Application of 'Land Management Governance' in rural development can devote a wide spectrum of idea like the form and nature of local governance, management of rural development programmes and capacity building of local government institutions in formulating and implementing local development policies and programmes as well.

Ineffectiveness in land management system generally occurs broadly due to three reasons - inefficient planning system, poor governing system or combination of both. But from the literature review it is recognized that weak governing system is a core problem of land management in many developing countries. It is not irrelevant to mention here that FAO with partners, GTZ, the World Bank, UN HABITAT, IFAD, FIAN and the Government of Finland has announced a new initiative to assist countries wishing to develop a formal policy response to the problems of weak governance and corruption. This work is intended to result in voluntary guidelines for good governance in land and natural resource tenure prepared jointly by governments, civil society and international organizations and approved by FAO's member nations, as well as other interested parties (IACC 2008). Therefore, the countries or cities where defective land management exists due to poor governing system and corruption, Land Management Governance can be an appropriate tool to bring the favorable solutions for that.

## 10.5.2 Practical solutions

Based on the developed theoretical concept the research provides a set of recommendations which are more specific for Dhaka to overcome the present problems in land development sector. According to the developed model planning and controlling ensures the proper execution of land management process and achieving the goals. Presently Dhaka has only planning for land management but no controlling which results in no execution. Therefore, the study suggests that Dhaka should focus more on controlling of land management activities. The issues that should be considered in planning, execution and controlling phases to guide urban fringe development are as follows -

- *Planning Phase*

### 10.5.2.1 Guiding informal land development

Informal land development is increasing in Dhaka which is accompanied by inadequate services and poor living standard. The situation is getting worse gradually. Therefore, the initiatives should be taken considering curative and preventive measures. Curative measures are for overcoming the present situation whereas the preventive measures are for future to control the informal development of land in Dhaka.

As curative measure slum upgrade can be approached from both 'bottom -up' and 'top-down'. In bottom up approach the informal land developers take initiative and seek the support from government. On the other hand, in top-down approach government (sometimes NGOs) takes the initiative and settlements are upgraded with the help of the residents. In case of Dhaka the research suggests that the initiative should come from government though lack of fund and inability to recover the cost from the upgradation can be a major problem for government. In that case coordination between NGOs and Government can solve the problem of fund raising. UNCHS (1996) argues that partnership should be based on principles of equity, economy, efficiency, flexibility and participation. Actually these requirements can be fulfilled through land management governance where government initiative is the starting point.

The research suggests that as preventive measure government should take initiative for formation of social and financial capital for poor and adapting minimum standard for development so that the lower income group can be motivated for formal development. The

research also recognized that present land development plan approval is quite expensive and bureaucratic for poor. Therefore, the lower income group should be exempted from certain procedure and fees. The concept of sites and services scheme and land sharing is quite common now a day in many Asian countries. To solve such type of problem these concepts can be kept under consideration also.

#### **10.5.2.2 Option of plan revision and circulation**

Dhaka Metropolitan Development Plan should be reviewed periodically to fit with the changing situation and fulfill the demand of the time. The research reveals that people have ignorance about present planning system in Dhaka and also are unaware about the DMDP. Moreover, the consultancy firms are not also keeping in touch with the people at the time of preparing DAP. Though RAJUK has started to disseminate the information through internet still it is out of reach for many people. In that case the basic information should be publicized through newspapers. This will also ensure RAJUK's accountability and transparency and also help to create awareness among people.

- *Controlling Phase*

#### **10.5.2.3 Political commitment and peoples' participation**

Reorienting urban decision making processes towards sustainable development requires change in how decisions are made and how different sectors implement these decisions. This can be only achieved with political support at highest level, since changing needs to disseminate throughout the whole city and not just in one department or area of work (Barton and Tsourou 2000, p. 38). To guide urban fringe development in Dhaka it also requires bringing change in the process of decision making and brings coordination among different sectors. This can be only achieved through political support. Adequate support from government who is the policy and decision maker will help in mobilizing local resources, curbing the corruption, achieving spatial land management goals and tenure security for poor.

Presently in case of land development in Dhaka the strategy of 'land for middle and upper income group' is being followed without caring for poor. Moreover, in the planning and management process peoples' participation is always ignored. Therefore, it is necessary to ensure that interest groups have the opportunity to intervene in planning and management process. This participation can take variety of form as participation level varies from



information giving to taking part in decision making level. In this regard, initiatives to take the ideas of stakeholders through workshops combined with moderation and mediation, public hearing and meeting at every stage of preparation of master plan can be effective.

#### **10.5.2.4 Strengthening institutional arrangement**

Decentralization is one of the means which can make the land development process efficient and can provide opportunity the local people to take part in decision making process. Presently due to centralized power of RAJUK and lack of decentralization policy in fringe area there is no field office of RAJUK to monitor land development trends. By this time many researches have been suggested that RAJUK should be decentralized and there should have local level offices at fringe area. But only to have local offices will not bring panacea. The present research is arguing that decentralization in the responsibility is also necessary. The power should be shared. For example, RAJUK will not be only one responsible authority for preparation of master plan, development control and township development. Private sector can be incorporated to bring a competitive situation and make the process transparent and efficient. For example, private sector could be responsible for field supervision. In addition, RAJUK should have coordination with Dhaka City Corporation and Division of Deputy Commissioner of Land to come up with the problem of settlement upgradation and complexity in compensation payment and rehabilitation respectively.

The research argues that private and public sector partnership is important and it is required to accumulate fund and to organize the interest groups in land development process. So, in order to accelerate the efficient land development each sector should be responsible for the issues for which it has comparative advantages. Here, the private sector should be main implementer and public authorities should be facilitator and protector (CITYNET 1995, p. 50).

#### **10.5.2.5 Provide a supportive legal framework**

In Dhaka spatial planning and land laws are not effective enough to guide land development and city growth. The present planning system is under the control of policy makers and does not facilitate local level. At the policy level the need of poor is being ignored always. For example, there is no specific law to ensure poor's access to land. Also at policy level the need of upgradation and regularization of informal settlements are practically missing. The research suggests that there is a strong need to review present land

laws and spatial planning system in Dhaka and incorporate the issue of urban poor's access to land and peoples' participation.

Specifically the research pinpoints the following issues which should be covered by the legal framework –

- To facilitate the development of informal land development and upgrading of existing settlement with providing tenure security;
- To promote New Town development where employment opportunity will be close proximity to the residential areas. But obviously New Town development concept should not be taken as a model as it may not be affordable always;
- To ensure the participation of affected members of community in the land development and decision making process. For example, in plots allocation meeting of RAJUK or in the private land development projects approval meeting there should be representative of interest groups to keep the process transparent;
- To review of land acquisition policy, for example, to enable quick payment of reasonable amount as compensation, to stop unnecessary acquisition of land by government and provision of conflict resolution within a reasonable time. In the land acquisition process the relation between government and land owners should not be like ruler and ruled. The total process should run like a partnership process where 'satisfy-satisfy' situation will remain after the acquisition of land.
- To enact policies and laws to control land speculation, for example, to enact the option of social contribution. Under this option the private land developers will have to keep a certain percentage of land affordable for lower income group if the land developers exceed a certain ceiling of land to develop.

- *Execution Phase*

#### **10.5.2.6 Access to information**

One of the first steps to establish land management governance is the enactment of an 'Access to Information Law'. It is almost impossible for people to fully exercise their rights and freedoms as long as they are not informed about government policy, rules and regulations. Only after being informed timely and accurately they can suggest the alternatives more effectively which suit to their needs.

### **10.5.2.7 Regular monitoring of land development and violations of laws**

From the research it is recognized that urban fringe in Dhaka is developing in uncontrolled and unplanned way without following any rules and regulations. RAJUK's poor monitoring capacity is one of the reasons for that. Therefore, there should have separate division of RAJUK which will be responsible for monitoring whether land and buildings development are taking place with conforming the rules and regulations or not. In this case RAJUK can make a collaboration work with private sector for field supervision. Obviously this process should not be confined in monitoring only. Necessary actions should be taken against violation depending on the extent of the violation. The report specifically on the violation of rules in land development should be disseminated through newspapers so that the prospective clients of private sector can be aware about that and can take the right decision.

## **10.6 METHODOLOGICAL LIMITATIONS AND DIRECTION FOR FURTHER RESEARCH**

The objective set out of the research was exploratory in nature. The main aim was to provide a picture that would contribute in understanding the roles and interests of different actors in land development processes and also the effectiveness of present planning system in land management. Consequently the research focused on RAJUK, private formal sector and informal sector of land development which could be observed in Dhaka mega city level instead of urban fringe level. This selected criterion has both advantage and limitation. One of the main methodological limitations of the research is that it is limited by the scarcity of data on corruption which is taking place in land development sector, for example, amount of money RAJUK officials/politicians receive as bribe. Due to sensitivity of the issue many respondents refused to give answer on the topic of corruption. Another limitation is that from the side of public sector only RAJUK has been studied as a representative of public institutions involved in land development though PWD and NHA are also playing the same role in Dhaka but their working scope is limited. In the research analysis there is absence of focus on squatter settlements. It is therefore recommended that future research can conduct on formation of squatter settlements in Dhaka and their eviction. This will provide a complete picture and understanding on poors' tenure security and informal land management issues in Dhaka. The research has given an idea that PPGIS can be an effective tool for land management governance. Therefore, it is also necessary to have a further research on PPGIS which can be used as an effective tool in Land Management Governance.

### 10.7 CLOSING STATEMENT

The process of land development takes place in a contextual environment and under local conditions that are neither uniform nor consistent (Bourne 1996 quoted in Starchenko 2005, p. 208.) The planning process is ever changing. Therefore, it is not possible to foresee the future land development pattern, form of city and its management as various factors are involved with these ongoing phenomena. But obviously the extent of intervention of government, private sector and civil society play a vital role here. A full-fledge concept of Land Management Governance is offering a coherent framework and it is possible to overcome the present problems in land development sector in Dhaka. But realizing the potential depends on the ability to look beyond time, existing legal requirements, political commitment and motivation of public and private sector. It is expected that both public and private sector will take attempt for efficient land development. But if the present trends go on, the real problems in land development processes will remain unsolved or even untouched.

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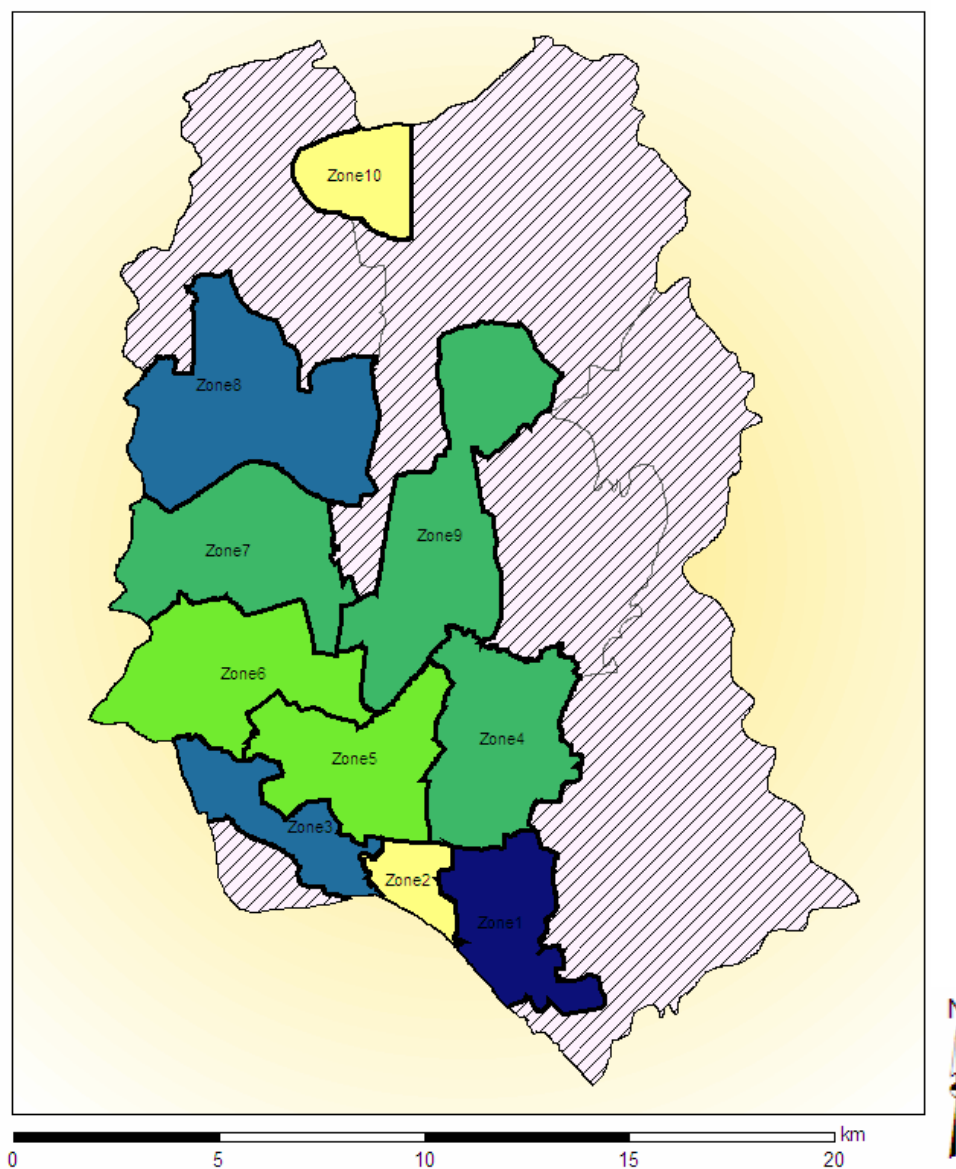
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# **ANNEXURE**



**Annexure A**

Map: Dhaka City Corporation Area (2005)



Source: Adapted from World Bank, 2007<sup>i</sup>

<sup>i</sup> World Bank (2007). *Dhaka: Improving living conditions for the urban poor*. Sustainable Development Unit: South Asia Region.

Table: Income groups in Dhaka City

Income group (Monthly household income in taka)	DCC 2004			DMDP 2004	
	Percentage	Million		Percentage	Million
Hardcore poor < 2500	25	40	3.0	40	4.8
Moderate poor 2,500-5,000	15				
Lower Middle = 5,000-10,000	20	50	1.5	53	6.4
Middle Middle = 10,000 - 25,000	20		1.5		
Upper Middle = 25,000- 50,000	10		0.75		
lower Upper = 50,000 - 100,000	7	10	0.75	7	0.84
Upper Upper 100,000+	3				

Source: Islam and Shafi 2008<sup>ii</sup>

<sup>ii</sup> Islam and Shafi (2008). *A proposal for a housing development programme in Dhaka city*. Dhaka: Centre of Urban Studies.

**Annexure B**

Actors and processes behind urban fringe development: Mechanism to guide urban land management. Study on Dhaka, Bangladesh

Checklist for taking interview with the official of RAJUK

(All the information collected here will be used for academic purpose only)

Designation of the interviewee: .....

Date: .....

• **Regarding Uttara Model Town**

1. What was the main motivation behind this township project? Is it considered as successful project or not? Why?

.....  
.....

2. From project initiation to implementation what were the major stages needed to follow?

.....  
.....  
.....

3. How the land was acquired? How long it took to comply with the whole process?

.....  
.....

4. What are the major problems faced during land acquisition?

.....

5. Who were the target beneficiaries of the project? How the beneficiaries were selected for allocation of land?

.....

6. Is there any specific quota for lower income group or former land owners? If yes, how they are selected?

.....

7. How the cost of the project has been recovered?

.....

8. Do you think RAJUK has proper coordination with other planning agencies?

.....

9. Do you think at the time of project implementation master plan has been followed fully? Allegation of bringing deviation in master plan (e.g. change in land use, occupying open space and park) has been brought. What's your opinion about that?

.....

.....

10. In land development process from initiation to implementation what are the problems RAJUK mainly faced? How did you overcome those?

.....

• **Regarding plan and development control**

1. What are the strength and weakness of present planning system, you think?

.....

.....

2. What are the reasons behind the weakness (e.g. non-implementation of DAP)?

.....

3. Do you think that preparation of DAP is going as per to the schedule? If no, please explain why. ....

.....

4. Do you think RAJUK has proper coordination with the consultancy firms assigned for DAP preparation?.....

.....

5. How far peoples' participation strategy is following in preparation of DAP?

.....

6. Do you think that DAP will serve effectively after its implementation?

.....

7. What are the measures you think, necessary to adopt to improve the present planning situation?

.....  
.....

- **Regarding private land development project approval**

1. What is the process generally need to follow for the project approval of private land development?.....

.....  
.....

2. Do you think present project approval process is sound and transparent enough?

.....  
.....

3. How far different laws and regulations (e.g. Wet Land Conservation Act, 2000) have been able to guide land development?

.....

---

Actors and processes behind urban fringe development: Mechanism to guide urban land management. Study on Dhaka, Bangladesh

Checklist for taking interview with private (formal) land developer

(All the information collected here will be used for academic purpose only)

Designation of the interviewee: .....

Date: .....

1. What are the different steps you need to follow in housing projects starting from land acquisition to building construction?  
.....  
.....
2. Do you think land development project approval process by RAJUK is transparent enough? Did you face any problem at the time of approval?  
.....  
.....
3. How do you purchase land? Do you employ any land broker to get information of land ownership?  
.....  
.....
4. How do you negotiate the land price? Is there any role of broker in the negotiation process?  
.....  
.....
5. According to your recent experience on land value, what is the price (in Taka) of per katha land in the fringe areas?  
.....  
.....
6. How do you evaluate present rules and regulations (e.g. Private Land Development Rules, 2000)?  
.....  
.....
7. Who are the target groups for land development project? How do they generally buy plots/apartments?  
.....  
.....

8. Do you keep any specific quota/price for lower income group?

.....  
.....

9. If any kind of government subsidy or support is provided to private sector, do you think it will encourage private sector to provide access to land to urban poor?

.....  
.....  
.....

10. Do you think present planning system of RAJUK is effective enough to guide urban fringe development?

.....  
.....

11. What is your suggestion to improve present planning system and land project approval system?

.....  
.....

---

Actors and processes behind urban fringe development: Mechanism to guide urban land management. Study on Dhaka, Bangladesh

Checklist for taking interview of private (informal) land developer

(All the information collected here will be used for academic purpose only)

Name of the respondent .....

Date: .....

• **About the land**

1. Total area .....
2. Previous use of land .....
3. Present land use .....
4. How did you get this land? Inheritance or purchase?  
If purchase, then purchasing year and price  
.....

• **About development**

5. When did you develop these structures? .....
6. What is the motivation behind this development?  
.....
7. What was the process of development?  
.....
8. Is it approved by development authority? If not why?  
.....
9. Present number of structures on land and their types (e.g. permanent, semi permanent or temporary).....  
.....
10. What are the facilities presently you are providing to your tenants? How are you getting access to water and electricity supply?  
.....



11. Did you face any problem at the time of development?

.....

12. What is your future plan for further development?

.....

13. What is your expectation from government or private sector to help you for further improvement of the area?

.....

• **About rent structure**

14. Present number of tenants.....

15. What is the range of monthly rent? How do you decide it?

.....

---

Actors and processes behind urban fringe development: Mechanism to guide urban land management. Study on Dhaka, Bangladesh

Questionnaire for household survey in case study area  
(All the information collected here will be used for academic purpose only)

Location: Uttara Model Town/ Bashundhara Land Project Area

Name of the respondent .....

Date: .....

• **Information about respondent**

1. Occupation: .....

2. Monthly income: .....

• **Information on land / building**

3. Total area: .....

4. How did you get the land/ building? through inheritance / purchase

If purchase then,

i. Year of purchase .....

ii. Purchasing price .....

iii. Method of payment .....

iv. Sources of fund .....

v. Waiting period to get the possession .....month / year

vi. Reason behind choose this place.....

vii. Problem (s) faced at the time of taking possession.....

5. Do you have any other land plot in Dhaka?

If yes, where .....

6. How will you evaluate this land development project as a resident? What are the problems you faced here?

.....  
.....

---

Actors and processes behind urban fringe development: Mechanism to guide urban land management. Study on Dhaka, Bangladesh

Questionnaire for household survey in Khilket slum area  
(All the information collected here will be used for academic purpose only)

Name of the respondent .....

Date: .....

• **Information about respondent**

1. Occupation and location: .....
2. Number of family members: .....
3. Monthly household income: .....

• **Information about the accommodation and life style**

4. Total occupied area and number of rooms: .....
5. Monthly rent: .....
6. How long are you staying here? ..... month / year
7. What are the facilities are you getting now?  
Water / sewage / electricity / gas/ others.....
8. Before here, where did you live? .....

If you are a migrate from rural area, then

- i. Why you have decided to settle in Dhaka?
  - ii. How did you arrange money to settle down here?
  - iii. Do you think with the expectations you came in Dhaka have been fulfilled? If not why? .....
  - iv. Do you want to go back to rural area again?
9. Why you have chosen this area (slum) to live?  
.....
10. What type of problem (s) you face here (slum area)?  
.....
11. How these problems can be solved, you think?  
.....