

A STUDY ON PRIVATE RESIDENTIAL LAND DEVELOPMENT
ACTIVITIES IN DHAKA AND THEIR COMPATIBILITY WITH
DMDP STRUCTURE PLAN 1995-2015

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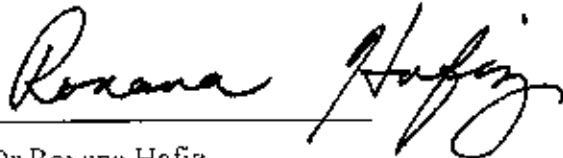
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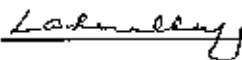
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It is hereby declared that this thesis or any part of it has not been submitted elsewhere for the award of any degree or Diploma.

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ABSTRACT

As a capital of a developing country, mega city Dhaka is experiencing outstanding growth over the last one decade. Dhaka has expanded 17.88 times from its initial size over the period 1951-2001, in the same time span population had increased 25.09 folds. According to 2001 census, Dhaka Mega City accommodates 10.7 million people, a major share of 37.45% of the total urban population of the country (BBS, 2003). In response to the growing demand of housing and other urban uses, private land development companies have emerged as a dominant force in the land market and posing significant impact on land development and planning. In order to regulate and guide urban development, Dhaka Metropolitan Development Plan (DMDP) has stated policies for the period 1995-2015. Like many other third world countries Dhaka also growing predominantly in an unplanned manner, even after the enactment of several acts and planning documents.

This research attempts to identify the locations and trend of residential land development projects by Private Land Development Companies (PLDC). List of private land development projects within the Dhaka Metro (DMDP) area has been collected from various sources like RAJUK, REHAB Fair, news paper advertisements and from internet. A GPS survey was conducted and 143 residential land development projects were found within the DMDP area. In addition to field survey, about 20 developers were interviewed to get idea about the factors responsible for existing trend of development. This research focuses on three objectives: (i) To identify the trend and locational aspects of private residential land development activities in Dhaka Metro Area since 1995. (ii) To evaluate the land development activities and its compatibility with the stated policies of DMDP (1995-2015) (iii) To find the causes of deviation from DMDP and recommendation for strengthening enforcement of structure plan.

Findings from the study depict the fact that a significant share of ongoing land development projects does not have any kind of approval from relevant authorities. Many of the projects have violated the policies stated in DMDP and are encroaching areas demarcated as restricted zones. As a result high value agricultural land and flood flow zones of Dhaka are in constant threat. This research portrays the current trend of land conversion by PLDCs which have severe environmental impact on the city.

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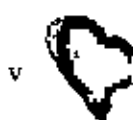


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Abbreviation

DAP	Detailed Area Plan
DC	Deputy Commissioner
DCC	Dhaka City Corporation
DIT	Dhaka Improvement Trust
DMA	Dhaka Metropolitan Area
DMDP	Dhaka Metropolitan Development Plan 1995-2015
DWASA	Dhaka Water Supply and Sewerage Authority
GPS	Global Positioning System
KDMA	Kolkata Metropolitan Development Authority
MoL	Ministry of Land
PRLDP	Private Residential Land Development Project
PRI.DC	Private Residential Land Development Companies
PRLDR	Private Residential Land Development Rules, 2004
RAJUK	Rajdhani Uন্নয়ন কার্ত্রিপাক্ষা (City Development Authority)
REHAB	Real Estate and Housing Association in Bangladesh
TIA	Town Improvement Act, 1953



Terminologies

Mouza	Mouza is a revenue village with a jurisdiction list number and defined area.
Taka	Unit of money in Bangladesh.
Thana	Thana is the unit for police administration in urban areas.
Union	Union is the smallest electoral unit of rural areas which are comprised of mouzas and villages
Ward	Ward is the smallest electoral unit of urban areas in Bangladesh. It has elected ward councils under the municipalities. There are 90 wards in DCC.
Khas Land	Government property, estate held in the management of government, sometimes are remain unused.
Khal	Natural canal

Measurement

1 Million	= 10 lac
1 Hectare	= 10000 sq. meters (2.5 acres)
1 sq. km.	= 0.3861 sq. mile
1 Katha	= 66.9 sq. meters



**Chapter One:
Introduction**



1.1 Introduction

The Dhaka Metropolitan Development Plan (DMDP) 1995-2015 provides a long term strategy for 20 years for the development of greater Dhaka sub region. The geographic boundary of the plan consists of 1528 Sq. km (590 sq. miles) that lies in 3 districts, Dhaka, Narayanganj and Gazipur covering 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 procedures and provision of physical and social services for metro Dhaka's planning and development. This planning document states direction of future urban growth and defines a broad set of policies to achieve overall plan objectives (Haque, 1999).

The present estimated population of Dhaka Metropolitan Area (DMA) is 10.71million (BBS, 2001). According to DMDP forecasts the population of Dhaka city will be 15.56 million at the end of the plan period. UN World Population Center estimates at 2005 the population of Dhaka city is 13 million and by 2015 it will have to accommodate 23 million people. To accommodate the growing population, Rajdhani Unnayan Karttripakha (RAJUK) and large number of developers are involved with hundreds of housing and land development projects. It is estimated in DMDP that between 1983 and 1991 some 14000 acres of land was converted into urban land use, mostly for residential development and located in the urban fringe (DMDP, 1995). But most of these land development projects for residential use are being done in an unplanned way contravening to the DMDP structure plan 1995-2015.

The year 2005 is the mid point of the structure plan time span. This study intends to assess the present development process of the city in the light of policies stated in the DMDP. It also intends to identify the trend and the factors responsible for the process. It is expected that it would reveal information about the current trend of unplanned growth by the private sector.

1.2) Background and Present State of the Problem

Rapid urbanization characterized by the growth of large cities and towns is a common phenomenon in the developing countries. Cities of the developing countries are growing at a rate much faster than those of the developed world. In Bangladesh the urban population grew from 6 millions in 1974 to 30.2 million in 2001 (Hossain, 2004). The

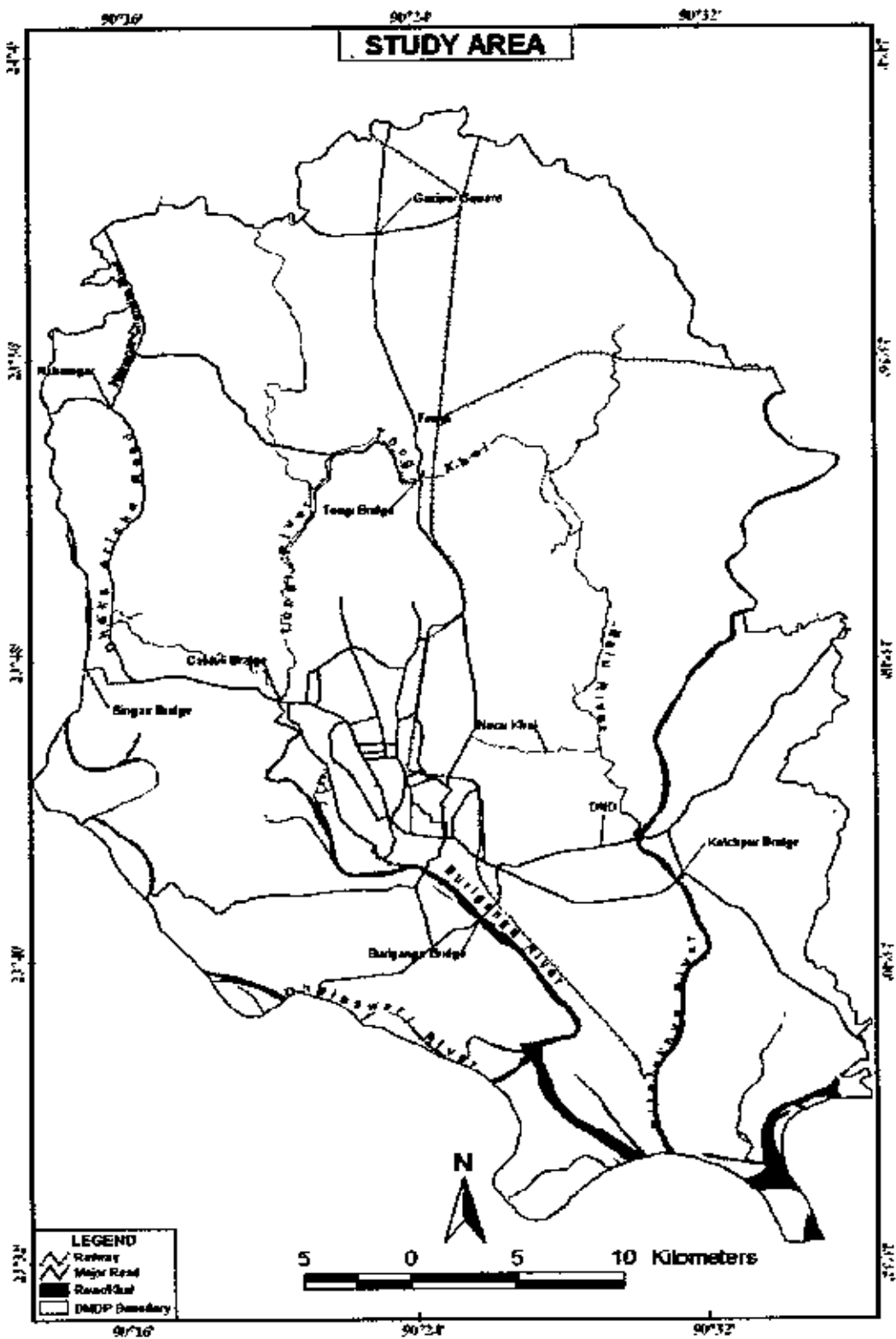
fast growing urban population of our country is concentrated in the major cities and towns, especially in Dhaka. Dhaka alone has the highest concentration with almost 40% of the total urban population and 6% of the national population (BBS, 2001).

Before 1971, physical development of Dhaka took place on the available flood free land, but last two decades Dhaka is expanding in an unplanned way encroaching river, lakes, low-lying areas, agricultural lands. The triple characteristics of Dhaka, capital city, mega city and prime city, attract people from all over the country and increase the demand for housing and other related services. Due to scarcity in the supply of flood-free land, low lying areas are filling above flood level and using for all sorts of development activities.

However, the rapid population growth of Dhaka has led to the rapid expansion of the city both vertically and horizontally. In recent years, in the process of development, the dominant role is played by the private sector, while the public sector limited itself to infrastructure development and service provision. Failure of the public sector to meet the demand and need of the citizens has provided opportunities for the private real estate developer to enter into the urban land market.

In the capital, the land development project for residential use started a long time ago by government agency. In the Pakistan period several residential areas were planned in Dhaka such as Dhanmondi, Lalmatia, after the liberation, Gulshan, Banani, Baridhara, Uttara were designed for the high income group. But government failed to cater the increasing demand of housing in Dhaka city and outside.

A close scrutiny of the development process of the city reveals that most parts of Dhaka have developed in an unplanned manner. Despite having Master plan (1959) and DMDP (1995-2015) very few parts of Dhaka have developed in a planned manner. Lack of implementation of proposed plans and policies can be identified as major drawback of urban planning sector of Bangladesh. Violation of planning policies and laws is a common trend. Especially, it became a crucial task to control and regulate the private land development companies of Dhaka. All the developers should follow the policies



Source: DMDP Structure Plan, 1995-2015

Figure 1.1: Study area

stated in the DMDP during the implementation of the projects. But the profit oriented motive of the developers has become a threat to the overall environment of the city.

1.3) Objectives

The aim of the study is to investigate the locational aspects and trend of private residential land development projects in Dhaka Metropolitan Area since 1995 and its compatibility with the policy stated in Dhaka Metropolitan Development Plan 1995-2015.

Objectives

- 1) To identify the trend and locational aspects of private land development activities for housing in DMDP area since 1995
- 2) To evaluate the land development activities and its compatibility with the stated policies of DMDP 1995-2015.
- 3) To find out the causes of deviation from DMDP Structure Plan and recommendation for strengthening enforcement of structure plan.

1.4 Outline of the Methodology

The Methodology of the study includes the following steps-

1.4.1) Selection of the Study Area

The total DMDP area is selected as the study area (Figure 1.1) because the private residential land development activities mainly occurring in the fringe and peripheral areas of the central Dhaka City. Study area covers about 1528 sq. km.

1.4.2) Data Collection

1.4.2.1) Literature survey

An elaborate literature survey on the topic has been done for better understanding and representation of the problem. To get real phenomena of the problem various books, journals, related thesis papers, project reports have been studied.

1.4.2.2) Collection of map

Map prepared by DMDP is used as a base map (Figure 1.1). It is collected from the RAJUK. Maps of different residential areas are collected from the developers and different government and non-government organizations.

1.4.2.3) Process of preparing the list of Private Residential Land Development Project (PRLDP) since 1995

Before going to the field survey it was a great task to prepare a list of residential land development projects within the DMDP area. All the available residential land development projects working within the DMDP area are included in the list (appendix-I) Thus the following sources are utilized-

- **RAJUK** - Development of township in the metropolitan capital is regulated by the Town Improvement Act (TI Act) of 1953. Under the Act, the Rajdhani Unnayan Karttripakkha (RAJUK) has been empowered to develop, improve, extend and manage the city and the peripheral areas through a process of proper development planning and development control. As a concerned institute for development RAJUK gives approval for any kind of development within its jurisdiction. A list of permitted housing projects and a list of housing projects applied for approval have been collected from RAJUK.
- **Daily News Paper**: - The "Daily Ittefaq" dated from 1995-2005 was reviewed, because most of the developers post their advertisement to this news paper.
- **Real Estate and Housing Association in Bangladesh (REHAB) Fair**: REHAB fair is the biggest exposition of Real estate and developing sector organized by REHAB every year. Information about land development projects are collected from this fair.
- **Internet**: Internet is vastly used as a source of getting information for this purpose because private developers put their advertisement in the internet and maintain official web page of their projects

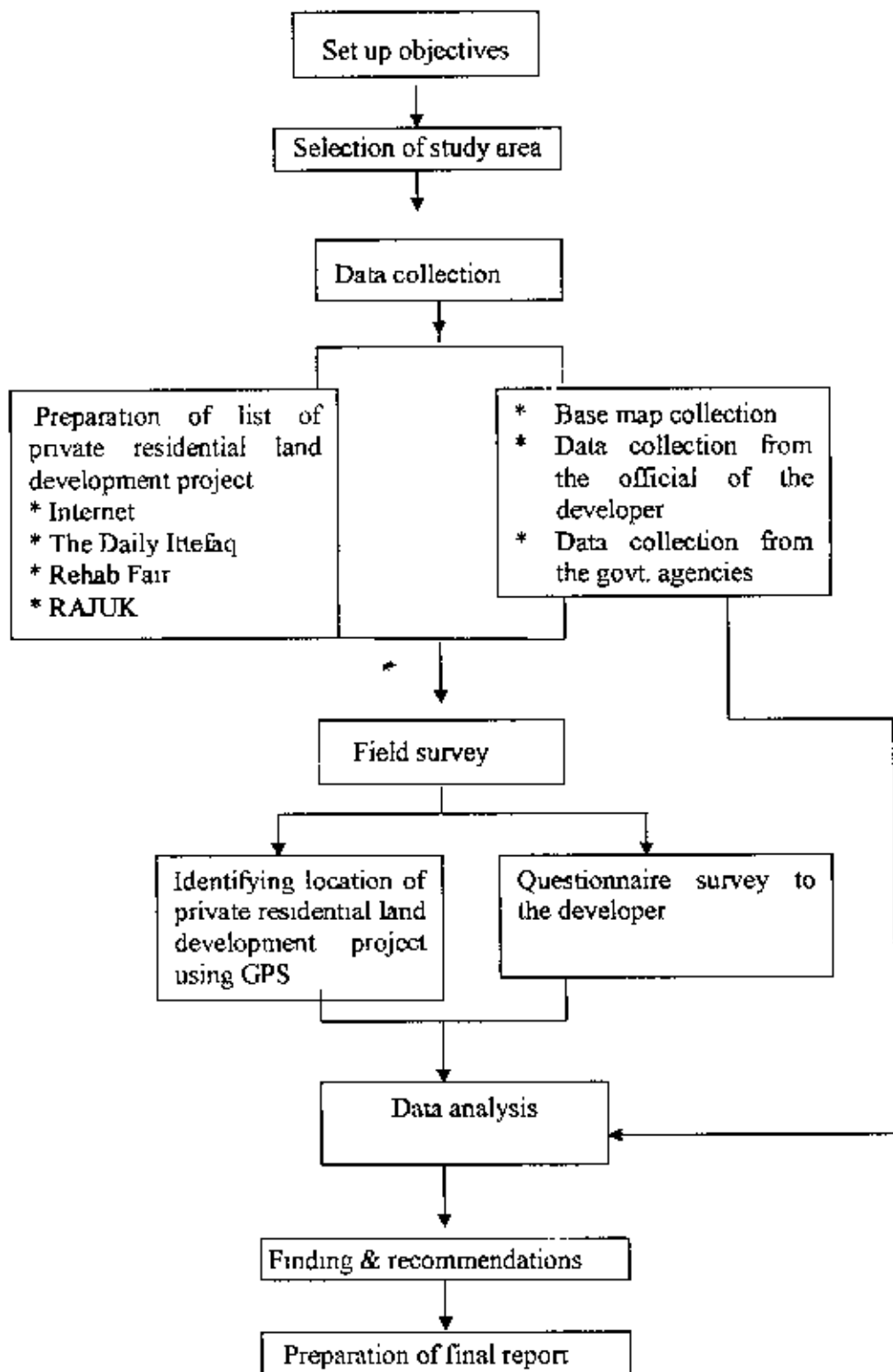


Figure 1.2: Flow chart of methodology

1.4.5) Reconnaissance Survey

In order to familiarize with the field condition a reconnaissance survey was done.

1.4.6) Field Survey

As evident from the objectives stated, this study is mainly based on data drawn from primary level of investigation. To identify the specific location of the listed projects on the map, a Global Positioning System (GPS) survey is done to get the exact location of the projects. The point is collected by visiting the project, but it was not possible to demarcate the area of the projects, so a point is taken to represent the location on the map.

1.4.7) Questionnaire Survey

Questionnaire survey is carried out among 20 developers to get detail information on different aspects. The survey is conducted by using pre-designed questionnaire. Land development companies are selected from the surveyed projects and key personnel's are interviewed to get information on various aspects of the development process. To get other related data local people are interviewed. About 50 peoples are interviewed from different sites to understand the present practice of private developer at that locality.

1.4.8) Data Processing and Analysis

The data obtained through literature survey, field survey, questionnaire, and observation survey has been classified, tabulated and presented in the form of maps, tables, and graphs using Excel, Arc/info, Arc/view and other software.

1.5) Limitation of the Study

- 1) **Data Collection** Some of the primary listed projects are not found during the field survey. Because there was no signboard or field office to identify. More over it needs extensive field survey to identify the entire projects. So total number of projects mentioned in the primary list do not match with the number of primary projects shown on the map. Primary list is prepared on the basis of advertisement on the paper, internet, and Rehab and RAJUK list.
- 2) **Map Preparation:** A GPS point based survey is done to identify the exact location of the projects. But it was not possible to show the total area of the PRLDP on the map, because it needs extensive field work, enough man power,

and sufficient funding. So that, to identify the location, a distinct point (mostly middle) of the projects is taken and thus is shown on the map. It was difficult to obtain information regarding the exact boundary of the projects.

- 3) **Area Calculation:** The area of the housing projects is calculated as approximately. Some times local people have given information about the area of the projects as any member of any project was not found. All the calculation is done on the basis of the given information. Moreover, the area of the 46 numbers of housing projects can not be collected. These projects are omitted when the area is calculated for different designated areas in the evaluation process.

1.6) Organization of the Chapters

This research is organized into seven chapters. Introduction, the first chapter, describes background information and sets up objectives, methodology of the study. Second chapter describes the concept and application of town planning in several cities in the world. It tries to review the policies of the present prevailing plan for Dhaka city. This chapter is followed by the physical, demographical and urban development characteristics of Dhaka city. It also discusses the process of private and public sector land development activities for residential use. The study, then tries to identify the location of the Private Residential Land Development Projects (PRLDP) within DMDP area and show the trend of the development activities. Chapter five examines and evaluates the present land development activities with the stated policies of DMDP structure plan. Chapter six tries to identify the factors related to the development of PRLDPs. The study ends with drawing some recommendations of the effectiveness of the strategy in accomplishing its objectives

Chapter Two:
Dhaka City and Its Urban Development

2.1) Introduction

Less developed countries are; on the whole, slow to embrace many ideas pertaining to strategic land use planning and development control. (Caprani, 1999) Planning of Dhaka city is by no means the exception of this trend. The recent unprecedented population growth within the Dhaka metropolitan area, is forcing land use planning up the list of government priorities. However this chapter intends to describe a brief description of different plan aspect of the DMDP structure Plan and a review of some city planning in the world

2.2) Concept of Town Planning

There are probably as many concepts of planning as there are planners, possibly more. Most would accept, however, that town planning is concerned with taking an objective and rational view of future conditions, assessing what society desires its destiny to be, forecasting the amount of change, estimating the degree of control required and formulating a policy to take account of this destiny, change and control (Ratcliff, 1976).

Andreas Faludi defines –

“Planning is an anticipatory and preparing; making arrangements or provision for the future. At the core of city and regional planning is spatial, physical, or land use planning. This involves – making arrangement for the future use of land by people and securing those arrangements by regulating and promoting changes in the use of land and building.”

He also added “The purpose is to explore and recommend those arrangements for change or no change in the use of land which will reconcile conflicts and best benefit the client. This may involve intervening in the rights of individual to carry out change and directing change in the interests of the client.”

The ‘concern’ of town planning is the formulation and implementation of plans and policies or other arrangements for the development and conservation of the land and the environment specific decisions measures for improving physical living conditions.

American Institute of Planners defines ‘Planning’ in the article II of their constitution that “ ---- the planning of the unified development of urban communities and their environs and states as expressed through determination of comprehensive arrangement of land uses and the land occupancy and regulation thereof (Faludi, 1976).

According to Ratcliff "Town planning is a reconciliation of social and economic aims of private and public objects. It is the allocation of resources, particularly land, in such a manner as to obtain maximum efficiency, while paying heed to the nature of the built environment and the welfare of the community. Town planning aims at securing a sensible and acceptable blend of conservation and exploitation of land, as the background or stage for human activity. This involves the process of establishing the desires of the community, formulating them in a manner that facilitates comprehensive and discussion, preparing a policy for their adoption, regulating the degree and proportion of public and private investment, guiding the provision of public services, initiating action where necessary, and continually examining the effect of adopted policy making adjustment if required."(Ratcliff, 1981)

According to the Royal Town Planning Institute (RTPI), UK, "Town planning embraces all forms of development and land use activities. It operates in all social strata and on several inter-related spatial level- local, rural, urban metropolitan, regional, national and international. It is concerned with the promotion, guidance, enhancement and control of development in the constantly changing physical environment in the interest of the common good by respecting the rights of individual" (Haque, 2004)

2.3 Structure Plan as a Technique of Town Planning

This is basically a written statement accompanied by any necessary supporting diagrammatic illustrations and is designated to introduce a large measure of flexibility into the system. The structure plan is intended to translate national and regional, economic and social policies into a local context and in doing so provide a framework for the implementation of local plans. While establishing the general aims and proposals for the area it should also contain the overall development control policy which can then be applied in particular circumstances at the more detailed and specific local plan stage. (Ratcliff, 1976)

This term 'Structure Plan' is derived from British planning practice, but the concept is now widely used internationally. The principal components of structure plan are:

- The built up area of a city, divided into broad zones of different land use, character and density
- Main lines of communication
- Principal institutional uses which serve the whole city
- The main functional of the city

A structure plan accepts and recognizes the uncertainty of future events by concentrating on fundamentals and leaving more detailed problems for resolution nearer the time they occur. In this way, it is to a certain context open-ended, providing a broad policy framework for action plans and development programs which because of their shorter time scale can be formulated in greater detail. Because of its concentration on central issues rather than details, should not become as rapidly outdated as the more traditional master plan. This form of planning is particularly appropriate for metropolitan Dhaka where the growth of population and economic development cannot be determine with any degree of precision. (DMDP, 1995)

2.4) Town Planning: Asian Context

For better understanding of the present town planning of the world, several city planning is reviewed. In this context two cities are taken into account, both have city planning, but one is well planned and the other is growing unplanned and haphazard way and facing various type of problem. Those cities are – 1) Putrajaya, Malaysia, a well planned city 2) Jakarta, Indonesia, growing in an unplanned way. Moreover Calcutta city planning is also reviewed as it is adjacent mega city of Dhaka

2.4.1 Planning Practice in Malaysia

The planning practice in several towns of developing world give inadequate emphasis on the environmental aspects for maintaining quality and sustainable living environment and proper development of a city. Present planning concepts of Malaysia do not explicitly demonstrate noble values, which are necessary for developing human values and mitigating social ills. Malaysian planners have realized that planning and development, which are not based on noble spiritual values, have in the past contribution to social ills and wrought damages and degradation to the environment. Natural disaster, such as flash

flood, building collapse, land slides and threat of haze has been underscored due to lack of human sensitivity to the environment, disrespect to fellow human being, and ultimately to the creator. A planning guideline based on Total Planning and Development Doctrine (TPDD) has evolved from sensitivity towards human development in national development. Therefore the current planning practices have been enhanced so as to serve as comprehensive guidance for the countries planning and development. The planning doctrine is able to handle social woes, respect the people and environment.

The main philosophy behind the TPDD is.

- **Comprehensive.** the TPDD or concept of planning should cover all values, moral; and spiritual, besides physical and material aspects. These elements cannot be separate because the main objective of TPDD is sustained well being of the citizens.
- **Man as the focus of development** Man's needs and attitude and aspirations are some of the most important factors that should be taken into account in the formulation of policies and development control. However, all considerations should stress on the achievement of a balance between the needs of man and capacity of the environment to fulfill and support these needs.
- **Multi-dimensional activities:** Planned development must be multidimensional in nature. With the above principles in view, the city of Putrajaya has been developed to ease out the increasing burden of urbanization of Kuala Lumpur. Putrajaya is indeed a fine example of urban planner dedication to build a city that is environmentally sustainable and viable. Putrajaya shows how a city can be built by being compatible, sensible and respectful to the nature and environment by enhancing natural resources within that particular region.

The TPDD is always follows the city and national level development strategies and these are continuously updated accordingly to demand to face new challenges in the new millennium. The proposals indicated in the plan are mostly implemented by the private sector. The TPDD applied in the case of Putrajaya have been meticulously worked out in detail so that no inconsistencies arise during the implementation of the plan.

2.4.1.1) Putrajaya: A planned city

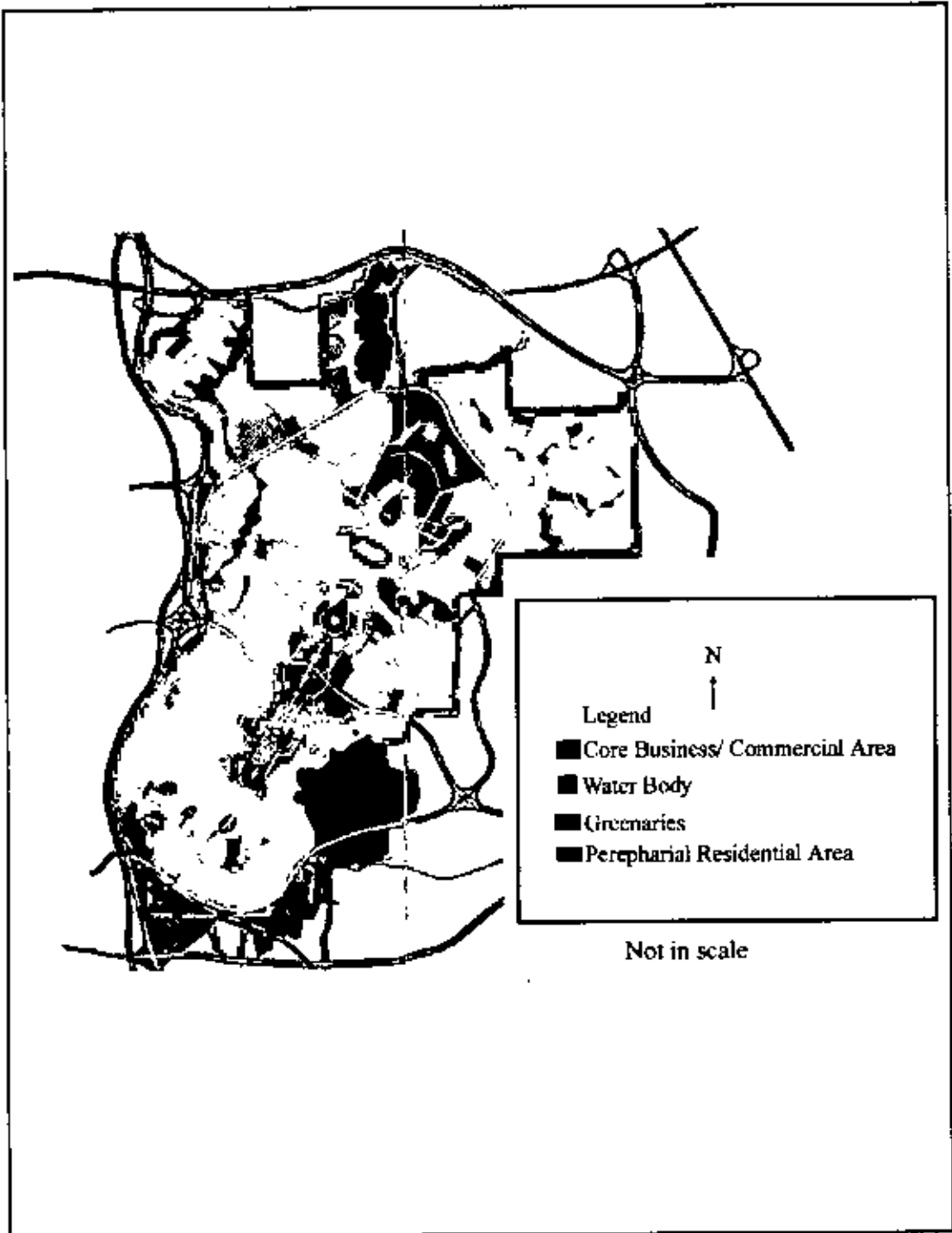
Putrajaya is the new administrative centre of the Federal Government of Malaysia taking the capital city away from 25 km south of Kuala Lumpur. Construction of Putrajaya is started from August 1995 and expected to complete 2010. Putrajaya is a planned city being built according to a series of comprehensive policies and guidelines for land use, transportation system, utilities, infrastructure, housing, public amenities, information technology, parks and gardens.

The planning of Putrajaya emphasizes the preservation of its eco-system while promoting an active, lively and caring society. The city is designed to provide opportunity for retreat from the pressures and stress of modern living.

Putrajaya was planned to embrace two major themes i.e. 'Garden City' and 'Intelligent City'. The main features of the city are: a formal axis punctuated with nodal features; structuring of the Core Area into identifiable precincts; a variety of informal and formal activity areas; 38 percent of the land earmarked as green areas; reforestation and enhancement of the natural landscape, creating a network of open spaces; designed to suit topography, local climate and cultural norms; optimization of scenic views and spatial experiences. For the development of the city two types of plans are taken-

a) Master plan of Putrajaya

Putrajaya master plan area covers 4,581 hectare which consists of natural, lush greenery, botanical gardens large water bodies and wetlands. Putrajaya is divided into two major areas - core Area and the peripheral area, where the separation is via a large lake (Figure 2.1). The core area of Putrajaya, which covers a total area of 1069 hectares, is divided into five zones (namely the Government Precinct, Commercial Precinct, Civic & Cultural Precinct, Mixed Development Precinct, and Sports & Recreational Precinct). Putrajaya's peripheral area comprises 15 precincts of various sizes. 12 of the 15 precincts make up the residential neighborhoods. The planning and design of Putrajaya's residential areas is intended to foster a sense of identity through the neighborhood focal points, landscaping and the treatment of the public realm. A total of 67,000 homes of varying ranges, sizes, types and densities have been planned for all income sectors.



Source: www.kia_net/malayasia.com
Figure 2.1: Master Plan of Putrajaya

b) Structure plan of Putrajaya

A structure plan encompassing an area of 14,780 hectares was prepared with the concurrence of the Selangor State Government in order to guide the development of Putrajaya and its surrounding areas. The structure plan area will accommodate an estimated population of 570,000 people, of which 250,000 will live within Putrajaya.

2.4.2) Jakarta, Indonesia

Jakarta is the national capital of Indonesia. It is the central region and has special status as one of the 37 provinces in the country. The 1965-85 master plan for Jakarta, emphasized on physical form and recommended a concentric pattern of spatial growth of the city after its inception. The governor of Jakarta has now formally approved the Jakarta Structure Plan, and in addition of modified regional development plan for Jabotabek will shortly be by the central government. Thus the framework for the future direction of urban growth is now formally agreed upon and be used as a framework for strategic planning by local governments (Haque, 2004).

In Jakarta, co-ordination between sectors is steadily improving, and the agreed east-west strategy for growth is being implemented by several new developments. The introduction of a pilot project for Guided Land Development (GLD) in east Jakarta, the development of high priority projects for arterial road planning and railway upgrading in the east and west expansion zones, and the implementation of the first stage of the urban betterment project in north Jakarta, and design of large regional service centers in the east and west expansion zones to encourage commercial decentralization.

For implementation the structure plan effectively, Jakarta faces several problem, such as lack of enough land to accommodate rapid growth compounds the conflict between the formal and informal city and causes steep increases in the land prices and reduces the supply of affordable low-income shelters. There also lies the problem of the dual city. In which the predominant informal low income housing and infrastructure sector is constructed outside the official system for providing shelter. This creates problems in designing balanced economic and physical solutions

2.4.3) Kolkata (Calcutta), India

The Kolkata Metropolitan Area (KMA) consists of 3 Municipal corporations (Kolkata Municipal Corporation, Howra Municipal Corporation and Chandannagor Municipal Corporation), 38 Municipalities, 72 cities, 527 towns and villages. According to 2005 Kolkata Metropolitan Development Authority (KMDA) reports, the population has crossed 15 million and the area covered by KMA now is more than 1854 km² The east-to-west dimension of the proper city is narrow, stretching from the Hooghly River in the west to roughly the Eastern Metropolitan Bypass in the east, a span of roughly 5–6 km. The north-south expansion is roughly divided into North, Central and South Kolkata. The Salt lake City (Bidhan Nagar) area to the northeast of the city is a planned section of Kolkata. Rajarhat, also called New Town, is the newest township being developed on the north-eastern fringes of Kolkata city. The Kolkata Metropolitan Development Authority (KMDA) is responsible for the devolvement of Kolkata.

Plan for metropolitan development of Kolkata

KMDA has been preparing Perspective Plans periodically KMDA has recently prepared the draft perspective plan titled "VISION-2025". The vision is to provide sustained and improved quality of life through basic urban services in an inclusive manner and create enabling environment for enhanced economic activities by utilizing available resources efficiently, in an eco-friendly manner while conserving heritage. It came into enforcement in 1991 and valid up to 2011.

Some important features of the Plan are as follows.

- **Delineation of three levels of Kolkata Metropolitan Regions**
- **Development of a hierarchical system of settlement pattern, in the Inner Metropolitan Region within the orbit of 50 km radius from Rajbhawan including KMA, consisting of district head quarter, sub-divisional head quarter, Block head quarter, service centers and basic villages, and**

- Development of 2 (two) million-plus cities --one at Uluberia - Bagnan area on the west bank and the other at Barasat-Barrackpur area on the east bank with a view to develop a strong urban system consisting Kalyani, Barrackpur, Barasat and Salt Lake towns to create antimagnetic effect to the over congested Kolkata- Howrah Metro Center, through construction of high speed transportation corridor part of which are already available or under construction.

KMDA has also formulated land use prescriptions and framed development control regulations for delineated development control zones. Regarding control function, powers have been delegated to the local authorities within KMA except for certain special cases, for example, all development proposals within 500 meter on either side of Highways / Expressways shall need the permission from KMDA.

Provision of various urban facilities at one place, with a view to providing customer comfort and cost effective services KMDA is taken some development works with the collaboration of private organization Salt Lake Bypass, West Howrah Township, Habitat Centre at DJ Block, Salt Lake, Water Park at East Kolkata and Stadium Complex at Rajdanga are proposed to be built and upgraded respectively through a public private partnership project.

2.5) Review of Development Plans for Dhaka

The first formal plan for Dhaka has been prepared by Patric Geddes in 1917, a much respected British town planner based on the 'Garden City Concept' – a concept most evident in the romantic street patterns and gardens of the Ramna area. But the formal and first master plan for Dhaka city is introduced in 1959.

2.5.1) Legislative Basis for the Development Plans of Dhaka

1) The Town Improvement Act, 1953

The Town Improvement Act, 1953 is the first statute that recognized the need for planning in the country, although planning was not in the preamble. The following are the main features of the TI act of 1953

- It was designated to create a development agency for Dhaka city.
- The act made provision for zoning in the city.

- The Act provided power to plan the areas which would be taken for improvement scheme.
- It was an impression that a special agency could be implement development activities more efficiently than a local authority like municipality, as a result DIT was established in 1956.
- The trust created a board of trustees consisting of not more than eleven members who were responsible for development improvement and expansion of the city of Dhaka and Narayanganj
- The TIA, 1953 provided the trust with power of review and veto the building plans which had already been approved by the municipality and over all planning of the city was not the aim of this act initially

The main draw back of the act was that it was a copy of Calcutta Town Improvement Act of 1911 and could not consider many local important issues.

2) The Town Improvement (Amendment) Ordinance, 1958

- This amendment to the Act established the DIT as a planning, controlling and developing authority.
- The DIT was given the responsibility of preparation of Master Plan for the area under its jurisdiction and building controls through the appointment of the authorized officer under the East Bengal Building Construction Act from among the staff member of DIT
- The amendment provides DIT with powers to control both the public and private developments.
- The amendment did not repeal the previous requirement of the chairman's power of review of the municipal building plan approval and
- The power of the chairman of DIT to accept or refuse permission for the use of the contrary to the provision of zonal plan under the original TIA, 1953 remained in effect

Although, it is the first legal document which empowered the town development authority to the prepare master plan but the highest power was vested to the chairman of the organization who was appointed from non -planning cadre. As a result the town

planner can not exercise their professional practice and in many cases the proper development and planning activities were hampered.

2.5.1. Development Plans for Dhaka

2.5.1.1) The Dacca (Dhaka) City Master Plan, 1959

The Dhaka Master Plan was prepared by foreign consultants working with officials of the Dhaka Improvement Trust (the precursor of RAJUK) and was submitted in 1958. The plan covered the then DIT area of roughly 830 square kilometers, with a population slightly exceeding 1 million, of which 575,000 were in Dhaka City. A short report was supplemented by a map of the DIT area at 1:20000 and the Dhaka City area at around 1:40000.

The consultants emphasized that the plan was meant to establish broad planning principles, not lay down a detailed inflexible basis for future development. The need for follow-up detailed plans and continuous review was also noted.

Average annual population increase was assumed at 1.75% and the Dhaka-Mirpur-Tongi (1978) population estimated at 900,000. The plan provided for major expansion areas at Mirpur, Tongi and Gulshan/Banani/Badda and proposed large-scale reclamation at Keranigong, Postgola and part of the DND triangle, to accommodate a population increase of 250,000 between 1958 and 1978.

The 1959 Dhaka Master plan was a land use type 'master plan'. The major deficiencies of the 1959 Master plan were:

- Its development control framework was not fully formulated nor effectively implemented.
- It did not effectively relate the issue of urban density with its impact on infrastructure (e.g. sizing of water supply lines)
- It was never linked to the ADP and government budget.
- Its various development components were not prioritized and funding sources were not identified
- The 1959 plan has been interpreted too rigidly and is not adaptable to the rapidly changing urban circumstances of Dhaka.

- It does not provide a suitable framework for inter-sectoral coordination of spatial planning with the capital budgeting of government development agencies.

2.5.1.2. Dhaka Metropolitan Area Integrated Urban Development Plan (DMAIUDP), 1981

DMAIUDP evolved from a series of reports and missions concerned with storm water drainage and flood protection. It was funded by ADB/UNDP. ADB strongly recommended that despite all previous studies and partial implementation of a flood control embankment, further flood protection investment should await the outcome of a broad multi-sectoral strategic study to evaluate metropolitan planning alternatives. Work in the study was undertaken in 1979-80 and the final report submitted in March 1981.

The primary objectives of DMAIUDP were:

- To prepare a long-term development strategy to guide and regulate future growth in the Dhaka metropolitan area.
- To set out policies to implement the strategy and facilitate implementation of priority projects.
- To identify priority projects and prepare prototype proposals for the low-income housing.
- To develop local staff skills and establish effective institutions for implementation.
- Continuation of current trends-sustained peripheral growth, limited expansion towards Tongi-Joydebpur.
- Peri-urban development-low-density resettlement with intensive agricultural production surrounding city.
- Comprehensive flood control protection of the city and development areas by embankments
- Sub-regional dispersal-decentralization of urban development to maximum number of existing towns in the regions.
- Limiting urban growth by reducing investment in favor of rural areas.

DMAIUDP is the only comprehensive approach to planning and development in the Dhaka region since the 1958 Master Plan. Many of the constraints, opportunities and issues it considered are equally relevant now

2.5.1.3. Dhaka Metropolitan Development Plan (1995-2015)

The Dhaka Metropolitan Plan (DMDP) 1995-2015 is the prevailing plan for the development of Dhaka with the time frame of 20 years covering 1528 sq. km. The DMDP addressed urban planning issues at three geographic level: sub regional, urban and sub urban and covered area now defined as the RAJUK area. It is contained Dhaka three districts: Dhaka, Narayangonj, Gazipur. In addition to the DCC and all of the thanas contained partially or wholly within the DCC, the RAJUK area includes all or portions of eight surrounding non-municipal thanas

- Gazipur Sadar and Kaligonj thanas in Gazipur District;
- Rupgonj, Sonargaon, Bandar And Narayangonj thanas in Narayangonj District;
- Keranigonj and Savar thana in Dhaka District

It is published by gazette notification in August 1997 to be used as the guideline for the development of the Dhaka city. The DMDP is not intended to present a single land use master plan describing plot based land use zoning. Rather it intends to address long term strategic and short term implementation guidelines along with a set of policies and programs.

The DMDP is comprised of the three following components:

1. Structure Plan
2. Urban Area Plan
3. Detailed Area Plan

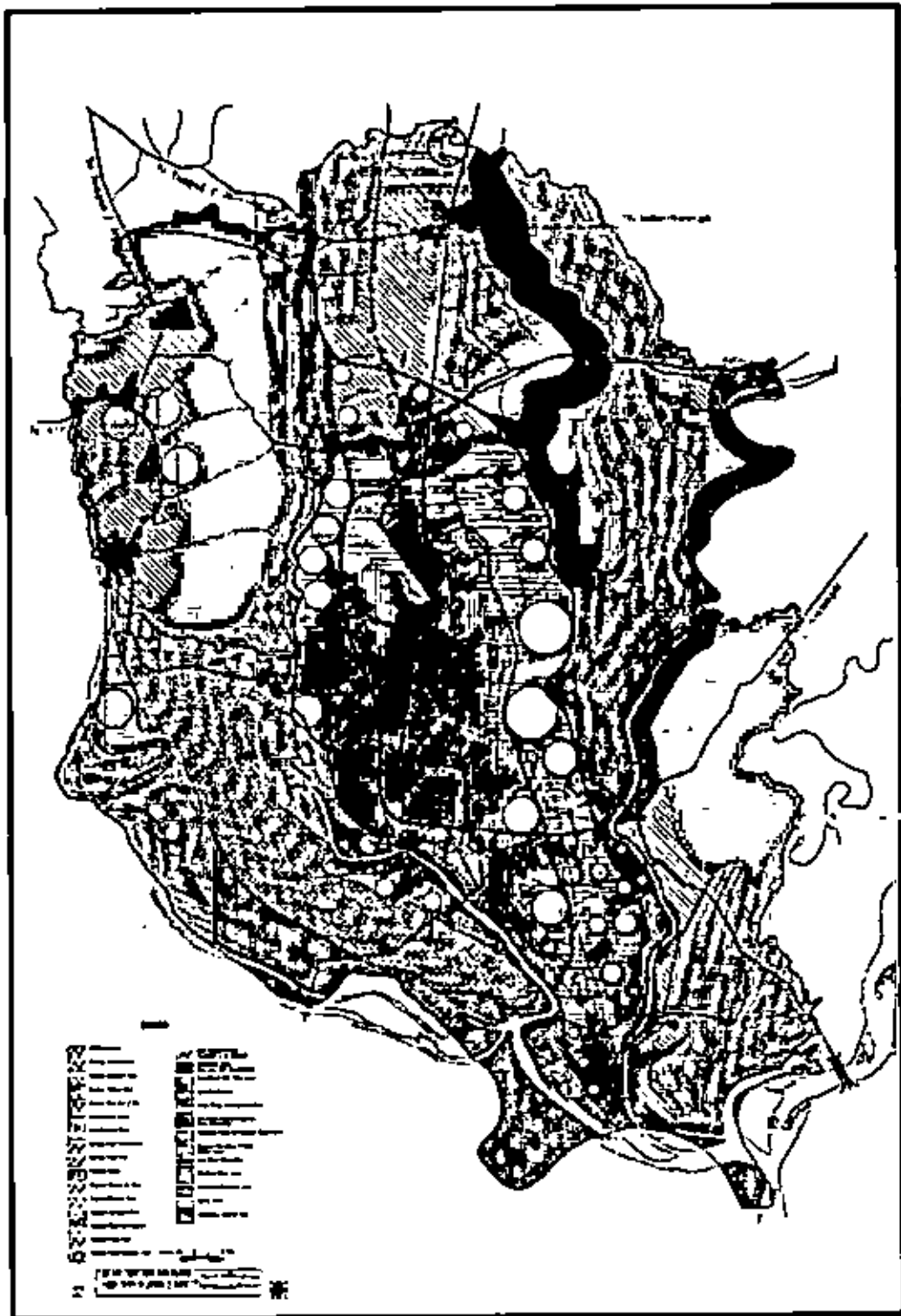
- 1) Dhaka Structure Plan (DSP) is prepared to provide a long-term (20-year) strategy for development of Greater Dhaka. It projects a population of 15 million by 2015. DSP defines a broad set of policies to achieve the overall plan objectives. It's supporting documentation proposed actions for the preservation of high quality wetlands, agricultural lands and watercourses. It highlights the need for ponds around the city limits for rain water retention and maintenance of an ecological

balance and a healthy environment. DSP also calls for the adoption of land use controls and building regulations that would make its storm water retention and other recommendations meaningful. The DSP calls for plan reviews every five years. Regrettably, no formal plan review or revision has occurred since the publication of the Structure Plan. This is spite of the fact that at least one of its major features (the Eastern Bypass) has been downgraded with profoundly different land use implications. Another major feature with structural implications has been added. Purbachal is a planned new town located in contradiction to the DMDP recommendations.

- 2) Urban Area Plans (1995-2005) (UAP) is developed for the DCC and its major expansion areas, including the area to the east of the DCC, the DND Triangle and for the Tongi, Gazipur, Savar, and Dhamsona areas. The UAP is intended to provide interim mid-term strategies for a 10 year period and were conceived as "nested" within the overall structure Plan. Unfortunately, although the UAP for Dhaka covers a smaller area and is drawn at a larger scale, its level of specificity is no different from the Structure Plan. Already this plan is lost in time frame and can be considered invalid.
- 3) Detailed Area Plans (DAP) provides more specific and detailed planning proposal for specific sub-areas. DAP consists of reports and maps at 1: 3960 scale with supporting documents. The DAP is yet to prepare. Until a DAP is prepared for sub area land use management function will be exercised through the policies, guidelines and rules found in the Structure Plan and Urban Area Plan.

Chapter Three:

**Dhaka City: Physical, Demographic and
Urban Development Characteristics**



Source: Dhaka Metropolitan Development Plan, 1995-2015

Figure 2.2: Composite policy map of Dhaka Metropolitan Development Plan, 1995-2015.

3.1 Introduction

Urbanization in the third world is essentially a post -1945 phenomenon. While urban processes were apparent under colonial administrations, the problem of urbanization in less developed countries has emerged only in recent decades. Unlike the processes of urbanization in the western world in the late eighteenth or nineteenth centuries, where by a more gradual, incremental increase in population occurred in urban areas in line with and economic change, urbanization in less developed countries is occurring in unprecedented rate (Chaprani, 1999).

Dhaka started as a settlement because of its strategic location at the hub of several rivers, providing relatively easy access to both the Bay of Bengal and other parts of the flood plain of the Jamuna, Brahmaputra, and Meghna rivers. Morphologically Dhaka has its limitation to grow in all direction because of its flooding intensity. Physically it is dominant character in the small area which is permanently flood free. The areas surrounding the central Dhaka in all direction are low lying lands and consequently go underwater for many months. This imposes a significant constraint on development of this area.

In this chapter effort is made to discuss the physical characteristics of Dhaka and a brief discussion on Dhaka's history. This chapter also describes the present land development practices both by public and private sector and the process of land development.

3.2) Dhaka: Historical and Political Background

The history of Dhaka city goes back to 400 years. The nucleus of Dhaka (generally referred to as Old Dhaka) is located on the north bank of the Buriganga River. The general area has been the site of urban settlements from as early as the 4th Century B.C. Dhaka grew to prominence in the Mughal era when Islam Khan (1603) was appointed the first Mughal Viceroy of Bengal. Under the rule of Islam Khan the city attained great commercial importance and become a trading centre for South East Asia. European and other traders from different countries started to arrive from 1616.

Dhaka declined in importance at the end of the *Mughal* rule and the inception of British dominance in 1765 while Calcutta grew in importance in the British administrative structure. Dhaka's fortune reversed, however in 1830 with founding of the Dhaka Committee, the forerunner of what eventually became the Dhaka Improvement trust (DIT) and later the Dhaka Capital Development Authority known by the name of RAJUK, an acronym of its Bengali name, Rajdhani Unnayan Karttripakha (RAJUK). During this period Dhaka's urban area increased to 14.5 Kilometers. Urbanization moved away from the waterfront and encroached north ward towards the Pleistocene Terraces high lands known today as Ramna, Paribag, and Shahbag. In July 1905, the Bengal was partitioned and Dhaka was declared the provincial capital. The population at that time was less than 100,000 inhabitants. When the partition is annulled in 1911, Dhaka once more lost its administrative role.

However, the first formal plan for Dhaka has been prepared by Patric Geddes, a much respected British Town Planner, in 1917, based on the 'Garden City Concept' – a concept most evident in the romantic street paterus and gardens of the Ramna area.

Along with the partitioning of British India, Dhaka became the capital of East Pakistan on 14 August 1947 and faced the problem of housing increasing number of migrants from India. A master plan was prepared in 1959 by British firm on the basis of 'The Town Improvement Act, 1953'. The master plan described DIT as a development agency authorized to take over municipal and private property. The trust was given the power to prepare zonal plans. The DIT was also authorized to review and veto building applications approved by a municipality a power related to its development role.

DIT master plan 1959 covered approximately 830 sq km. (320 sq. miles) The plan suggested broad planning principles and zoned the urban area accordingly for various activities. The master plan was prepared with a 20 years (1960-1980) horizon. The population at the time the plan was prepared is reported to have been one million, with 0.05 million living in the core area, 0.1 in Narayangonj and the rest in the surrounding areas. Expansion of the city was largely predicted towards the north and northwest

leading towards Tongi and Mirpur and the city spread out to the new band of development containing Azimpur, New Market, New Eskaton, Purana Paltan, Kamalapur, Dhanmondi dates from 1953 and the development of Mohammadpur, Tejgaon followed suit in the 1960s.

After liberation in 1971, the annual growth rate increased to 10% (Siddique et al.1991). In spite of the rapid growth rate after 1971, the 1960 Master plan continued to guide the development of Dhaka until the adoption of 'Dhaka Metropolitan Development Plan' in 1995. By 1980 the population had grown to approximately three million. Swamps and other wetlands of the city started to disappear as new areas of residential, administration, business and commercial importance developed. Low-lying areas on the east Jurain, Goran, Badda, Khilgoan, Rampura and on the west -Kamragirchar, Shyamoli, kalyanpur -all were brought under habitation, (Nasrin, 1989) The metropolitan planning limit was extended in 1987 by extension of jurisdiction of the then DIT from 320 sq.miles to 590 sq. miles and DIT was renamed as Rajdhanı Unnayan Kartripaka(RAJUK). This latest extension added 270 sq miles to RAJUK covers most of Savar, Joydevpur, Keranigonj and Narayangong in its fold for purpose of regulatory control. Area covers 1528 sq km (590 sq miles), the historical expansion of Dhaka city is shown in the figure 3.1.

3.3) Physical Characteristics of Dhaka

3.3.1.) Location and Topological Characteristics

Dhaka is located between the latitude of 20° 30' N- 25° 05' N and Longitude of 90° 15' 90° 35' E.

Geologically the central part of the city is adequately high but extensive flood plains within greater Dhaka normally remain inundated to varying depth for approximately four months a year during the monsoon season. The major geomorphic units of the city are: the high land or the Dhaka terrace, the low lands or floodplain, depression and abandoned channels. Low lying swamps and marshes located in and around the city are other major topographic features. The general contour height of the area is 1.5-5 meters while at the central city is the 7-8 meters. The normal flood free level of Dhaka is 6 meters. Generally the low lying land is converted into a single cropping land during the dry season. Thus in

order to make the land fit for housing development, earth filling up to 3-5 meters is needed (Islam, 1993). The general land elevation of part of the DMDP area (mainly city and around city) is shown in the figure 3.2.

Table 3.1: Land elevation of Dhaka city (above mean sea level)

Land form area	Land elevation above mean sea level (meter)	Comments
1	Higher than 10.0	1&2= these type of landforms considered as safe from annual flooding.
2	8-10 meter	
3	6-8 meter	
	Average flood level 6.0	3= this is marginally free from normal flooding
4	4-6 meter	4-6= these type of landforms are under severe threat of flooding.
5	2-4 meter	
6	Lower than 2 meter	

Source: FAP 8A, 1992.

3.3.2.) River System

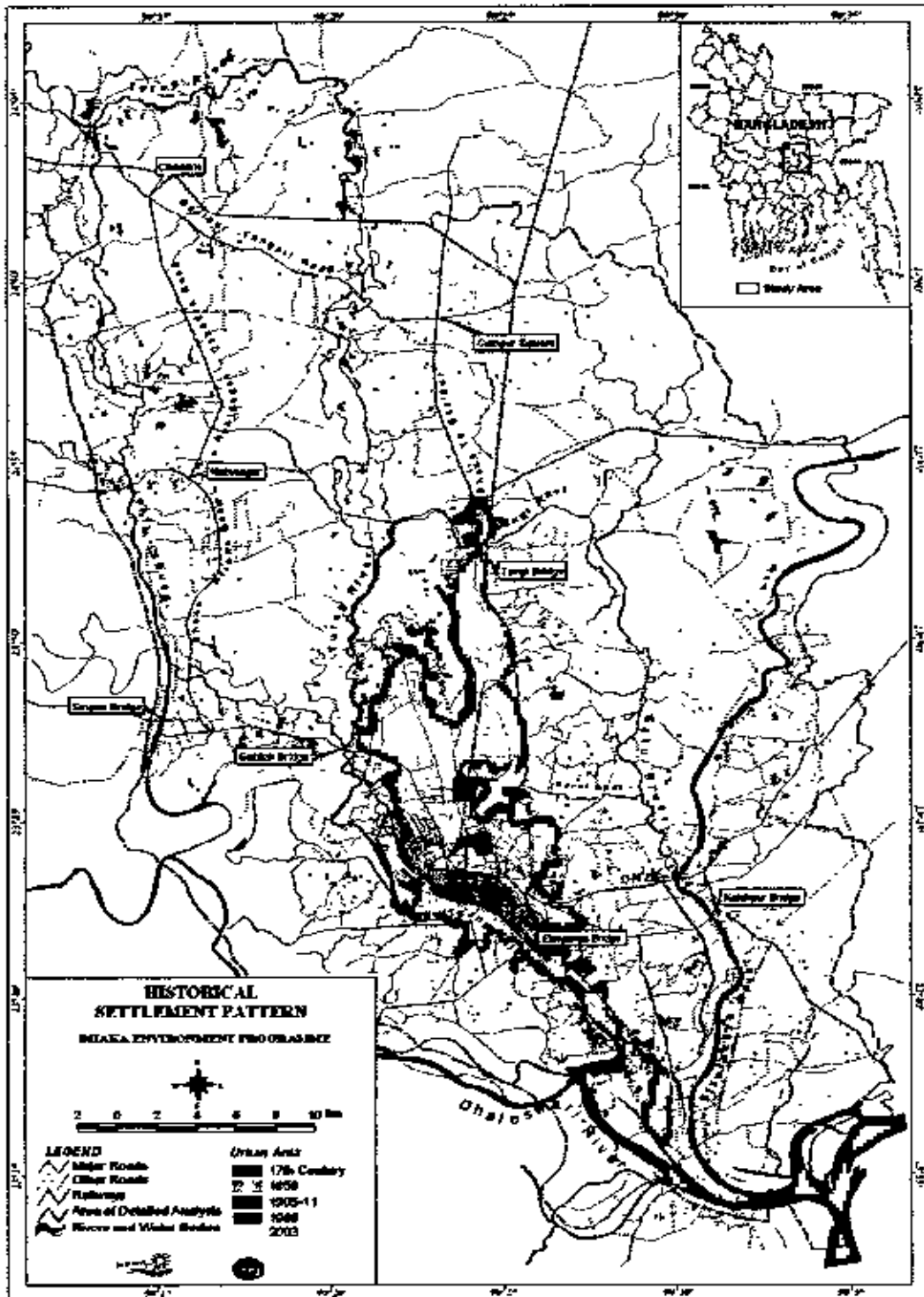
Dhaka is located geomorphologically at the down stream of one of the largest river basin system in the world, named Ganges- Brahmaputra river basin (Ahmed, 1993). The Branches of the river system surrounded it. Dhaleswari and Lakha rivers are the main tributaries of new and old Brahmaputra. Dhaka is surrounded by Tongi *Khal* on the north, Balu and Sitalakha on the east. Turag is flowing at the middle part of the DMDP area. Turag is the distributory of the old Brahmaputra river and Balu river is the tributary of the Lakha river while Tongi *Khal* connects the Turag with Balu river. Dhaleshwari covers the western side and at the southern most ends, Buriganga meets with Dhaleshwari. Low lying lands around the river system (Figure 3.3) serve as the retention body of the excess water of these rivers during the rainy season. These rivers are flooded during July to September due to back water of Meghna, Dhaleswari and Sitalakha river. As a result, if the rivers and low lying catchments areas of the rivers are filled up for construction, it will cause severe flooding as well as drainage congestion in Dhaka city. So the river system and the connected *Khals* and low lying areas should be kept free from all shorts of development works.

3.3.3) Drainage System

Dhaka metropolitan area predominantly depends on the natural drainage system. DWASA serves only 850 sq. km. areas of Dhaka. Rest of the metropolitan areas mainly

the peripheral area depends on the natural drainage system. During the monsoon from May to October, the drainage of the Dhaka city mostly dependent on the water level of its peripheral river system. During this period, river water generally remains higher than the internal water level. The connected *Khals* drain the excess water to the river and the adjacent low-lying areas act as the reservoir of the water of rainy season. There are more than 40 *Khals* in greater Dhaka city comprising three major *Khal* systems, which act as the natural drain to keep Dhaka free from congestion, are follows:

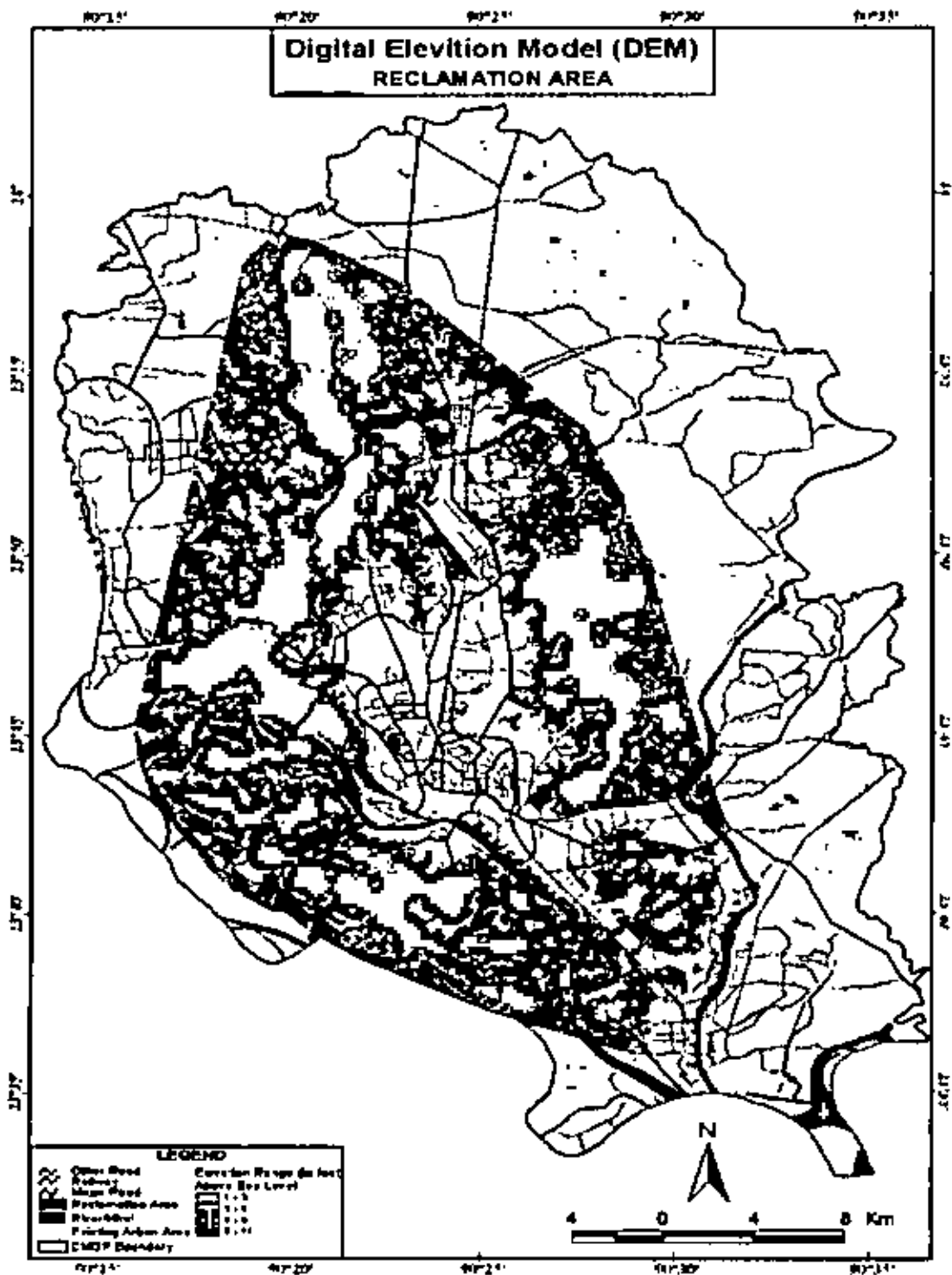
- 1) Digun-Ibrahimpur-Kallyanpur *Khal* system which drains to Turag river.
- 2) Dhanmondi -Purbagh-Gulsion-Banani-Mohakhali-Begunbari *Khal* system which drains to Balu river.
- 3) Segunbagicha-Cerani-Dholi *Khal* system which drains to Balu and Burriganga river.



Prepared by the Creative International Development Agency (CIDA) Dhaka, Bangladesh

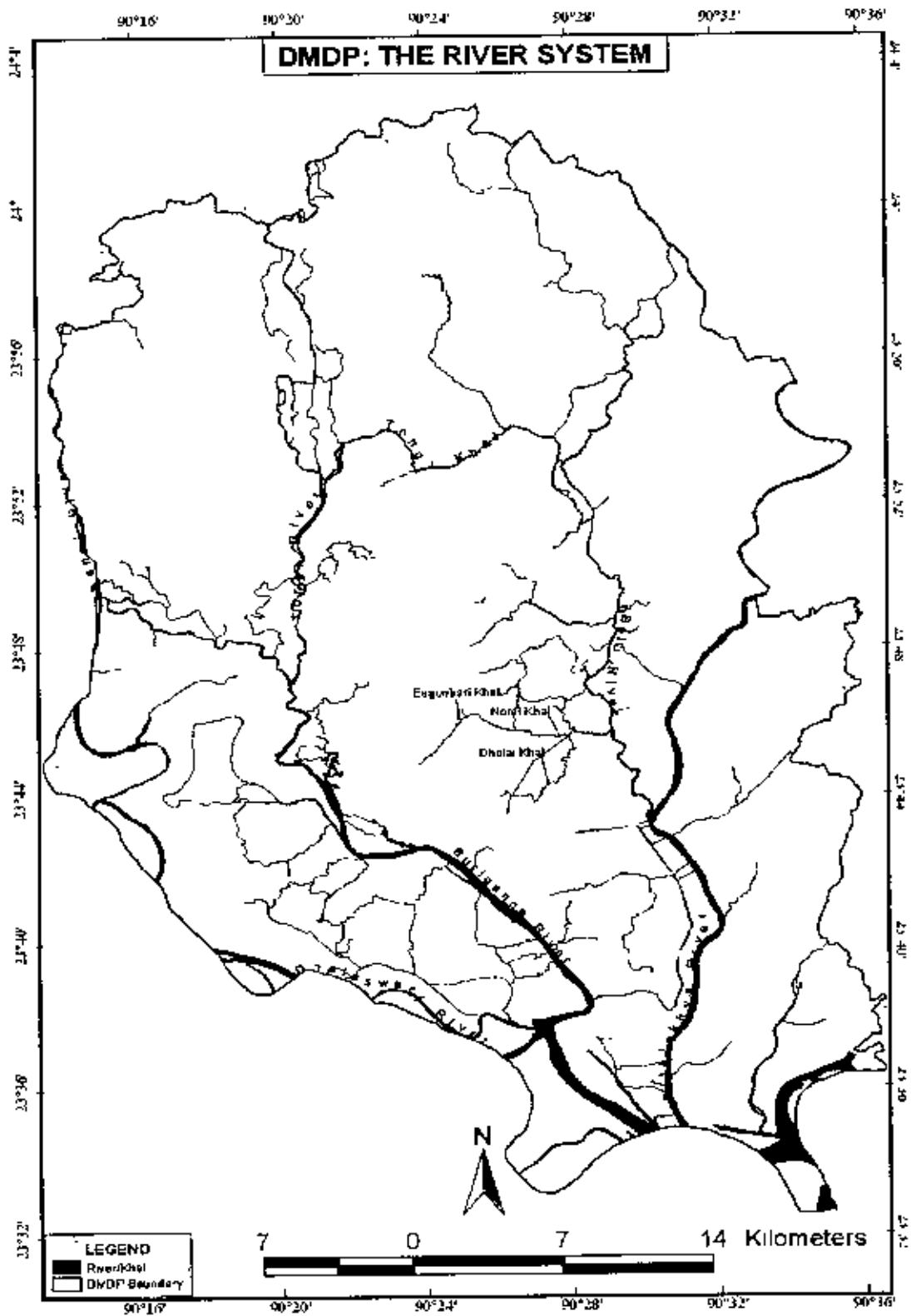
Source: Directorate of Environment, 2005

Figure 3.1: Historical expansion of Dhaka



Source: Directorate of Environment, 2005

Figure 3.2: Digital Elevation Model of part of Dhaka showing land development activity



Source: Directorate of Environment, 2005

Figure 3.3: River system of Dhaka

3.4) Population

Bangladesh is one of the fastest growing countries in the world, with an average growth rate of 1.4% (BBS, 2001) per annum. Population growth in the urban areas is also consistently higher than that in the rural areas. The resulting rapid urbanization in Dhaka ensures that this area is accounting for an increasingly higher proportion of the national population as indicates the following table (table 3.2).

Table 3.2: The population of Dhaka compared with national population

Year	Bangladesh			Dhaka	
	Total urban population(in million)	% of total population	Annual growth rate	Population	Annual growth rate
1951	1820	4.33	1.58	335928	
1961	2641	5.19	3.72	550143	
1974	6274	8.78	6.70	1607495	9.32
1981	13228	15.70	10.97	3440147	9.994
1991	22450	20.15	5.40-	6105160	5.90
2001	28808477	23.39	-	123000000	1.96

Source: Population Census, 1991 and Preliminary Census Report of 2001

The growth of Dhaka from 1850 to 2001 can be seen as the growth of urban population due to several factors. Perceived employment opportunities and access to social facilities have led to immigration from rural, natural population increase and expansion of Dhaka city's border. Presently Dhaka has had the highest population growth rate of any major city in the world, with more than 13 million people. It is now 8th largest city and by 2015 it is forecasted to be the 2nd largest city with around 23 million populations. (DEP, 2005)

Table 3.3: Population changes in Dhaka Metropolitan area

Year	Population	Growth rate	Remarks
1974	1950252	-	-
1981	3458602	8.5	1974-81 trend rate of growth
1991	73340000	7.8	World bank estimate
2001	11162000	8.2	Structure plan estimate
2016	15569000	8.33	Structure plan estimate

Source: Census Report, 2001 and Dhaka Structure Plan, 1995-2015

With the growth of population, vast amount of land was being consumed for residential and commercial purposes. In between the year from 1989 to 2003, huge land has been developed at the expense of agricultural, forest, wetlands etc. It is evident that areas covered by water and agricultural fields have been decreasing very fast. On the other hand built up area, home stead vegetation (mainly rural settlement, urban fringe and high class residential area), earth fill and bare soil have been increasing significantly. Percentage in the DMDP area as a whole, only 4.3% area is covered by built up area in 2003. But each and every year it is increasing at the rate of 0.16% (Basak, 2006)

3.5) Land Development Activities for Residential Use in Dhaka

With the growth of population in Dhaka, acquisition of lands for housing in the central and sub-center zone is nearly impossible for majority of the people. That's why the residential expansion into the fringe areas has become inevitable. It is stated in DMDP that the 1980's were a period of major land conversion. It was calculated that about 5670 hectares of land converted from rural to urban land use since 1983 to 1991. An analysis indicated that the urban expansion of Dhaka Metropolitan resulted in the considerable reduction of wetlands, cultivated land, vegetation and water bodies. Between 1960 and 2005 built-up areas increased approximately 15,924 ha, while agricultural land decreased 7,614 ha, vegetation decreased 2,336 ha, wetland/lowland decreased 6,385 ha, and water bodies decreased about 864 ha. The amount of urban land increased from 11% (in 1960) to 344% in 2005. Similarly, the growth of landfill/bare soils category was about 256% in the same period. (Dewan, A. M., Yamaguchi, Y. 2006)

In the intense conversion of land of Dhaka city, various stakeholders are playing their roles respectively. The participants in the land and the housing developing process are the land owner, the contractor, the land subdivider, the land developer, the building developer, the land speculator, the land broker, the owner or possessor occupier, the tenant occupier, the intervening agencies like RAJUK, DCC, and the other public agencies. The agents are grouped under the following major conventional heading-

1. Public Sector Residential Land Development Activities
2. Private Sector Residential Land Development Activities

3.5.1) Public Sector Residential Land Development Activities

The government, through its various organizations, like HSD, PWD, RAJUK and other development authorities are involved in the development of land for housing purpose. During this development process the public sector has made large scale conversion of agricultural land into residential areas for example, Dhanmondi in 50s and Mirpur and Joydevpur in 60s. Some of the government land development programs are listed below-

Table 3.4: Public sector residential land development housing projects

Area	Year of development	Area (in hectares)	Purpose of Development	Authority
Mirpur	1950-60	-	A large residential satellite area	HSD
Gulshan	1960s	296.24	High class residential area	DIT (presently called RAJUK)
Baridhara		140.83	Do	Do
Banani		132.41	Do	Do
Uttara	1960s	561.72	Large scale middle and upper middle income residential suburb	Do
Badda	1970s	29.95	Middle and lower middle income residential area	Do
Dattapara		40.87	Do	Do
Gandaria		5.67	Do	Do
Khiilgaon, Basaboo, Madertek, Goran	1960s		Middle and lower middle residential suburb	Do

Source : RAJUK, 2006

3.5.1.1) Present residential land development activities of RAJUK

At Present RAJUK plays as a public sector agency regarding land development. With the permission of concerned ministry, the government authorities acquire suburban and peripheral lands for designated purpose by compensating the owners of these lands. Following this the concerned authority subdivides the land into residential plots with necessary infrastructure. The plots are then transferred through sale by the authority to

private individuals for a lease of 99 years and allocation of such plots are supposed to be made considering income, occupation, age, previous ownership of land in the city and income tax etc.

Current RAJUK programs that are ongoing for land development are listed below-

Table 3.5: Current ongoing residential projects of RAJUK

Name of the project	Location	Area (in hectare)	Number of serviced plot	Population accommodation
Purbachal (Yusufgonj residential project)	Rupganj, Eastern side of Balu river under Narrayangonj district and Kaligong under Gazipur district	2470	28000	3 million
Nikunja (Residential Housing Estate)	Joarshara near Kurmitola Airport	27.52	500	5000
Jhilmil (Residential Project)	Southern part of Dhaka under Keranigonj Thana	154.38	500	10000
Uttara 3 rd Phase,	Extension of Uttara model town towards west. It is inside the western embankment	2126.25	7500	1, 560, 00

Source: RAJUK, 2006

3.5.2) Private Residential Land Development Activities

The tremendous increase in population in Dhaka city has consequently created a demand for housing and other related services. The efforts of public agencies regarding housing fall far short of the demands and needs of the people. The government can meet only 7% of the total demand for housing whereas private sector entertains the bulk of 93 percent (Haque, 2004) Thus, it has been encouraging the private sector to take initiatives to provide housing to the people. The private sector basically meets the housing demand through initiatives undertaken by individual, households, groups, companies etc. Presently private sector real estate developers have been constructing multi-storied residences to meet a part of housing needs. Such multi-storied residential construction is quite profitable both for land owners and developers. Some developers have acquired

lands in the peripheral areas of Dhaka city and are developing residential estate as small townships. Most of the townships have provision for different size residential plots, schools and various community facilities.

Private Residential Land Development Companies (PRLDC) are very much active in land development process usually known as housing project. Land development for residential purpose through private sector housing companies became active in the 80s, in the peripheral areas of Dhaka city. During this period formal and informal housing companies come up in the peripheral areas with housing projects through massive land filling. They purchase undeveloped land with low cost and make plot through subdivision and sell them with a big profit. They offer serviced plot at an attractive price with easy installment. They give colorful advertisement to the mass media (Television channels, Radio, News paper, internet etc.) to attract prospective buyers.

Presently land development is occurring to more distant locations from city center where land purchase and access is easier and large chunk of land is available for buying. The main motif of the companies is profit oriented. Most people interested to buy land from PRLDCs because they are located in planned sites and it's an easy business to invest money.

3.5.2.1) Process of private land development for residential use

The private housing companies buy land in the fringe and peripheral areas, then make subdivision plan for that particular land parcel and get approval from the concerned authority. For Dhaka, the concerned authority is RAJUK. For any type of development work, it needs the permission of RAJUK. However, after getting the permission they subdivide the land, some time they develop it by filling the land or leveling the land by cutting down of high land and then make it for allotment. Generally plot size varies from 200 sq. meters to 700 sq. meters. In that purpose, they follow the steps-

1) Land Leveling

Land leveling starts at the beginning of the land development. It includes soil filling and cutting of the area. If the area is located in the low-lying area (general practice in Dhaka city, most of the housing project is situated in the low lying area) the land is to be filled above the flood level, and in that case land filling cost will be higher. Generally land

filling should be done above the flood level so that flood water couldn't drain the residential areas. Usually the developers do not fill the land of whole sites at a time. They complete it part by part. In case of high land they start to cut down the area and then make it level to sell. For development of the projects the companies generally use river silt. In most case, they use pipeline for filling their land through dredging from the nearest river.



Source: Field survey, 2006

Figure 3.4: Land leveling through river dredging

2) Attractive advertisements

The PRLDCs give colorful advertisements in the daily news paper, radio, and TV channels and set up billboard to attract potential clients for buying plots from their projects. These advertisements highlight project location, physical, social and community facilities, environmental soundness and easy payment system etc. But the companies usually exaggerate statement about the project for the interest of their business. Through these advertisements the companies attract buyers.



Source: Field Survey, 2006

Figure 3.5: Some colorful advertisements of different projects

3) Plot selling

The developers develop a part of the project area and started selling of the plots then the rest of the area develops with the money of the selling plots. Most of the cases after the development of the 0-20% of the total project area they go for selling plots. The land developers sell the plot in accordance of the location and size form the layout of the area. The plot is according to the *Katha* (1 *Katha* = 66.9 metres) basis, but the prices of the plot vary according to the location and size of the plot. They offer number of ways in which the plot buyer can pay the money of the plot, such as at a time paying (takes less cost per *katha*), installment payment of different time period (takes more cost than the cost of at a time), and loan on certain condition. All the private developers start selling the plots before the land development even before getting permission from the authority. It is found that most of the companies do not have permission even do not have registration number to enter in the land market.



Figure 3.6: Ready plot for sale

4) Plot registration

After the payment of the total cost of the plot, the plot owner goes for the registration. The plot owner has to pay certain taxes and fees to the government for the transformation of the plot from the developer. The fee for the plots within the project area varies with location and fixed by the developer by negotiation with govt.

5) Plot hand over to the owner

Developer fixes a term or period of time to handover of the plot to the plot owner, such as after payment of the 75% of the total cost of the plot or after three or four years later. Actually at first the PRLDCs sell to the buyer's paper plot, so to say printed on maps of proposed projects, long before the lands have been acquired and

developed. The buyers will physically get delivery of the plots only when the plots are ready and after full payments of the price are made after booking of the plot. But they often fail to implement their commitment. In some cases they put up sold plots without any development of the plot.

However increasing number of such companies seems to have become interested in actual housing activities in the recent years. It has been alleged that commercial housing companies are motivated primarily in making profit and are occasionally involve in frauding through land transaction.

3.5.2.3) Present activities of private residential land development companies

The PRLDCs to implement housing projects in low lying areas as well as agricultural land, with their own style ignoring the existing laws, restrictions, and even they are not sincere and co-operative with government agencies. They are always looking for loopholes and defaults of laws / acts as well as the weakness of authorities. It is apprehended that such development in the long run is not only contradictory to the recommendations made in the DMDP, the massive land is going to aggravate flood situation of the city. One of the main causes of floods of 1987, 1988, 1998, 2004 was unplanned land conversion. The regularity bodies in this context are not always eager to enforce law effectively. The PRLDCs have filled up hectares of low lying land, agricultural land, river, lakes and canal around the city flouting government directives and laws. For example, several hundred hectares of land have been filled up for housing project such as Basundhara of East west Property Limited, Modhumati Model Town of Modhumati Limited, Badda Model Town of Darul Islam Development company etc.

The present trends of residential land development around the city have posed environmental threat to the areas. The areas have been considered as reservoir for a long time where storm water of the city run off through internal *Khals*. The development activities damage natural landscaping and changing the character of the areas. At the same time, loss of agricultural lands and reducing productivity are occurring. The urban upstream cannot discharge storm water adequately in the natural reservoir.

However, such land development is mainly occurring on the following areas-

1) Agricultural land

Approximately one fifth of land within the DMDP Structure Plan area has been evaluated as good to very good agricultural land. According to DMDP agriculture includes "horticulture, farming, growing of crops, fruits, vegetables, flowers, grass fodder, and trees or any kind of cultivation of soil, breeding, and keeping of live stock including cattle horses and poultry and the use of land which is ancillary to the farming of land or any other agricultural purposes". Depending on the definition DMDP identifies three areas of high quality agricultural land within the catchments area of Dhaka, will be conserved and promoted as areas of high intensity food production. Those areas are -Savar, Gazipur and Rupgonj. Other than these three areas, there are vast single cropping low lying areas around the city are used for cultivation during the dry season. From the field survey it is found that most of projects are located in the single cropping agricultural land. It is found that built up area has increased from one -fifth in 1990 to about one third in 2000 (approximately) while agricultural lands and water bodies decreased from four- fifths to nearly half only in the eastern part of Dhaka.(Hauqe, 2004).

2) Wet land

Wet land include open *Khals*, natural water bodies, ponds, depressed land where water is stagnant through out the year or any particular of time. Wetland area is characterized by sluggish or standing water that can create an open water habitat for wildlife. The Ramsar Convention(1971) has defined wetlands as - "areas of marsh, fen, peat land, or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters.

So from the above definitions the following the things are clear about wet land -

- Wet land can be manmade or natural,
- It may be permanent or temporary.
- The water of wetland may be sweet or salty and it may be static or floating.

Considering the above criteria, the low lying areas around the city can be defined as wet lands that are very much important for conserving the environment. The whole fringe

area of Dhaka city turns into a vast water body in the rainy season and most of the lands are cultivated during the dry season, ponds and ditches are common features within the areas. The private land developing companies and individual land owners are active to fill those areas in a continuous process resulting the deterioration of wetland features, canals and adjacent lands. In such situation, the private developers take some opportunity to fill up the wet lands-

- Most of the wet lands are in or adjacent to the city. People like to develop new habitation and infrastructure adjacent to the existing and one due to the availability of utility and communication facility. Thus the low lying areas in and around the Dhaka city continuously filled up and threatened by various unplanned and illegal activities of private and public bodies.
- The selling price of wetlands is comparatively less than flat and filled up land. So people want to buy these lands in low price to make filled up.
- The low lying wetlands have easy availability. As a large amount of land is found at a time in the form of wetland, different companies buy those to develop as housing area.

3) Government owned (*Khas*) land

The natural rivers, canals, channels and ponds are shown on the Cadastral Survey map. These are government-owned lands. Furthermore, government mostly owned a large quantum of lands within deep low-lying areas, agricultural land, plain land and forest which are not properly looked after by the authorities concerned. In case of *Khas* land the proper records are not properly maintained in the DC offices, and in fact there are no physical demarcations. This weakness makes the opportunity for unscrupulous PRLDHCs to encroach such land without lease agreement. Some companies make agreement with the MoL or Deputy Commissioner to exchange their land with government *Khas* land. It is alleged that some active canals are being government *Khas* land and some are filled up or encroached by the PRLDCs.

4) High land

Geographically Savar and some portion of Gazipur are situated in the lower part of Madhupur tract. Tectonically this land is uplifted than other part of the Dhaka

metropolitan area. This high land is used for cultivation (Savar and Gazipur both the areas are identified as the high value agricultural land by DMDP) and Jackfruit garden. These high lands are also used for cultivation of many kinds of seasonal vegetables. But in recent year the areas are changing its characteristics by cutting down those land. The PRLDCs are developing land by cutting down the area (such as Ashulia garden city) as well as the cultivable land and garden (such as Chaya Kunja -1,2,3 of M.A Ohab and Sons Ltd.)

However, presently a good number of residential land development projects in different sizes are being developed in Dhaka. The activities of these projects are summarized below:

- I. Incremental land activities, reduction of wetlands, ponds and canals;
- II. Rapid changes in the original land use character
- III. Squeezing permanent and seasonal agricultural lands and reduce productivity;
- IV. Demarcated *Khals* (canals) are being gradually squeezed up by illegal occupation.

3.5.3) Process of Planning Permission of the Development of Residential Housing Projects according to DMDP

The planning permission is given under the Article 6 of the Urban Area Plan (DMDP). According to the article "the requirements for obtaining planning and building permission is applicable to all persons seeking permission to carry out development activities within the area under the Jurisdiction of RAJUK for the purpose of development and construction and as defined by the Dhaka Structure Plan". So this permission is mandatory for both individual owner and for housing estates. Following aspects are considered during the permission process

- Proposed land use must be in conformity with Structure Plan and Urban area plan (DMDP 1995-2015)
- Review and site inspection are mandatory.
- Clearance from other agencies Such as DoE, DWASA, BIWTA, DoL etc.

Types of Permission:

According to DMDP the permission are given in the following ways.

- a) Full planning permission
- b) Conditional permission
- c) Permission after plan and site inspection

The Chairman, RAJUK can give construction permission exercising the power under sub-section of 75(1) of the Town Improvement Act.1953 (amended 1987) where desired land use is indicated in DMDP. The provision of 75(1) is quoted below.

“If any person desires to use land other than the use that stated in DMDP, he may apply in writing to the Chairman for permission so to do.

- i) If the Chairman refuses permission to any person, such a person may, within sixty days of the Chairman’s refusal, appeal to the authority against such refusal.
- ii) the decision of the authority on any appeal under sub-section (2) shall be final”

In this process a large number of planning permissions are given based on site inspection by the planning team. Although this is an interim arrangement as the DAPs (Detailed Area Plans) of the private areas are not yet prepared.

3.5.4) Legal Basis for Land Development in Dhaka City

Without any legal basis, enforcement of planning activities is not possible. There are a number of urban planning related legislations in Bangladesh which help to regulate and control urban development.

3.5.4.1) The Private Residential Land Development Rules (PRLDR), 2004

To guide the land development activities in Dhaka Private Residential Land Development Rules (PRLDR), 2004 is framed with guidelines and instructions of private housing project. The implementing agency of this rule is RAJUK. This rule clearly states that how the projects will prepare, and how the project will get approval and how the projects will be monitored. However, the salient features of PRLDR, 2004 are summarized below-

- 1) **Registration:** The interested companies may register with the RAJUK and obtain a registration number for doing real estate business in Dhaka Metropolitan areas. The basic requirements for registration are: trade license, VAT certificate, TIN No. and memorandum of understanding and articles of association and performance of the company etc. But every body should aware of that getting registration no is not similar as getting approval status. But in practice after getting the registration no. from RAJUK, the companies start to give advertisement on different media and sell their plots. But this practice is totally prohibited according to the rules.
- 2) **Advice:** After getting registration no, companies may apply for taking advise from the RAJUK for their land development project to get approval and lay out plan. RAJUK personnel will give advice to the companies for the applied project about DMDP, government policies and programs, executive order from the government, and provide guidelines from the PRLDR, 2004. But in practice no companies take advice from the RAJUK. They start their business without any consultation or taking any advice from RAJUK.
- 3) **Application:** The companies will submit a duly filled-up prescribed application form to the RAJUK along with land ownership document, clearances from 9 concerned agencies and DoE for specific project for approval. If the project implementation is hampered for land procurement, the government will acquire only 15% land for the interest of the project.
- 4) **Lay-out plan:** Lay out plan should be submitted with the prescribed application form. The plan should be done on the *mouza* Map. The Lay out plan should be prepared by RAJUK registered urban planner/ engineer/ Architect. Along with the lay out plan the company will submit the description of existing land use which will be prepared by using GPS based survey and the location of the natural environment should be demarcated. The plan must show the road, infrastructure and service network. In the layout plan, more than 30 percent land should be reserved for schools, colleges, playground, open space, lakes and other services.
- 5) **Land use provision:** The project land must be in conformity with the DMDP land use provision. The Natural water bodies, flood flow zone and sub flood flow zone

can not be converted for housing projects. The government will identify such area and notify those in the government gazette.

- 6) Checking and verification: The project documents shall be checked by the authority and make the report on field verification.
- 7) Approval procedures: The RAJUK authority will endorse it and forward to the Approval Committee (Appendix-1) constructed as per rule 18. The committee comprises of 13 members headed by the Ministry of Housing and Public Works.
- 8) Implementation: After getting approval from the committee the company then go for project implementation through advertisement, plot development, plot sale. During the implementation stage, the authority will supervise and monitor the project according to the terms and condition of approval. Simultaneously, the company will inform to the authority concerned time to time and obtain completion certificate within the stipulated period.
- 9) Completion of project: The land developer company will have to complete the project within 10 years. After completion of the project the company will submit Report on project completion, as-built development plan, cost benefit analysis final environmental assessment and will get project completion certificate.

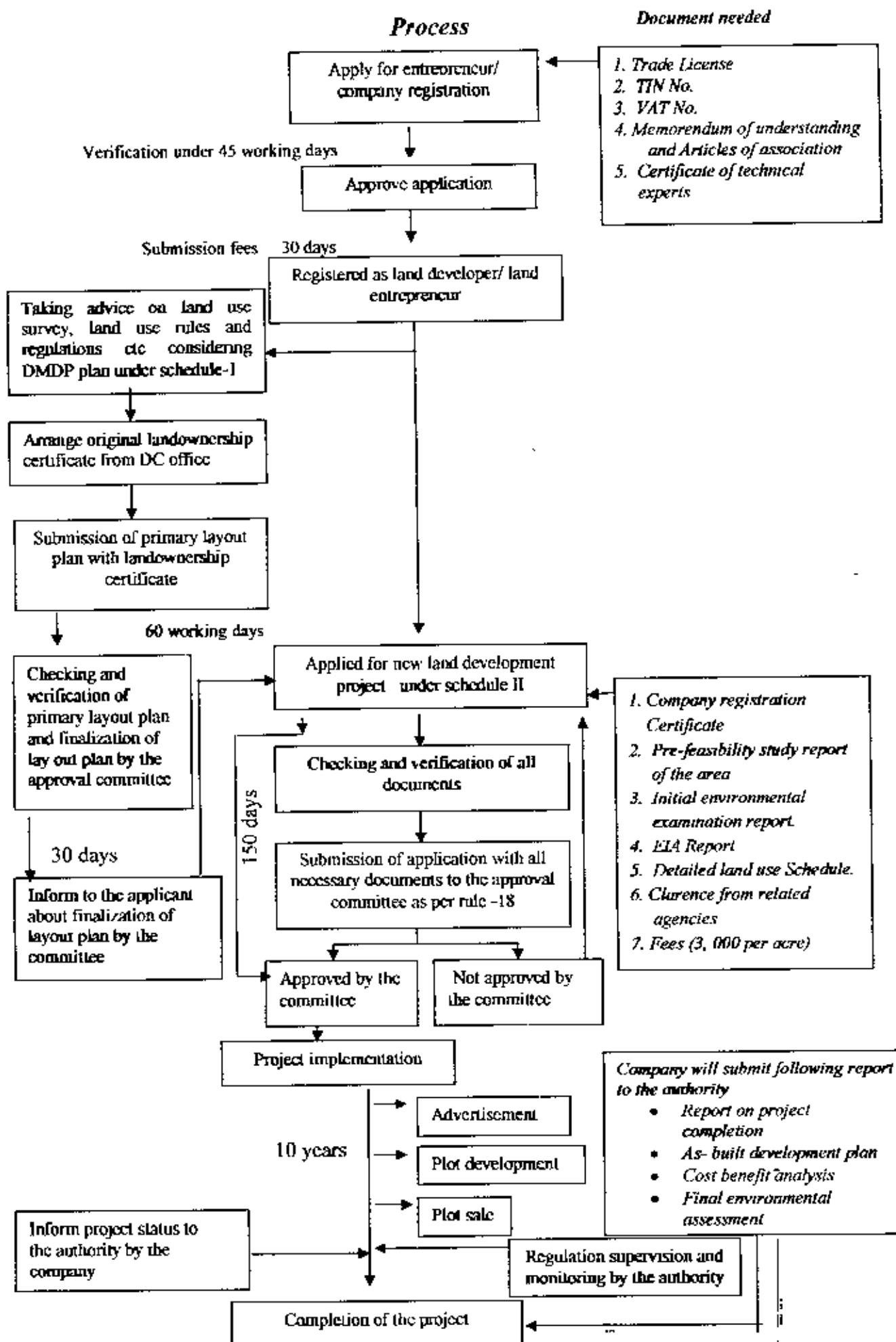


Figure 3.7: Approval process of residential land development project according to PRLDR, 2004

3.5.4.2) The Natural Water Body, Play ground, Open space Conservation Act, 2000

The most important legislation for conservation of wet land is “Water Body Conservation Act, 2000”. According to this act -----

- The identified river, khals, bill, lake, natural water body, flood flow zone and sub-flood flow zones, low-lying areas in the master plan must be protected.
- For conservation of all playgrounds, open spaces, parks and natural reservoir, change of the nature of any land is prohibited in all the municipalities including the municipalities in the capital, divisional towns and district town.
- These areas must be published by gazette notification

This land mark legal tool can protect environmentally sensitive areas of Dhaka but its implication become difficult because the water bodies, the low-lying and retention area, *khals* within the DMDP area are not demarked on the *mouza* map.

3.5.5) Legal Status of the Private Residential Land Development Companies according to RAJUK

It was great task to prepare a primary list before going to field survey of Private Residential land development projects (PRLDC). To find out the legal status of those projects, the RAJUK approval list is discussed. Considering the PRLDHR, 2004 the listed land development projects are divided into two categories based on legal status-

3.5.5.1) Approved residential land development project

As RAJUK is the key organization to permit land development activities in the DMDP area; the organization has a list of approved projects (Appendix II). RAJUK approved only 36 projects up to 1998 After 1998 to 2006 RAJUK did not give permission to develop land for residential projects.

3.5.5.2) Illegal residential land development project

1) Registered residential land development companies

According to PLDHR, 2004 every housing company must get registered to RAJUK for the land development project. RAJUK has a list (Appendix II) of those companies are registered to start private residential housing project according to the PRLDHR, 2004. But it should keep in mind that the projects are not approved just have permission to start land development business. Following the steps discussed earlier in this chapter, the

companies will get approval status and then they can start advertisement on different media and go for selling plot.

2) Projects without any legal status:

There are huge numbers of private residential land development projects without having any legal status. Neither they are approved nor did they apply for registration. They are starting their business without any concern of RAJUK. To identify the illegal projects within the DMDP area who are working without any legal aspect is prepared (Appendix II) on the basis of the primary list of housing projects and RAJUK approval list. Recently RAJUK has filed cases against the developers of all these projects (RAJUK identified), accusing them of violating the wetland protection act 2000, private housing land development rules 2004, town improvement act 1953 and Dhaka metropolitan development plan 1996-2015.

Table 3.6: List of housing companies RAJUK filed case against land development companies

Name of the project	Name of the company	GD no and thana	Date of the GD
Green Model town	Amin Mohammad Lands	No 54, Demra	20-3-2006
Ashulia Model Town	Amin Mohammad Lands	No 520, Savar	14-9-2006
Jamuna Model Town	Jamuna Builders Ltd.	Khilkhet police	16-8-2005
Uttaran Project	Mission Energy and Properties Ltd	GD (No779), Turag police	22-6-2006
Tamanna River view Project of	Baitul Aman Bahumukhi Samity Ltd.	A GD (No 897) Shah Ali Police Station	-
Basumati project of Ltd	Hirajheel Properties Development	GD (No 143/06) with Badda police	3-7-2006

Source: RAJUK office record, 2006

Chapter Four:

Location and Growth Pattern of Private Residential Land Development Activities

4.1) Introduction

To study the compatibility of private residential land development activities with the DMDP stated policies, it is necessary to identify the exact location of the Private Residential Land Development Projects (PRLDP) within the DMDP boundary. By identification of the PRLDPs on the policy maps of DMDP, it is possible to draw a clear picture about the land development practices in the DMDP area. Overlaying the identified point of PRLDPs on different policy maps of DMDP, locational aspects of housing projects are discussed. It is found that land development projects are capturing agricultural land, rivers, wet land etc. ignoring the environmental and planning consequences.

4.2) Location of the PRLDPs within DMDP Area

4.2.1) Location and Identification of PRLDPs within DMDP Area

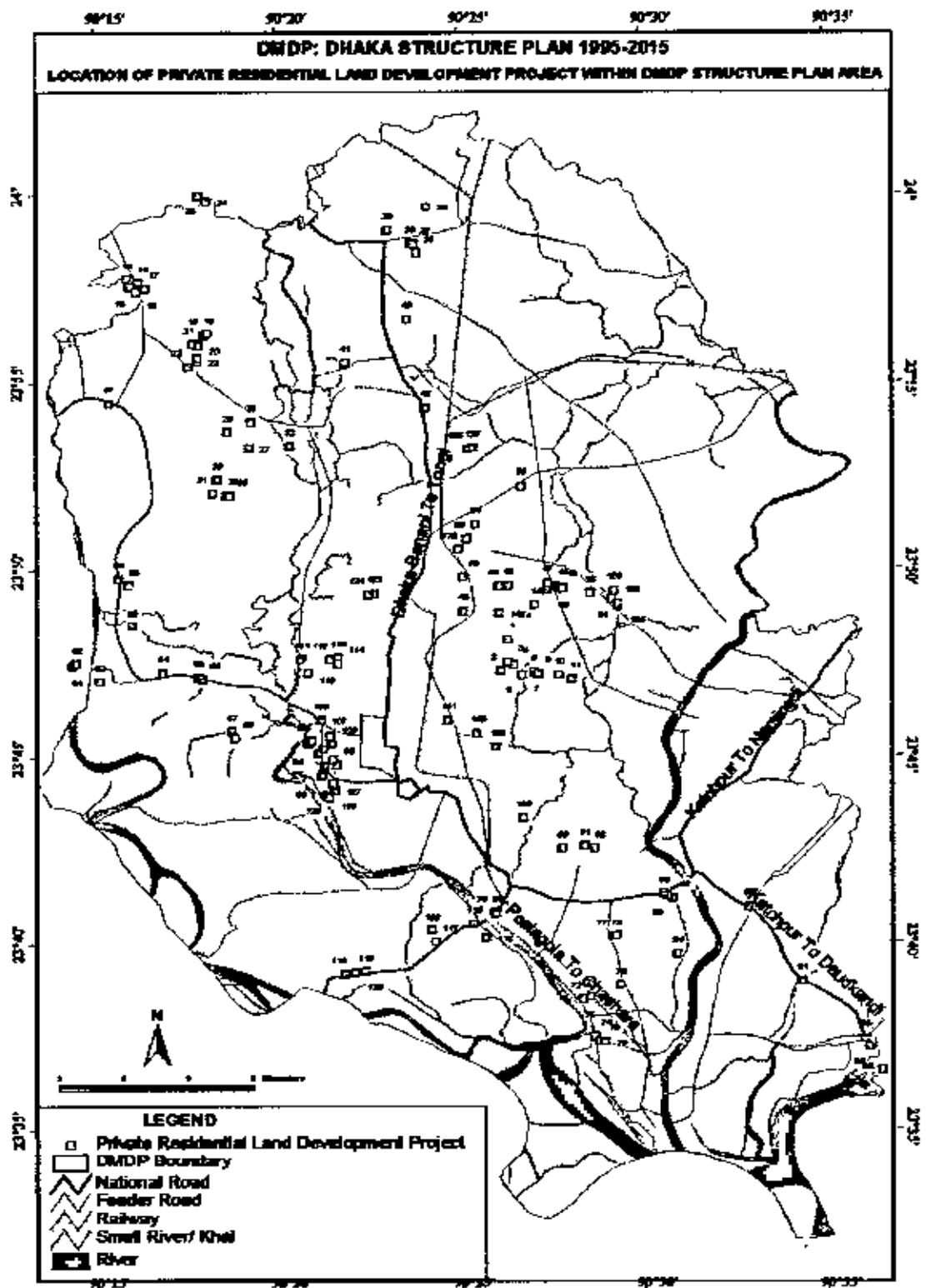
On the basis of the prepared primary list of PRLDPs (appendix II) a field survey was done to identify the location of projects. To identify the exact location of the PRLDPs a GPS point based survey is done. Before going to field it was a great task to prepare a list of housing projects. The 'Daily Ittefaq' dated from 1995-2005, is extensively reviewed collect the information about PRLDPs. 'REHAB Fair 2006' was also a unique source to collect information. In the field survey some of the listed projects could not be identified, because no signboard or site office was found in the field. Other than this, some projects were added to the list as those are found in the field survey.

Among the listed project, 143 projects are identified during the field survey are shown as a point on the map because it was not possible to mark the whole area of individual project. To show the area on the map, it needs extensive field survey, enough man power and sufficient funding. Moreover the project area of the PRLDPs are changing regularly because the developing companies buy new land frequently for its extension.

The total area of the PRLDPs are shown in a tabular form. Among 143 PRLDPs the approximate area of 96 PRLDPs are collected from different sources (developing

companies, local people). It is found that approximately 10252 hectares of land is being converted into the residential use.

The location of the PRLDPs within the DMMP area are shown in the Figure 4.1. On the map PRLDPs are identified with their ID no, shown in the table 4.1. From the figure it is evident that PRLDPSs are acting in all direction of Dhaka Metropolitan Area. Eastern part is the most attractive zone for land development, DND triangle and Savar are also developing



Source: Field survey, 2006 and DMDP structure plan
Figure 4.1: Location of private residential land development project within the DMDP boundary

4.2.2) Location of Residential Land Development Projects in Spatial Planning Zone

DMDP divided strategically the whole Dhaka metropolitan areas into several zones for planning purpose. The strategic planning zones are to conform with ward, mouza and pourasava boundaries. While there are 19 zones, some of these have been further subdivided into subzones so that the actual total becomes 26. Figure 4.2 shows the location of PRLDPs in the 26 SPZs of DMDP. It is clearly evident from the picture that and from the table that the most concentration of the PRLDPs are in the western suburbs, flood zone west, Dhaleshwari flood zone and the eastern fringe areas. Among the areas flood zone west, Dhaleshwari flood zone and eastern fringe areas are most vulnerable for the environmental and planning consequences. The land development activities in those areas are most contradictory to the structure plan policies. Urban area policy clearly suggested the possible development option of these areas.

Eastern Fringe: The area is low lying and the part of the flood plain of Balu river is the spawning ground of various species of fishes. The area is also under the project of FAP-8A. But the areas east to Pragati Sarani is experiencing very rapid development by the land developers and several developers are implementing large scale land development projects (East-West Property Ltd, Shawdesh Property and Development Ltd., Hirajheel Property Development, Eastern Housing Ltd. etc) ignoring the FAP 8A projects requirements. FAP-8A estimated to reduce flooding intensity and water logging 12% (195.36 hectares) areas should be reserved as retention pond. Presently 21 land development companies are very much active with their land filling activities. If present land filling continues, no land will remain for retention pond.

Dhaleshwari flood zone: This area is low lying area under Keranigonj thana and makes up the south-western boundary of the RAJUK area. The area is subject to annual flooding by Dhaleshwari River and has been designed as Flood Zone South. DMDP identifies the area as a major flood zone, as such to avoid negative effects (discussed in chapter five), flood water flow should not be disturbed. Even it is suggested to relocate the Container port in the DND triangle on the opposite side bank of Buriganga river. But ignoring

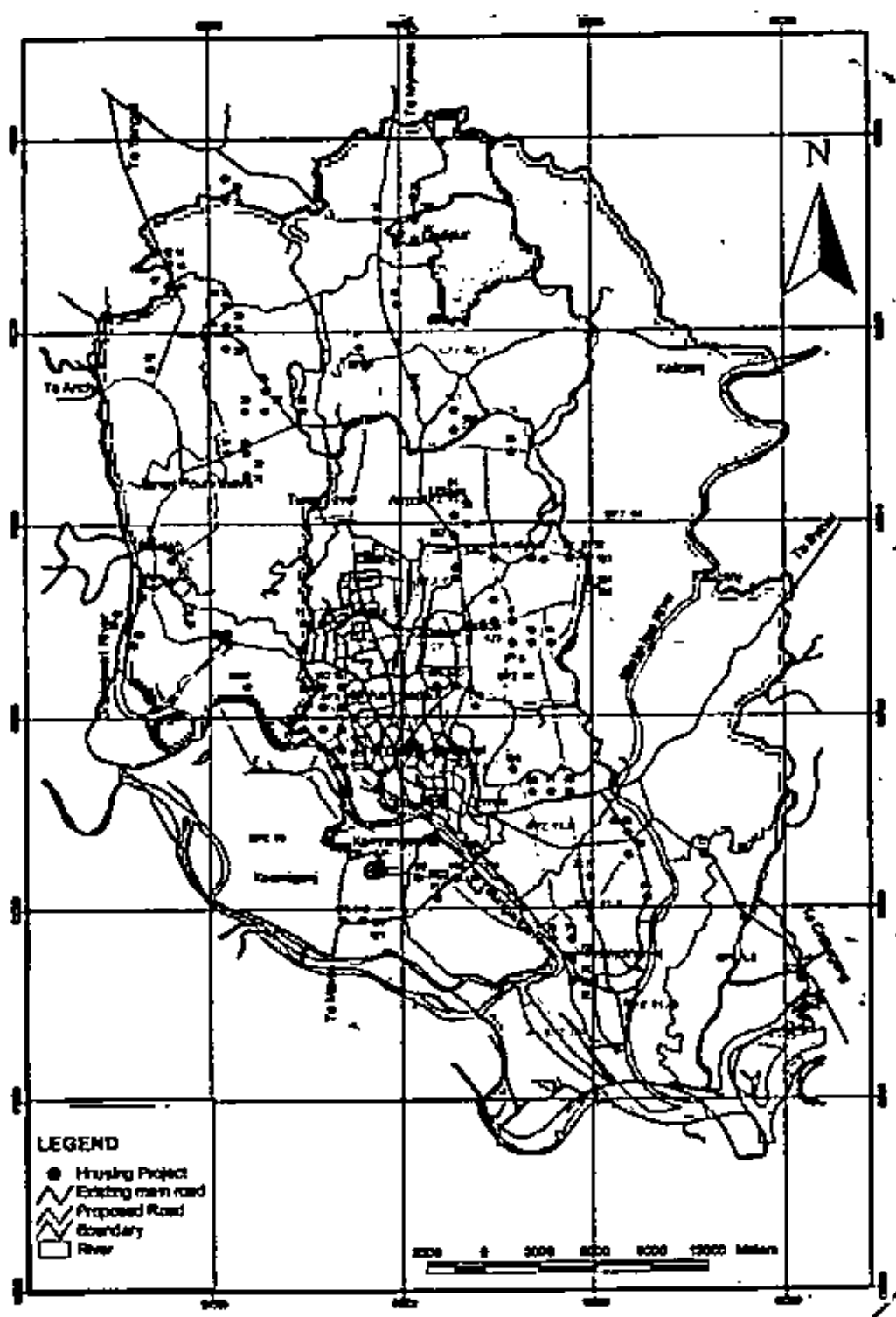
every effort land filling is going on by the 9 land development companies. In this process Dhaka-Mawa road is playing a vital role.

Table 4.1: Numbers of housing projects in different SPZs

SL.No of SPZs	Name of SPZ	Number of PRHPs
1	CBD South	-
2	CBD North	1
3	Old City	-
4	Western Suburbs	23
5	Mirpur	8
6	Gukshan, Banani, Badda, Baridhara	2
7	Eastern Suburbs	2
8	Injira/ Keranigonj	3
9.1	Narayangonj Fringe west	-
9.2	Narayangonj Fringe East	4
9.3	Kadam Rusul Pourasava	-
10	Narayangonj	-
11.1	DND Triangle South	5
11.2	DND Triangle north	3
12	Eastern Fringe	21
13.1	Cantonment	2
13.2	Uttara	5
14.1	Tongi	3
14.2	Tongi/ Gazipur fringe	2
15	Gazipur	5
16	Northern Fringe	9
27.1	Savar	3
17.2	Dhansona	7
17.3	Flood Zone West	23
18	Dhaleaswari Flood Zone South	9
19	RAJUK East	4
Total		143

Source . Field Survey, 2006

Flood zone west: The zone covers the areas between the Savar and Dhansona in the west and the present Dhaka established in the east. The zone is low lying cut across by Turag and its Khals and is designated by the structure plan. This is a flood plain and all



Source :Field survey, 2006 and DMDP Structure Plan

Figure 4.2: Location of private residential land development project in different Spatial Planning Zones

development should be discouraged to enable free of flood water. There will be considerable negative effect on surrounding areas if natural flow of water is prevented. Being a lowlying area, it has an opportunity for development of agriculture and physiculture and also can be used as open space to make life easy and comfortable. But there are 23 housing schemes by private sector, especially in the Amin Bazar area on the south of Dhaka –Aricha road and Ashulia. Some of thses have received development permit from RAJUK. Moreover DMDP suggests all the development permits issued for the development of housing should be withdrawn and no new one is needed to maintain the nature of zone. But reality is that this suggestion is mare a written document, it has not come into enforcement. This area now turns into an attractive zone for development.

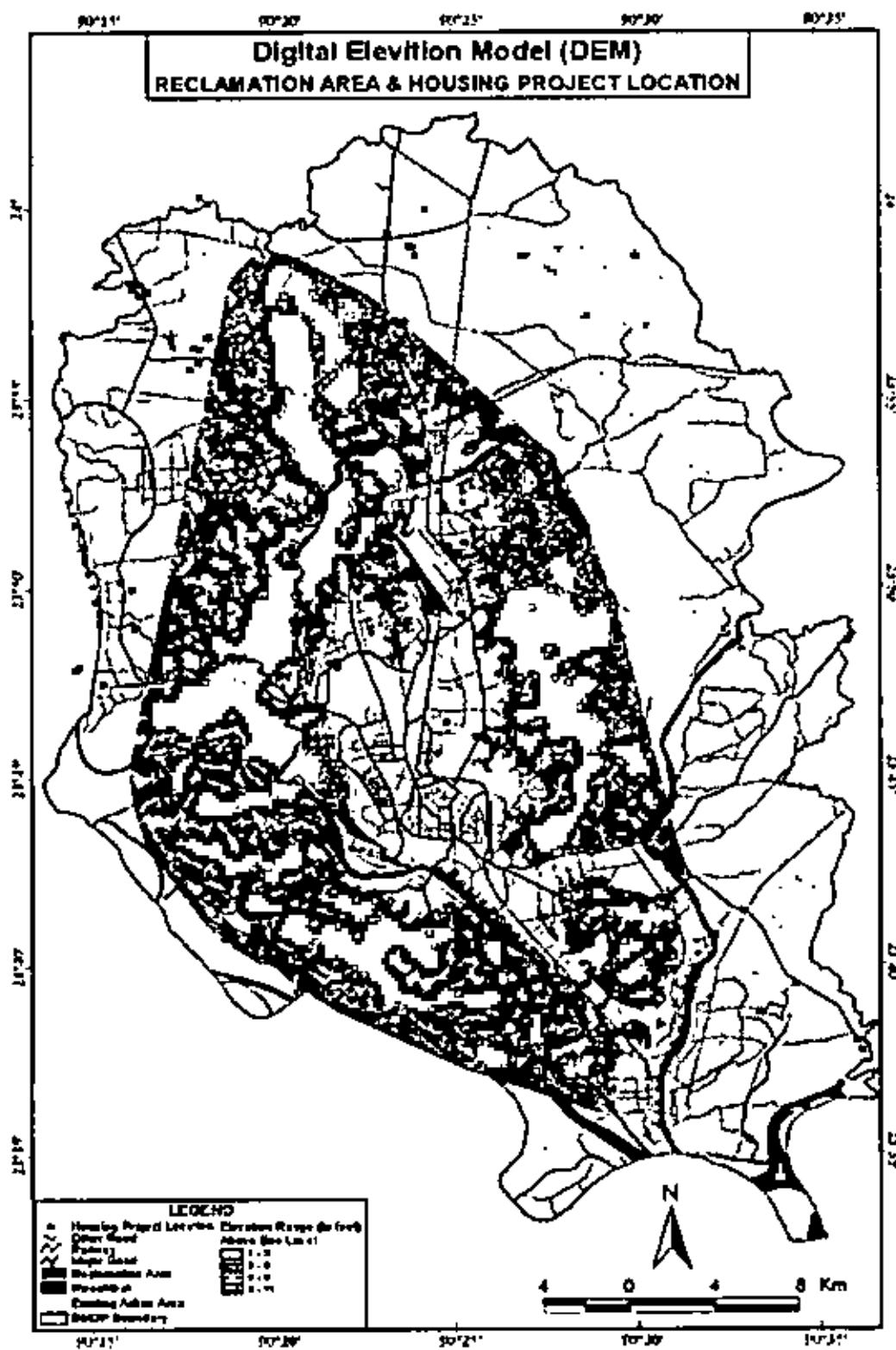
4.2.3) Topography of Private Residential Land Development Projects

Land elevation of PRLDPs are analyzed by overlapping the location on the Digital Elevation Model (DEM) of DMDP area in the year of 2004. The Figure 4.3 shows the land elevation of the housing projects, and the table interprets the elevation of the PRLDPs. It is found that 56 numbers of PRLDPS, among 143 Housing projects, are located in the low lying areas which are below 6 meters and need massive land filling. Total 7371 hectares of land is acquired by land developers for residential use. Elevation of 46 housing projects ranges from 1-3 meters above sea level and 10 projects are lying in the range of 3-6 meters. It is seen from the follwing table that 2890 hectares of low lying land have been uplifted above the sea level.

Table 4.2: Land elevation of private residential land development projects

Land elevation of housing projects	Number of project	Area of the project (in hectare)
1-3meters	46	3926
3-6meters	10	555
6-8meters	-	-
8-11 meters	12	2890
Total	68	7371

Source: Field survey, 2006



Source : Directorate of Environment and field survey, 2006

Figure 4.3: Private residential land development projects in the DEM of Dhaka

4.3) Trend of Private Residential Land Development Activities

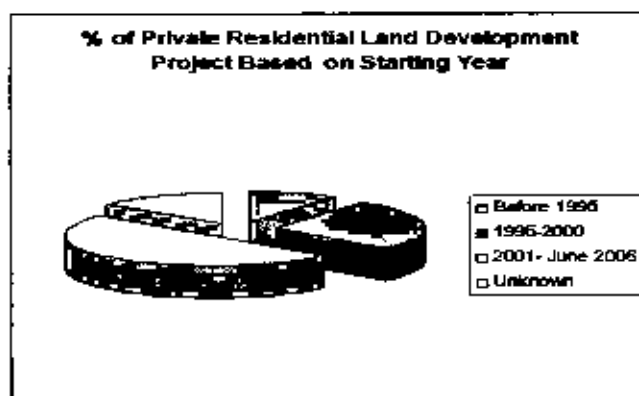
To study the trend (Figure 4.5, 4.6, 4.7 and 4.8) of housing development in the DMDP area, the identified PRLDPs are divided into three categories based on the starting year of the housing projects. Table 4.4 shows the percentage of land development projects which are established over the years.

It is revealed that 2001 to 2006 is the year of introduction of major land development projects. 49 % of housing projects were introduced in that period and 27% projects came into land market from 1995 to 2000. Most significantly, the projects, introduced from the year of 2001, are unapproved/ unauthorized because after 1998 RAJUK did not give any permission for land development.

Table 4.3: Trend of private residential land development activities

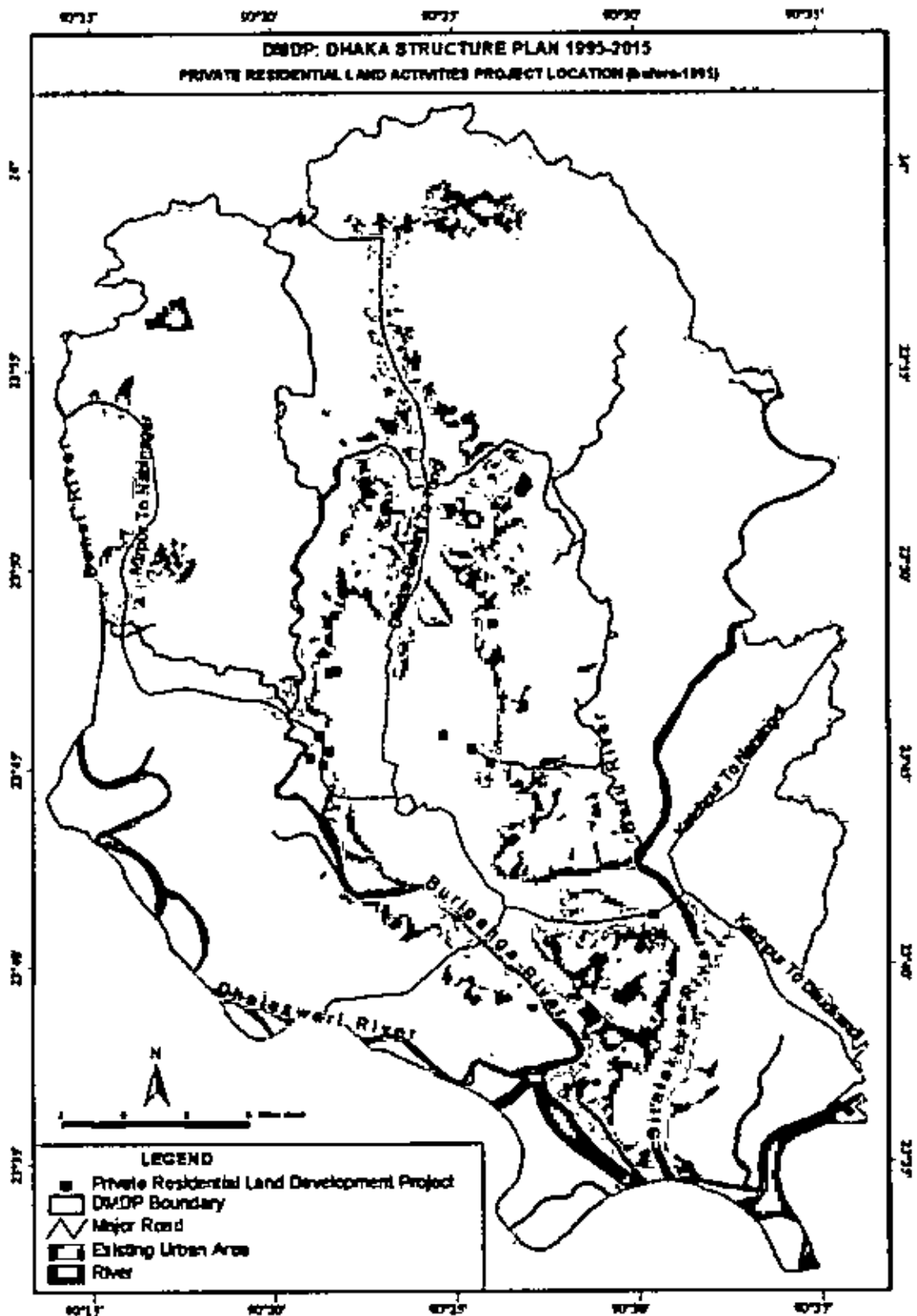
Year	Number of projects	% of total projects
Before 1995	14	10
1996-2000	39	27
2001- June 2006	70	49
Unknown	20	14
Total	143	100%

Source: Field survey, 2006



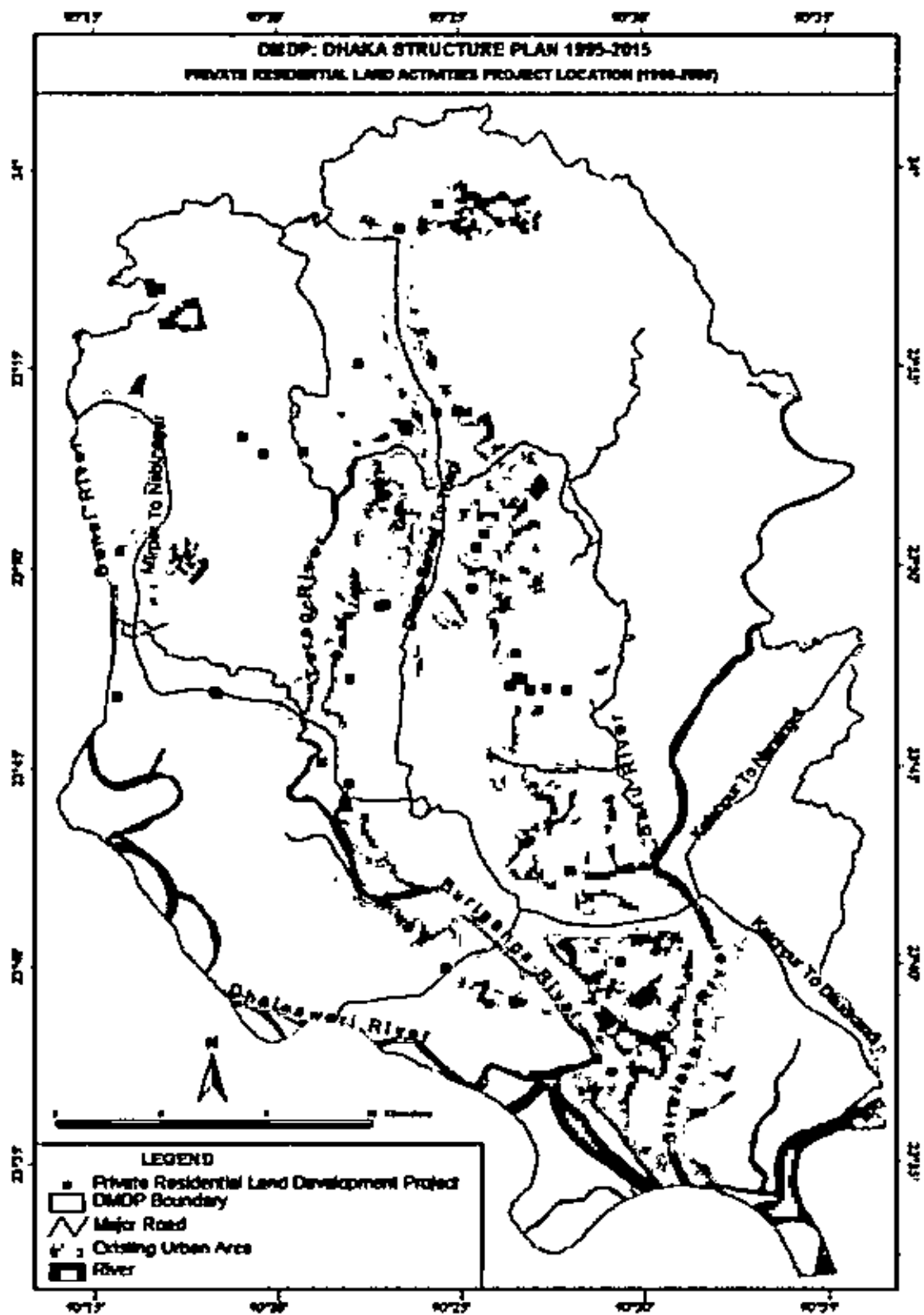
Source: Field survey, 2006

Figure 4.4: Growth pattern of private residential land development projects



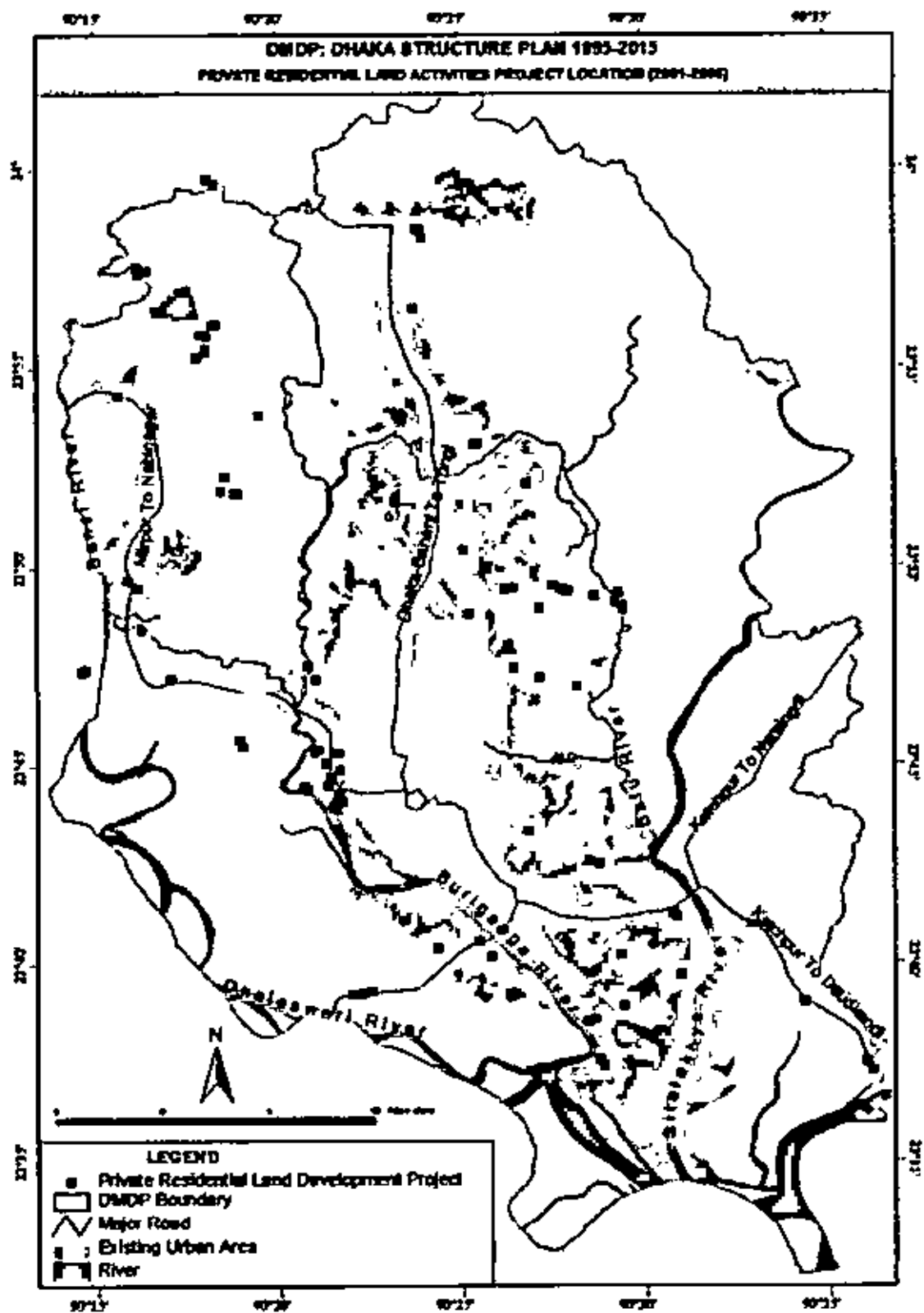
Source: Field survey, 2006

Figure 4.5: Location of private residential land development activities before 1995



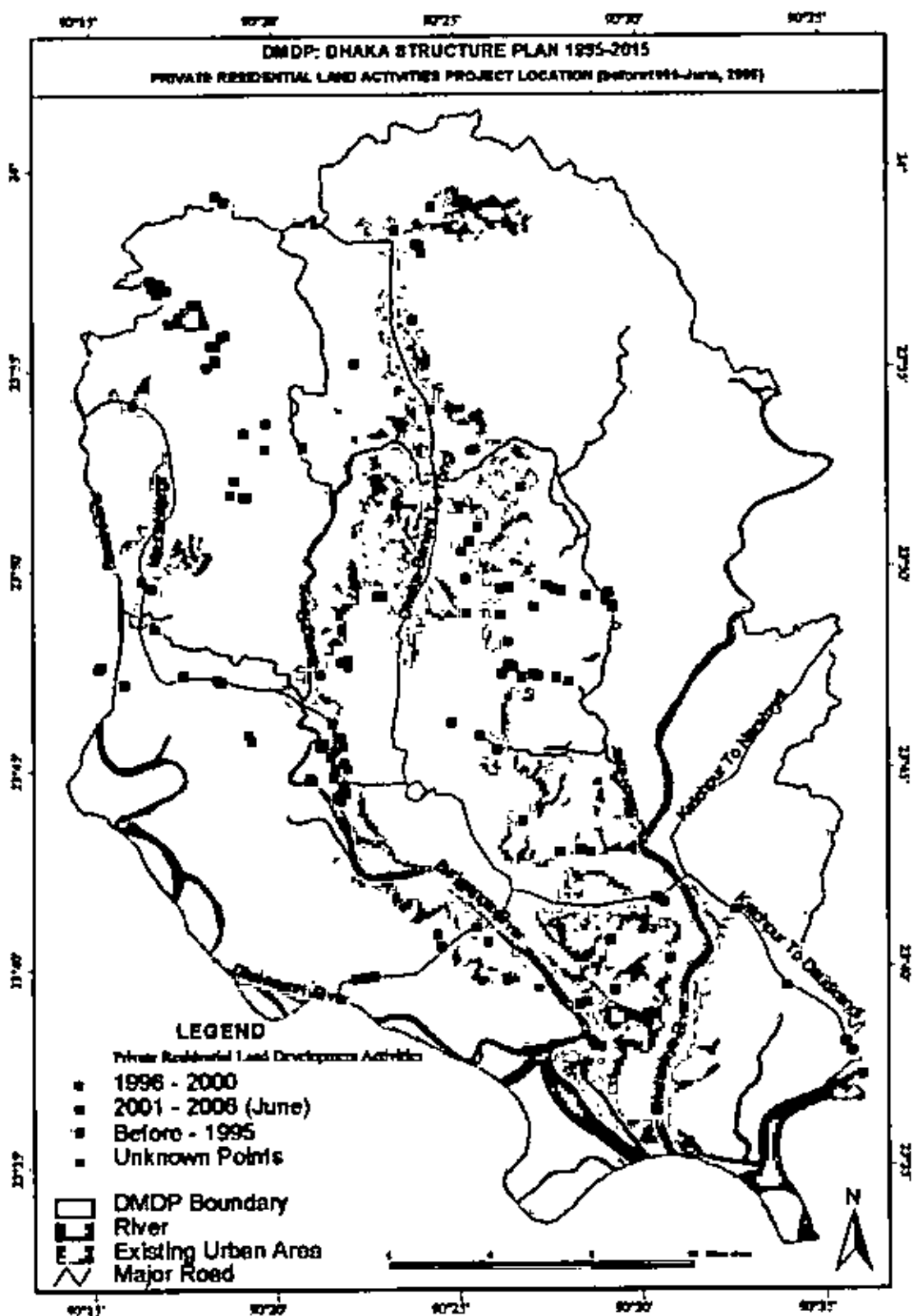
Source: Field survey, 2006

Figure 4.6: Location of private residential land development activities from 1996 -2000



Source: Field survey, 2006

Figure 4.7: Location of private residential land development activities from 2001 -2006



Source: Field survey, 2006

Figure 4.8: Trend of private residential land development activities in DMDP area up to 2006

4.4) Legal Status of Private Residential Land Development Projects

It is discussed earlier (chapter three) the permission process of land development in the DMDP area, RAJUK is the main authority to give permission for such activities. It is found in a close scrutiny that maximum (61%) housing companies are engaged in land development without any concern of RAJUK. Only 7% of surveyed land development projects have approval status for land development. 26% housing companies registered for private residential land development projects but do not have approval status. To examine the legal status of the PRLDPs, the list of housing project providing by RAJUK is consulted.

Table 4.4: Legal status of private residential housing companies

Legal status		No of projects	% of the projects
Approved		10	7%
Illegal	Registered to RAJUK	37	26%
	Registration under process	9	6%
	Without any measure	87	61%
Total		143	100%

Source: Field survey, 2006 and RAJUK office record, 2006

Chapter Five:

Evolution of Private Residential Land Development Activities with the DMDP Policies

5.1) Introduction

The PRLDPs, in the name of housing provision and project extension they are destroying low-lying areas, wet lands, flood flow zones, agricultural land, forest etc. by their whimsical activities. Some of them do not bother about planning provision of the prevailing Dhaka Metropolitan Development Plan and other rules and regulations. This chapter intends to evaluate the activities of the PRLDPs with the reference of DMDP Structure Plan in some point of view. The evaluation is being done with overlapping the point of PRLDPs on the different policy maps.

5.2) Evaluation of Land Development Activities according to DMDP Policies

DMDP suggested some policies for designated sub-areas. For this study the rural and special area policies and urban area policies are taken into account to observe whether residential land development activities are done in a proper way or not. By overlying the location PRLDPs on the different policy maps, the evaluation is being done.

5.2.1) Urban Area Policies for Future Expansion

The area designated as urban in the DMDP Structure Plan is, for strategic Planning purposes, subdivided into four broad categories. The urban sub areas so defined are.

- established pre-1983 urban area (areas of consolidation)
- recently (post -1983) urbanizing fringe (areas of acceleration)
- proposed flood protected development areas (promotion)
- dispersed flood free location (enabled)

The established pre-1983 urban area (areas of consolidation): The DMDP Structure Plan acknowledge the continuous densification throughout the whole planned period in the older established area and in those areas established in 1983. To mitigate the impact of the densification, optimization of land resources within the defined urban areas might be encouraged by the infilling of vacant land, allowing vertical development up four to six floors and by redevelopment or re-subdivision of land within lower density communities

The optimization needs to be supported with a strong effort to rehabilitate and upgrade the infrastructure facilities and services. Infrastructure consolidation, community based development initiatives, urban neighborhood action programmes, will be the effective measure of proper utilization of the area.

Recently (post -1983) urbanizing fringe (areas of acceleration): This is the area of land which was converted to urban use in the 1980's. It is widely scattered around most of Dhaka's established urban area with its 3000 areas. The municipal authority will initiate and coordinate a range of measure aimed at stimulating re-organization and re-subdivision of the urban the urban fringe area.

Proposed flood protected development areas (areas of promotion): To optimize the utilization of land converted to urban use in the 1980s to early 1990s and to promote planned development both the public and private sector will work together.

Peripheral urban land development areas (enabled): According to DMDP Tongi / Gazipur and Savar /Dhamsona in the north and north –west of the DMDP plan area are the first priority locations for dispersed town development, but only in the latter half of the plan period, not before 2010. Enabling development in the area in the Short and Medium term, to only which is supportive to the DMDP structure Plan and the DMDP Urban Area plan.

Peripheral areas (Discouraged): These are the locations where urban development should be discouraged. These locations are East Narayanganj, Jinjira and Amin Bazar as well as the flood zones and totally rural areas which should not be developed. While improved services to benefit the exiting population are permissible, further provision which would foster higher growth should be discouraged. Major developers should not be permitted to supply or contribute towards off-site service provision in these areas.

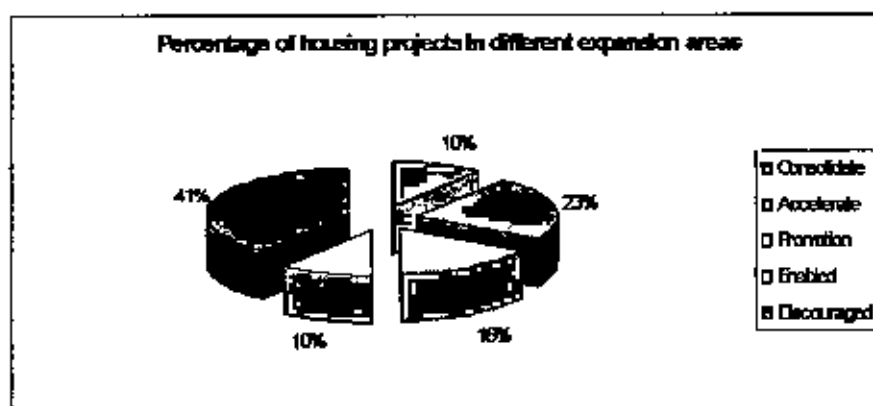
5.2.2) Private Residential Land Development Housing Project in Different Expansion Areas

DMDP in its urban area policies shows the direction of future growth dividing the area into four priority areas. It is found from the table 5.1 among 143 projects 57 projects are located in the discouraged zone for future expansion and the percentage bearing 41%. It is assumed that this type of expansion in the discouraged zone will cause unplanned growth and hamper proper expansion of Dhaka city. The figure 5.2 shows the distribution of the housing projects in the priority areas.

Table 5.1: Number of housing projects in the urban expansion area

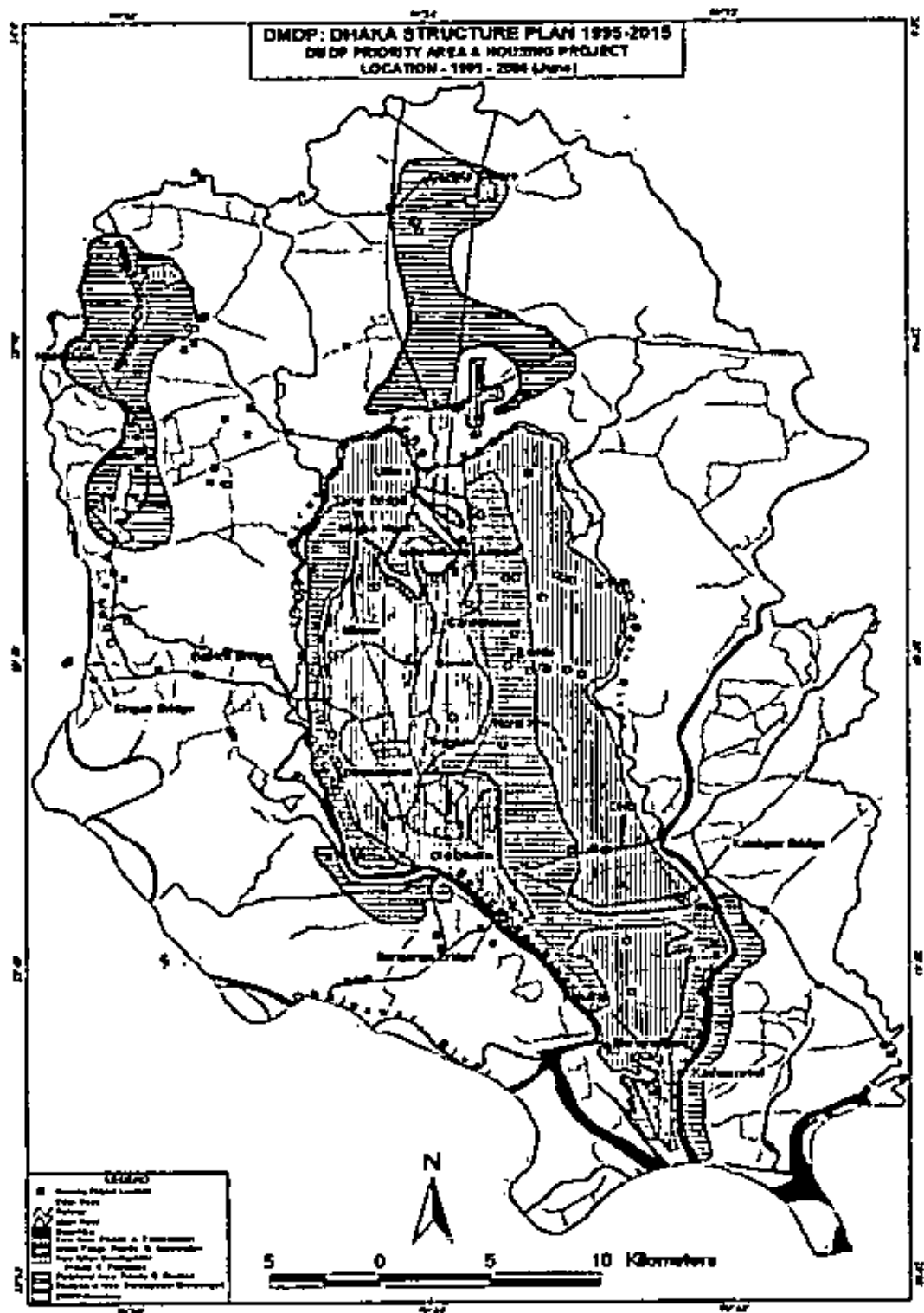
Location	Strategic intervention	No of project	% of share
In the established pre -83	Consolidate	15	10%
In the Newly urbanizing fringe (post 83)	Accelerate	33	23%
New area development post 1990	Promotion	23	16%
Peripheral Area	Enabled	15	10%
Peripheral Area	Discouraged	57	41%
Total		143	100%

Source: Field Survey 2006 and DMDP structure Plan



Source: Field Survey 2006 and DMDP structure plan

Figure 5.1: Percentage of private residential land development housing projects in different expansion areas for urban development



Source: DMDP Structure plan and field survey, 2006

Figure 5.2: Distribution of private residential land development project within the future expansion areas

5.2.3) Policies Regarding Flood Flow Zone and Water Retention Pond

The rivers and flood plains within the DMDP area play an important role in both the ecology and the economy of the capital region. As well as being the source of flood risk to urban development, they are the provider of water both for agricultural irrigation and for urban uses. As such, the flood plains and the rivers they contain require policies which will both limit the damage inherent in uncontrolled flooding and manage and conserve the rich resources which they bring to the areas rural and urban economics a like.

Policy

Land development, within the designated flood plain areas of the DMDP Structure Plan will be controlled in order to avoid obstructions to flood flow, which might otherwise result in adverse hydraulic effects such as, for example, the rise of flood water levels and changes in flow direction.

Policy regarding water retention pond

Flood retention ponds are a key and critically important component of the FAP 8A and FAP 8B flood control scheme. The flood retention pond is designed to reduce the intensity of local flooding within the protected areas and also reduce pumping requirements at times of maximum surface run-off. On the policy map the identified areas for retention ponds are indicative. But it is suggested that 12 percent land should be reserved for retention pond.

Policy

Controlled will be maintained over the areas designated in the DMDP Structure Plan for flood retention ponds in order to ensure that they remain capable of fulfilling their primary function of water storage at times of flooding

DMDP structure plan proposed some development restrictions to protect the flood flow zones and water retention pond. Proposed controls are as follows:



Table 5.2: Permitted uses and restrictions of flood flow zone and water retention pond

Flood flow Zone	Permitted uses	Restriction
Main flood flow Zone	<ul style="list-style-type: none"> • Agricultural • Dry season recreation facilities • Ferry terminal • Excavation of mineral deposits 	Land development for residential commercial and industrial development through land filling is strictly prohibited
Sub-Flood flow zone	Development compatible with the rural nature of these mainly rice growing areas	Development will be permitted on condition that the -Structures are built on silt, or on land raised above design flood water level -Alignment of structures and raised land to be designed so as not to disturb flood flow.
Flood retention pond	<ul style="list-style-type: none"> • Agriculture • Fish cultivation • recreation 	No land filling and permanent structure will be permitted within the designated area, if already exist, those will be discontinued and the owners compensated by the government

Source: DMDP structure plan, 1995-2006

5.2.4) Location of Private Residential Land Development Projects on Flood Flow Zone and Water Retention Pond

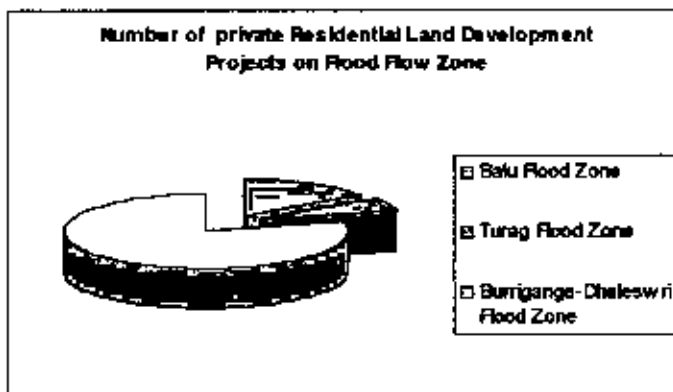
It is acknowledged that the DMDP can effectively regulate unplanned urbanization. This plan talks about keeping the eight flood flow zones undisturbed. Unfortunately this is not happening. It is identified from the field survey that all the flood flow zones are being filled up by unscrupulous developers (figure 5.3), but RAJUK has miserably failed to prevent these activities. Their filling up activities has no approval from RAJUK. Such filling up of the flood flow zones are essentially changing the nature, character and utility of the natural water body and at the same time is doing gross violation of DMDP plan and also the wet land protection act, 2000. The 2000 act strictly prohibited activities that

would change the nature of water bodies including flood-flow zones without prior approval from government. The violation of the Act 2000 is punishable with imprisonment of 5 years and fine up to taka 50 thousand. In defiance of all their legal requirement 39 housing projects (Appendix -II) are proposed to develop on the flood flow zones over an area of 1488 hectares that government failed to prevent effectively.

Table 5.3: Conversion of flood flow zone through private residential land development activities

Flood Zone	Number of residential land development projects	Area (hectare)
Balu Flood Zone	6	389
Turag Flood Zone	2	433
Buriganga-Dhaleswri Flood Zone	31	666
Total	39	1488

Source: Field survey, 2006



Source: Field survey, 2006

Figure 5.3: Distribution of private land development projects on different flood flow zones

Similarly sub-flood flow zone is under threat of PRLDPs. It is found that 11 PRLDPs are acting there with the area of 2253 hectares. The flood flow zones are related to drain out the water from the area during the rainy season. But by the development of PRLDPs in the flood zone, drainage network is gradually reduced, which creates water logging. The same situation has been experienced in the western part of Dhaka and DND protected areas where water logging is a critical issue now. Not only in the western and DND area, recent experiences have showed that heavy showers submerged most of the city and became waterlogged due to inadequate drainage facilities.

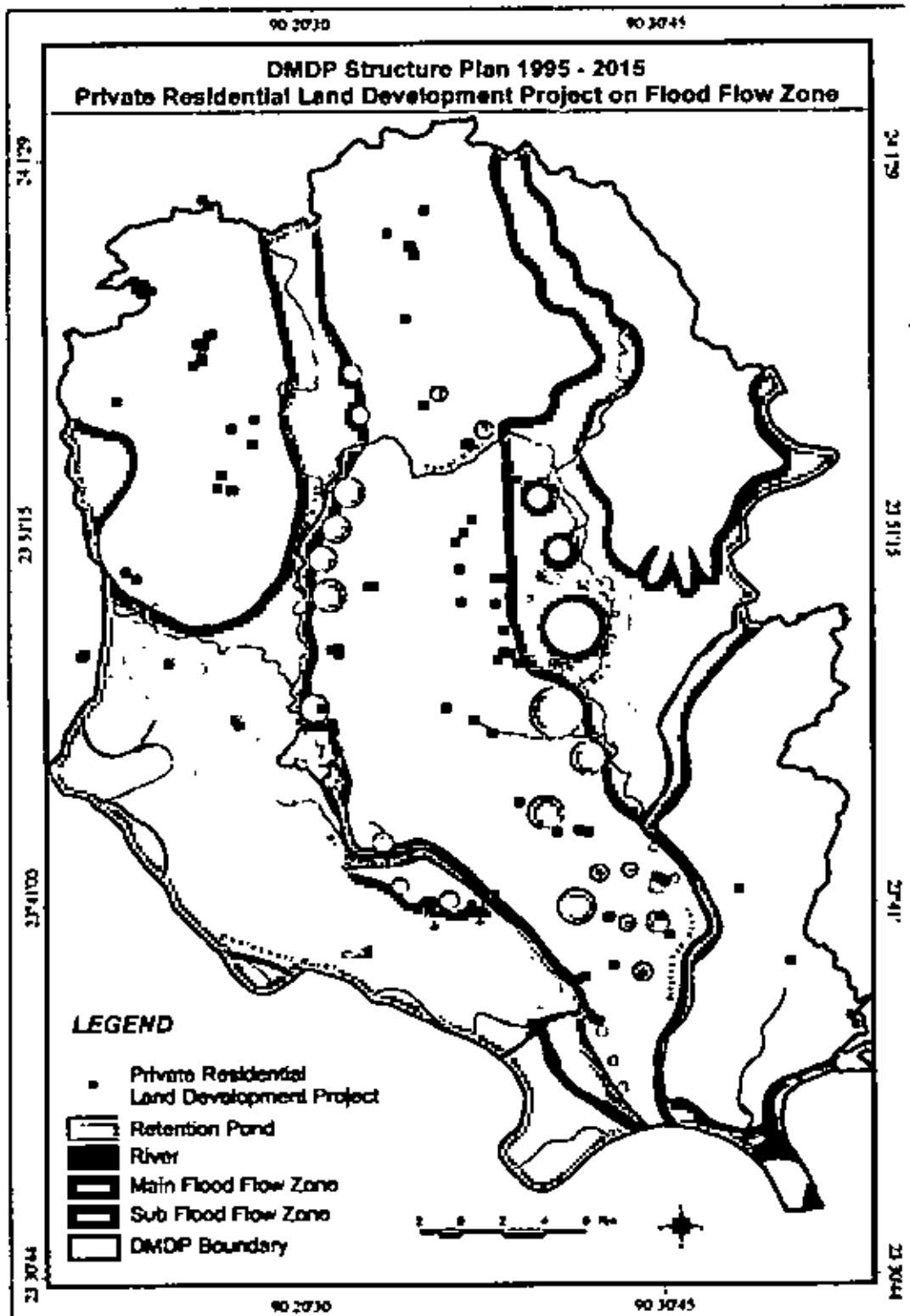


Figure 5.4: Private residential land development activities on flood flow zones and retention ponds

Flood Retention Pond

DMDP strongly prohibited not to fill the land or develop any permanent structure in the retention areas, though these areas yet to demark and still remains indicative. But the figure 5.3 shows that land filling is occurring in and around the designated areas without maintaining the policy. It is assumed that if such development is not stopped, within a few years there will remain no open land for making flood retention pond.

5.2.5) Policy Regarding High Value Agricultural Areas

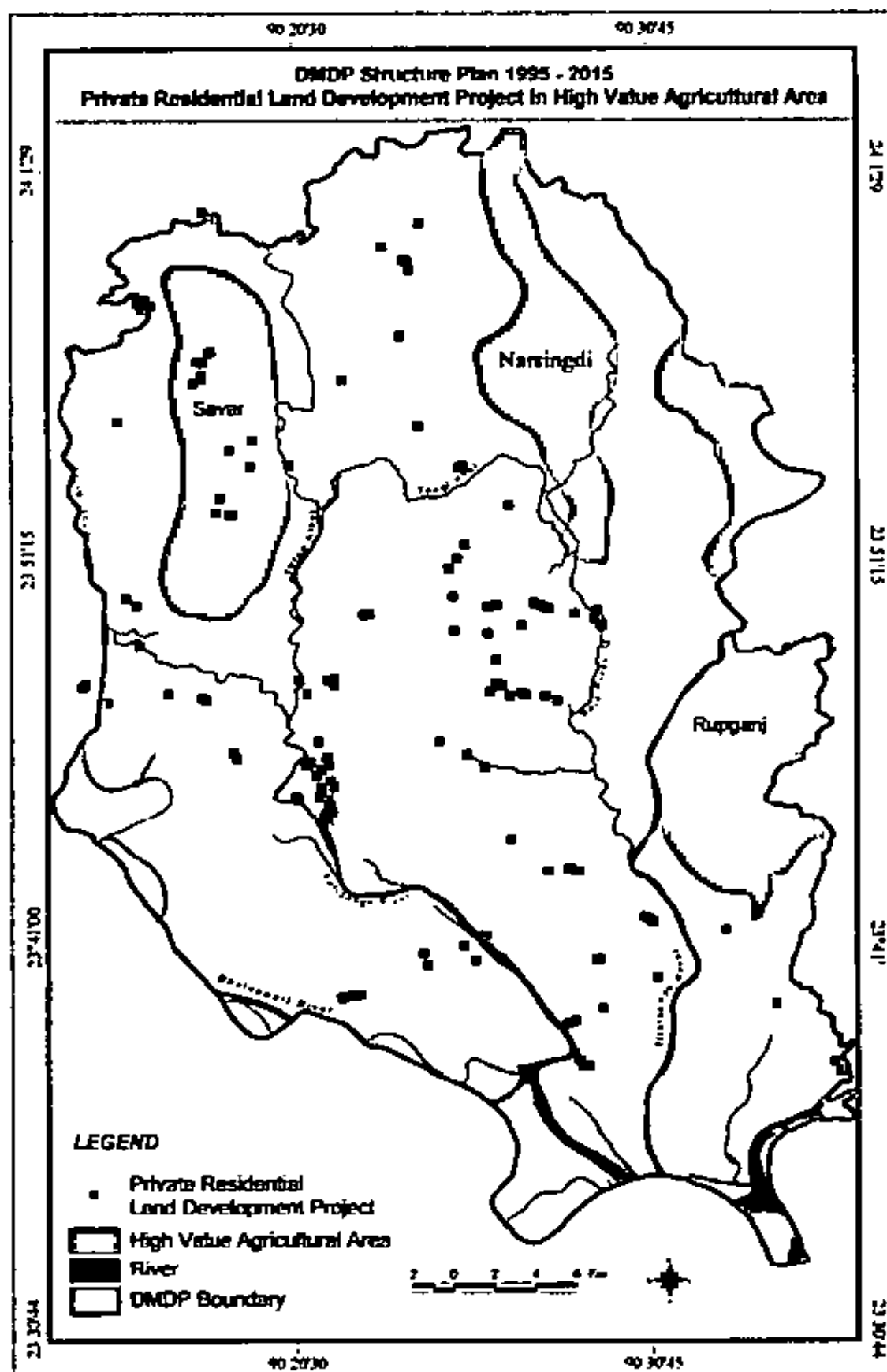
Approximately one fifth of land within the DMDP Structure Plan area has been evaluated as good to very good agricultural land. This land is predominantly associated with well-drained upland and is therefore largely confined to the northern half of the DMDP Structure Plan area. Large expanses of these top quality agricultural lands have already been lost due to urbanization. But this high value agricultural land should be kept free from any kind of permanent development. DMDP identifies three areas of high quality agricultural land within the catchments area of Dhaka. These areas are –Savar, Narsingdi and Rugganj and should be restricted for development to ensure a base for urban food supplies in close proximity to the city and to improve levels within the agricultural sector of the metropolitan area's economy.

Policy

Three areas of high quality agricultural land within the catchments area of Dhaka will be conserved and promoted as areas of high intensity food production.

5.2.6) Location of Residential Land Development Projects in the High Value Agricultural Area

Figure 5.5 shows that 'high value agricultural lands' are being converted to the residential use. In the policy these areas are restricted to develop because of cropping intensity. The agricultural zone at 'Savar' is losing its characteristics in a tremendous rate. 15 projects are located in that restricted area converting 503 hectares of land. On the other hand Narsingdi and Rugganj areas are still free from residential land development activities, but in the field observation survey it is found that in these areas commercial and industrial activities are growing in an increasing rate.



Source: Field survey, 2006

Figure 5.5: Private residential land development activities in high value agricultural area

Table 5.4: Number of private residential land development project in the high value agricultural areas

Agricultural Location	Number of Project	Area(hectare)
Savar	15	503
Gazipur	-	-
Rupgonj	-	-
Total	15	503

Source: Field survey, 2006

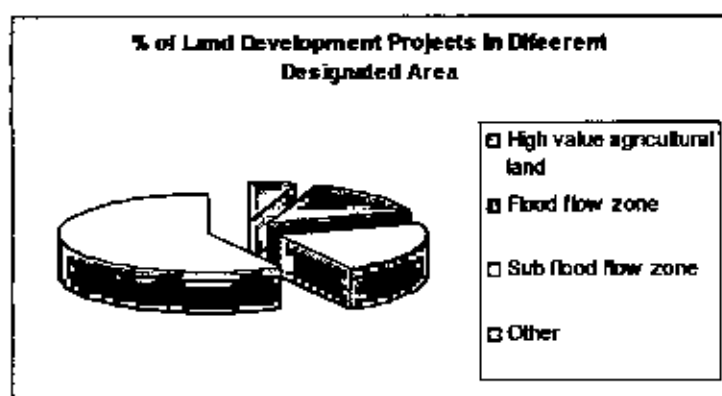
5.3) Distribution of Private Residential Land Development Projects in Different Restricted Areas

Discussion from the above mentioned tables and figures in this chapter prove that the housing projects are engaged in developing huge amount of land in the name of housing provision without considering any rules and regulation, making Dhaka to grow in an unplanned way. From the table 5.5 it is revealed that the stated housing projects are converting approximately 10252 hectares of land including high value agricultural area, flood flow zone, proposed retention areas which are highly restricted to develop according to DMDP policy. It is very significant that 19% of total converting area lies in the main flood flow zone

Table 5.5: Amount of land conversion in the different designated areas

Designated area	Area(hectare)	% of share
High value agricultural land	503	5%
Flood flow zone	1488	15%
Sub flood flow zone	2253	22%
Other	6008	58%
Total	10252	100%

Source: Field survey, 2006



Source: Field survey, 2006

Figure 5.6: Percentage of land development activities within the restricted areas

5.4) Possible Environmental Impact of Private Residential Land Development Activity

It is evident from the prior analysis of the activities of PRLDPs with special reference to DMDP policies, the land development activities undertaken by the PRLDPs in the DMDP area is a deviation from stated objective and norms of urban planning and urban development. These activities are reducing high value agricultural land, flood flow zone, sub-flood flow zone which are predominantly used as agricultural land and causing adverse impact on environment. The environmental impacts are identified as follows-

5.4.1) Loss of Agricultural Land

It is found from the survey that high value agricultural lands at 'Savar' as well as other agricultural lands are being converted into residential use. The peripheral areas of Dhaka city turns into a vast waterbed and become wet lands during monsoon period. In the dry season, these lands are used for cultivation. Increasing rate of land development is reducing the intensity of agricultural production. As a result people will face shortage of food. More over the labour force engaged in the agriculture will be unemployed and that will cause the extra pressure on the city centre. An agricultural study on Jirabo, located in Savar high value agricultural area, is found that in 2005, 30.40% of total area is under agricultural use but in 1995 it was 71.92% (Islam, 2006).



Figure 5.7: Conversion of agricultural land due to land development project

5.4.2) Loss of Wet Land

The flood flow zones and retention pond areas are found in the form of low lying areas and wet lands. The wet land and the low lying areas are converted as seasonal wet land during the rainy season and act as natural reservoir of water. But the wet lands are being filled up to meet the excessive demand of land. Thus the environment of Dhaka city is being continuously endangered and threatened by various unplanned and illegal activities of private and public bodies without considering and respecting the minimum environmental standards. This extinction of wetlands are not only creating localized flood in the area but also aggravated the yearly flood of the inner part of the city. However, the existing canals and wetlands should be kept free from all sort of development work otherwise internal flooding within the protected areas will be obvious.



Figure 5.8: Loss of wet land due to land development.

It is evident from an analysis of wet land of Dhaka city is shrinking gradually. It is alarming to find that yearly rate of loss of wetland during 1999-2003 periods is 5.67

percent whereas during 1989-1999 period, yearly rate of loss was 1.23 percent, Despite the enactment of the Water Body Conservation Act 2000, wetlands are disappearing. If the current rate of loss of wetland continues, by the year 2037 all temporary wetlands of Dhaka will be disappeared.(Islam, 2006)

5.4.3) Drainage and Water logging

The human interference associated with land filling and unplanned development activities over the natural drainage system have aggravated the present water logging in the study area. There are more than 40 *Khals* in greater Dhaka city linking with each other. The *Khals* are well connected and open. The ring type drainage system always protected Dhaka from water logging. More over the adjacent low –lying areas of Dhaka city serves as the retention pond of the excess water of these rivers during the rainy season. But land development through land filling process in the low lying areas and natural *khals* and channels is occurring severe drainage congestion especially in the city center. Figure 5.10 shows the encroachment of a channel by Basundhara (Baridhara) residential project. DND area and Dhaka west are the examples of severe drainage congestion due to massive land filling.

5.4.4) Loss of Fisheries

The rivers surrounded Dhaka and most of the low lying areas including flood plain are used for single cropped agricultural purpose and are also potential for open water capture fisheries. A JICA study under FAP -8A identified about 74 fish species, 10 fresh water prawn species and two oval species only in the eastern fringe area (JICA, 1992). But the habitations of fishes in floodplain and reserve areas are reducing due the land development work. Sagufta, a housing project of N.M. Housing Group, is converting nearly 1600 hectares of land which were used as the fishing cultivation area. Similarly other projects are doing so.

5.4.5) Loss of Trees

Geographically Savar and Gazipur are situated in the Mudhupur Tract region. These areas are well known for *Shal* trees and *Mehagony* trees. Moreover the study area

abounds in mango, litchi, Jackfruit, coconut; berries etc. There are several orchards of jackfruit in Savar and Ashulia. The orchard and the natural plants are disappearing day by day due to land development process.

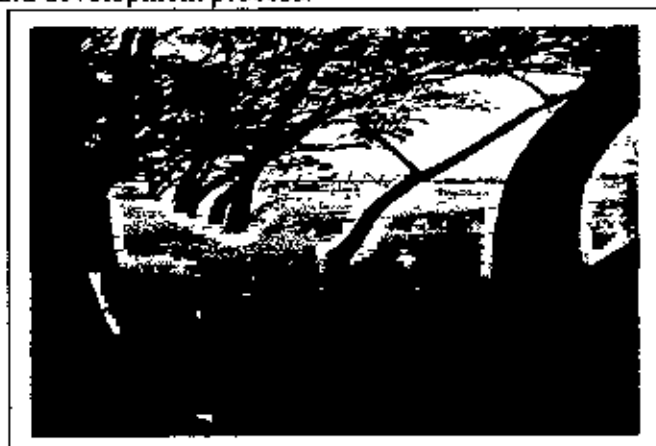


Figure 5.9: Loss of trees due to land development.

5.4.6) Changing of Soil quality

The silt and clay are prominent in the upper layer if the soil having an approximate thickness of 5- 20 meters in Dhaka city and its surrounding areas. Sands occupy the major portion of the lower deposits. The soils of Dhaka can be classified into three main classes namely the Red clay of Madhupur Tract, the ordinary beel clay and marsh clay and peat are the combination of alluvial and paludal deposits. The red clay when dry is extremely hard and it becomes slippery rather than soft when exposed to rain. The beel Clay is stiff clay deposited on the bottoms and edges of beds. It is S most common in the natural Khais and along the rivers and many places mixed with the decayed remains aquatic plants. This clay is soft in nature. Marsh and peat are common in beel and structurally controls depression. The soil of Dhaka is clay layer at the top followed by fine sand and soil layer at a depth of about 50 meters. The top spoil of Dhaka city is fertile for agricultural product and habitat of many plants, flora and fauna. But the PRLDPs are filling their projects with river silt which is changing the natural soil quality of those specific areas. Thus situation will cause severe environmental problems.

5.5) Supply and Demand aspect of Land within the DMDP Area

DMDP population forecast anticipates a doubling of population over 25 years and average growth rate of 3.1 %. The end of the structure plan period the population of Dhaka city will be 15.569 roillion. With the population growth Dhaka is expanding in

every direction. The impact of the Spatial Development Strategy on Dhaka's distribution of population is shown in the following table. DMDP summarized the main results of population growth as follows-

- the Consolidation sub-strategy, within the 1983 established urban area, is expected to result in a twenty five year increase in population (from the 1991 census total) of some 2.65 million or 32% of the total projected growth, with approximately half this increase occurring in Dhaka's western and eastern suburbs. The rate of increase is expected to decline over the DMDP Structure Plan period as opportunities for infill and densification diminish.
- In the present under-developed urban fringes (converted from rural to urban use after 1983), the accelerate growth strategy is expected to accommodate the absorption of an additional 1.29 million, increasing the capacity of these areas more than threefold.
- Together the above two sub-strategies will accommodate just over (48%) in the projected 1991-2015 population increase to be absorbed within the defined 1991 urban area
- The bulk of the remaining population (52% or 4.26 million) will be strategically directed to new development locations, split approximately 75/25 between expansion of existing urban areas and to more dispersed locations to the north and northwest. The new area development will take an increasing share of total population growth through the DMDP structure Plan Period -33.5% increasing to 45% in the ten year period. While the peripheral area where development will be enabled will maintain its share of growth at 15%.

Table 5.6: Total population and share of total by location and time
total in millions

Location	Strategic Intervention	1991		2006		2016	
		Total	Share %	Total	Share %	Total	Share %
In the established Pre-1983 Urban area	Consolidate	5 525	75.0	7 610	60.5	8.200	52.5
In the newly urbanizing Fringe (post0-1983)	Accelerate	0.541	7.5	1 239	10.0	1.829	12.0
New area development post 1990	Promotion	-	-	1.757	14.0	3.087	20.0
Peripheral development	Enable/ Discouraged	1.280	17.5	2.013	15.5	2.453	15.5
Grand Total				12.619	100	15.569	100

Source: DMDP, 1995-2015

In terms of influencing and changing the spatial development pattern of the metropolitan area, the main impacts of the DMDP Structure Plan will be as follows:

- Existing urban areas will account for approximately 64.5% of total population in 2015, compared to 82.5% in 1991 within the older established urban areas, this declining share will be even more pronounced and despite an actual increase of 2.67 million in the DMDP Structure Plan period, its share of total population will drop from 75%-52.5%
- Balancing this relative decline in the centre of Dhaka, new area development will have increased the share of more dispersed locations from 17.5% in 1991 to 30.5% by 2015.

Without maintaining the spatial development strategy, new land conversion is continued to occur, particularly in locations adjacent to presently developed and developing areas and in spite of high flood risk and paucity of infrastructure services and other social and community services provision. This form of development is taking place due to Dhaka's fragile eco-system and natural and vulnerable drainage system. There is clear evidence of these sites at Kuril, Kazipara and Meradia, Bhatara, DND areas and opposite side of

western embankment. Private sector interests have been and are acquiring large tracts of fringe areas, filling land with loose and excavated soil of inherent unstable qualities, ignoring geological consequences, the potential and increases risk of subsidence and water logging of land are filling these areas.

Land development for residential use is going on both by the private and public agencies. From the following table it is revealed that 15030 hectares of land will be ready to accommodate 13.68 million of people by 2015.

Table 5.7: Total amount of land will be used for residential purpose by 1995- 2015

Residential land development	Area(in hectares)	Population accommodate (in million)
Public residential land development projects	4778	4.71
Private Residential land development projects	10252(approximately)	8.97
Total	15030 (approximately)	13.68

Source: Field Survey, 2006 and RAJUK

But question is that “Is this huge amount of land necessary to accommodate the future population?”

We can conclude it whether it is necessary or not by doing a simple mathematical equation That is-

$$\begin{aligned}
 \text{“New land required for future population} &= \text{Total population / Density per hectare”} \\
 &= 1 \text{ Million/ 425 per hectare} \\
 &= 2352.94 \text{ hectares of land}
 \end{aligned}$$

Basis of the concepts are:

- 1) DMDP estimates that Dhaka will have to accommodate 15.569 million people at the average growth rate of 3.1% at the end of the plan. At present, in the year of 2006 the population of Dhaka city is nearly 12.5 (as per DMDP projection) million so that Dhaka will have to accommodate 3 million people more within 2015 DMDP states two-thirds of the increased population over the decade will be accommodated higher densities in established urban areas, and only one-

third through new development. That means new land development could accommodate only 30% of the increased people as stated earlier

- 2) So that the new developed land both by the public and private sector will have to accommodate 1 million people by 2015
- 3) Population density of PRLDPs is calculated as per the rules of PRLDR, 2004. The density is 875 person per hectare.
- 4) To calculate the amount of land needed to accommodate the future population the average density of Purbachal is taken into consideration. The average density of Pubachal is planned 425 pph.

Comments: It is revealed that total land development is much more to accommodate the future population. So it should be stopped now. If the land development is increased, the following situation will be faced-

- 1) The amount of land is being developed or going to develop is more than sufficient to accommodate the future population and if more land is developed will face shortage of desired buyers. That means huge amount of land will be used as speculative mood
- 2) Dhaka city will grow in a haphazard manner without considering proper planning that will cause serious environmental, social, infrastructural, economic loss.

5.6) Case Study of Private Residential Land Development Activities

In this section intends to show the present land development activities through some case studies. These PRLDP's are located different part of the Dhaka at different geological areas.

Case Study I

- 1) Name of the Project : Basundhara (Baridhara) Housing Project
- 2) Name of the Company : East-West Property Development Ltd.
- 3) Location : The project is located in the eastern side of Progati Sarani and the north –east of RAJUK 's Baridhara Model Town. The project comprises of Joar sahara , Bhatara, and Kathaldia Mouza under Gulshan Thana.
- 4) Starting year : Busundhara got its approval at the year of 1987 from RAJUK comprising 123 6 hectares of land within different blocks with certain terms and conditions At present RAJUK approved A-F block of the housing project. The project is now expanded up to Q block which does not have any authorization.
- 5) Present Status of the Project : At present the company is trying to get permission for extension. Initially it started business dividing the plot by 5 sectors, named A, B, C, D, E, F now it extends its area up to Q sector (Figure 5.6). For that purpose it has acquired land from the surrounding areas. The company buys land from the landowner or acquires *Khas* land from the Government. The following table summarized the project-

Table 5.8: Project phases, blocks and areas of Basundhara (Baridhara) residential area

Phase	Blocks	Areas(hectare)	in comments
Phase-1	A, B, C, D, E, F(Part)	123.6	Most of the plot were sold out
Phase 1(revised and extension)	F, G, H, I, J, K, L,	381.5	Incremental land filling is continued
Phase -2 (future Extension)	M, N, O, P,Q	200	Maximum land is low – lying areas and use for agricultural purpose only.
Total		605.1	

Source: RAJUK Office Record, 2006

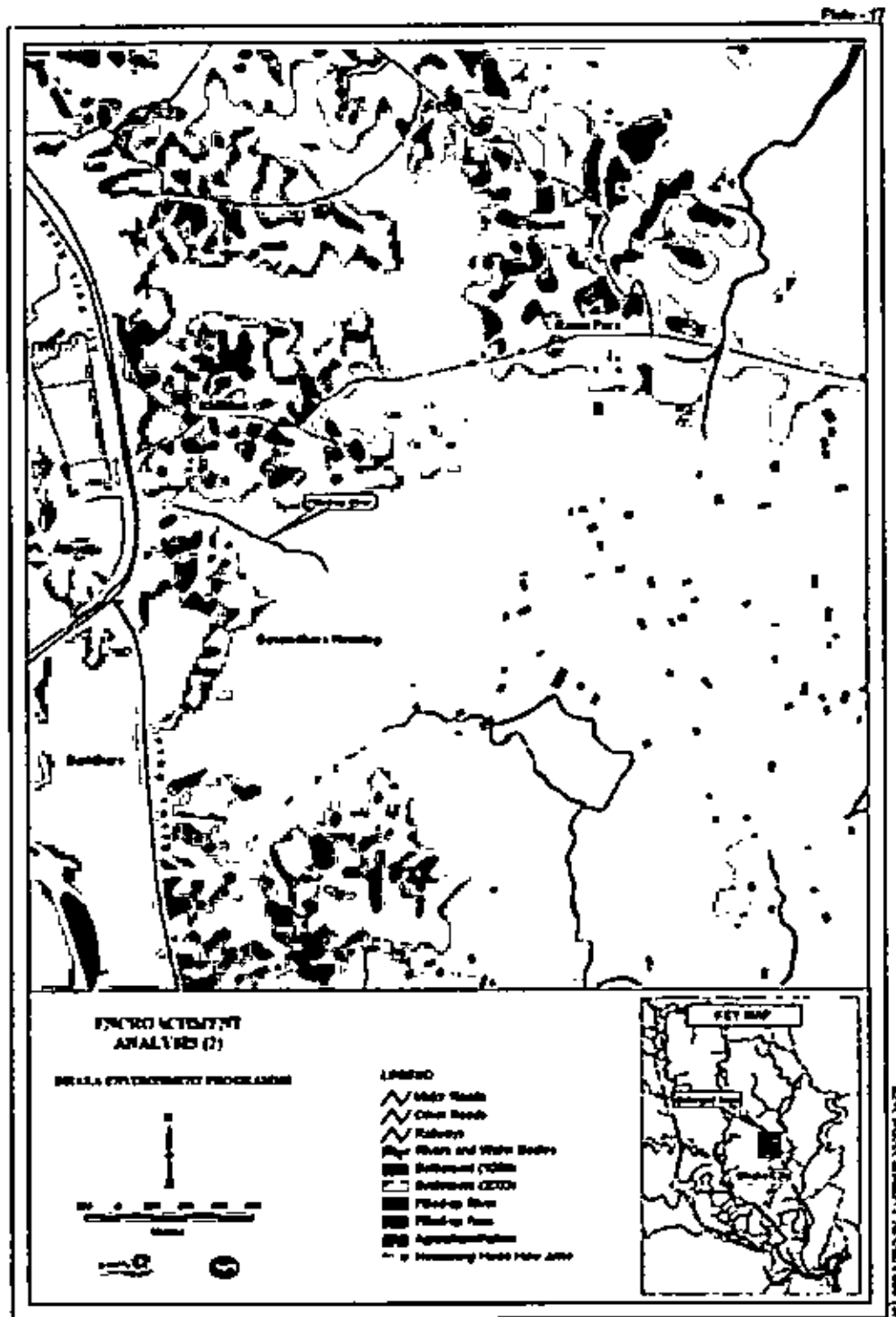


Source: Basundhara (Baridhara) office record, 2006

Figure 5.10: Block-wise plan of Basundhara (Baridhara) housing project

The table shows that the company submitted its layout plan for 605 hectares to approve. Real picture is little bit worse in the grabbing of land. This project already grabbed 1400 hectares of land. From the field with it is found that the company is giving pressure and using brutal force on the land owners to sell their land to do so at the companies quoted price. Company buys land at a minimum cost. From the field survey it is found that the company buys land 7-8 Lakh / Bigha. The company sells their plots at high rate. The selling price varies from 8-10 lakh / katha (from the price list of the company).

6) Land Development activity : The land development activities are continuing in the project areas and the company develops plots for sale. During the project preparation, the identified retention areas and canals were not properly shown. The company has filled -up the existing canals /khals for the interest of the project. The following figure proves the same activity.



Source: Directorate of Environment, 2005

Figure 5.11: Encroachment of canal by Basundhara (Baridhara) housing project
Case Study II

Name of the project : New Utara Model Town

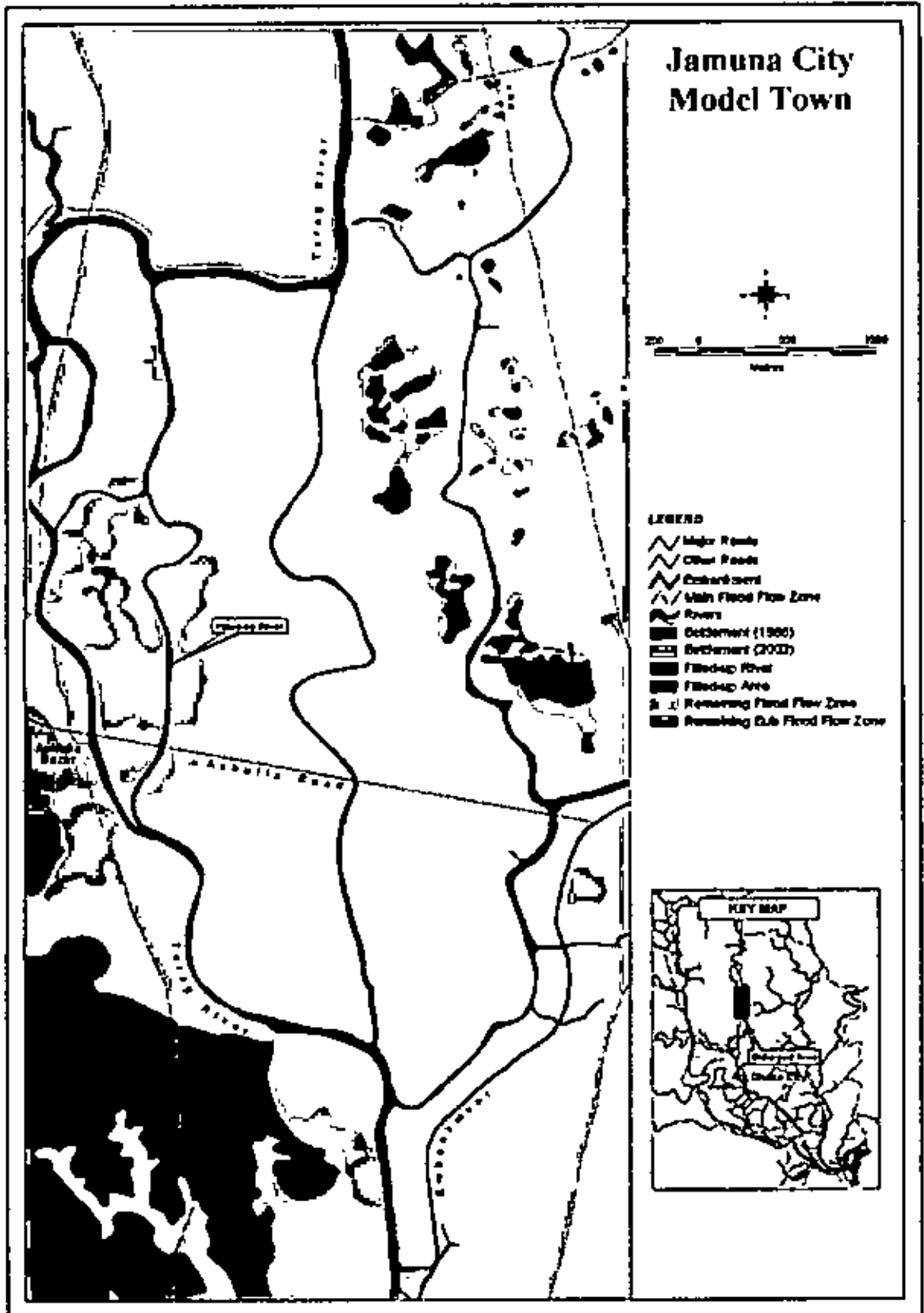
Name of the company : Jamuna Builders Limited

Location : The project is located on the Turag flood flow zone.

Land development Activities : Proposed lay out plan of the company to develop housing over an area of 303.9 hectares but the company encroached nearly 400 hectares of flood flow zone and started to fill up the land without approval of RAJUK. Such filling up the flood flow zone and the branches of the Turag river flowing thereon is changing nature, character and utility of the natural water body. The land development activity is now stopped by the order of RAJUK

Chapter Six:

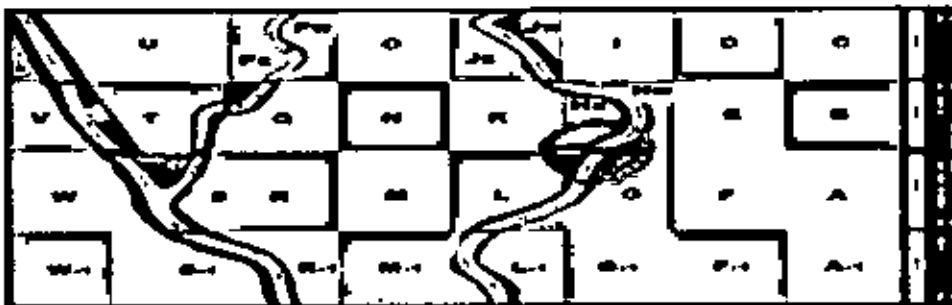
Factors Involved on the Land Development Activity



Source: Department of Environment, 2005
Figure 5.12: Encroachment of Turg Flood Flow Zone by Jamuna Builders

Case Study III:

Name of the Project : Modhumati Model Town
Name of the Company : Metro Makers & developers Ltd.
Location : Amin Bazar under Savar thana
Total area : Total area of this project is 204.5 hectares ([http// www. modhumati. com](http://www.modhumati.com)). The project is divided into 34 blocks. The lay out plan of the project is shown in the following figure



Source: www.metro-makers.com

Figure 5.13: Block wise plan of Modhumati Model Town

Starting year : The project is started in the year of 1990, but started to sell the plots from 2001.

Present Status : Not approved by RAJUK.

Land development Activity : Modhumati Model town is located in the Savar flood flow zone. The vast low-lying area of Savar is recognized as sub-flood-flow zone in the DMDP policies and discouraged all development therein to enable free flow of flood water. While the Metro Makers were advertising for selling of plots, a series of advertisements were given by RAJUK warning the general people not to buy any plot/land in the said township under development on the ground that the same has not been authorized by RAJUK and as such illegal and unauthorized. Despite such move by RAJUK, earth filling in the said area is progressing much to the derogation of the flood retention pond and exposing the city dwellers to the high risk and danger of flooding.

6.1 Introduction

Within the DMDP Boundary, PRLDPs are expanding in all directions of the area specially in Eastern part of Dhaka, Tongi, Narayanganj , Gazipur, Savar. Various factors are identified for the expansion of the areas, such as road network, low land price, close to city proximity etc. Government decision and lack of institutional arrangements are also playing vital role for development. To identify the factors, 20 land developing companies were interviewed. From the interview and the field observation survey several factors are identified for the deviation of DMDP policies.

6.2) Factors Associated with the Deviation of DMDP Policies

From the field survey and interview of developing companies and interview of local people several factors are identified. These factors are – physical, economical, political and institutional issues associated with the current trend of development.

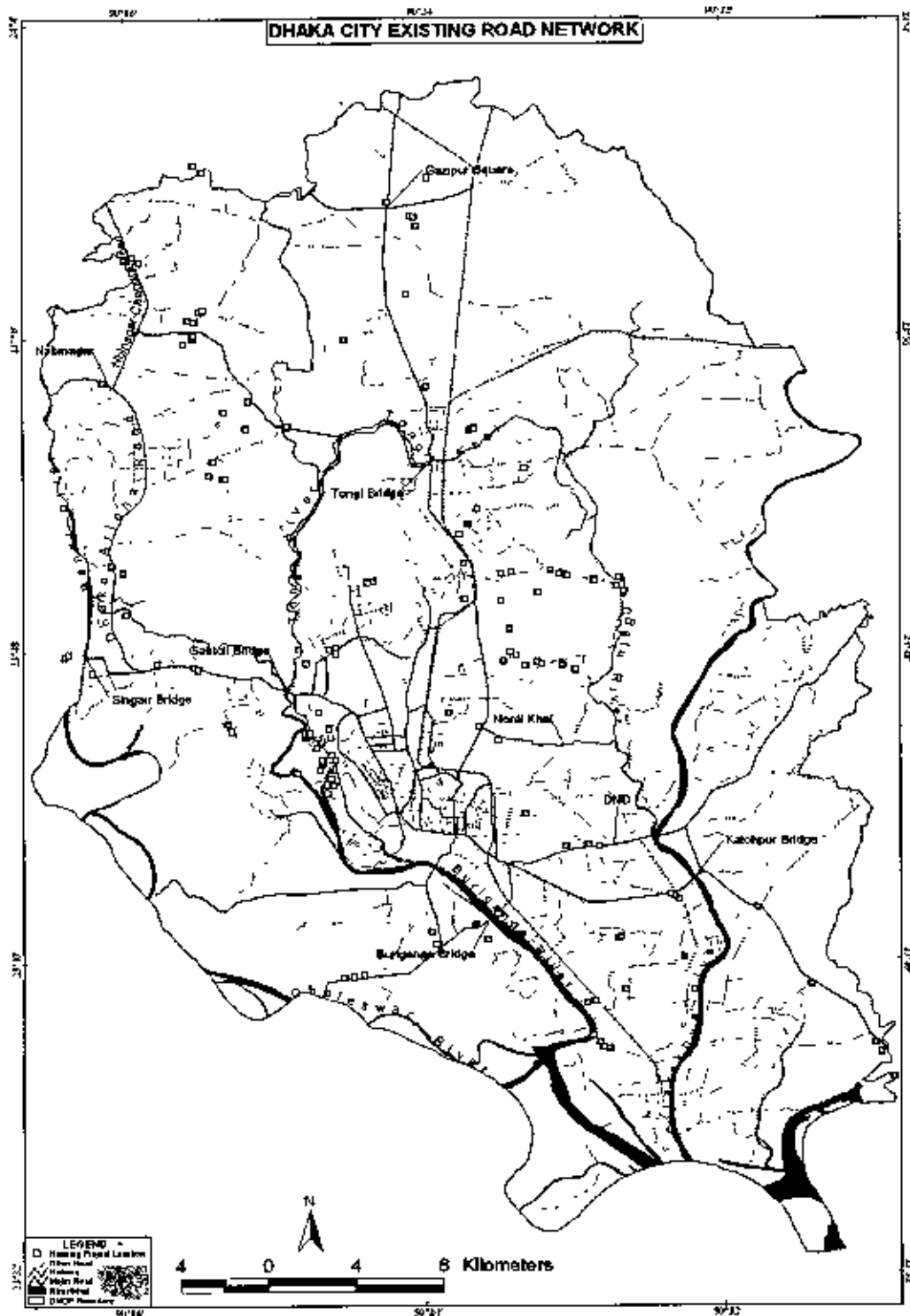
6.2.1) Physical Aspect of Land Development

6.2.1.1) Road network

Road network is the vital agent to development of housing projects in the study area. Overlaying the location of PRLDPs on the policy map of DMDP proposed network and existing road network, it is revealed that (figure 6.1) linear type land development is occurring along with the major road of the region. Tongi – Ashulia to the North -West part, Dhaka –Mawa road in southern part of Dhaka, Dhaka-Aricha road in the western part, and Dhaka –Kaligonj in the north-east road are acting the major role in the development process. The east –west connecting roads towards Balu river from airport road gives the easy access to PRLDPs development in the eastern part of Dhaka.

6.2.1.2) Close to city center

Most of the wet lands are in and adjacent to the city. People like to develop new habitation and infrastructure adjacent to the existing one due to the availability of



Source. RAJUK and Field Survey, 2006

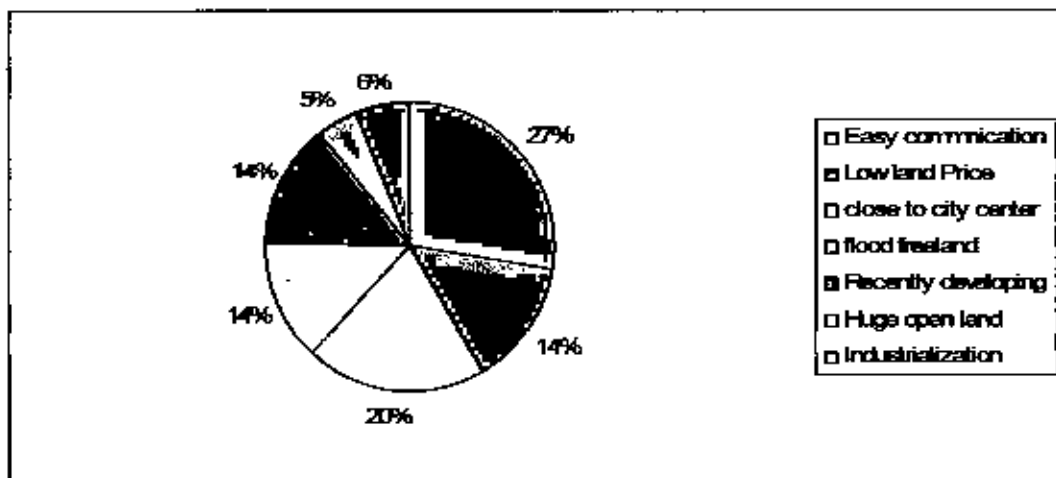
Figure 6.1: Existing road network and private residential land development projects

services and communication facility. There are five municipalities within the boundary of DMDP area. These are:Kadmrasul, Tongi, Savar , Gazipur , Narayangonj and the areas are well connected from the Dhaka city centre. Thus the private land development companies get the opportunity to establish their project near to the city center. If we go through the advertisement (such as Ashian City, Basundhara River View, Green Model Town etc) on the various media, we will find that they always show the adjacency to the city center.

6.2.1.3) Industrialization

Industrialization is another component to influence the growth of PRLDPs within the DMDP area. Within DMDP boundary Tejgaon, Tongi and Narayangonj are developed as the commercial and industrial area. Tongi and Naranyangong attract private residential housing companies to start their business, but in these cases development of PRLDPs are not contravening to the DMDP, because DMDP identifies Tongi and Narayangonj as the long term peripheral expansion.

Dhaka Export Processing Zone (EPZ) and Adamjee Export Processing Zone created another dimension for the land development activities. Already many other industries have been commissioned near the EPZ as forward and backward linkage expansion or just to use the agglomeration effect. To serve the large population working in the EPZ new urban facilities are growing very fast in the nearby areas. (Zohir and Yunus, 2003) .



Source: Field survey, 2006

Figure 6.2: Percentage of respondent to identify the factors associated with private residential land development

6.2.2) Economic Factors

6.2.2.1) Low land price

Low land price is another factor for development of the PRLDPs in the fringe and peripheral areas. Land prices are low in the areas compared to the established urban areas. It is found that most of the PRLDPs are located in the peripheries and out side the urban area. The low lying wetlands are easily available. So, the PRLDPs buy the non-serviced land in a low price and sell the serviced plot at a higher cost. The selling price of the landowner and selling price of the PRLDPs in the different areas are shown in the following table 6.1. The developing companies sell their plot nearly 10 times higher than its purchasing price from the original owner.

Table 6.1: Buying and selling price of the land development housing projects
Thousand/unit

Area	Average selling price of the land owner	Average selling price of the PRLDHPs
Badda, Sholmaid, Bhatara	60	500
Uttara(Uttar khan, Dhakhsinkhan)	30	400
Tongi	55	400
Gazipur	35	300
Ashulia	35	300
Savar	65	400
Demra	70	400
Fatulla	100	470
Keranigonj	50	300
Mohammadpur	125	900

Source: Field survey, 2006 (Note: 1 unit = 66.9 sq. meters)

It has alleged that PRLDHPs occupy land without giving the real price of the land. They give the landowner just a little amount of money as compensation. For an example, Shahidul Islam, a landowner of Keraniganj, had 0.187 hectares agricultural land just beside the 'Basundhara River View' project of East -West Property Development Ltd. Recently the Bansundhara River view Project grabbed his land without paying the real land value. He got only Tk. 100000 as a compensation for the total land.

6.3) Political Power and Elite

In Bangladesh no decisions are taken in a political vacuum, especially those concerned with urban developments or more precisely, with development projects. This means that urban development and urban politics are very much interconnected. In the private land development project ruling elites and their allies are interested as it gives them chances for enhancing their supreme position as the dominant class and opportunities for increasing their individual wealth. The political and social elites are involved in this process. These elite groups are always very much active as they can achieve benefits from such situations. They are mainly either past or present local representative, influential persons. They are powerful in terms of political and financial powers. In the development process, the role of such elites is always very tricky; sometimes they support landowners against developers and raised questions like why landowners are forced out of their land without proper compensation saying these activities of the developers absolutely unfair. On the other hand they are getting benefit in kind or cash from developers through secret dealings. In some cases they are engaged with developing such projects.

A good number of land development companies are involved in the land development activities in the study area. Among them some companies are big and powerful in terms of financial and political powers. The larger companies employ '*Mastan*' or '*Muscleman*' to protect their land and also occupy land for the next expansion of the land. An allegation has come against companies that some companies sell the land which are not occupied by them. The ruling elites and other powerful people of the society also support the activities to be in good business terms with them.

There remains a politics within the PRLDPs also. Among them, they are engaged in a competition to increase their boundary or start new projects in the different areas. There is more than one project of different companies, such as Navana real estate, Rupayan Development and Holdings Limited, Eastern Housing Ltd, East West property Development Ltd. in different locations. In this way the PRLDC are increasing in all the directions of Dhaka city that causes the deviation of the implementation of the DMDP rules.

6.4) Institutional Weakness

Present management practice of development agencies in the Dhaka Metropolitan area is not at all systematic. Urban planning and development management in Dhaka is fragmented and uncoordinated. There are 42 agencies belonging to 22 ministries that guide and control metropolitan Dhaka. On one hand, RAJUK, the capital development authority has both urban planning and development responsibilities for Dhaka Metropolitan area. On the other hand, citizen services are provided and maintained by DCC and other municipalities. These arrangements have led to conflicts and misunderstandings among different government agencies.

The existing acts and laws of different agencies remain as management tools which are not properly exercised in the areas. Overlapping functions among the agencies create conflicts in management and controls. Coordination among the public agencies and their management system are ineffective because most agencies implement their program in their own way. The effective control over the study area is not possible due to lack of coordination among the city development agencies. Although there are many rules and laws in theory to control all the activities that may cause the unplanned and haphazard expansion of Dhaka city, but in reality these are often ignored and weakly enforced. This situation encourages the PRLDCs to execute their projects as they desire.

6.5) Problem Associated with RAJUK

- 1) RAJUK is empowered to prepare master plan of Dhaka city under section of 74 and 73 of the TI Act 1953 (amended in 1987) indicating land uses. The provision of the act is that no compensating shall be payable to any person owing to the restricted use to which his land may be put under above sections. The enforcement for ensuring prescribed land use as per the master plan has become weak because of such lands is privately owned.
- 2) There are provisions for RAJUK to monitor regularly the land development activities indicated by both the DMDP and the PLDHPR, 2004. But in reality RAJUK does not do the same. In 2004 RAJUK had prepared a list of PRLDC that indicates the authorization status of the housing companies acting in the DMDP area. All the housing projects other than the 36 approved project of RAJUK are acting

illegally. But RAJUK did not take any legal action against the PRLDCs which have already started their business without permission.

3) The total boundary of DMDP is 1528 sq. km. So monitoring and managing the whole area is quite impossible for RAJUK. RAJUK did not set any field offices to monitor the unplanned growth.

5) According to the Structure Plan, RAJUK has five municipalities under its jurisdiction –Narayanganj, Savar, KadamRasul, Tongi and Gazipur . But the RAJUK did not take any steps to regulate urbanization in these areas jointly. The plan clearly stated that for integrated development initiatives of the capital city, the RAJUK should chalk out development strategies and monitoring mechanisms for the peripheries. But RAJUK failed to invent any strategy or mechanism to check the ongoing unplanned growth of the city and municipalities. Thus gives opportunity to the PRLDC to establish their project and run their business.

6.6) Problem associated with DMDP Structure Plan

1) DMDP does not provide detailed guidelines to the private sector or other developers. The general guideline has loopholes for the irrational land development activities, because DMDP did not prepare any land use map according to the C.S. *Mouza* map (scale 1: 3960). When a PRLDHP seeks permission to develop an area, it is difficult to check individual C.S. plot.

2) A broad land use has been shown in the Dhaka Metropolitan Structure Plan (1:50000) and Urban Area Plan (1:25000). But in the Detailed level land use are not yet been demarcated on *Mouza Map*.

3) The overall development strategies and development guidelines of Dhaka city are formulated by the structure Plan and Urban Area Plan as the first and second level of planning. On the third level these have to be elaborated and turned into an effective implementation tool through DAP. DAP is under preparation and will take one year to complete where it will provide more detailed planning proposals for specific sub-areas of Dhaka.

But there remains a problem. In the UAP the metropolitan area is divided into 26 SPZs. But now for the preparation of DAP the metro area has been divided into 5

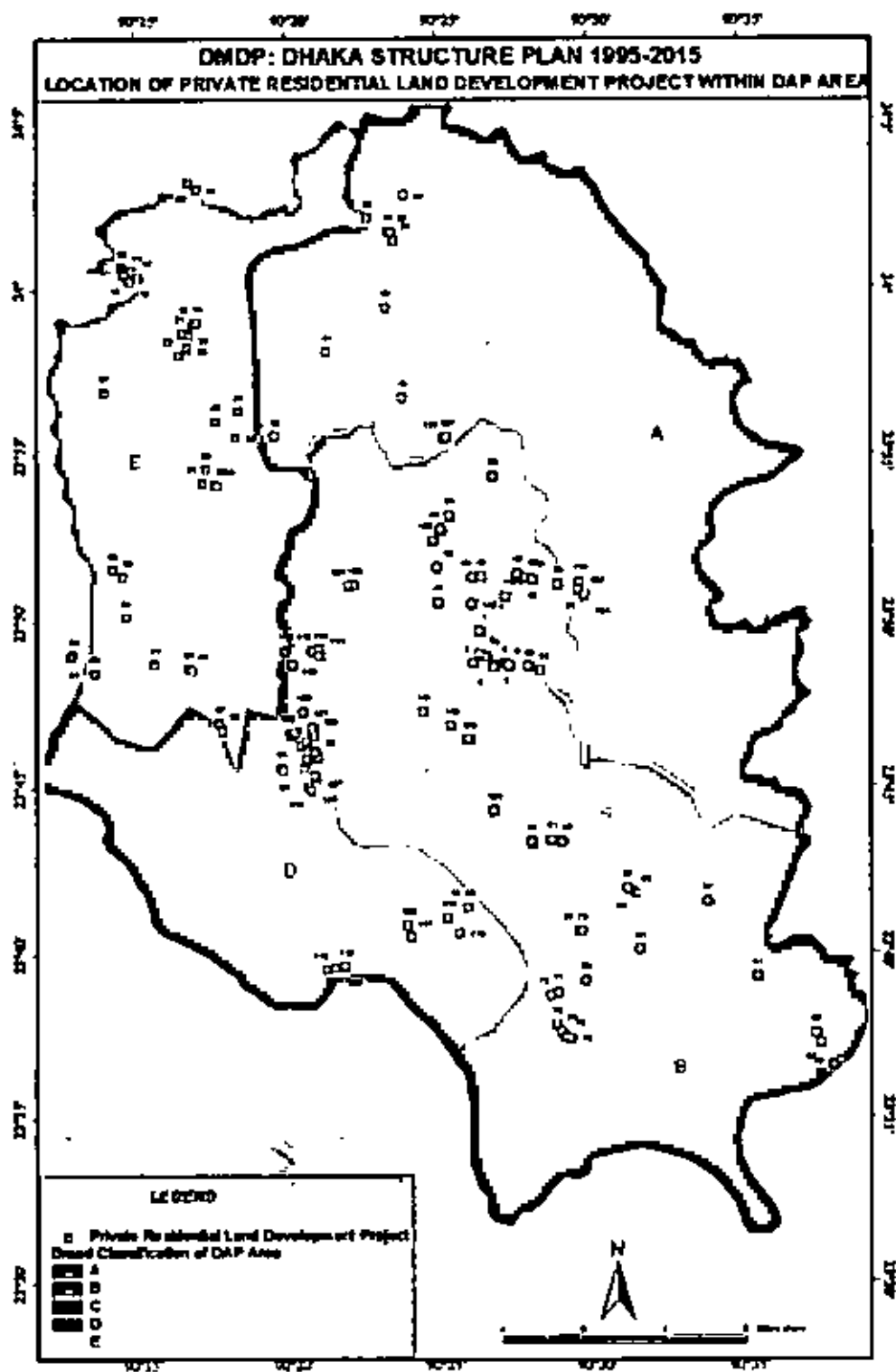
groups (table 6.2) on the basis of geographical location and settlement pattern which are assigned by five different consulting agencies.

Table 6.2: Group wise area distribution of DAP

Group A		Group B		Group C		Group D		Group E	
SPZ	Area (Hectare)	SPZ	Area (Hectare)	SPZ	Area (Hectare)	SPZ	Area (Hectare)	SPZ	Area (Hectare)
14	3228	9.1	4670	1	453	8	2311	16	8157
14.5	7591	9.2	7169	2	451	18	13529	17.1	2752
15	4499	9.3	2211	3	624			17.2	5171
19	26797	10	901	4	802			17.3	13147
		11.1	4580	5	949				
		11.2	2190	6	931				
				7	617				
				12	172				
				13.1	1328				
				13.2	1728				
	42115		21721		8055		15840		29227

Source: Bid Document for DAP, RAJUK, 2003

It is evident from the table (6.2) and figure (6.3) that each consulting agency is working on a huge parcel of land for DAP huge number of housing projects burdened the area. Since the monitoring and implementation facilities are weak, it might create problems during execution because of this huge extent of land for each group. In such situation, the effectiveness of DAP will be questioned, while the PRLDPs are ignoring all the laws and regulations of development. The figure 6.3 shows the location of PRLDPs in the DAP areas. These unauthorized activities will create during the planning period.



Source: RAJUK, 2006 and field survey, 2006

Figure 6.3: Private residential land development housing projects within the DAP areas

6.7) Weak Regulation and Control

For the proper development of Dhaka metropolitan area regarding land development and environmental consequences, several regulations and laws, such as PLDPR, 2004, wet land conservation act, 2000, environmental policy, 1995 are initiated. But all the regulations are not particularly effective in controlling unauthorized development, since there are numerous loopholes that allow much malpractice.

6.7.1) Weakness of PLDPR, 2004

Who will be responsible for the enforcement of PLDPR, 2004, is not properly indicated in PLDPR, 2004 and therefore the whole process of implementation, is delayed and cumbersome. Moreover there is no penal section in this rule which can apply to protect the growing unauthorized housing projects. Moreover PLDPR is supported by the clearance of other agencies. Those agencies are supported by acts and laws.

6.7.2) Weakness of the Natural Water body, Park/ Playground Protection Law, 2000

Declaration of natural water bodies, the low lying and retention area, *khal*, natural water body within DMDP are not demarked on *mouza* map. More over there remains controversy on the delineation of wetlands. This controversy mainly lies on whether the flood flow zones which contain water only in wet season will be included in the definition of wet land or not. Again wetlands are demarcated in the Metropolitan development plan with circular boundary but it is not clear in which *mouza* it falls. It provides a greater scope for the developer to fill it up and change the original characteristics of the low land.

Chapter Seven:

Recommendation and Conclusion

7.1) Recommendation: It is evident from the study that the DMDP policies are extremely violated by the PRLDPs. Government initiative, institutional weakness and lack of expertise of planning tools and acts are responsible for such incident. Moreover the wide spread corruption and political influences upon the administration is also deteriorating the situation. In such a condition, following issues can be addressed to regulate and control development.

7.1.1) Preparation of Detail Area Plan

- DAP is essential for development and land use control. The Dhaka Metropolitan Development Plan was approved nine years ago, but there is little progress in the preparation of DAP in compliance with the DMDP policy. Recently DMDP cell of RAJUK has been taken steps to complete the DAP dividing the total area into five zones. Already the delay in the preparation of DAP have caused huge damage to the environment of the DMDP area as well as the proper planning perspective. So it is recommended to complete the DAPs as soon as possible and the different designated area within DMDP should be demarked on the *mouza* map (1:3960) indicating plot schedule.
- DAP is an opportunity to bring Dhaka metropolitan areas under planning guidelines. In the UAP the metropolitan area is divided into 26 SPZs. But now for the preparation of DAP the metro area has been divided into 5 groups (table 6.1) on the basis of geographical location and settlement pattern which are assigned five different consulting agencies. Since the implementing and monitoring facilities are weak, it might create problems during execution because of this huge extent of land for each group.

In such situation, the effectiveness of DAP will be questioned. It would be better to make subdivision plan for some pilot projects to an area in detail format along with the recommendation for the whole area so that the supervision can be possible to control the unplanned growth. For that purpose, DAP could consider DMDP suggested techniques, such as -guided land development, land readjustment depending on the situation of the locality. In this regard the input from the local communities mentioned in the DAP should be taken into

consideration and work in partnership with local people as they know better of their areas as well as problems.

- The planning of the study area should be guided by the topography, land level, and canal network. The existing built up housing will be adjusted in the DAP on the basis of PRLDR, 2004
- It would be better to stop all kind of land development project through government order before completion of DAP.

7.1.2) Land use zoning

7.1.2.1) Areas of agricultural land

Areas of high agricultural activity are particularly evident in the Savar, part of Narsindi and Rupganj, these areas play a significant economic role and maintain green corridors separating developed areas. In the light of population increase some agricultural land will have to be surrendered to urban development. But such strategy will be introduced that more valuable agricultural land will be kept from development and urban expansion. Existing crop land cannot be converted to other non-agricultural uses. In the case of unavailability of land for non-agricultural use, less productive land can be acquired.

7.1.2.2) Areas of flood zone

- Any permanent development work in the areas designated as flood flow zone must be stopped and should not be given any permission.
- Flood flow zones can be used as tourism and recreation spot. Ashulia is a good example in this regard. The low-lying open areas and wet lands offer great relief to the dwellers of a highly congested city like Dhaka who would enjoy its calm flow and natural view particularly in the monsoon for recreation so both the private and public sector can take initiative. These activities will provide not only recreation for people but also enhance employment.
 - a) Government initiative: Government can employ Parjatan Corporation to take projects providing recreational facilities in the restricted areas, so that in this way government can earn some revenue.
 - b) Private initiatives: Some private entrepreneurs can also take part in developing these sites as tourist spots without disturbing the wet land.



7.1.2.3) Areas of retention pond

Flood retention ponds are an important part of the flood protection project. The ponds will reduce the intensity of local floods within the protected areas and reduce pumping requirements

The present land use within the flood retention pond has been affected due to land filling activities. Although the retention ponds identified in the DMDP are indicative, but it is suggested that 15% of the total land should be reserved for retention pond. But incremental land filling of the PRLDPs in the low lying and agricultural areas will remain no land for retention pond. Problem is that for retention pond huge amount of land is necessary. Most of the land needed for ponds is privately owned. DMDP suggests not developing the retention pond area rather these areas can be used for recreational and agricultural purpose. Considering the above criteria following options can be taken for the implementation of retention pond.

- **Compulsory Acquisition:** Compulsory acquisition of all retention pond areas. In this option huge investment is needed
- **Land Exchange.** Land exchange option could be considered whereby equivalent value land in other city areas could be offered to the land owners as an incentive to resettle, leaving the retention pond area. Then government can take appropriate measures to use the land.
- **Fish cultivation:** Fish ponds can be constructed in the area. It is an economically attractive option since there is a ready market for fish and fish products in Dhaka. In such case, restriction on land fill would also have to be enforced.

7.1.3) Extending Road Network in compliance with DMDP

Extending road network will invariably attract unauthorized development in areas close to it and undesirable development inappropriate will be the most outcomes (chaprani, 1999) This study shows that most of the PRLDPs are developing their projects near to the roads and highways (Figure 6.1) So road development work should follow the DMDP policies

7.1.4) Institutional Management

Though RAJUK is the key agency for planning and development of Dhaka but as so many other agencies are involved in urban development process, it hinders the

implementation of existing laws. Such overlapping is a severe constraint to regulate the planned growth of Dhaka. Thus it is necessary to establish a central planning and administrative body to ensure coordination among the agencies.

7.1.5) Improving Monitoring System

7.1.5.1) Establishment field office of RAJUK

RAJUK is responsible to monitor the development work within the RAJUK boundary, but it is really impossible for RAJUK to monitor the whole area with its lack of manpower, lack of technical expertise. Moreover RAJUK does not have any field office to monitor the development work and enforce the laws properly. It is acknowledged that existing planning documents and legal measures are sufficient to regulate development. Major problem lies at the implementation. To improve the monitor the unplanned development and enforcement of laws RAJUK should set up its field office to monitor the development work in the peripheral areas especially in 5 municipalities

7.1.5.1) Strengthening of local government

- To monitor development work properly RAJUK can include local level organizations offices such as – ward office, union parishad and Pourasavas under the umbrella of field offices of RAJUK. At the field level ward commissioners or union chairmen can play active role to monitor all the development work. RAJUK can arrange different training programs to inform about the exiting planning, laws/regulations and different development programs. in such a way they will create awareness among the local community people.
- Local government should be active partners in development projects. The local organizations would be empowered to take and execute decisions for the development of their locality, so that they can actively participate in this process.

7.1.6) Public and Private Partnership

Public and private sector (NGOs, local elites, MPs) interaction is necessary to enforce DMDP structure plan. For providing the housing facilities to the people, public and private organization can work together. Government policy as well as DMDP encourages the private sector to take part in the development process of Dhaka metropolitan area. In this case, RAJUK will acquire land, develop it and make subdivision of plots. The private

sector will be responsible for constructing infrastructure and services. The government will retain the power to allocate plots to the private sector. An important advantage of this process is that private resources can be mobilized for infrastructure provision.

In this process, the responsibilities of private and public sector are

Public Sector-

- Properly maintaining land records and schedule
- Preparing comprehensive plan comprising of physical, drainage and environmental component
- Planning standard and norms to be followed during the plan preparation
- Responsibilities for land allocation and land management through Management information system

Private Sector-

- Providing fund for land acquisition
- Constricting all infrastructure indicated in the plan (road, schools, bridge etc.)

The opportunities of the private sector will be-

- Public sector will allocate adequate lands to private sector for specific project adjusted with their involved fund.
- Private sector will be allowed to sell plots to their clients at market price.
- Private sector may get privileges of tax holiday for certain period

7.1.7) Land Speculation

Land speculation must be carefully considered for proper development of Dhaka. Every one has the right to enter in the field market according to their affordability. The peripheral areas outside the Dhaka city are now considered as money making market place for the land developer. If we consider the land price of the land development companies the rate is too much higher than the actual land price. Thus it is not possible to buy land for the medium and lower class people. Then the land will be used as speculative mode. So the enforcement of law should be such to prevent land speculation which will prevent underutilization of valuable land.

7.1.8) Wise Enforcement of Legal Actions

Recently, the government has issued some directives to stop the illegal activities in Dhaka. It is not wise to take strict decision to stop the land development activities (other

than the projects located in the restricted areas) instantly because of abrupt enforcement of the act will ensue a sudden and severe repercussion challenging the government posture. Firstly enforcement of act will infringe upon the constitutional rights of individual owning lands, full and unhindered enjoyment of their property. Secondly the sudden and abrupt closure of the business land developers will cause heavy financial losses for the buyers who booked plots with the PRLDCs.

On the contrary, PRLDCs will lose almost nothing as they run their business by acquiring the land discriminately and raising the land by earth filling with the money received by them in advance from the buyers of the plots, in monthly installment, over a period of 5 to 6 years. The PRLDCs sell to the buyer's paper plot, so to say printed on maps of proposed projects, long before the lands have been acquired and developed. The buyers will physically get delivery of the plots only when the plots are ready and after full payments of the price are made after booking of the plot.

Therefore if the government forces PRLDCs to close down their business when their ongoing projects are in the process of starting or completing with the money of buyers, it will be the buyers who will be caught unaware and will suffer loss of their investment.

The government has to take a look back at the Act, should revise and modify and definition of restricted areas should be clear cut and they must be outlined on the CS map as well as on the DAP.

7.1.9) Role of Media

Different media can play a vital role to protect the unauthorized development in Dhaka metropolitan area. They should not air or print any advertisement without showing the approval status. RAJUK could post advertisement on the different media regularly not to buy the unauthorized land.

7.2) Conclusion

The study reveals that PRLDP are growing rapidly over the years in the peripheral areas of Dhaka city. In this study effort was made to prove that the development activities are ignoring the prevailing plan by overlapping the location of the surveyed PRLDPs on the policy maps of the DMDP.

It is also evident that huge amount of agricultural lands, flood flow areas, low lying areas are converting at a tremendous rate, the private housing companies legally and illegally occupy these types of lands and try to establish their rights and are developing the areas according to their will, flouting the policies stated in the DMDP Structure Plan.

From the field survey 143 PRLDPs are identified and most of the projects are growing contravening to the policies. The conversion of agricultural land into urban use has caused loss of agricultural land with the decrease of agricultural production, loss of farm related job. The DMDP area is physically dominated by low-lying areas including wetlands, ponds and ditches available for water storage. The random land filling by the PRLDPs, is damaging wet lands and water reservoir and encroaching the flood flow zone. Therefore it provides severe impact on the productivity of agriculture and fisheries. More over DMDP identified the future direction of development but in practice urbanization through the land development is occurring at a faster rate in the discouraged zone.

Extending road network, low land price and the tendency of high profit, organizational weakness are acting as main factors for deviation of the policies identified in DMDP. Overlapping functions and jurisdiction of the agencies often lead to inaction. It creates conflicts among the agencies management process and acts as a main reason for growing number of housing in the study area.

Without effective policies and regulation, it is difficult to control indiscriminate land filling by private sectors. The development restriction should be empowered by the acts and laws and the laws will not only be just a written document but also must come into enforcement and practice. However, the city is undergoing rapid expansion. One of the most challenges is to achieve a proper and balanced urban development.

Despite the limitations, this study will help the decision makers as well as urban planner, researcher and other organizations to formulate better planning, monitoring and controlling the measures related to the planned expansion of Dhaka city.

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Appendices

Appendix-I

BAGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

(Questionnaire survey for the fulfillment of MURP thesis paper titled “A Study on Private Residential Land Development Activities in Dhaka and Their Compatibility with DMDP Structure Plan 1995-2015” in the Department of Urban and Regional Planning)

1) Identification :

- Name of Developer :
- Name of the Project :
- Date of Establishment :
- Address of the Head Office :

- Address of the Site/ Branch

2) Location of the Project

- Name of the Place :
- Name of the Mouza :
- Name of the Union :
- Name of the Thana :
- Name of the District:

3) Total Area of the ProjectAcres.

4) Starting Date of the Project.....

5) Approximate Completion Date of the Project.....

6) Type of Ownership

- Inherited
- Bought
- Other (Specify)

7) Use of Land before Development

- Agricultural
- Forest
- Barren Land
- Fisheries
- Grazing land
- Orchard
- Rural settlement

8) Elevation of Land

- Low lying areas
- High land
- Plain land

5) Flood Status

Year	Depth of Water
1988	
1998	
Normal Monsoon	

10) Information about the Land Value

PLOT SIZE	BUYING PRICE	SELLING PRICE	Development Cost/Katha
2.5 Katha			
3 katha			
3.5 Katha			
4 Katha			
5 katha			
5& More			

11) Trend of land Value Change

YEAR	BUYING PRICE	SELLING PRICE
1995		
2000		
2005		

12) Number of plot of the project in terms of plot size

PLOT SIZE	TOTAL	NUMBER OF PLOT	
		SOLD	NOT SOLD
2.5 Katha			
3 katha			
3.5 Katha			
4 Katha			
5 katha			
6 & More			
TOTAL			

13) Number of plots of the project in terms of land status

Status of land	sold	Not sold
Developed		
Not developed		
Under development		

14) Categories of Roads:

Distance from Main Road	Access Road Width	Existing Access Road Condition		
		Katcha	Brick soling	Metalled
	20 ft			
	30 ft			
	40 ft			
	60 ft			
	60 ft and more			

15) Distance from major city centre-

- Motijheel
- Gulshan
- Uttara

16) Have you Demarcated the Boundary?

Yes
no

18) Is there any provision to allot land for original owners?

19) What are the factors related to choosing the place for development?

- Easy communication
- Low land price
- Near to city center
- Others (specify)

Signature of the Surveyor:

Date

Appendix II

Table A-1: List of primary land development projects prepared from different sources

Sl. No.	Name of project	Project area	Name of company
1	Kaderabad Housing	Mohammad pur	Kaderabad Housing Ltd.
2	Sugandha property	Hemayetpur, Savar	Sugandha property Ltd.
3	Nibaban Residential project	Satarkul	Nipaban Housing projects
4	Fulbaria project-2, 3, 4, 5	Savar	Popular Engineering & Real Estate
5	Badda project	Rampura	Topaban project
6	Savar project	Ashulia	Topoban project
7	Anandagar project-2	Savar	Calantica property & development Ltd.
8	Turag project	Tongi	Foundation association Ltd.
9	Rotoburn & Co	Shympur	Rotoburn & company
10	Rex properties	Mirpur-2	Rex Properties Pvt. Ltd.
11.	Saikat Residential project	Mohammadpur	Saikat Ltd.
12.	Green Touch project	Manikdia, Sabujbag	Green Touch Real Estate
13	Agrajatra-18	Uttarakhan, Uttara	Dhaka (West) Tax employees Society
14	Agrajatra-19	Daskhin Khan	"
15	Agrajatra-20	Dogair, Demra	"
16	Agrajatra-22	Kalayanpur	"
17	Agrajatra-23	Nurayongonj road	"
18	Ananda Niketon-1,2	Mazar Road, Mirpur	Pantha Enterprises
19	Panthanibas-1,2	Mazar Road, Mirpur	Pantha Enterprises
20	Shantinmeer	Gaboli	Pantha Enterprises
21	Sambhar Housing	Ashulia	Sambhar Real Estate (Pvt. Ltd.)
22	Mutual Housing	Madertak	Mutual Trading Co.
23	Demra Residential project	Demra	Eastern Housing Ltd.
24	Mohana Satellite Town	-	Mohana Sattelite project

Sl No.	Name of project	Project area	Name of company
25	Banarupa Residential Project	Joar Sahara	Banani Development Pvt. Ltd.
26	Fatulla project	Dhaka Narayongonj road	Rusen Housing Ltd.
27	Turag city	Mazar Road, Mirpur	Pisciculture Housing Ltd.
28	Islamic Model Society	Mijmiji	Darul Islam Multipurpose project Ltd.
29	Savar project	Nabinagar	EHL
30	Bandhu Nibas	Rampura	Alfa Property & Construction
31	Al-Issatnagar	Amin Bazar	Al-Issaf Corporation Ltd.
32	Bithika Residential Project	Mariali	Bithika Real Estate
33	Nandan Kanan	Mirpur Ceramic-12	Housing Ltd.
34	Kakoli	Rupnagar, Mirpur-II	Desh Housing Ltd.
35	Mou-ban Residential project	Hazicamp Uttara	Mou-ban property Development Ltd.
36	Swadhin Land Property	Sector-5, Uttara	Swadhin Land Property Development
37	Swapner Neer	Savar	Islam Associates Ltd.
38	Niribili	Nabinagar, Savar	Uddog Multipurpose Ltd.
39	New Gulshan Residential project	Gazipur	Banani Property Development Ltd.
40	Uttarayan	Dattaapara, Tongi	Bishal Development Holding Ltd.
41	Chayakunja-1	Gazipur	M.A. Ohab & Sons
42	Chayakunja-2	Ashulia	M.A. Ohab & Sons
43	Chayakunja-3	Ashulia	M.A. Ohab & Sons
44	Shah Ali Estate	Mirpur-I	Priyanka Property Development
45	Heranagar	Mirpur-II	Excellent Builders Ltd.
46	Morisha Housing Project	Jirabo	Morisha Housing Ltd.
47	Dhansiri	Baunia	Dhanshiri Pvt. Ltd.

SL No.	Name of project	Project area	Name of company
48	Navana-Village	Ashulia	Navana Real Estate
49	Navana Green Homes	Ashulia	Navana Real Estate
50	Navana Green Park	Savar	Navana real Estate
51	Navana Valley	Surabari	"
52	Neelachal	Tongi	Shinepukur Holding Ltd.
53	Suncity-1	Ashulia	"
54	Suncity-2	Kaliakair	"
55	Ashulia Abasan	Jirabo, Savar	"
56	R.K Nagar	Ashulia	R.K Builders Ltd.
57	Barnali Ideal Residential Project	Gulshan	Gulshan Land Development Co (Pvt.) Ltd.
58	Great wall City-1	Gazripur	Great wall housing Ltd.
59	Great wall City-1	Purbachal	Great wall housing Ltd.
60	Pink City	Joar sahara	Xenovelty Model Town
61	Lake City Concord	Khilkhet	Concord Real Estate & Development
62	Banakunja Residential Project	Khilkhet	Banakunja Residential Project
63	Giasnagar Residential Project	Tegharia, Keranigonj	Jajira Housing
64	Gulshan-E-Mohammadi	Barura	Mohammadia Housing Ltd.
65	Rongdhanu-1,2	Kathgara	Hasem real Estate Ltd.
66	East Town	Madanpur	Bangladesh Development Company Pvt.Ltd.
67	West Town	Hemayetpur	"
68	New town	Kadam Rasul	"
69	North twon	Tongi, Gutia	"
70	South town	Keranigonj	"
71	Angina Model town	Fatulla	Angina Housing Ltd.
72	Niloy	Gacha, Tongi	Nabody Housing Ltd.
73	Nirman Village	Ashulia	Nirman International Ltd.

Sl. No.	Name of project	Project area	Name of company
74	Far-East	Mirpur-2	Far-East Property Development Ltd.
75	Maya Kanan	Amin Bazar	Eastern Housing Ltd.
76	Rupayan Model Town	Bhuiyan	Rupayan Housing Estate Ltd.
77	Rupayan Abasan	Jirabo	"
78	Rupayan Ashulia City	Ashulia	"
79	Ashulia Homes-1	Jamgara	Brack Concord Lands Development
80	Rajdhani Project	Demra	Brack Concord Lands Development
81	Krisnachura Project	Demra	Brack Concord Lands Development
82	Rainbow Land	Ashulia	Brack Concord Lands Development
83	Jalalabad City	Amin Bazar	Jalalabad Housing
84	Kobotak Valley	Amin Bazar	Kobotek Real Estate
85	Concord River Side	Dariakandi	Concord Real Estate & Development Ltd.
86	Concord Pirojpur Project	Madanpur	
87	Siddirgonj Housing Project	Ali Road	Siddirgonj Housing (Pvt.) Ltd.
88	Dreamland Housing Project	Ashulia	Officers Multipurpose Co-Operative Society Ltd.
89	Sahara City	Futullah	Baridhi Development
90	Bhuiyan Nagar Residential Project	Demra	Diamond Property Development Company
91	Ashulia Garden City	Ashulia	Model Homes Ltd.
92	Uttara Green Town	Kathgara	South Asia Housing Ltd.
	Century River City	Purbachal	Century Reality Ltd.
93	Banpalasi-1, 2	Gazipur	Green Velly Properties Development Ltd.
94	Kingshuk Bithi	Gazipur	Kingsuk Grehayan Prokolpo
94	Kinshuk Karnafuli	Ashulia	Kingsuk Grehayan Prokolpo
95	Kinshuk Titas	Ashulia	Kingsuk Grehayan Prokolpo
96	Kingshuk Meghra	Ashulia	Kingsuk Grehayan Prokolpo
97	Kingshuk Rupsa	Ashulia	Kingsuk Grehayan Prokolpo
98	Sharakunja	Mohammad Pur	South-West Development Ltd.
99	Unitech Holding Ltd.	Kathgara	Unitech Holding Ltd.

100	Reliance Model Town	Joar Shara	Reliance Model Town Ltd.
102	Gazi Housing	Tongi	Gazi Properties Ltd.
103	Ashkona City	Ashkona, Uttara	Givency Real Estate Ltd.
104	Rahat Housing	Ashulia	Rahat Real Estate & Construction
105	Uttaran	Ashulia	Mission Energy & Properties Ltd.
106	Badda Model Town	Satarkul	Darul-Islam Housing Ltd.
107	Sonargaon Resort City	Sonargaon	Unique Property Ltd
108	Unique Spring City	Khilgaon	Unique Property Ltd
109	Uttara Unique Velly	Askhona	Unique Property Ltd
110	United City	Bhatara	Lepture Land Development Ltd.
112	Sayeeddnagar	Bhatara	Saudia Development Ltd.
113	Bddl Notondhara	Joor Shora	Bddl Pvt. Ltd.
114	Christian Association Housing-1,2	Bhatara	Christian Co-Operatives Ltd.
115	Apon Nibas	Satarkul	Urban Development Ltd.
116	Darul Makan	"	
117	Sunvelly	"	Swadesh Property Ltd.
118	Anandanagar Project	Ashulia	Unknown
119	Sunvelly	Ashulia	Unknown
110	Green Land Project	Ashulia	Green Land Housing Ltd.
111	Padma Housing Group	Ashulia	Padma Housing Group
112	Sad-Rose Residential Project	Gazipur	Sadrose Housing Project
113	American City	Khilkhet	Unknown
114	Rock City	Khilkhet	Unknown
115	Western City	Khilket	Western City Ltd.
116	Quality Residential Project	Mainertak, Uttra	Quality Residential Project
117	Rang-Be-Rang	Genda, Savar	Rang-Be-Brang Residential Project
118	Choice Palli	Magarkanda Savar	-
119	New Ali Bahar Housing	Shyampur, Fatullah	New Ali Bahar Housing Society
120	Bikrampur Housing Ltd.	Shyampur, Fatullah	Bikrampur Housing Society
121	New Modern Housing	Panchabati Fatullah	New Modern Housing Project

122	A.M.K Garden City	Panchabati Fatullah	A.M.K. Garden City Ltd.
123	Afaznagar	Panchabati Fatullah	Unknown
124	Jubok Housing	Narayongonj	Jubok Housing Ltd.
125	Heera Jheel Residential Project	Narayongonj	Heera Jheel Property Ltd.
126	Basila Garden City	Bosiala	Unknown
127	Basial Model Town	Bosila	Unknown
128	Shajalal Housing	Mohammadpur	Shajalal Housing Ltd.
129	Chowdhury Real Estate	Mohammadpur	Shajalal Housing Ltd.
130	Buriganga Housing Project	Mohammadpur	Chowdhury Real Estate (Pvt.) Ltd.
131	Mohammadpur Lake City	Mohammadpur Embankment	Mohammad Pur Lake City
132	Akkas Nagar	Mohammadpur	Akkas Real Estate Pvt. Ltd.
133	Masurabad Housing Project	Adabar	Latif Real Estate & Pvt. Ltd.
134	Sagufta	Mirpur-12	N.M. Housing Pvt. Ltd.
135	Green City-1, 2	Mohammad Pur	Amin & Momin Development
136	Hasnabad Housing	Subadya, Keranigonj	Hasnabad Housing Ltd.
137	Bhuiya Residential Project	Abdullahpur, Keranigonj	Bhuiyan Residential Project Pvt. Ltd.
138	Ashian City	Khilkhet	Ashian City Land Development Ltd.
139	Vuhua Royal City	Near Purbachal	Vuhua Royal City Pvt. Ltd.
140	Capital Co-Operative Housing	Tongi	Capital Co-Operative Housing Society Ltd.
141	Nabi Nagar Project	Mohammadpur	Mohammadia Housing Ltd.

Source: Literature survey, 2006

Table A-2: List of private housing projects approved by RAJUK

(Area in hectare)

Sl.	Name of company	Name of project	Location	Area	Date of approval
01.	Eastern Housing Ltd (EHL)	Pallabi Residential project, Mirpur	Senpara, Parbata	30.44	21.03.84
02.	Do	Arambag Co-operative Housing society, Mirpur	Senpara, Parbata	7.59	20.8.84
03.	Sikdar Real Estate	Sikdar real Estate Dhanmondi	Shibpur, Rajmusrri	12.73	13.3.86
04.	Eastern Housing Ltd.	Kalayanpur Land project Mirpur	Bara Sayek	4.79	29.5.86
05.	Adarsa Chayanir Grihanirman Samity	Adarsa Chayanir Grihanirman Samity Mirpur	Uttar Adab, Barab	1.5	05.06.86
06.	Abdur Rafiq Housing	Abdur Rafiq Housing Mohammad pur	Ramchandrapur	7.48	17.7.86
07.	Baitul Aman Co-operative Housing Society	Baitul Aman Housing Society	Ramchandrapur Uttar Adab	12	17.7.86
08.	Eastern Housing Ltd	Cap Hasan Housing Complex, Tejgaon (Niketon)	Tejkunpara, Mohakhali	68.5	2.3.86
09.	Mohammad pur Housing Coperative Society	Mohammad pur Piesiculture Housing	Ramchandrapur Borab	38.01	16.3.86
10	Feroja Properties & Development	Feroja Properties & Development Residential Project.	Ramchandrapur	3.33	13.4.87
11	Sunibir Grihanirman Society	Sunibir Grihanirman Samabaya Samity Mohammad pur	Mohammadpur	13.81	20.4.87
12	Dhaka Real Estate	Dhaka Real Estate Mohammad pur	Katasur	10.70	19.8.87
13	Metropolitan Christians Co-operative Housing Ltd.	Metropolitan Christian Co-operative Housing, Tejgaon	Mohakhali	-	19.8.87
14	Janata Housing Ltd.	Janata Housing Project Mirpur	Kafrul	4.40	19.8.87
15	EHL	Mohanagar Project	Badda	197	21.9.87
16	EHL	Banasree & Aftabnagar	Khilgaon, Badda	965	21.9.87
17	EHL	Postagola Residential Project	Jurain, Suterapur	2.22	22.10.87
18	EHL	Rayer Bazar Project	Jafrabad	10.03	22.10.87

Sl	Name of company	Name of project	Location	Area	Date of approval
19	EHL	Pallabi- 2 nd phase Residential project	Goran. Chat Bari	232	22.10.87
20	EHL	Shismal Land Project Baghari, Mirpur	Anadanagar	11.31	22.10.87
21	EHL	K.M. Das Lane Residential Project, Motijheel	Urban Dhaka Word-3	1.02	22.10.87
22	Cap Hasan Housing	Cap Hasan Housing, Paikpara, Mirpur	Paikpara, Senpara	6.13	2.11.87
23	EHL	Postgola River view land project, Sutrapur	Gurain	9.23	18.9.89
24	Sheltech Private Ltd.	Mollica Residential project, Mirpur	Senpara Parbata	4.53	1.7.90
25	Ms. Blue Star Real Estate Ltd.	Blue Star Apartment Housing	Kakrail	-	22.04.90
26	Probal Housing Ltd	Probal Housing Md. Pur	Ramchandrapur	8.49	20.05.90
27	Janata Co-operative Housing Ltd.	Janata Co-operative Housing	Ramchandrapur	4.65	22.7.90
28	East-West Property Development (Pvt) Ltd.	Busundhara Residential Project, A-F Block	Joar Sahara, Bhatara	305	30.7.90 24.12.90 13.10.88
29	Mukti Real Estate Ltd.	Mukti Real Estate, Mirpur	Senpara, Parbata	-	24.9.90
30	Shyamoli Housing Ltd.	Shymoli Housing, Uttara	Fayadabad	6.08	11.7.91
31	Rahat Reality Ltd	Rahat Reality Residential Project	Vola, Badda	4.00	9.6.92
32	Happy Homes Ltd.	Hatirjheel Project	Tojkunipara	3.99	13.9.92
33	Susamaya Multipurposo Society	Susamaya Multipurpose Co-operative Housing Society	Uttar Khan	-	6.2.94
34	Jahanirnagar Co-operative Housing Society	Arunapalli	Kalma, Savar	82.34	1.1.98

Table A-3: Illegal private housing projects identified by RAJUK

Sl. No.	Name of project	Project area	Present status
1	Noor Nagar Housing Project	Satarkul ,Badda	Established Signboard
2	Town View Residential Project	Satarkul, Badda	Established Signboard
3	Ashulia Model Town Projects.	Ashulia, Savar	Established Signboard & Started Land Development
4	Dhaka Uddan Dhaka Uddan Multi-Purpose Society Ltd.	Mohammad Pur	Established Signboard & Started Land Development
5	New Uttara Model Town Jumuna Builders Ltd	Ashulia, Savar	Established Signboard But Development Work Stopped
6	Mudhumati Model Town Project	Amin Bazar	Estb. Signboard Started Development
7	Sornali Residential Project Showadesh Properties Ltd.	Barua	Estb. Signboard Started Development
8	Jumuna City Jamuna Builders Ltd	Barua	Estb. Signboard Started Development
9	Green Model Town	Manda, Sabujbag	Estb. Signboard Started Development
10	Basundhara River View Project East-West Property Development	Keranigonj	Estb. Signboard Started Development
11	Aftabnagar & Banasree Extension	Rampura	Estb Signboard Started Development
12	Vacation City	Savar	Estb. Signboard Started Development
13	B C.S Police Officers Co-Operative Housing Project	Savar	Estb. Signboard Started Development
14	Savar Model Town Project	Savar	Established Signboard
15	Bipail Project	Savar	Established Signboard
16	Faraji Real Estate	Savar	Established Signboard
17	Ashulia Abasan Project	Ashulia	

SL No.	Name of project	Project area	Present status
18	City Lands Project	Ashulia	
19	Addl Project	Ashulia	
20	Ashulia City Project (Partex Group)	Ashulia	
21	Paradise Real Estate Project (Partex Group)	Ashulia	
22	Hashem Real Estate Project	Ashulia	"
23	Rainbow Town Project Bract Concord	Ashulia	"
24	Protasa Housing Project	Tongi Ashulia	"
25	Main Land City	Mohammad Pur	"
26	Shyamoli Welfare Project	Mohammad Pur	"
27	Meena Bazar Project	Mohammad Pur	"
28	Nabi Nagar Project Mohammadi Housing	Mohammad Pur	"
29	Ali Noor Real Estate Project	Mohammad Pur	"
30	Janak Nanani Model Town	Mohammad Pur	"
31	Rayer Bazar Model Town	Mohammad Pur	"
32	Fenci International Project	Mohammad Pur	"
33	Mohammadia Housing Project	Adabar, Mohammad Pur	Developed
34	Chand Housing	"	"
35	Nobody Housing	"	"
36	Latif Real Estate	Katasur, Mohammad Pur	"
37	Basumati Residential Project	Kathaldia, Badda	Estb. Signboard & Started Land Development
38	Prominant Housing Project	Mohammad Pur	Developed

Source: RAJUK, 2006

Table A-4: List of private residential land development projects in the DMDP Structure Plan Area

(Area in hectare)

ID	Housing Project	Name of Company	Location	Area	Starting Year	Legal Status
1	Basumoti Housing Project	Herajheel Property Development Ltd.	Bhatara	155.65	1997	Registration under process (RUP)
2	Sayeednagar	Saudia Property Dev.	"	20	1997	Illegal
3	Bddl - Notondhara	BDDL property development Ltd.	"	480	2005	Registered
4	Christian Association Housing project-1	Metropolitan Christian Association	"	8	2000	"
5	Christian Association Housing Project-2	Metropolitan Christian Association	"	8	2000	"
6	Apon Nibas Housing Project	Urban Property Development Ltd	Satarkul	12	2000	RUP
7	ICAB City project	ICAB City Company Pvt. Ltd	"	13.33	1998	"
8	United City	Neptune Development and Holding Ltd.	"	73.33	2004	Registered
9	Survelty	Swadesh Property Dev. Ltd	Satarkul, Beraid	2066.67	2000	Registered
10	Darul-Makan	Darul Islam Housing Ltd.	Beraid	2.67	2000	"
11	Badda Model Town	Darul Islam Housing Ltd.	"	53.33	2001	"
12	Ananya Project	Ananya Housing Ltd.	Ashulia	20	2002	RUP
13	Nirman Palace	Nirman International Ltd.	Muzar Mail	40	2000	"
14	Dallas And Green City	Southren Property Dev. Ltd.	"	46.67	2001	Illegal
15	Dehra Project	Eastern Housing Ltd.	Shimulia			"
16	Sun Valley	Sun Valley Ltd.	"	40		Illegal
17	Sun City-1	Shine Pukur Holding Ltd	"	60	2000	illegal
18	Navana Village	Navana Real Estate Ltd.	Jamgara	48	2001	Registered
19	Garden Island	Brac Concord Land Development Ltd.	"	60	2001	Illegal
20	Ashulia City	Eastern Housing Ltd.	"			Registered
21	Rupayan Abasan-2	Rupayan Development Ltd.	"	48	2001	Registered
22	Greenland Project	Greenland Housing Ltd. Project	"	4	2001	Illegal
23	Padma Housing Project	Padma Group	"	13.33	2001	Illegal
24	City Land project	Partex Group	"			Illegal
25	Ashulia City	-	"			Illegal

26	Rongdhunu	Hashem Realestate Ltd.	Tongabai	13.33	2000	Illegal
ID	Housing Project	Name of Company	Location	Area	Starting Year	Legal Status
27	Ahsulia City	Rupayan Development Ltd	Ahsulia	60	2000	Registered
28	Ahsulia Garden City	-	"	6.67	2001	Illegal
29	Khagan Abasik Prokolpo	Eastern Housing Ltd.	Khagan		2002	Registered
30	Ashulia Model Town	Amin Mohammad Foundation Ltd.	"	213.33	2001	Registered
31	Chayakunja-3	M.A. Ohab and Sons Ltd.	Khagan	23.33	1999	Registered
32	New Uttara Model Town	Jamuna Builders Ltd.	Tongi	400	2000	Registered
33	Banpalasi-1	Green Valley Properties Ltd.	Lohaleur	2.4	2003	Illegal
34	Banpalasi-2	Green valley Properties Ltd	"	2	2003	"
35	Kingshuk Bithi	Kinkshuk Grehayan Prokolpa Ltd.	"	12	2001	"
36	Chayakunja Abasik Prokolpa	M.A. Ohab and Sons Ltd.	Gazipur	26.4	2003	Registered
37	Sad Rose Abasan Project	Sad Rose Abasan Ltd.	Candana	0.13	2004	Illegal
38	Great Wall City-1	Great Wall Housing Ltd.	Gazipur	86.67	1998	Illegal
39	Bithika Abasik Prokolpa	Great Wall Housing Ltd.	Gazipur		1998	Illegal
40	New Gulshan Model Town	Mohammadi Housing Ltd	Board Bazar, Gazipur	33.33	2002	Illegal
41	Niloy Abasik Prokolpo	Naboday Housing Society Ltd.	Gacha, Tongi	46.67	1998	RUP
42	Nilachal Housing Project	Shine Pukur Holdings Ltd.	Tongi		2000	Illegal
43	Nikunja	Govt. Intervention	Joar Sahara		-	Govt. proposal
44	Leck City Concoard	Concord Real Estate and Development Ltd.	"	7.2	-	Landuse clearance
45	Jamuna City	Jamuna Builders Ltd	Hazi Camp.		2004	Registered
46	American City	-	Joar Shahara		2004	Illegal
47	Shamali Abasan Project	Swadesh Property Ltd.	Domni, Barua	466.67	2001	Registered
48	Pink City	Xenovalley	Joar Shara	120	2003	Registered
49	Rock City	-	"		2004	Illegal
50	Western City	Western City Ltd	"	60	2005	Illegal
51	Park city	Park City Ltd.	"	-	-	Illegal
52	Reliance Model Town	Reliance Development Ltd.	"		2001	Registered
53	Ashkona City	Givency Real Estate	Uttara	60	2000	Registered
54	Mozammel Property	Mozammel Development Pvt. Ltd.	"	2	1997	Illegal
55	Quality Abasik	-	"	1.33	2003	Illegal
56	Banarupa	Banani property	Mainer tek		1999	Landuse

ID	Housing Project	Name of Company	Location	Area	Starting Year	Legal Status
57	Jalalabad Model Town	Jalalabad Model Town Development Ltd.	Nabinagar	-	2004	Illegal
58	Rong-be-rong Abasik Prokolpa	-	Genda	1.33	2003	Illegal
59	Ananda Model Town	Ananda Model Town Ltd.	"	4.16	2003	Illegal
60	Vacation City	Excellence International Ltd	Hamayetpur	33.33	2001	Illegal
61	West Town Abasik Prokolpa	Bangladesh Development company Ltd.	"	60	2002	Registered
62	Ford City	Farmland Housing Ltd.	"	2	2000	Illegal
63	Janata Housing	Janata Housing Ltd	"	6	2001	Illegal
64	Sugandha Property	Sugandha Property Development Ltd	Hemayetpur	33.33	1998	Illegal
65	Kobotak Valley	Kobotak Real Estate Ltd.	Amin Bazar	33.33	1999	Illegal
66	Modhumati Model Town	Metro Makers and Development Ltd.	"	213.33	2001	Registered
67	Choice Polly	-	Magar kanda,		-	Illegal
68	Al Insaf Nagar	Al Insaf Corporation Ltd.	Amin Bazar		-	"
69	New Ali Bahar Housing	New Ali Bahar Housing Ltd	"	1.33	2001	"
70	Bikrampur Housing	Bikrampur Housing Ltd.	Faridabad		-	"
71	Angina Housing Prokolpo	Angina Housing Ltd.	Dapa, Idrapur	2.13	2001	Registered
72	Sahara City	Baridhi Development Ltd.	Fatullah		2003	Illegal
73	Rusen Housing	Rusen Housing Ltd.	Panchabati	2	1997	"
74	New Modern Housing Project	New Modern Housing Ltd.	Fatullah		2001	"
75	A-M-K Garden City Project	A-M-K Garden City Ltd.	Panchabati, Fatullah		2001	"
76	Afajagar Housing Project	Afajagar Housing Ltd	"		2000	"
77	Rupayan Town	Rupayan Housing Ltd	Baghair	40	2000	Registered
78	Madani Nagar Project	Mohammadi Housing Ltd.	Panchabati	20	2001	Illegal
79	Jubak Housing Project	Jubak Housing Ltd.	Narrayangonj	12	2003	RUP
80	Rajdhani Prokolpo	Brac Concord Land Development.	Matuail	60	2000	Illegal
81	Demra Abasik Prokolpo	Eastern Housing Ltd.	Demra		2001	Registered
82	Eastern Housing	Eastern Housing Ltd	Daigar, Demra			Registered
83	Siddhirgonj pro.	Jajira Housing Ltd.	Ati, Narrayangonj		2001	Illegal
84	Bhuiyan City	Navana Housing Ltd.	Adamji	140	2002	Registered
85	Vumi Prokolpo	Govt. Officers of	Ati, Siddhirgonj	-	-	Illegal

Ministry of Land						
ID	Housing Project	Name of Company	Location	Area	Starting Year	Legal Status
86	Hirajheel Abasik Prokolpo	Hirajheel Property Development Ltd.	Naya At, Siddhirgonj	80	1995	Registered
87	East Town	Bangladesh Development Company Ltd.	Kanchpur Sonargaon	53.33	2002	Registered
88	New Town	Bangladesh Development Company Ltd.	Madanpur, Sonargaon	53.33	2002	Registered
89	Concord City (Pirojpur)	Concord Real Estate and Development Ltd.	"	31.33	2001	Registered
90	Sonargaon Resort City	Unique Development Ltd.	Sonargaon	26.67	2004	RUP
91	River Side Concord	Concord Real Estate and Development Ltd.	Darakandi	53.33	2001	Registered
92	Kaderabad Housing Project	Kaderabad Housing Ltd.	Mohammadpur		1997	Illegal
93	Ali Noor real estate	Ali Noor Real Estate Ltd.	Bashila		2001	Illegal
94	Bashila Garden City	Bashila Garden City Ltd.	Bashila		2003	Illegal
95	Bashila Model Town	Bashila Model Town Ltd.	"		2003	Illegal
96	Shahjalal Housing	Shahjalal Housing Ltd.	"	16	-	Registered
97	Chowdhury Housing Project	Chowdhury Real Estate Ltd	"	16	2002	Illegal
98	Burriganga Housing Project	Burriganga Housing Ltd	Mohammadpur	16	2004	Illegal
99	Mohammadpur Lack City		"		2004	Illegal
100	Nabinagar housing	Mohammadia Housing Ltd	Mohammad pur		2003	Illegal
101	Dhaka uddan	Dhaka Uddan Multipurpose Society Ltd.	"		2001	Illegal
102	Akkas nagar	Akkas nagar Ltd.	"		-	Illegal
103	Nabodoy Housing	Nabodoy Housing Ltd.			1995	
104	Shymoli Welfare Housing				-	
105	Mohammadia Housing	Mohammadia Housing Ltd.			1987	
106	Japan Garden City	Japan Bangladesh Friendship Ltd.	Adabar	3.2	2002	
107	PC culture Housing	Mohammadpur Housing Cooperative Society	Ramchandrapur	15.20	1986	Approved
108	Probal Housing	Probal Housing Ltd.	Ramchandrapur	3.39	1990	
109	Munsurabad	Latif Real Estate Ltd.	Mazar Road	-	1990	RUP
110	Priyangan Abasik Prokolpo	Pnyangan Housing Ltd.	Bisil	1.2	1997	Illegal

111	Turag city Housing Project	Priyangan Housing Ltd. Name of Company	" Location	2 Area	1998 Starting Year	Illegal Legal Status
112	Janata Housing Project	Janata housing Ltd.	Mirpur	2	1995	Approved
113	Popular Housing project	Popular housing Ltd.	Mirpur-2		1995	Illegal
114	Far-east Housing project	Far east Development Pvt. Ltd.	Mirpur-2	-	1998	"
115	Hasnabad Housing Project		Subadhya, Keranigong	-	-	"
116	Basundhara River View	East west Property Development Ltd.	"	240	2002	Registered
117	Gias-nagar	Gias Nagar Housing Ltd.	Abdullahpur	6.67	1999	Illegal
118	South Town	Bangladesh Development Company	"	53.33	2001	Registered
119	Bhuiyan Abasik Prokolpa	-	"	20	2001	Illegal
120	Anwar city	-	"	2	-	Illegal
121	Jubak Housing	Jubak Housing Ltd.	"	9.33	2003	RUP
122	Moula Housing Project	Moula Real Estate Ltd.	"	24	-	Illegal
123	Sagufta	N. M Housing Limited	Mirpur-12	426.67	1996	Registered
124	Shine Pukur	Shine Pukur Holding Ltd.	Mirpur-2	-	1999	Illegal
125	Shikder housing	Shikder Housing Ltd.	Mohammadpur	200	1988	Illegal
126	Sikder Real Estate	Sikder Real Estate Ltd.	"	22	1995	Approved
127	Shorokunjo	South West Development Ltd.	"	20	2003	Illegal
128	Rayer Bazar Model Town		"	24	2002	Illegal
129	Sadak Nagar Model Town		"	24	-	Illegal
130	Ali and Noor Real Estate	Ali and Noor Real Estate	"	17.6	-	"
131	Ashian City	Ashian Lands Development Ltd	Uttara	466.67	2004	RUP
132	Ashian City	-	"	-	2003	"
133	Great Wall City 2	Great Wall Housing Ltd.	Yusufgonj	120	2005	Illegal
134	Vulua Royal City	Vulua Royal City Ltd.	"	16	2005	RUP
135	Century River City	Century Reality Ltd.	"	140	2003	Registered
136	Capital Corporate Housing	Capital Corporate Housing Ltd.	Tongi	4		Illegal
137	Turag Prakolpo Green Model Town	Chalantica Property Development Ltd. Amin Mohammad Foundation Ltd	"		1995	Illegal
138			Sabujbag	200	2002	Registered

ID	Housing Project	Name of Company	Location	Area	Starting Year	Legal Status
139	Banasree Housing Ltd.	Eastern Housing Ltd.	Rampura	160.28	1987	Approved
140	Aftabnagar	Eastern Housing Ltd	"	517.18	1987	"
141	Niketan society	Cap Hasan Housing Complex	Tejgaon	27.4	1987	Approved
142a	Basundhara (A-F)	East West property Development Ltd.	Joar Shahara	123.6	1987	
142b	Bashundhara (G-P))	East West property Development Ltd.	Bhatara, Satarkul	1400	2001	Unapproved
Total				1025		
143				2.08		

Source: Field Survey, 2006

Table A-5: Conversion of high value agricultural land

(Area in hectare)

ID No	Name of the project	Name of company	Converted area
15	Dehra Project	Eastern Housing Ltd.	-
18	Navana Village	Navana Real Estate Ltd.	48
19	Garden Island	Brac Concord Land Development Ltd.	60
20	Eastern Asulia	Eastern Housing Ltd	
21	Rupayan Abasan -2	Rupayan Development Ltd	48
22	Greenland Project	Greenland Housing Ltd Project	4
23	Padma Group	Padma Group	13.33
25	Partex Asulia City	-	
26	Rangdhunu	Hashem Real Estate Ltd.	13.33
27	Rupayan Asulia City	Rupayan Development Ltd	60
28	Ashulia Garden City	-	6.67
29	Khagan Abasik Prokolpo	Eastern Housing Ltd.	
30	Asulia Model Town	Amin Mohammad Foundation Ltd.	213.33
31	Chayakunja -3	M.A. Ohab And Sons Ltd.	23.33
60	Vaccation City		13.33
Total=15			503.32

Table A-6: Land development activities on the flood flow zone

(Area in hectare)

ID no	Flood flow zone	Name of Project	Name of Company	Arca
11	Balu flood zone	Badda Model Town	Darul Islam Housing Ltd.	53.33
50		Western City	Western City Ltd.	60
51		Park City	Park City Ltd.	-
133		Great Wall City 2	Great Wall Housing Ltd	120
134		Vulua Royal City	Vulua Royal City Ltd.	16
135		Century River City	Century Reality Ltd.	140
32	Turag flood zone	New Uttara Model Town	Jamuna Builders Ltd.	400
60		Vacation City	Excellence International Ltd	33.33
63	Burriganga – Dhaleshwari flood zone	Janata Housing Project	Janata Housing Ltd.	6
69		New Ali Bahar Housing	New Ali Bahar Housing Ltd.	1.33
70		Bikrampur Housing	Bikrampur Housing Ltd.	2.33
72		Sahara City	Baridhi Development Ltd.	

Id No		Name of Project	Name of Company	Area	
73	Burriganga – Dhaleshwari flood zone	Rusen Housing	Rusen Housing Ltd.	2.33	
91		River Side Concord	Concord Real Estate and Development Ltd.	53.33	
93		Ali noor Real Estate	Ali Noor Real Estate Ltd.		
94		Basila Garden City	Bashila Garden City Ltd.		
95		Basila Model Town	Bashila Model Town Ltd.		
96		Shahjalal Housing	Shahjalal Housing Ltd.	16	
97		Chowdhury Real Estate	Chowdhury Real Estate Ltd	16	
98		Burriganga Housing	Burriganga Housing Ltd.	16	
99		Mohammdpur Lake City			
100		Nabi nagasr housing	Mohammadi Housing Ltd.		
101		Dhaka Uddan	Dhaka Uddan Multipurpose Society Ltd.		
102		Akkas Nagar	Akkas nagar Ltd.		
103		Nobodoy Housing	Nabodoy Housing Ltd.		
104		Shymoli Housing	-		
105		Mohammadi housing	Mohammadi Housing Ltd.		
106		Japan Garden city3.2	Japan Bangladesh Friendship Ltd.	3.2	
107		PC Culture Housing	Mohammadpur Housing Cooperative Society	15	
108		Probal Housing	Probal Housing Ltd.	3	
110		Priyangan Abasik	Priyangan Housing Ltd		
111		Turag city	Priyangan Housing Ltd	1.2	
115		Hasnabad Housing Project	-	-	
116		Basundhara Riverview Project	East West Property Development Ltd.	240	
125		Shikder housing	Shikder Housing Ltd.	200	
126		Sikder Real estate	Sikder Real Estate ltd	22	
127		ShoroKunja	South West Development Ltd	20	
128		Rayerbazar Model Town	-	24	
129		Sadek Nagar Model Town	-	24	
Total= 39					1488.38

Table A-7: Conversion of sub flood flow zone

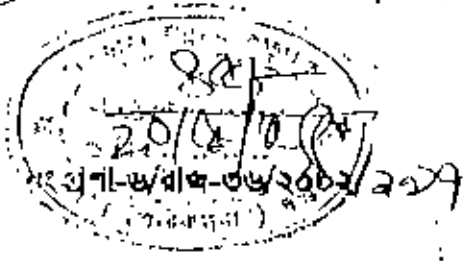
(Areas in hectare)

Id No	Name of Project	Name of Company	Area
41	Niloy Abasik Prokolpo	Naboday Housing Society Ltd.	46.67
46	Amerian city	-	-
47	Shornali Abashan	Swadesh Property Ltd.	466.67
49	Rock City	-	-
64	Sugandha Properties	Sugandha Property Development Ltd	33.33
65	Kobotak Valley	Kabotak Real Estate Ltd.	33.33
66	Modhumali Model Town	Metro Makers and Development Ltd.	213.33
67	Choice Palli	-	-
68	Al -Insafnagar	Al Insaf Corporation Ltd.	-
117	Gias Nagar	Gias Nagar Housing Ltd.	6.67
118	South Town	Bangladesh Development Company	53.33
119	Bhuiya Abasik Prokolpo	-	-
142b	Basundhara extension (F-P)	East West Property Ltd.	1400
Total = 13			2253.33

১৯/০৮/০৮ ২৫/৮/০৮

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
গৃহায়ন ও গণপূর্ত মন্ত্রণালয়
প্রশাসন শাখা-৬।

৩৭৩
২২/৮



তারিখঃ- ১৮/৮/২০০৮

প্রজ্ঞাপন

সরকার "বেসরকারী আবাসিক প্রকল্প ও ভূমি উন্নয়ন বিধিমালা-২০০৪" এর ১৮ নং বিধি শোভাবেক উক্ত বিধিমালায় উদ্দেশ্য পূরণকল্পে নিম্নে বর্ণিত কার্যকর্তৃগণের সমন্বয়ে একটি কমিটি গঠন করলেনা-

(১) মাননীয় মন্ত্রী, গৃহায়ন ও গণপূর্ত মন্ত্রণালয়	-	চেয়ারম্যান
(২) সচিব, গৃহায়ন ও গণপূর্ত মন্ত্রণালয়	-	সদস্য
(৩) সচিব, পরিবেশ ও বন মন্ত্রণালয়	-	সদস্য
(৪) সচিব, ভূমি মন্ত্রণালয়	-	সদস্য
(৫) সচিব, বেসামরিক বিমান পরিবহন ও পর্যটন মন্ত্রণালয়	-	সদস্য
(৬) অতিরিক্ত সচিব, মহিলাবিষয় বিভাগ	-	সদস্য
(৭) মুখ্য-সচিব (প্রশাসন), গৃহায়ন ও গণপূর্ত মন্ত্রণালয়	-	সদস্য
(৮) প্রধান প্রকৌশলী, গণপূর্ত অধিদপ্তর	-	সদস্য
(৯) চেয়ারম্যান, রাজধানী উন্নয়ন কর্তৃপক্ষ, ঢাকা	-	সদস্য
(১০) মহাপরিচালক, ঢাকা ত্রাসা	-	সদস্য
(১১) মহাপরিচালক, বাংলাদেশ গানি উন্নয়ন বোর্ড, ঢাকা	-	সদস্য
(১২) চেয়ারম্যান, জাতীয় গৃহায়ন কর্তৃপক্ষ, ঢাকা	-	সদস্য
(১৩) প্রধান নগর পরিকল্পনাবিদ, রাজউক, ঢাকা	-	সদস্য সচিব

কমিটির কার্যপরিধি নিম্নরূপঃ-

- ১। কমিটির বিবেচনার জন্য উপস্থাপিত বেসরকারী আবাসিক প্রকল্প ও ভূমি উন্নয়ন প্রকল্পসমূহ পরীক্ষাধে চূড়ান্ত অনুমোদন গ্রহণ।
- ২। সরকার কর্তৃক সময় সময়ে অর্গিত বেসরকারী আবাসিক প্রকল্প ও ভূমি উন্নয়ন সংক্রান্ত অন্যান্য দায়িত্ব পালন।

বাইগড়ির আদেশক্রমে,

(মোহাম্মদ মজিবুর উদ্দিন বহমান)
উপ-সচিব (প্রশাসন-২)
ফোনঃ ৭১৬৫২৭০।

ই-৭-নিয়ন্ত্রক,
বাংলাদেশ মন্ত্রণালয় ও প্রকাশনা অফিস,
ভৈরবপুর, ঢাকা।