Managing Megacities: A Case Study of Metropolitan Regional Governance for Dhaka.

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Declaration

I declare that this is my own account of my research.

Sirajul Haq Talukder
Abstract

Megacities of over 10 million population are a phenomenon not seen before in human history. Among 19 Megacities, 14 are in developing countries and 11 are in Asia. Dhaka represents one of the most extreme examples of rapid Megacity growth having a mere 129,000 at the start of the 20th century, 417,000 by 1950 and more than 12 million in 2001.

How can a city be governed that has increased 30 times in size over a person’s lifetime? This thesis makes a case for integrated Metropolitan Regional Governance (MRG) of the Extended Metropolitan Region of Dhaka.

The growing problems of Asian Megacities in general and Dhaka in particular are outlined, showing how governance has developed in a sectoral and national way rather than being place oriented. This has fractured and become totally inadequate as a means of solving the deep environmental, social and economic problems of the Megacity.

The governance issues of Megacities are traced to the primary problem of the need for integrative functions in strategic and statutory planning as well as development facilitation of the Extended Metropolitan Region (EMR). Ten core principles of Metropolitan Regional Governance are established. Without this, the Megacity’s functions of infrastructure, investment, housing, environmental management, employment etc. are not coordinated or prioritised in ways that lead to ‘common good’ sustainability outcomes.
The ten principles are applied to four Asian Megacities – Metro-Manila, Tokyo, Bangkok and Jakarta – to confirm their relevance and application before applying them to Dhaka.

The problems of Dhaka are outlined then an analysis of Dhaka governance options is attempted based on the ten core principles of MRG. Four possibilities are analysed and a way forward is suggested combining the options.

The proposed structure will build on the present system with greater responsibilities for strategic planning, statutory planning and development facilitation. It will also build up municipalities through a more transparent and engaged local planning process and create partnerships for infrastructure development.

The proposed governance structure would use the dynamism of the Megacity to create sustainable solutions and hope for the future of the city. The key to implementation will be finding the political solution to make such painful change, and training professionals in the broad integrative skills of urban sustainability and community engagement that are required for the region as well as the participation and partnership skills at local level.
Acknowledgements

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<th>Title</th>
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<td>5.1</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
<td></td>
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</tr>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
<td></td>
</tr>
<tr>
<td>APEC</td>
<td>Asia Pacific Economic Council</td>
<td></td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of South-East Asian Nations</td>
<td></td>
</tr>
<tr>
<td>BAPA</td>
<td>Movement for Bangladesh Environment</td>
<td></td>
</tr>
<tr>
<td>BAPPENAS</td>
<td>The national planning agency in the Indonesian Government</td>
<td></td>
</tr>
<tr>
<td>BBS</td>
<td>Bangladesh Bureau of Statistics</td>
<td></td>
</tr>
<tr>
<td>BMA</td>
<td>Bangkok Metropolitan Administration</td>
<td></td>
</tr>
<tr>
<td>BMR</td>
<td>Bangkok Metropolitan Region</td>
<td></td>
</tr>
<tr>
<td>BOI</td>
<td>Board of Investment (GOB)</td>
<td></td>
</tr>
<tr>
<td>BOO</td>
<td>Build, Operate and Own</td>
<td></td>
</tr>
<tr>
<td>BOT</td>
<td>Build, Operate and Transfer</td>
<td></td>
</tr>
<tr>
<td>BPC</td>
<td>Bangladesh Tourism Corporation</td>
<td></td>
</tr>
<tr>
<td>BRTA</td>
<td>Bangladesh Road Transport Authority</td>
<td></td>
</tr>
<tr>
<td>BRTC</td>
<td>Bangladesh Road Transport Corporation</td>
<td></td>
</tr>
<tr>
<td>BSCIC</td>
<td>Bangladesh Small and Cottage Industries Corporation</td>
<td></td>
</tr>
<tr>
<td>BT&amp;TB</td>
<td>Bangladesh Telegraph and Telephone Board</td>
<td></td>
</tr>
<tr>
<td>BUET</td>
<td>Bangladesh University of Engineering and Technology</td>
<td></td>
</tr>
<tr>
<td>BWDB</td>
<td>Bangladesh Water Development Board</td>
<td></td>
</tr>
<tr>
<td>CARE</td>
<td>Cooperation of American Relief Everywhere</td>
<td></td>
</tr>
<tr>
<td>CBO</td>
<td>Community Based Organizations</td>
<td></td>
</tr>
<tr>
<td>CMDA</td>
<td>Calcutta Metropolitan Development Authority</td>
<td></td>
</tr>
<tr>
<td>CMDA</td>
<td>Chennai Metropolitan Development Authority</td>
<td></td>
</tr>
<tr>
<td>CSO</td>
<td>Civil Society Organization</td>
<td></td>
</tr>
<tr>
<td>CUST</td>
<td>Centre for Urban Studies</td>
<td></td>
</tr>
<tr>
<td>CWASA</td>
<td>Chittagong Water and Sewerage Authority (GOB)</td>
<td></td>
</tr>
<tr>
<td>DC</td>
<td>Deputy Commissioner of a District (GOB)</td>
<td></td>
</tr>
<tr>
<td>DC Corporation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCC</td>
<td>Dhaka City Corporation</td>
<td></td>
</tr>
<tr>
<td>DESA</td>
<td>Dhaka Electric Supply Authority</td>
<td></td>
</tr>
<tr>
<td>DIT</td>
<td>Dhaka Improvement Trust</td>
<td></td>
</tr>
<tr>
<td>DMAIUDP</td>
<td>Dhaka Metropolitan Area Integrated Urban Development Project</td>
<td></td>
</tr>
<tr>
<td>DMDP</td>
<td>Dhaka Metropolitan Development Planning</td>
<td></td>
</tr>
<tr>
<td>DMP</td>
<td>Dhaka Metropolitan Police</td>
<td></td>
</tr>
<tr>
<td>DMRC</td>
<td>Dhaka Metropolitan Regional Corporation (proposed)</td>
<td></td>
</tr>
<tr>
<td>DMRP&amp;CD</td>
<td>Dhaka Metropolitan Regional Planning and Coordination Division in the Planning Commission (proposed)</td>
<td></td>
</tr>
<tr>
<td>DND</td>
<td>Dhaka-Narayanganj-Demra Triangle</td>
<td></td>
</tr>
<tr>
<td>DOE</td>
<td>Department of Environment (GOB)</td>
<td></td>
</tr>
<tr>
<td>DPHE</td>
<td>Department of Public Health Engineering (GOB)</td>
<td></td>
</tr>
<tr>
<td>DTBC</td>
<td>Dhaka Transport Coordination Board</td>
<td></td>
</tr>
<tr>
<td>DU</td>
<td>University of Dhaka</td>
<td></td>
</tr>
<tr>
<td>DWASA</td>
<td>Dhaka Water and Sewerage Authority</td>
<td></td>
</tr>
<tr>
<td>EBR</td>
<td>Extended Bangkok Region</td>
<td></td>
</tr>
<tr>
<td>EMR</td>
<td>Extended Metropolitan Region</td>
<td></td>
</tr>
<tr>
<td>FAP</td>
<td>Flood Action Plan (GOB)</td>
<td></td>
</tr>
<tr>
<td>FPCO</td>
<td>Flood Plan Coordination Organization (GOB)</td>
<td></td>
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<tr>
<td>GOB</td>
<td>Government of Bangladesh</td>
<td></td>
</tr>
<tr>
<td>HBFC</td>
<td>House Building Finance Corporation (GOB)</td>
<td></td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
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<td></td>
</tr>
<tr>
<td>HDS</td>
<td>Housing and Settlement Directorate (GOB)</td>
<td></td>
</tr>
<tr>
<td>IUCN</td>
<td>World Conservation Council</td>
<td></td>
</tr>
<tr>
<td>JABOTABEK</td>
<td>Joint body of DKI Jakarta and West Java Provinces in Indonesia</td>
<td></td>
</tr>
<tr>
<td>JICA</td>
<td>Japan International Development Authority</td>
<td></td>
</tr>
<tr>
<td>LGED</td>
<td>Local Government Engineering Department (GOB)</td>
<td></td>
</tr>
<tr>
<td>MCGM</td>
<td>Municipal Corporation of Greater Mumbai</td>
<td></td>
</tr>
<tr>
<td>MH&amp;PW</td>
<td>Ministry of Housing and Public Works (GOB)</td>
<td></td>
</tr>
<tr>
<td>MLGRD&amp;C</td>
<td>Ministry of Local Government, Rural Development and Cooperatives (GOB)</td>
<td></td>
</tr>
<tr>
<td>MMDA</td>
<td>Metro Manila Development Authority</td>
<td></td>
</tr>
<tr>
<td>MMRDA</td>
<td>Mumbai Metropolitan Regional Development Authority</td>
<td></td>
</tr>
<tr>
<td>MRDA</td>
<td>Metropolitan Regional Development Authority (proposed)</td>
<td></td>
</tr>
<tr>
<td>MRG</td>
<td>Metropolitan Regional Governance</td>
<td></td>
</tr>
<tr>
<td>MRPA</td>
<td>Metropolitan Regional Planning Authority (proposed)</td>
<td></td>
</tr>
<tr>
<td>MSIP</td>
<td>Multi Sector Investment Programming</td>
<td></td>
</tr>
<tr>
<td>MWR</td>
<td>Ministry of Water Resources (GOB)</td>
<td></td>
</tr>
<tr>
<td>NEC</td>
<td>National Economic Council (GOB)</td>
<td></td>
</tr>
<tr>
<td>NGO</td>
<td>Non Government Organization</td>
<td></td>
</tr>
<tr>
<td>NHA</td>
<td>National Housing Authority (GOB)</td>
<td></td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
<td></td>
</tr>
<tr>
<td>PWD</td>
<td>Public Works Department (GOB)</td>
<td></td>
</tr>
<tr>
<td>R&amp;HD</td>
<td>Roads and Highways Department (GOB)</td>
<td></td>
</tr>
<tr>
<td>RAJUK</td>
<td>Capital Development Authority (GOB)</td>
<td></td>
</tr>
<tr>
<td>SCP</td>
<td>Sustainable Cities Program of UNCHS</td>
<td></td>
</tr>
<tr>
<td>TMG</td>
<td>Tokyo Metropolitan Government</td>
<td></td>
</tr>
<tr>
<td>UDD</td>
<td>Urban Development Directorate (GOB)</td>
<td></td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
<td></td>
</tr>
<tr>
<td>UN ESCAP</td>
<td>UN Economic and Social Commission for the Asia Pacific</td>
<td></td>
</tr>
<tr>
<td>UNCED</td>
<td>United Nations Centre for Environmental Development</td>
<td></td>
</tr>
<tr>
<td>UNCHS</td>
<td>United Nations Centre for Human Settlements/HABITAT</td>
<td></td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
<td></td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Program</td>
<td></td>
</tr>
<tr>
<td>UNU</td>
<td>United Nations University</td>
<td></td>
</tr>
<tr>
<td>UPO</td>
<td>Urban People’s Organization</td>
<td></td>
</tr>
<tr>
<td>WA</td>
<td>Western Australia</td>
<td></td>
</tr>
<tr>
<td>ZP</td>
<td>Zilla (District) Parishad (Committee)-GOB</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 1 INTRODUCTION

This chapter demonstrates why Megacities\(^1\) are at the forefront of the governance crisis especially in developing countries. In particular it introduces the problems of Dhaka, the capital of Bangladesh. The chapter explains the relevance of this research for Dhaka. The hypothesis, approach and research questions are then outlined.

1.1 Megacities

According to the UN Global Report on Human Settlements (UNCHS 2001) the world has 19 Megacities, defined as having over 10 million in population (see Table 1.1). Several other cities (Seoul, Paris, Istanbul and Moscow) are about to surpass the 10 million and within 15 years the UN says 26 cities will be classed as Megacities (UN 1991, pp. 25-27).

Literature on managing such settlements is vast with many different sectors all signifying growing problems, especially in the developing countries. Problems of water supply, waste management, housing, transport, communication, energy, employment, education, social services and health are constantly in crisis mode. In the midst of such apparent chaos there is surprisingly little attention given to the governance of such cities. Governance is mostly based on sector approaches of national or state agencies and local governments. Thus solutions tend to be framed within the constraints of these authorities.

This thesis will explore a more fundamental approach to urban governance in Megacities. It will do this by examining Megacities in general, particularly through the literature on Asian Megacities. In particular it will examine the Megacity of Dhaka in Bangladesh,
which as Table 1.1 shows has a growth rate 4.9% p. a. (1995-2000) with Lagos equal fastest in the world². Dhaka was the only Megacity which had a growth rate higher in 1975-2000 than in 1950-1975.

Table 1.1: The World's Megacities

<table>
<thead>
<tr>
<th>City</th>
<th>Urban Agglomeration: population size, growth rate and share in country’s urban population (estimated and projections)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2000 (thousands)</td>
</tr>
<tr>
<td>Tokyo</td>
<td>26,444</td>
</tr>
<tr>
<td>Mexico City</td>
<td>18,131</td>
</tr>
<tr>
<td>Mumbai</td>
<td>18,066</td>
</tr>
<tr>
<td>Sao Paulo</td>
<td>17,755</td>
</tr>
<tr>
<td>New York</td>
<td>16,640</td>
</tr>
<tr>
<td>Lagos</td>
<td>13,427</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>13,140</td>
</tr>
<tr>
<td>Calcutta</td>
<td>12,918</td>
</tr>
<tr>
<td>Shanghai</td>
<td>12,887</td>
</tr>
<tr>
<td>Buenos Aires</td>
<td>12,560</td>
</tr>
<tr>
<td>Dhaka</td>
<td>12,317</td>
</tr>
<tr>
<td>Karachi</td>
<td>11,794</td>
</tr>
<tr>
<td>Delhi</td>
<td>11,695</td>
</tr>
<tr>
<td>Jakarta</td>
<td>11,018</td>
</tr>
<tr>
<td>Osaka</td>
<td>11,013</td>
</tr>
<tr>
<td>Metro Manila</td>
<td>10,870</td>
</tr>
<tr>
<td>Beijing</td>
<td>10,839</td>
</tr>
<tr>
<td>Rio de Janeiro</td>
<td>10,582</td>
</tr>
<tr>
<td>Cairo</td>
<td>10,552</td>
</tr>
<tr>
<td>Seoul</td>
<td>9,888</td>
</tr>
<tr>
<td>Paris</td>
<td>9,624</td>
</tr>
<tr>
<td>Istanbul</td>
<td>9,451</td>
</tr>
<tr>
<td>Moscow</td>
<td>9,321</td>
</tr>
</tbody>
</table>

*Urban Agglomeration* refers to the contours of contiguous territory without regard to administrative boundaries. It comprises the city or town proper and also suburban fringe lying outside of, but adjacent to, the city boundaries. Note: A Megacity is defined as over 10 million populations in the city-region. Defining the region as outlined in this thesis is often problematical.


According to Yeung (1995, pp.191-220), one of the most interesting developments since World War II has been the rapid urbanization in developing countries and the concentration of urban populations in large cities. He also noted that between 1950 and 1990, the number of ‘million cities’ in the world more than tripled, from 78 to 276, and is

¹Megacities can be spelt in many ways but this thesis follows the convention of the UN to make it one word with a capital M.

²The 12 million of Dhaka in 2000 was confirmed by the UN Population Division (World Urbanization Prospects: The 2001 Revision). It shows Dhaka continuing to be among the fastest growing cities in the world.
now projected to reach 511 by 2010. In 1990, 33 percent of the world’s population lived in ‘million cities’ and 10 percent in cities of more than 8 million inhabitants.

The growth of Megacities and other large cities appears to be related to the economic processes unleashed by globalization (Borja and Castells 1997). The consequences of globalization on city management, especially in conditions of weak public institutions and poor governance, have sometimes been dramatic. In several cases, the worsening urban poverty and urban income inequality have been aggravated by the skewed allocation of resources in urban public investments and by technology, which favours highly skilled labour, as well as the relative weakness of public institutions and public policy in responding to problems. All this leads to the gradual fragmentation of the metropolis and its institutions.

From an operational viewpoint, the capacity to address the critical management needs of metropolitan areas, in particular Megacities, is often limited, given the usual absence of a metropolitan agency that is empowered to lead often a dozen or more component municipalities and sectors. In some instances umbrella agencies have been created. For example, the Metropolitan Development Authorities in Manila and Calcutta (now Kolkata) have played important roles in the institutional constellation of the city, but without the powers required to address the inter-jurisdictional issues effectively. More recently, the focus has been on metropolitan-wide management of specific sector or sub-sector activities such as water, public transport, or solid waste, where there is a rationale for cross-border collaboration and externalities are tangible. City strategy exercises have also been key instruments in the identification of shared stakeholder interest in metropolitan cities where coalitions exist with vision and broad credibility, even in the absence of a formal executive agency (World Bank 2001).
However, in general there is a distinct absence of strong examples of regional governance in Megacities, particularly in the rapidly growing Asian Megacities.

1.2 Regional Governance Dearth

Why the governance of Megacities has not been the focus of more study, more in depth and more detailed response, and of a higher priority, is something of a mystery given the extent of the problem. The following reasons are suggested.

a) Megacities have grown extremely rapidly in the past century. Table 1.2 shows the population growth of the 19 Megacities over the past 50 years indicating the

<table>
<thead>
<tr>
<th>City</th>
<th>1950 (in thousands)</th>
<th>2000 (in thousands)</th>
<th>Growth of population (in 100 times)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tokyo</td>
<td>6,700</td>
<td>26,444</td>
<td>3.95</td>
</tr>
<tr>
<td>Mexico City</td>
<td>3,100</td>
<td>18,131</td>
<td>5.85</td>
</tr>
<tr>
<td>Bombay</td>
<td>2,900</td>
<td>18,066</td>
<td>6.22</td>
</tr>
<tr>
<td>Sao Paulo</td>
<td>2,400</td>
<td>17,755</td>
<td>7.39</td>
</tr>
<tr>
<td>New York</td>
<td>12,300</td>
<td>16,640</td>
<td>1.35</td>
</tr>
<tr>
<td>Lagos</td>
<td>3,00</td>
<td>13,427</td>
<td>44.75</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>4,000</td>
<td>13,140</td>
<td>3.28</td>
</tr>
<tr>
<td>Calcutta</td>
<td>4,400</td>
<td>12,918</td>
<td>2.93</td>
</tr>
<tr>
<td>Shanghai</td>
<td>5,300</td>
<td>12,887</td>
<td>2.43</td>
</tr>
<tr>
<td>Buenos Aires</td>
<td>5,000</td>
<td>12,560</td>
<td>2.51</td>
</tr>
<tr>
<td>Dhaka</td>
<td>4,00</td>
<td>12,317</td>
<td>30.79</td>
</tr>
<tr>
<td>Karachi</td>
<td>1,000</td>
<td>11,794</td>
<td>11.79</td>
</tr>
<tr>
<td>Delhi</td>
<td>1,400</td>
<td>11,695</td>
<td>8.35</td>
</tr>
<tr>
<td>Jakarta</td>
<td>2,000</td>
<td>11,018</td>
<td>5.51</td>
</tr>
<tr>
<td>Osaka</td>
<td>3,800</td>
<td>11,013</td>
<td>2.90</td>
</tr>
<tr>
<td>Metro Manila</td>
<td>1,500</td>
<td>10,870</td>
<td>7.25</td>
</tr>
<tr>
<td>Beijing</td>
<td>3,900</td>
<td>10,839</td>
<td>2.78</td>
</tr>
<tr>
<td>Rio de Janeiro</td>
<td>2,900</td>
<td>10,582</td>
<td>3.65</td>
</tr>
<tr>
<td>Cairo</td>
<td>2,400</td>
<td>10,552</td>
<td>4.40</td>
</tr>
<tr>
<td>Seoul</td>
<td>1,000</td>
<td>9,888</td>
<td>9.89</td>
</tr>
<tr>
<td>Paris</td>
<td>5,400</td>
<td>9,624</td>
<td>1.78</td>
</tr>
<tr>
<td>Istanbul</td>
<td>1,100</td>
<td>9,451</td>
<td>8.59</td>
</tr>
<tr>
<td>Moscow</td>
<td>4,800</td>
<td>9,321</td>
<td>1.94</td>
</tr>
</tbody>
</table>

phenomenon of rapid urbanization. Dhaka has increased 30 times during the last 50 years, which is one of the great migrations in human history.

b) As Megacities grew, they absorbed villages, towns and regions, which have all had historical governance structures. The coalescing of these structures into an urban region has occurred in terms of economic processes but has rarely occurred in governance processes. Power has remained within the local jurisdictions, which have little linking them one to another.

c) The 20th century saw the rise of professions with clear lines of responsibility based on sectors. This process swept the world, and has been instituted into government agencies at a national level and at a local level (Sandercock 2003). The professions are vertically integrated and provide solutions to infrastructure demands and service demands of their client populations through their governing bodies. Thus the spatial dimension of a Megacity with its multiple local jurisdictions, and its large-scale national jurisdiction, does not have an appropriate scale of governance that can provide integration of such professional activity. To change this requires a different way of thinking about urban problems.

Changes to governance are slow as they are politically painful. Local power, national power and professional power are all threatened by the need for changes in governance in a Megacity. Integrated, regional governance is nevertheless likely to be among the most important issues facing the future of the earth (The World Commission on Environment and Development 1987).
1.3 Sustainability as a Challenge for Megacity Governance

The UN began to examine the global process that threatens the earth from the 1972 UN Conference on Human Environments in Stockholm through to the 2002 Johannesburg Summit. It has continued to promote processes based around the concept of sustainable development. Sustainable development has two core ideas that have great significance for challenging how Megacities are governed:

(a) *Long-term thinking and action*: The emphasis on future generations means that any form of governance must be appropriate for the long term, not what has been cobbled together from the past due to the absorption of areas around a rapidly growing city. The political pain of change in governance is a challenge that is set by the need for long-term thinking. The UN Global Review of Human Settlements asserted that the lack of an overall municipal governance structure is a constraint to Megacity management (UNCHS 2001).

(b) *Integrated thinking and action*: The emphasis on integration of environmental, social and economic thinking and action is critical to sustainable development. This is a challenge to governance and to professions (Govt. of WA, 2003). The entrenched process of thinking and acting within the individual silo of a profession can no longer be considered sustainable. Each profession still has important work to do but now must do it within an integrated structure to achieve synergistic and overlapping outcomes. The appropriate scale at which integration occurs depends on the issue. For water quality issues it will require catchment-wide governance. For Megacities, it will require a full functional urban region as only on this scale can the issue be addressed in a way that enables integration.
The historical expansion of Megacities into other jurisdictions explains why Megacities have not generally been provided with appropriate regional scale governance and the challenge of sustainability provides the impetus for change. Much however will be different depending on the history and challenges facing each of the world’s Megacities. This thesis will examine Asian Megacities and in particular will use the case study of Dhaka, Bangladesh, in order to pursue in more detail the challenge of urban governance. It will use the Asian and Dhaka case study to provide perspective on how different the problems have become and the potential options for how the Megacity can now proceed. It will obviously have most relevance for the Megacities of the Developing countries but the character of the issues will remain relevant to all large, rapidly growing urban areas.

1.4 Future of Megacities

UN forecasts suggest that the population of Asian Megacities will triple over the next 30 years from 126 million in 1995 to 382 million in 2025. Dhaka is expected to grow to 16 million by 2015 and to 25 million by 2025, even with a slowing growth rate.

Megacities are a major outcome of the process of globalization (Hall and Pfieffer 2000; Egger 2003) and this process shows little sign of abating. The sustainability movement is attempting to manage the excesses of globalization where the global market rides roughshod over regional environments and regional cultures, leaving considerable benefits to the winners and little for the losers.

Dhaka and other Developing countries Megacities can lose out in the next few decades of development, becoming victims of the globalization process. All the problems now being
experienced could simply be multiplied and expanded as poor jobs are exchanged for an even poorer environment and quality of life.

On the other hand, it is also possible to see that Dhaka and its residents could grasp the opportunities of globalization so that development is able to help solve its problems, creating ‘common good’ solutions where the city is (both) simultaneously wealthier and more equitable and offers an improved quality of life.

Such a future, as with all Megacities, will depend on how the city-region manages to alter its urban governance system to address its many problems in an integrated way appropriate to the scale at which it works.

### 1.5 Megacity Dhaka

Development planning as practised in Bangladesh is done on a sector basis and hence it disregards spatial dimensions of integrating the development and management of the city. Urban development within a national planning perspective has been an outcome of a process that has been shaped by the functional roles of national sector agencies and local government organizations (Mohit 1992). Neither level of government has the functioning of the city as its core focus. Therefore, at a fundamental level this would suggest that the city of Dhaka as a system is not likely to be developed sustainably, i.e. with a simultaneous improvement to the environmental, social and economic aspects of the city (Newman and Kenworthy 1999).

Development agencies have recognized for a long time that ‘the present institutional framework and the capacities of institutions in the urban sector are major constraints to
urban development management’ (World Bank 1981, p.ii). A Mayor (1994-2002) of Dhaka City Corporation (covering a part of greater Dhaka City and having only limited powers) spelled out on many occasions that ‘the lack of proper organization and integration of agencies, among other things, is responsible for the development management problems in the city’ (The Daily Star: August 08, 1996).

In a recent study by the Asian Development Bank (1998) on ‘Contemporary Approaches to Municipal Management’, it was noted that as many as 51 institutions were involved in various capacities in service provision and development activities in Dhaka. While the creation of specialised agencies to cope with the increasing demand for services might have some justification, an overall coordination agency was clearly needed to administer these services that vitally affect the lives of Dhaka’s citizens. As will be shown in this thesis there is a lack of integrative functions particularly strategic planning, statutory planning and development facilitation.

The emerging literature on the governance of Dhaka and its development problems finds some shortfalls in the city’s original planning (Islam and Khan 1996; Siddiqui et al 2000). However, it was natural that the earlier planners could not envision the future demographic and physical growth and technological boom of the 20th century. The city is now huge and sprawling with all the worst aspects of a Megacity:

- Intractable motor vehicle congestion with some of the world’s worst urban air quality;
- Uncontrolled industrial wastes, human wastes and municipal wastes that pollute the water supply;
- Inadequate infrastructure for electricity and gas; and
- Growing poverty and its associated problems such as crime, slums, poor land records and uncertain tenure.
All of these problems have far outgrown the institutions of the small town that were created to manage them. At the same time, Dhaka continues to grow as it is providing opportunities for people not found elsewhere in Bangladesh.

Bangladesh is mostly an agrarian country. However, in recent decades the shift from agrarian to industrial economy has accelerated in Bangladesh, and in the past decades the global knowledge economy has also arrived. These new forms of wealth generation are city based, and indeed are increasingly Megacity based. The management of urban areas, particularly Dhaka having reached a population of 12 million, will play a key role in the economic development of Bangladesh in the 21st century.

The quality of life for residents in Dhaka City will be closely related to the quality of their urban management. This is not to say there are no fundamental questions, for example:

- To what extent will Dhaka continue to grow?
- Will population growth undermine any attempts to create a better environment or livelihood in the city?
- How could a governance structure be made effective with clearly defined responsibilities?
- Can sufficient funds and cost recovery be mobilised from urban growth to deliver adequate quality of life and sustainability?
- How can partnerships be developed among the government, civil society, and community based organizations and non-government organizations to strengthen the governance process?
While these questions cannot be answered fully as yet, there are many lessons or best practices that can be shared and applied to meet the needs of Dhaka in the 21st century. At the same time, an analysis of Dhaka can also provide perspective for other cities grappling with these issues.

1.6 Relevance of the Study for Dhaka

The predicted growth of any Asian Megacity will take place in a period of major economic and technological change, dominated by the emerging global economy, a revolution in information technologies, and an increasing emphasis on market-based decision-making. These new external influences mean that Megacities are competing with each other. If they are well managed, Megacities can be productive and provide a high quality of life for their residents. If not, the Megacities’ productivity and quality of life will be adversely affected. For the less well off Megacities like Dhaka, the most urgent actions required include reducing poverty, improving the environment and strengthening overall management capacities; while at the higher levels of development, demand management and reduction in pollution and congestion will be more important. Hence it will be critical for governments to develop a holistic vision of Megacity evolution, involving the whole range of city interest groups in the decision-making process and prioritising policy for the Megacity (Asian Development Bank 1996).

Governance can be defined as the means and process through which a city government and its stakeholders enable the whole city to fulfil its functions effectively. The challenge of a city in the 21st century is to balance and integrate a number of interacting, different roles, which put very different demands on the city’s resources. There is an emerging international consensus that good governance is a crucial prerequisite for eradication of poverty (Panos Institute 2000),
the overcoming of environmental problems and improvement of the social quality of life, in other words, for sustainable urban development (Newman and Kenworthy 1999).

The population of Dhaka increased more than 30 times (Table 1.2) and the size of the city expanded by 18 times (Table 5.2) during the last 50 years with only minimal strategic guidance for the growth of the city. In particular there are significant water problems with flooding in some places and drawdown of ground water in other places. Therefore, the institutions that exist in Dhaka and its Extended Metropolitan Region (EMR) need to be studied to identify the governance weaknesses within existing institutions in order to propose a definitive Metropolitan Regional Governance (MRG). The study will therefore:

a) Define EMR of Dhaka and outline present practices in urban management in Dhaka;

b) Define the present problems of governance and opportunities for Dhaka;

c) Make a comparative study of Dhaka with other Megacities emphasising those where city-wide governance has made a difference and how;

d) Suggest possible ways of providing good governance for the EMR of Dhaka, reducing tensions among the city dwellers, incorporating local government and central government, and developing partnerships with industry and the economy to provide sustainable development.

To achieve these objectives requires a detailed understanding of how the Megacity Dhaka works and how it can best change. It also requires a context of how other Megacities, especially Asian Megacities, are developing their governance systems.
1.7 Research Hypothesis, Approach and Questions

The thesis seeks to examine the following hypothesis:

Hypothesis:

Megacities will require Metropolitan Regional Governance (MRG) in order to overcome their multiple and interacting problems and create a sustainable future.

Approach:

The thesis will attempt to address this hypothesis by examining:

(a) Literature on Megacities (especially Asian Megacities) that suggests why they should be managed as one organic system, i.e. with Metropolitan Regional Governance (MRG);

(b) A Case Study of Dhaka based on literature, interviews and personal observation that illustrates why MRG is needed and how it may be done.

The thesis will then suggest:

(c) What are the key principles of Metropolitan Regional Governance, and

(d) How to apply them to Dhaka with an analysis of governance options.
Questions:

This research aims to answer the following questions:

(a) What makes a Megacity?
(b) What is the future of Megacities and how they are being managed?
(c) What are the core principles of Metropolitan Regional Governance (MRG) and how do these cores MRG principles apply to Asian Megacities?
(d) What makes Dhaka a Megacity and how Dhaka Megacity is being managed?
(e) Why is Metropolitan Regional Governance (MRG) needed for Dhaka and what are the options for Metropolitan Regional Governance (MRG) in Dhaka based on the core MRG principles?
(f) How can Metropolitan Regional Governance (MRG) be implemented in Dhaka?

1.8 Chapter Outlines

Chapter 1 introduces why Megacities are at the forefront of the governance crisis particularly in developing countries. In particular it introduces the problems of Dhaka, the capital of Bangladesh. The chapter also explains the relevance of this research for Dhaka. The thesis hypothesis, approach and research questions are outlined in this chapter.

Chapter 2 tries to define Megacities and their characteristics with particular reference to Asian Megacities, their economic development and growth characteristics. The sheer size of Megacities presents a challenge quite different in many respects from other cities producing many large problems. Therefore, the concept of sustainable development is discussed with reference to Megacities.
Chapter 3 discusses how Megacities by their population size and unique physical characteristics as well as their history, present a challenge quite different in many respects from other cities. This chapter begins with the issue of Megacities governance and their Extended Metropolitan Region (EMR), the definition of urban management and governance and their contexts. It also discusses the issue of city size and the challenge to management to see what forms of governance could meet this great challenge. A set of ten principles is developed based on the literature on Megacities management/governance and these are discussed here. This then leads to the theory of how Metropolitan Regional Governance (MRG) can be applied based on metropolitan-wide institutions.

Chapter 4 explores the experience of four of the fast growing Asian Megacities in tackling problems of metropolitan governance. The cities examined are: Metro-Manila, Tokyo, Bangkok and Jakarta. The institutional functions for each city are examined in light of the ten MRG principles. This enables the principles to be clarified and made more relevant before proceeding to an examination of Dhaka Megacity as the main case study.

Chapter 5 describes the physical and population growth of Dhaka City. The different area connotations of Dhaka Megacity are described in this chapter. The chapter also describes the physical setting of the city and its topography in order to outline the physical constraints, particularly in water management, which reveal a city in desperate need of regional governance.

Chapter 6 examines the present governance institutions and recognizes the missing link of metropolitan-wide institutions in the city. A description of the governance structure of Bangladesh is provided in this chapter followed by a survey of the existing situation in
Dhaka. Finally an evaluation is made of the existing institutions against the ten principles of MRG, revealing inadequacies in nearly all of the core functions.

Chapter 7 describes why Megacity Dhaka needs Metropolitan Regional Governance (MRG). This chapter shows that in the absence of regional government and without the political recognition of the Extended Metropolitan Region (EMR) of Dhaka, the reinforcing competitive strength of an urban region, which forms an ‘Integrated Urban Space’, will not be seen in the future. It outlines the fundamental lack of integrative functions. The human dimension which drives Dhaka suggests however that there is hope for the future of the city.

Chapter 8 outlines some of the options for the governance of the EMR of Dhaka. The process of creating Metropolitan Regional Governance for Dhaka has been approached by putting emphasis on the whole EMR and providing governance for the missing integrative functions of strategic and statutory planning and development facilitation. Ten core principles for Metropolitan Regional Governance developed from the thesis are applied to Dhaka. The final suggested structure is outlined in some detail to show how best to take the present institutions of Dhaka’s governance and forge them into a new Metropolitan Regional Governance system.

Chapter 9 concludes the thesis. It summarizes the answers to each of the questions raised in this thesis. In particular it sets out how the ten core principles are applied to Dhaka. Finally it reflects on the further research required and the political and professional training implications.
CHAPTER 2 MEGACITIES: GROWTH, PROBLEMS AND SUSTAINABLE DEVELOPMENT

Megacities by their population size and unique characteristics are set apart from other urban areas. This chapter tries to define Megacities and their characteristics with particular reference to Asian Megacities, their economic development and growth characteristics. The sheer size of Megacities presents a challenge quite different in many respects from other cities. Therefore, the concept of sustainable development is discussed with reference to Megacities.

2.1 Megacity?

2.1.1 Definition and Characteristics of Megacities

Cities have developed over the last 8000 years as places of commerce and culture. They provide humans with opportunities not available elsewhere due to the sharing of skills and ideas. Megacities are new forms of human settlement; they have not been seen before in the history of human civilization. Megacities have developed in different physical locations of different countries with different growth rates and socio-economic histories. However, Laquian (1994) says:

‘Megacities have more in common with each other than with their rural hinterlands whether they are located in developed or developing countries. This makes for easier comparability in an analysis of their economic, social and welfare conditions. Though, it is still true that, most Megacities development is rooted in the specific economic, social and cultural conditions in the country or region the Megacity is in (p.192).’
Clarke (1996) has noted:

‘...Megacities provide some of the best opportunities for specialisation in and interaction between socio-economic, education, research, and technology activities. And, Megacities often provide the best location for the dissemination of information as hubs of the knowledge economy which is likely to be becoming important with the impact of the global economy in the Asian region (pp.63-4).’

Therefore, Megacities have some common features of growth that can be examined before addressing their emerging governance problems. First, it should be possible to seek a common definition.

The Task Force on Megacities of the International Geographical Union (IGU) has examined different aspects of Megacities and Professor Frauke Kraas (2005), Chairman of the Task Force, explained that a Megacity is characterised by (www.geographie.uni-koeln.de/kraas):

‘...new dimensions of large high-density concentrations of population with immense sprawl and a serious increase in infrastructural, socio-economic and ecological overload. Furthermore, these may develop extreme dynamism in demographic, economic, social and political processes’.

These two characteristics of size and dynamism will dominate the discussion in this thesis. Their size creates the problems that require a new form of governance and their dynamism ensures that their opportunities and problems are likely to keep growing.
2.1.2 Size of Megacities

Megacities are usually defined on a quantitative level as those metropolises with a population over 5 million, more than 8 million or more than 10 million inhabitants. In this thesis a threshold of 10 million is used to delimit Megacities, as this thesis deals with Dhaka, which had a population nearly 10 million in 2001 (BBS 2001). In spite of definitions based on population size, it is important to note that (Kraas 2005):

- To fight for a fixed definition of Megacities on the basis of their population size is insignificant, because it is subjective and thus it can be debated;

- Inconsistent spatial boundaries for administrative districts and the questionable reliability of up-to-date population figures give inconsistent censuses, projections and estimations of population;

- Megacities data are based on different areas of reference; therefore, the figures given for the size of Megacities vary and are probably unreliable.

Nevertheless Megacities as discussed here will be taken to mean that group of very large cities with more than 10 million inhabitants. Table 1.1 shows the current list of Megacities across the world with their population and growth rates.

Although any city with a population above 10 million may be defined as a Megacity, such a definition, however useful for demographic purposes, leaves much to be explained. It does not reflect the great variety of urban foci that may be associated with a given population concentration. It does not reflect the unique features that differentiate a
Megacity functionally from other cities. Therefore, it should be the concern of any study such as this to know a lot more about the characteristics of Megacities.

Some of these other characteristics of Megacities can be briefly stated as:

- High population concentration in the built-up city areas having largely uncontrolled spatial physical (both vertical and horizontal) expansion;
- Huge traffic congestion with a largely uncontrolled mass transit system in downtown areas in the day time;
- In some cases very severe infrastructural deficits, often with motorised and non-motorised vehicles on the same street;
- High concentrations of industrial production;
- Signs of ecological strain and overload;
- Moderately regulated and disparate land and property markets;
- Insufficient housing provision especially for poorer people, widening inequalities among various zones; and
- High level of dynamism in all demographic, social, political and economic processes.

The other major quantitative characteristic of Megacities is their rate of growth. Cities throughout the world are growing at 2.3%/p.a. whilst rural areas are growing at 0.1%/per year (and in many places are declining) (UN HABITAT 2003). However, Megacities in
developing countries are generally growing faster than this as shown in Table 1.1. As shown in table 1.1 Megacities growth in developed countries is much slower than the growth of Megacities in developing countries which has been very rapid and continuing (Table 2.3). Fast growth has been both up and out so there has been considerable territorial expansion in developing country Megacities. By growing larger the system’s complexity is increased, the growth over jurisdictional boundaries makes government and citizen consultation more difficult and issues of sharing services are far more complex in Megacities than in smaller cities (Gilbert 1996).

2.1.3 Asian Megacities

The Asian Development Bank (1996) characterized Asian Megacities as having-

‘...A threshold population of 10 million. A large metropolitan area which is in many cases, an extended area beyond the administrative boundaries of the constituent municipalities with a complex economy, large and highly skilled and unskilled labour force (p.24).’

This ‘extended area’ has become a particular characteristic of Asian Megacities and is a special interest for this thesis.

Asian Megacities have an already built-up historical city core area and surrounding suburbs, and then an extra characteristic of an extended region of mixed spontaneous settlements having informal industrial growth often connected by expressways. For example, Kaothien and Webster (1999) characterized urban forms of the Extended Bangkok Region (EBR). To do this they classified the city into three different urban
forms: core area, suburbs and exurbia. They further classified the three forms by characteristics, built form, drivers, population and major threats (Table 2.1).

The ‘Core Area’ is already built up and it is knowledge based with a tertiary/service sector economy and slowing population growth; the ‘Suburbs’ are characterized by residential blocks, supermarkets, expressway oriented development, people migrating from the core areas to these areas seeking some space with redevelopment activities. People migrating from the north-eastern part of Thailand mostly from rural areas are living in the ‘Exurbia’ region of Bangkok. In these areas industrial estates and support industries are located. These areas are primarily FDI (Foreign Direct Investment) driven and most infrastructure is built on FDI loans; however, spontaneous squatter settlements are prominent here.
Table 2.1: The Extended Bangkok Region: Emerging Extended Urban Form in Southeast Asia

<table>
<thead>
<tr>
<th>Form</th>
<th>Characteristics</th>
<th>Built Form</th>
<th>Drivers</th>
<th>Population</th>
<th>Major Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>-Knowledge/Tertiary Economy</td>
<td>-Poly Nuclear</td>
<td>-Global / National Fusion Synergy</td>
<td>-Increasingly 2nd and 3rd Generation</td>
<td>- Too Rapid De-concentration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mixed Land Use</td>
<td></td>
<td>-Slowing In-migration</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Hotels, Offices and Condominiums</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Mass Rail Transit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suburbs</td>
<td>-Residential (Commuters)</td>
<td>-Sub-Urban Villages (Muban)</td>
<td>-Thai Property Developers</td>
<td>-Households from Core seeking space at Affordable Prices</td>
<td>-Mature Industry Threatened by International Competition</td>
</tr>
<tr>
<td></td>
<td>- Retailing</td>
<td>-Gated Communities</td>
<td></td>
<td>-Some Worker Housing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Mature (Lower Value) Industry</td>
<td>-Mega Malls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Expressways</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Radial Redevelopment (primarily North and East)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exurbia</td>
<td>-Industrial Estates</td>
<td>-Industrial Estates</td>
<td>- Exogenous</td>
<td>- Rural Migrants Primarily from the Northeast</td>
<td>-Overlay Dependent of Exogenous Drivers</td>
</tr>
<tr>
<td></td>
<td>- Industrial Support Infrastructure</td>
<td>- Port</td>
<td>- FDI Driven</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Spontaneous (squatter) Worker Settlements</td>
<td>- Infrastructure Loan Driven e.g., OECF/JBIC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Kaothien and Webster (1999)
A further characteristic of this exurbia area is that considerable intensive agricultural production occurs here—see Box 2.1 on Desakota*.

Box 2.1: Features of Desakota Regions in Asian Megacities

Regions designated as desakota have six main features:

- The desakota zones are characterised by a large population engaged in small-holder cultivation of rice and other intensive agriculture, especially horticulture of relevance to feeding the Megacity; they have considerable interaction with the cities through accessible transportation routes.

- The desakota zones are generally characterised by an increase in non-agricultural activities in areas that have previously been largely agricultural. These non-agricultural activities are very diverse, including trading, transportation, and industry. The increase in non-agricultural activity is characterised by a mixture of activities, often by members of the same household.

- The desakota zones are generally characterised by extreme fluidity and mobility of the population. The availability of relatively cheap transport such as two-stroke motorbikes, buses and trucks has facilitated relatively quick movement over longer distances than could be covered previously. Thus, these zones are characterised not only by commuting to the larger urban centres but also by intense movement of people and goods within the zones.

- The desakota zones are characterised by an intense mixture of land use with agriculture, cottage industry, industrial estates, suburban developments, and other uses existing side by side. Such a mix has both negative and positive effects. Agricultural products, particularly industrial crops, have a ready market, but the waste of industrial activity can pollute and destroy agricultural land. On the whole, these zones are much more intensely utilised than in purely rural areas. In the desakota zones of Asian countries, pressures of population place greater demands on the available space.

- Another feature of the desakota zones is the increased participation of females in non-agricultural labour. In part, this feature is associated with a demand for female labour in industry, domestic service, and other activities, but it is also closely related to changing patterns of agricultural production in the desakota regions. Generally, agricultural production shows a shift from mono crop grain cultivation to increased diversity with production of livestock, vegetables, and fruit, sometimes for national and international consumption.

- Finally, desakota zones are to some extent “invisible” or “grey” zones from the view point of the state authorities. Urban regulations may not apply in these “rural areas,” and it is difficult for the state to enforce them despite the rapidly changing economic structures of the regions. This feature is particularly encouraging to the “informal sector” and small-scale operators who find it difficult to conform to labour or industrial legislation. These areas are generally not part of traditional urban governance.

Source: McGee 1991, pp.16-17

*The term Desakota first used by T.G. McGee in 1991, comes from Indonesian words for village and town and has been used to describe the extended exurbia where agricultural land persists along with rapidly developing suburbs, industrial and commercial centres.
Megacity Dhaka resembles the growth characteristics of the Bangkok Extended Region, e.g. Dhaka has a city core area having three Central Business Districts primarily with service sector establishments. Megacity Dhaka has a good number of suburbs where development of the settlements was controlled; however, there are further suburbs where uncontrolled spontaneous development has taken place. The extended region or ‘Exurbia’ of Dhaka has the characteristic of worker settlements that surround the city leading to sprawling growth. These areas are mostly based on informal industrial production with backward and forward linkages to large industrial estates. These areas are linked with the city by expressways and have largely developed spontaneously. Considerable intensive agriculture still exists there. The types of people living here are mostly from rural parts and the areas have poor infrastructure. The challenge for urban governance is clearly evident as the exurbia of Dhaka is not seen to be part of Dhaka in any traditional governance structure.

2.1.4 Asian Megacities and the Extended Metropolitan Region (EMR).

From the above definition and characteristics of Asian Megacities, it is clear that the spatial extent of the Megacity needs to be considered more closely. This area is called the Extended Metropolitan Region (EMR). When discussing the EMR, Macleod and McGee (1996) stated:

‘...it is the economic basis of Asia’s Megacities which are extensive urban areas incorporating a lot of rural activity as well. These areas are today characterised by extremely high levels of economic diversity and interaction, a high percentage of non-farm employment and a deep penetration of global market forces into the countryside. In these Extended Metropolitan Regions (EMRs), one finds that apparently rural areas are coming to adopt economic characteristics usually thought of as urban (pp.419-421).’
They (Macleod and McGee 1996) further explained how these EMRs are growing:

‘…what EMR adds to socio-economic analysis is that it both breaks through the artificial urban/rural dichotomy and emphasises the uneven geography of the regionalization process emphasizing the analysis away from issues of defining boundaries and relations between artificial constructs such as “urban” and “rural” and moves towards a deeper consideration of processes (p.418)’.

Therefore, the processes of economic and spatial development need increasingly to be seen as regional (or metropolitan regional) rather than as rural or urban. Thus, one needs to consider ‘region-based urbanisation’ instead of ‘city-based urbanisation’. This point has important consequences for region-based governance when considering the Megacities’ governance agenda.

Macleod and McGee (1996, p.418) identified some EMRs in ASEAN countries. These are Tokyo and Osaka in Japan, the Shenyang-Dalian Corridor; Beijing-Tianjin; the Shanghai-Nanjing conurbation; and the Hong Kong-Guangzhou belt in China; Taipei-Kaohsiung in Taiwan; the central plains of Thailand; and Jabotabek in Indonesia; and the Singapore-Johore-Riau growth triangle. This thesis adds the Extended Metropolitan Region (EMR) of Dhaka in Bangladesh to this list.

The Asian Development Bank (1996, p.26) in a theme paper ascertained that ‘in some large metropolitan areas, the EMR is given recognition by a formal /administrative/ institutional status, such as JABOTABEK, the Jakarta city region; the Bangkok Metropolitan Region and the Manila National Capital Region. Such EMRs contain a significant share of the national urban population: 20% in the case of JABOTABEK, 50%
in the case of Bangkok Metropolitan Region (BMR), and 15% in the case of Metro Manila National Capital Region (MNCR)." According to McGee (1994, pp.83-84) the features of Extended Metropolitan Regions (Figure 2.1) of Asia are:

- **First**, EMRs include both the urban cores and surrounding economically correlated areas. Often these areas are small and medium sized urban centres. A large productive agricultural land within the formation of the EMR is a common phenomenon. However, the shape of these regions varies and in most cases the main corridors link these urban areas with the core built up areas of the Megacity. EMRs are ‘large integrated urban regions’ and they are the major focus of economic growth for the region.

![Fig 2.1: Growth of core areas in Asia (T.G. McGee 1991, p.13)](image)

- **Second**, EMRs are the major focus of economic growth in their countries. Historically large cities have primarily developed in the coastal areas and they
remain at the core of the regions, having global linkage through ports with densely crowded population in the core areas. Global linkages of these cities have pulled readily available surplus labour in these large urban centres, which in turn has created the necessary precondition for rapid growth of industrialisation in its extended regions. For example, in 1986, the four EMRs of China contained 12 percent of the population, produced 46 percent of the value of total industrial output, and 13 percent of the agricultural output. In the period between 1970 and 1980, while the population of Bangkok Metropolitan Region (BMR) grew from 13 percent to 14 percent of Thailand’s population, 58 percent of Thailand’s non-agricultural economic growth was generated here. Similar figures exist for the JABOTABEK region of Indonesia, the EMR of Manila. It is obvious that these regions are of major importance to the economy of their countries (McGee 1994, p.83).

- **Third**, surfacing of speedy transports has a significant role in the emergence of these regions. Many of these regions had well-developed systems of regional transportation where water transport plays an important role with access to rivers and sea; however, gradually land transport and fast highway and railway linkages have become important. This is greatly facilitated by the creation of arterial linkages through the region that collapse time and space. Megacities would not grow without modern transport linkages.

- **Fourth**, the rapid population and physical growth dynamism in these regions present a large number of problems of environment and mixed land use.

McGee (1994) thought it was important to spell out the implications of the EMRs for the future of Asian urbanization. He argued that:
‘such zones are economically productive, “catalytic” regions for economic growth and therefore economic growth should be encouraged. It has mixed, decentralised, intermediate and small scale economic organisation and the persistence of agriculture offer exciting prospects that involve recycling, use of alternative energy sources, etc., which are difficult to introduce into conventional city space (pp.90-91).’

The Extended Metropolitan Region (EMR) or Desakota regions are important for the future of Asian urbanization because of its diverse economic activities and availability of relatively cheap labour, its dynamic linkages between agriculture and non-agriculture, investment seeking to utilize cheap labour [and] land within a distinctive agro-economic setting (McGee 1994, p.91) . The regions where the desakota process are in full operation are clearly an important part of the ‘settlement transition’ in Asia and these zones (Box 2.1) are to some extent ‘invisible’ or ‘grey’ from the point view of the state authorities. The urban regulations do not apply in these ‘Desakota’ areas and ‘it is difficult for the state to enforce them despite the rapidly changing economic structure of the regions and this feature is particularly encouraging to informal sector and small scale operators, who find it difficult to conform to labour or industrial legislation’ (McGee 1991, p.17-18).

The EMRs are important for the national economies as well as for global linkages, however EMRs have emerging problems. Therefore, EMRs should have strategic plan and policy to boost the diverse economy of such regions in Asian countries. McGee prioritized five aspects for planning and policy formulation for such urban regions. These are (McGee 1994, p.92):

- First, the government should focus on the viability of these regions. These regions require hard decisions to be made by governments through small-town development and rural industrialization;
- **Second**, governments should improve access in these zones of intense interaction which includes building of fast major arterial routes in these regions. For this, the advantage of pre-existing systems of multi-modal communication in the country, such as road, water and rail routes, could be strategically linked in order to increase the accessibility of the region to bring flexibility in the transportation system;

- **Third**, environmental and land use problems in these regions should be strategically planned and administered to keep ‘conflict problems’ to a minimum;

- **Fourth**, the highly flexible labour force that exists in the region and the varying types of work need policies that cope with the human resources of the region;

- **Finally**, the private sector’s activities in these regions have to be addressed clearly. The Private sector largely stimulates development in these regions. Desakota or exurbia regions of Megacities are attractive to the private sector because of cheap labour, cheap land, and more flexible work environments. The economic activities of these regions are diverse, e.g. sub-contracting of production processes, and backward and forward linkages to industries including the informal sector industries.

Governance for these newly emerging city forms will be difficult. It is also clear that the growth and features of these desakota regions vary dramatically between different Asian countries. The emergence of desakota regions offers an alternative to the Western city-centred urban transition. The challenge is to grasp the meaning of this development and plan for the future of the area. The case of Dhaka will be pursued in this thesis.
One of the key issues is why Megacities are growing? What is the source of this dynamism? How economic development happens in Megacities is discussed in the next section.

2.2 Megacity Dynamism: Economic Development and Megacity Growth in the Asian Region

Castells (1998, p.1) noted that the most important phenomenon of human settlements at the end of the second millennium of the Christian era is the formation of Megacities of 10 million inhabitants, that work as magnets for people, functions, and organizations, structuring the country and the world around their social and economic dynamics. Castells (1998) strongly argued that:

‘...Megacities are a new, distinctive spatial form. They have a central coherence. The functions and activities performed in their territory are spatially interconnected. They are not a juxtaposition of different areas, even if we can differentiate analytically spatial subunits. They are one single area in a very fundamental sense: they constitute a complex unit of production, a single labour market and a specific system of power, beyond their extreme cultural and social differentiation. Their territory, even if it is of gigantic size, is used daily by millions of people within the boundaries of the Megacity. As for the rest of the country it increasingly becomes the hinterland for the functions and power that emerge from Megacity (p.1).’

Castells (1998) further explained the importance of Megacities stating:

‘...Megacities are the nodes of the global economy, concentrating the directional, productive, and managerial upper functions, the real political power, and the symbolic capacity to create and
diffuse messages. But they also function as magnets for their hinterlands where they are located. Megacities should be seen in terms of their gravitational power toward a given region of the world (p. 8).’

He referred to the case of Hong Kong, suggesting that Hong Kong is not just its 6 million people, but also Canton and the Pearl River Delta, that is about 60 million people whose jobs, income, and symbols increasingly depend on Hong Kong’s connection to the world economy (e.g. Hong Kong’s firms employ 700,000 manufacturing workers in Hong Kong itself and 2 million in the Pearl River Delta) (Castells 1998, p.8).

Megacities both lead to economic development and are themselves the outcome of this economic development. The Asian Development Bank in its Annual Report (1996, pp.26-27) theme paper (also see Clarke 1996, pp.61-62) stated that ‘there is a generally well-established correlation between economic development and level of urbanisation in the Asian region’. Clarke made this point referring to the per capita income of Asian countries which has grown with urbanization. For this he categorised the economic development of three broad groups of countries and made a comparative table showing the different points in their urbanisation trajectory (Table 2.2). According to the ADB Annual Report, 1996 (p. 26) and Clarke (1996, p.61-62) the groups are:

- **First**, include countries of Australia, Japan, New Zealand and the newly industrial economies of Hong Kong, Republic of Korea, Singapore, and Taiwan, have per capita incomes of over $3,200 per year and levels of urbanisation between 70 and 100 percent.

- **Second**, include countries of the Association of Southeast Asian Nations (ASEAN), plus Fiji and Pakistan, have per capita incomes of between $500 and $3,200 per year and urbanisation levels between 23 and 43 percent.
Third, include countries of South Asian countries, People's Republic of China, and other East Asia and Pacific nations have incomes below $500 and urbanisation levels below 28 percent.

Given the above examples Clarke (1996) noted that:

`..it is particularly important that among the 46 large urban agglomerations in the region in 1990, 10 were in the high income countries, 6 in the middle income countries, and 30 in the low income countries (p. 62).`

These differences can be explained historically. Developing countries like Bangladesh, with most of its economy in the agricultural sector, are developing a global economy link through their one main city and this is where most of the new employment and wealth is being created. Other middle-income countries with cities already having an industrial base are now adding their global services economy mostly to only one or two cities for each major regional area.

The Asian Development Bank (1996, pp.30-32) listed the stages of Megacity growth in the Asian region. ADB have taken the per capita income as a determinant to categorise the levels of Megacity development in different countries and classified sectors with some distinctive features to make a comparative study (Table 2.2). Table 2.2 shows the kind of economic development that determines a Megacity’s level of development.

The growth level of each sector in different categories of countries is the challenge for Megacity management. Economic growth and urbanisation are clearly inter-linked and therefore it is inevitable that Megacities will continue to grow. Much of this growth is determined by the natural growth of the population; however the critical variable would be to what extent a Megacity will absorb agricultural and rural land holdings resulting in
Table 2.2: Stages and Levels of Megacity Development

<table>
<thead>
<tr>
<th>Sector</th>
<th>Stage /Level of Income (per capita city GDP in US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First/Low¹ ($1000 and less)</td>
</tr>
<tr>
<td></td>
<td>Second/Middle² ($1000-$10,000)</td>
</tr>
<tr>
<td></td>
<td>Third/High³ ($10,000 and more)</td>
</tr>
<tr>
<td>Economy</td>
<td>Trade and transport oriented moderate industry</td>
</tr>
<tr>
<td></td>
<td>Informal sector dominant</td>
</tr>
<tr>
<td></td>
<td>Increasingly industrialised but secondary centres developing</td>
</tr>
<tr>
<td></td>
<td>Moderate impact of global economy</td>
</tr>
<tr>
<td></td>
<td>Substantially industrialised but some industries moving to lower cost locations</td>
</tr>
<tr>
<td></td>
<td>Strong impact of global economy</td>
</tr>
<tr>
<td>Population and labour force</td>
<td>Small middle class; very young population</td>
</tr>
<tr>
<td></td>
<td>Substantial middle class; young population</td>
</tr>
<tr>
<td></td>
<td>Large middle class; ageing population</td>
</tr>
<tr>
<td>City structure</td>
<td>Single or only a few centres</td>
</tr>
<tr>
<td></td>
<td>Several multiple centres</td>
</tr>
<tr>
<td></td>
<td>Multiple centres</td>
</tr>
<tr>
<td>Settlement pattern</td>
<td>Predominantly informal settlement</td>
</tr>
<tr>
<td></td>
<td>Mixed formal and informal settlements – growth of extended metropolitan region</td>
</tr>
<tr>
<td></td>
<td>Predominantly formal settlement; redevelopment of city centre</td>
</tr>
<tr>
<td>Transport</td>
<td>Substantial walk and bicycle to work; bus transport number predominates; traffic management through road design</td>
</tr>
<tr>
<td></td>
<td>and intersection control; Public transport often subsidised</td>
</tr>
<tr>
<td></td>
<td>Private cars and bus predominate, mass transit being introduced, traffic jams emerging; management involves</td>
</tr>
<tr>
<td></td>
<td>separation of public and private transport; introduction of mass rail transit</td>
</tr>
<tr>
<td></td>
<td>Public transport profitable; public-private partnership established</td>
</tr>
<tr>
<td></td>
<td>Private cars, bus, and mass transit</td>
</tr>
<tr>
<td></td>
<td>Traffic restraint schemes become essential; further development of mass rail transit</td>
</tr>
<tr>
<td></td>
<td>Fiscal mechanisms used to support traffic restraint</td>
</tr>
<tr>
<td>Water supply</td>
<td>Substantial dependence on ground water; piped water of poor quality, much water unaccounted for</td>
</tr>
<tr>
<td></td>
<td>Ground water table drawn down in high use areas</td>
</tr>
<tr>
<td></td>
<td>More dependence on piped water, 24 hour potable water supplies achieved in higher income cities</td>
</tr>
<tr>
<td></td>
<td>Initial efforts of groundwater management to prevent decline in and pollution of groundwater</td>
</tr>
<tr>
<td></td>
<td>Almost total availability of high quality piped water</td>
</tr>
<tr>
<td></td>
<td>Effective management of groundwater</td>
</tr>
<tr>
<td>Sanitation</td>
<td>Most waste domestic; reliance on on-plot and surface drainage; provision of</td>
</tr>
<tr>
<td></td>
<td>central sewerage constrained by affordability</td>
</tr>
<tr>
<td></td>
<td>Increasing volume of industrial wastes; pollution control mechanisms vary in effectiveness; central sewerage</td>
</tr>
<tr>
<td></td>
<td>coverage expanded</td>
</tr>
<tr>
<td></td>
<td>Pollution control mechanisms much more effective; central sewerage and sewage treatment for most wastes</td>
</tr>
</tbody>
</table>

¹Bangladesh, India and Pakistan

²People's Republic of China, Indonesia, Philippines and Thailand

³Japan and Republic of Korea
<table>
<thead>
<tr>
<th>Sector</th>
<th>Stage /Level of Income(per capita city GDP in US$)</th>
<th>First/Low⁴ ($1000 and less)</th>
<th>Second/Middle⁵ ($1000-$10,000)</th>
<th>Third/High⁶ ($10,000 and more)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drainage</td>
<td>Flooding occurs but substantial natural retention reduces peaks; main drainage through natural watercourses</td>
<td>Severe flooding as natural retention is lost; substantial construction of manmade canals and rivers</td>
<td>Flooding reduced in frequency</td>
<td></td>
</tr>
<tr>
<td>Solid waste disposal</td>
<td>Open dumping mixed wastes</td>
<td>Mostly uncontrolled landfills; mixed wastes</td>
<td>Controlled landfills</td>
<td></td>
</tr>
<tr>
<td>Urban poor</td>
<td>Lack secure land tenure; live in unimproved slum areas; suffer from waterborne diseases</td>
<td>Land tenure regularised, slums improved; disaster reduced; but journey to work time increases up to two hours</td>
<td>Some redevelopment occurs; some of the poor are rehoused in apartments; journey to work time reduced as public transport becomes more efficient</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>Traditional health risks- waterborne diseases; indoor air pollution; inadequate medical measures</td>
<td>Transition to modern health risks; transport and industrial pollution; urban stress, cardiovascular diseases</td>
<td>Emphasis on old age related diseases</td>
<td></td>
</tr>
<tr>
<td>Pollution</td>
<td>Water pollution</td>
<td>Problems from inadequate sanitation and raw domestic sewage</td>
<td>Severe problems from untreated industrial discharges</td>
<td>Overall treatment of municipal and industrial discharges improving</td>
</tr>
<tr>
<td></td>
<td>Air pollution</td>
<td>Severe problems in some cities using soft coal; indoor exposure for poor non-existent capacity</td>
<td>Severe problems from soft coal, manufacturing and/or vehicle emissions</td>
<td>Use of clean burning fuels helps reduce emissions</td>
</tr>
<tr>
<td></td>
<td>Hazardous waste management</td>
<td>Non-existent capacity</td>
<td>Severe problems from uncollected wastes</td>
<td>Pollution control measures implemented and growing capacity to alleviate risks</td>
</tr>
<tr>
<td>Disaster</td>
<td>Recurring disasters with severe damage and loss of life</td>
<td>Recurrent disaster with damage and loss of life</td>
<td>High risks from industrial disasters</td>
<td></td>
</tr>
<tr>
<td>Planning</td>
<td>Uncontrolled land development and use; squatter settlements</td>
<td>Some environmental zoning practised</td>
<td>Effective land use controls</td>
<td></td>
</tr>
</tbody>
</table>

⁴ Bangladesh, India and Pakistan

⁵ People’s Republic of China, Indonesia, Philippines and Thailand

⁶ Japan and Republic of Korea
<table>
<thead>
<tr>
<th>Sector</th>
<th>Stage /Level of Income (per capita city GDP in US$)</th>
<th>First/Low7 (≤ $1000)</th>
<th>Second/Middle8 ($1000-$10,000)</th>
<th>Third/High9 ($10,000 and more)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td><strong>Finance</strong></td>
<td>Low cost recovery of water supply and public transport; low property tax rates; dependence on government finance</td>
<td>Full financial cost recovery for water supply and public transport; property tax rates increased; some financing from the private sector</td>
<td>Full economic cost recovery for water supply and public transport, property tax rates of 0.5-1.5% of value; most financing from the private sector Use of bonds/ access to other sources of funds</td>
</tr>
<tr>
<td>Institutions</td>
<td><strong>Institutions</strong></td>
<td>Weak local governments; central/provincial government agencies dominant role in planning and development; poor operation and maintenance; poor co-ordination</td>
<td>Decentralisation and local government strengthening under way; special purpose agencies created; co-ordination mechanisms improved</td>
<td>Full decentralisation accomplished; co-ordination achieved through well-designed institutional and fiscal arrangements</td>
</tr>
<tr>
<td>Land value</td>
<td><strong>Land value</strong></td>
<td>High in areas with infrastructure</td>
<td>Very high, particularly in areas with infrastructure, due to overall shortages in the supply of land services</td>
<td>High but growth slowing down as infrastructure provision catches up with demand</td>
</tr>
<tr>
<td>Investment priority</td>
<td><strong>Investment priority</strong></td>
<td>Water supply, low-cost sanitation, slum improvement</td>
<td>Roads, water supply, drainage, sanitation, slum improvement</td>
<td>Roads; mass transit; water supply; drainage; sewerage; sanitation; redevelopment</td>
</tr>
</tbody>
</table>


---

7 Bangladesh, India and Pakistan

8 People’s Republic of China, Indonesia, Philippines and Thailand

9 Japan and Republic of Korea
impacts on rural urban migration. It is very difficult to make specific and long-term forecasts as to what scale the growth will take. Therefore, the integration of multi-sectoral development will be the main task of the management of Megacities, especially incorporating the Desakota zones.

The United Nations University (UNU) organised a conference in 1990, where participants explored a range of issues relating to Megacities: the demographic and economic causes of Megacity growth and its features; the economic and social consequences of this growth. The conference revealed many areas of broad agreement, e.g. the need to conceptualize and define the Megacity along a greater range of dimensions than size alone (Fuchs 1994, pp.2-3). The conference did not attempt to achieve any consensus other than to recognize the extreme dynamism of Megacities, especially in Asia.

Economic factors are driving the growth of Megacities. However, they are growing so large and so rapidly that their many problems are overwhelming them.

### 2.3 Problems of Megacities

Megacities typically experience rapid population growth (Table 2.3) and physical expansion that spills over the boundaries of the core cities exacting strong locational impacts on an ever expanding metropolitan region. The impacts constantly challenge the agenda of governance in Megacities. These issues are economic (the informal sector), environmental and social though they are all linked. The rapid growth in Asian Megacities is invariably associated with the growth of a very large informal sector in the economy.
Table 2.3: Megacities and their Population Growth

<table>
<thead>
<tr>
<th>Megacities</th>
<th>Population (million)</th>
<th>Growth rate</th>
<th>% of urban population of the country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagos</td>
<td>0.3</td>
<td>0.8</td>
<td>2.0</td>
</tr>
<tr>
<td>Mexico</td>
<td>3.1</td>
<td>5.4</td>
<td>9.4</td>
</tr>
<tr>
<td>Bangkok</td>
<td>1.4</td>
<td>2.2</td>
<td>3.1</td>
</tr>
<tr>
<td>Bombay</td>
<td>2.9</td>
<td>4.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Calcutta</td>
<td>4.4</td>
<td>5.5</td>
<td>6.9</td>
</tr>
<tr>
<td>Dhaka</td>
<td>0.4</td>
<td>0.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Jakarta</td>
<td>2.0</td>
<td>2.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Manila</td>
<td>1.5</td>
<td>2.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Karachi</td>
<td>1.0</td>
<td>1.8</td>
<td>3.1</td>
</tr>
</tbody>
</table>

These impacts generate problems; the problems are:

Megacities rapid spatial and demographic growth impacts existing land uses pattern those mostly take place in absence of development control. Its rapid sprawling physical growth and the highest level of density of inhabitants create huge demand for infrastructures. Spontaneous development of settlement at the extended region of Megacities hinders the planned urban development very significantly. Further, as the rapid squatter settlement grows in many developing country Megacities, fringe areas are not safe for planned urban development. Megacities create high rate of consumption of natural resources especially land for new settlements, water and energy. It impacts an ecological strain to the environment with serious pollution of water, air and soil including the food chain. Moreover, the accelerated and uncontrolled growth of most of the developing countries Megacities has contributed to the ecological transformation of the surrounding of the city. Providing clean water to their inhabitants in the developing countries Megacities is another problem. The factors of local circumstances or the country’s situation contribute to the Megacities vulnerability, e.g. drying down the ground water aquifer due to excessive ground water drawing, famine in rural areas or harvest damaged by the natural calamities, river erosion, sea level rising and areas prone to cyclonic storms (Brennan and Richardson 1989, pp.117-8; Kotter 2004, pp.2-4).

According to Clarke (1996), ‘Megacities and more recently EMRs, provide best conditions for informal manufacturing, commercial, and other service enterprises to flourish, since there is the widest potential for formal / informal business linkages, as well as opportunities for domestic, retail, and other service industry jobs (p.64).’ Regarding the cause of growth of EMRs, Clarke said, ‘growth of the EMRs is both a cause and effect of the informal employment in the region: such a scattered low density form of urbanization provides the best chance for low income households and businesses to gain access to land
and still remain within a reasonable distance of formal employment and residential areas (p.65).

Table 2.4 shows how Megacities engage huge informal sector employment. It also indicates that the informal sector employment disappears along with the economic development of the city, e.g. Seoul does not have any record of informal sector employment, nor does Bangkok, both of which are now more developed economies.

However, the processes that enable economic development to be implemented involve the governance of the whole metropolitan region.

Table 2.4 Informal Sector Employment in Asian Megacities

<table>
<thead>
<tr>
<th>City</th>
<th>Employed in Informal sector (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangkok</td>
<td>-</td>
</tr>
<tr>
<td>Calcutta</td>
<td>30</td>
</tr>
<tr>
<td>Dhaka</td>
<td>65</td>
</tr>
<tr>
<td>Jakarta</td>
<td>40</td>
</tr>
<tr>
<td>Karachi</td>
<td>75</td>
</tr>
<tr>
<td>Manila</td>
<td>50</td>
</tr>
<tr>
<td>Seoul</td>
<td>n. a.</td>
</tr>
</tbody>
</table>


Informal employment is generally associated with urban poverty. According to Clarke (1996, p.69) ‘the most negative characteristic of Asia’s Megacities is perhaps urban poverty and widespread poverty is a striking feature in a number of Megacities in the Asian region’. Therefore, reducing urban poverty is a great challenge to Asian Megacities governance.

Table 2.5 shows that the number of people who live below the poverty line in the Asian Megacities inversely correlates with the economy of the country.
Table 2.5 Poverty in the Asian Megacities

<table>
<thead>
<tr>
<th>City</th>
<th>Population below the poverty line (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangkok</td>
<td>15%</td>
</tr>
<tr>
<td>Calcutta</td>
<td>33%</td>
</tr>
<tr>
<td>Dhaka</td>
<td>42%</td>
</tr>
<tr>
<td>Jakarta</td>
<td>34%</td>
</tr>
<tr>
<td>Karachi</td>
<td>60%</td>
</tr>
<tr>
<td>Manila</td>
<td>15%</td>
</tr>
<tr>
<td>Seoul</td>
<td>0.36%</td>
</tr>
</tbody>
</table>


Managing urban poverty and the informal sector in Asian Megacities is a great challenge for Megacities governance and is unlikely to be adequately addressed unless the whole EMR is involved as the Desakota region is where much of this informal economy occurs.

All human activity transforms the environment in some way. Megacities do this more than any other human activity. Megacities impact on landscapes and transform them according to their size, and not only within their built-up areas, but also around the region of their setting. Megacities transform the environmental, social and economic aspects of their surrounding region. The inhabitants and the environment of the surrounding region are affected by cities, because according to Hardoy et al. (2001, pp.172-173):

- Cities require a high input of resources – fresh water, fuels, land, and all the goods and new materials that their populations require. The larger the city, the greater the demand on resources in general;

- Cities are major centres for resource degradation. Water is needed for domestic, industrial and agricultural consumption, before it is returned to nearby rivers, lakes or coast in the city region, at far lower quality than it had when it was supplied;
• Solid waste collected from the city is usually disposed of on land sites in the region around the city, while a significant portion of the waste is not collected and finds its way in to water bodies, adding to the pollution;

• Air pollutants generated by the city are transferred through the surrounding region.

Moreover, unplanned and moderately regulated growth and development at the expanding urban fringe areas as well as in the city core areas are a great problem for Megacities. When a city rapidly grows or expands in the absence of an effective land use plan or in the absence of formal controlled development then the private goals of every landholder are fulfilled haphazardly. Landholders do not consider broader public goals for the provision of public spaces, infrastructure for achieving public goods like clean water and good transport access. Within these expanding areas agriculture gradually disappears or declines as land is bought up by people in anticipation of its conversion to urban use. Natural wetlands needed for flood protection are filled in, in the wake of increasing demand for land for expansion. Illegal or informal settlements are generally concentrated on land sites prone to flooding and other natural hazards. Unplanned and uncontrolled city expansion produces a mixture of different activities like industrial estates with high density residential blocks which can be totally incompatible. The unplanned and moderately regulated expansion of city has serious social and environmental cost, e.g. silting or filling of drainage channels and the segregation of low income groups in the worst location without having proper infrastructures. Most importantly when an area is built up, it become almost impossible to redevelop it for many years (Hardoy et. al 2001, pp.174-176).
The effects of fast growth, expansion of city size and complexity are largely correlated, as the growth increases the complexity of the system. The traditional style of urban management in cities with a high population growth rate is generally not able to cope with the highly dynamic and complex interactions of economic, social and environmental problems within Megacities. Thus governance of Megacities is inherently going to be more complex.

It is very likely that the larger the cities the greater the diversity of lifestyles and cultures, interest groups, administrative districts/municipalities/city councils, NGOs and CBOs. Crime is also associated with such dynamic and complex social organisation (see Box 2.2). Crime and violence in the densely populated neighbourhoods are inevitable in Megacities. Lifestyle contrasts among different neighbourhoods in the Megacities are the outcome of social, economic, political, and income disparities. The contrasting lifestyles of different zones are exacerbated when the urban poor are concentrated in low income neighbourhoods. It may not be the Megacities that induce crime and violence; rather poverty, social and political exclusion from the decision-making process are the causes; however, these are more prominent in most of the Megacities. Pinheiro (1993) adds that ‘it is not the city that generates violence: poverty, political and social exclusion, and economic deprivation are all working against the solidarity that would enable city inhabitants to live together peacefully despite their conflicts (p.3).’ The Montreal Conference of Mayors (1989) noted that ‘the basic causes of violence are: urban growth with the marginalization of the underprivileged and the isolation of groups at risk, qualitative and quantitative insufficiency of social housing programs and community amenities, unemployment of young people’.
BOX 2.2: Conflicts, Violence and Crime in Megacities

High levels of urban crime and perhaps especially of violent crime are bringing major changes in the spatial form of many cities of the world and of their built up areas and public spaces. Violent crimes are most visible in cities, and they help create a sense of insecurity that generates distrust, intolerance, the withdrawal from community life, and in some instances, violent reactions. Middle and upper income groups in many cities around the world journey by private automobile between apartment complexes, shopping centers or malls and office complexes each with sophisticated security systems and their own secure car parks so there is little or no necessity to walk on the streets or to use open spaces. High levels of crime and fear of violence have helped to push shopping malls, office complexes and leisure activities to sub-urban areas and in some cities, this has reached the point where it is increasingly rare for middle and upper income groups to visit the city center (International Center for the Prevention of Crime, ‘Urban Policies and Crime Prevention’, paper presented for the Prevention of Crime, Montreal, 1995).

The desertion of neighborhoods by the most constructive elements; the decrease in traffic and the risks of break-ins and armed robbery drive business out. Industries opt for other sites because these areas no longer have the labor force they are looking for and the physical conditions they need to operate. The juxtaposition of these pockets of poverty and more affluent areas generates envy on one hand and fear on the other (International Center for the Prevention of Crime, ‘Workshop on Urban Violence’, 9th UN Congress on Crime Prevention, Cairo, 1995).

Urban violence is the result of many factors which affect each city depending on the specific local context – and there is a considerable debate about the relative importance of different factors. It is because of the significant inadequate incomes which are usually combined with very poor and crowded housing and living conditions, and often insecure tenure, as fertile ground for the development of violence.


Hasan (1993) argued that ethnic conflict; political disagreements; the absence of basic physical and social infrastructure; social and economic pressures; poor public administrations and corruption among city planners; and the squatter settlers in informal areas who are alienated from the main stream of urban life are the causes of violence, crime and conflicts which are closely related and can not be isolated from one another. Therefore, Clarke (1996) prescribes the reversal of continuing horizontal and vertical divergence of society, which requires inter alia: political vision and will; new and innovative planning and implementation strategies that are compatible with the culture, economies, and sociology of low income groups; creating a city government that represents the people; the active promotion of institutions and attitudes that support
urban values and culture; and recognizing the culture of second generation dwellers and their potential valuable contribution to the planning (p.71).

The issue of social equity is more complicated in developing countries. Megacities as large cities experience greater processes of social divergence (Buehler 2003). There are extremes of wealth associated with globalize economy and large sections of the city that are not part of this and are often trapped in their poverty.

Megacities of the Asian region are facing serious problems of housing quality and quantity, air pollution, inadequate water supply, sewerage coverage, solid waste collection and traffic. These features fundamentally are caused by their rapid population growth and are dominant in most of the Asian Megacities. Table 2.6 summarises some data on these problems.

Table 2.6: Characteristics of Megacities in the Asian Region

<table>
<thead>
<tr>
<th>City</th>
<th>Area sq. km</th>
<th>Housing % sub standard</th>
<th>Water supply % coverage</th>
<th>Sewerage % coverage</th>
<th>Air pollution (standard 100)</th>
<th>Water pollution Industrial/domestic</th>
<th>Roads to total land area %</th>
<th>Solid waste collection %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangkok</td>
<td>1568</td>
<td>19</td>
<td>75</td>
<td>10</td>
<td>276</td>
<td>26.8/73.2</td>
<td>11</td>
<td>40</td>
</tr>
<tr>
<td>Calcutta</td>
<td>1380</td>
<td>30</td>
<td>90</td>
<td>3.2</td>
<td>900</td>
<td>-</td>
<td>6-7</td>
<td></td>
</tr>
<tr>
<td>Dhaka</td>
<td>1530</td>
<td>33</td>
<td>65</td>
<td>28</td>
<td>-</td>
<td>-</td>
<td>1.5</td>
<td>50</td>
</tr>
<tr>
<td>Jakarta</td>
<td>650</td>
<td>50</td>
<td>44</td>
<td>partly</td>
<td>-</td>
<td>80</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Metro-Manila</td>
<td>636</td>
<td>39</td>
<td>83</td>
<td>16</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>82</td>
</tr>
</tbody>
</table>

Source: Stubbs and Clarke 1996, pp. 360-37
Due to rapid spatial growth, Megacities have distinct transport problems which are compounded by traffic congestion and deteriorating air quality. Allport (1996) argued that congestion undermines economic efficiency because it creates a polluted urban environment and often degrades the city as a place to live. Congestion threatens prosperity and expectations of an improving quality of life for all sectors of society in a city. Due to the growth in vehicle numbers, Asia’s Megacities are increasingly congested, polluted, and sprawling, and out of control (p.180).

Allport (1996) also noted that the enormous economic, social, and environmental importance of Megacities could be a major asset or a major problem. He therefore, cautioned that,

‘…accessibility is central to the achievement to their intrinsic advantage – their economies of scale and density. But as congestion becomes endemic, the economies of scale break down, and practicable density reduces. They develop towns within a city. The costs of inaction, or ineffective action, are therefore, uniquely high in terms of incomes foregone, urban sprawl, increased pollution, and a progressively deteriorating quality of life (p.183).’

Every day journeys are made by millions of people in Asian Megacities. Most of these journeys are by public and private vehicles. However, Table 2.7 shows there are major variations between cities in their use of transports modes. The role of public transport in the wealthier cities of Asia (e.g. Hong Kong, Singapore, Seoul and Tokyo) is much greater than the less well off cities (e.g. Manila, Kuala Lumpur, Jakarta and Bangkok). Although comprehensive transport planning is not yet widely practised in Asian cities, there are exceptions in Hong Kong, Tokyo, Seoul and Singapore. These cities use fewer private vehicles; they have a greater use of public transport, are less congested and more easily accessible. Hong Kong is mostly served by public transport (74%) and is the most
efficient city in the Asian region serving the most densely populated urban centre (its overall density is 300/ha and it has 1700/ha in its city centre; this compares to 19/ha in New York and 227/ha in its city centre (Newman and Kenworthy 1999). The wealthier the city the better the public transport system is organized in this sample of Asian cities. Comprehensive planning and management of transport is one of the most important aspects of urban governance. It shapes the city’s land use and is critical to the solving of most urban management problems. But good public transport requires a strong public domain in the city which requires good urban governance.

Table 2.7: Asian Cities – Mode of Transport Use, Distance Travel, Journey Time, Air Quality and City Wealth

<table>
<thead>
<tr>
<th>Cities</th>
<th>JtW Private %</th>
<th>JtW Public %</th>
<th>JtW NMM %</th>
<th>JtW (km)</th>
<th>JtW (mins)</th>
<th>Total CO₂ Per Capita (kg)</th>
<th>City Wealth GDP/capita (US$) in 1990</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong</td>
<td>9.1</td>
<td>74.0</td>
<td>16.9</td>
<td>10.9</td>
<td>44.0</td>
<td>760.4</td>
<td>14, 101</td>
</tr>
<tr>
<td>Seoul</td>
<td>20.6</td>
<td>59.6</td>
<td>19.8</td>
<td>11.2</td>
<td>41.2</td>
<td>704.7</td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>21.8</td>
<td>56.0</td>
<td>22.2</td>
<td>9.0</td>
<td>33.1</td>
<td>1317.4</td>
<td>12, 939</td>
</tr>
<tr>
<td>Tokyo</td>
<td>29.4</td>
<td>48.9</td>
<td>21.7</td>
<td></td>
<td></td>
<td>1397.4</td>
<td>36, 953</td>
</tr>
<tr>
<td>Manila</td>
<td>28.0</td>
<td>54.2</td>
<td>17.8</td>
<td>6.1</td>
<td>40.0</td>
<td>528.9</td>
<td>1,099</td>
</tr>
<tr>
<td>Kuala Lumpur</td>
<td>57.6</td>
<td>25.5</td>
<td>16.9</td>
<td>9.0</td>
<td>27.2</td>
<td>1424.0</td>
<td>4, 066</td>
</tr>
<tr>
<td>Jakarta</td>
<td>41.4</td>
<td>36.3</td>
<td>22.3</td>
<td>8.3</td>
<td>39.8</td>
<td>653.2</td>
<td>1, 508</td>
</tr>
<tr>
<td>Bangkok</td>
<td>60.0</td>
<td>30.0</td>
<td>10.0</td>
<td>5.5</td>
<td>31.7</td>
<td>1304.4</td>
<td>3,826</td>
</tr>
</tbody>
</table>

Note: JtW - Journey-to-Work, NMM – Non Motorized Mode / Walk, CO₂ – Carbon Dioxide

Einsiedel (1999) noted:

‘…rapid population and economic growth coupled with the equally rapid deterioration of the urban environment is aggravating already serious social problems, such as urban poverty and related ills. While most Asian Megacities are the engines of their country’s economic growth, they are also hosts to some of the world’s largest slums and worst traffic congestion, the highest level of air pollution and terrible water pollution (p.123).’
Megacity growth is associated with interlinking economic, social and environmental problems. It is hard to say anything is just an environmental problem or just a social problem or an economic problem. This raises the whole question of sustainability and its application to Megacity governance. Thus this thesis moves to consideration of sustainable development in a city.

2.4 What is a Sustainable City?

The Brundtland Commission Report (WCED, 1987) definition of sustainable development—"meeting the needs of the present without compromising the ability of future generations to meet their own needs"—has not often been applied to the debate on the problem of rapid urbanization. The Brundtland Report itself hardly mentions cities. This definition has been applied by Hardoy et al. (2001, pp.352-4) to cities as set out in Box 2.3. This sets out the vision of what a Megacity should be doing.

The United Nations Centre for Human Settlements (UNCHS) released a paper on ‘Sustainable Cities and Local Governance’ in November’ 2000 which stated that:

‘A Sustainable City is a city where achievements in social, economic and physical development are made to last; and has a lasting supply of natural resources on which its development depends (using them only at a level of sustainable yield); a Sustainable City maintains a lasting security from environmental hazards, which may threaten development achievements (allowing only for acceptable risk).’
Box 2.3: Sustainable Development of Cities

Meeting the Needs of the Present...

- **Economic needs** - includes the access to an adequate income/livelihood or productive assets; also economic security when unemployed, ill, disabled or unable to work.

- **Environmental needs** - includes accommodation that is healthy and safe with adequate provision of piped water, sanitation and drainage. Also a home, workplace and living environment protected from environmental hazards, including air and water pollution. Provision for recreation and for children’s play. Shelters and services must meet the specific needs of children and of adults responsible for most child-rearing (usually women).

- **Social, cultural and health needs** - includes healthcare, education, and transport. Needs related to people’s choice and control - including homes and neighborhoods that they value and where social and cultural priorities are met – are also important.

- **Political needs** - includes freedom to participate in national and local politics and in decisions regarding management and development of one’s home and neighborhood – within a broader framework that ensures respect for civil and political rights and the implementation of environmental legislation.

Without Compromising the Ability of Future Generations to Meet Their Own Needs...

- **Minimizing use or waste of non-renewable resources** - includes minimizing the consumption of fossil fuels in housing, commerce, industry and transport, plus substituting renewable sources where feasible. Also, minimizing waste of scarce mineral resources (reduce use, reuse, recycle, reclaim). There are also cultural, historical and natural assets within cities that are irreplaceable and thus non-renewable, for instance, historic districts and parks and natural landscapes that provide space for play, recreation and access to nature.

- **Sustainable use of finite renewable resources** - cities drawing on freshwater resources at levels that can be sustained (with efficient use, recycling and reuse promoted). Keeping to a sustainable ecological footprint in terms of land area on which city based producers and consumers draw for agricultural and forest products and biomass fuels.

- **Biodegradable wastes and overtaxing the capacities of renewable sinks** (e.g. the capacity of a river to break down biodegradable wastes without ecological degradation).

- **Non-biodegradable wastes/ emissions not overtaxing the (finite) capacity of local and global sinks to absorb or dilute without adverse effects** (e.g. especially persistent organic pollutants, greenhouse gases and stratospheric ozone-depleting chemicals).

- **Social/human capital** that future generations need, including institutional structures that support human rights and good governance, and more generally the passing on intact of knowledge, experience and each nation’s or social group’s rich cultural heritage.

According to UNCHS (2000):

‘Sustainable City is fundamental to social and economic development; a Sustainable City (SC) is a universal search for sustainable development; applies specialised know-how in urban environmental management; operates at city/country/region and global levels. Broad-based local governance is key to a sustainable city; is a vehicle for inter-agency co-operation; it supports a learning-based process to advance collective know-how among the cities’ (p.2).

Apart from these normative descriptions of a sustainable city, Newman and Kenworthy (1999) have developed a model to define the goals of a city in a way that is more sustainable. They suggest ‘it is possible to define the goal of sustainability in a city as the reduction of the city’s use of natural resources and production of wastes, while simultaneously improving its liveability, so that it can better fit within the capacities of local, regional and global ecosystems (pp.6-11).’

Newman and Kenworthy’s (1999) model is called the Extended Metabolism Model of Human Settlements (Figure 2. 2). They consider that metabolism is a model for understanding a biological system; it is also a way of looking at the resource inputs and waste outputs of settlements. The approach they have taken illustrates ‘how the basic metabolism concept has been extended to include the dynamics of settlements and liveability in settlements (p.7).’

Newman and Kenworthy (1999) further argued stating ‘the metabolism approach to cities is a purely biological view, but cities are much more than a mechanism for processing resources and producing wastes - they are about creating human opportunity’ (p.9).’ Thus they took this basic metabolism concept and extended it to include liveability in settlements such that the economic and social aspects of sustainability are integrated with the environment (Fig 2.2).
Thus they suggest sustainability for a city is not only about reducing metabolic flows (resource inputs and waste outputs), it must also be about increasing human liveability (social amenity, health, and well-being).

What Newman and Kenworthy (1999) have shown in the ‘Extended Metabolism Model’ has also been suggested in part by the World Bank in its new urban strategy *Cities in Transition: A Strategic View of Urban and Local Government Issues* (World Bank 2000):

> 'If cities and towns are to promote the welfare of their residents and of the nation’s citizens, they must be sustainable and functional in four respects. First and foremost, they must be liveable- ensuring a decent quality of life and equitable opportunity for all residents, including the poorest. To achieve
Therefore, it can be stated that cities require poverty reduction, social and institutional strengthening, infrastructure development and servicing provision, pollution control and ecosystem management simultaneously for the liveability of their citizens. The successful resolution of these problems requires a much broader vision of sustainable cities.

How a city like Dhaka, as an organism, goes about achieving an integrated approach to all aspects of sustainability is the concern of this thesis.

Hardoy et al. (2001, pp.339-340) argue that sustainable development is important for cities at least for three reasons:

1. A large and growing proportion of the world’s population lives in cities and the countries having the highest proportion of their population living in urban areas use the highest levels of resources and generate the most waste and greenhouse gas. On the other hand people coming to cities have fewer children so population growth slows.

2. In urban areas most of the world’s resource use and waste are generated. Therefore, urban-based consumption is mainly responsible for the ecological footprint of humans on the world. This is because cities are where most industry is located as well as where most wealthy people live.

3. Urban policies have very serious implications for future levels of greenhouse gas emissions. Urban policies that encourage energy-efficient production units (through appropriate regulation and incentives) and that also ensure urban forms that are not increasingly dependent on high levels of private car use (for...
instance through appropriate transport and land-use policies) have a major role in de-linking high living standards from high greenhouse gas emissions.

2.5 Conclusions

Megacities are increasingly a phenomenon of the developing world especially in Asia. Their immense problems are bound to exert major environmental, social and economic impacts because of the concentration of needs. A Megacity will have to be efficient in its management and governance. The Megacities of the developing world are confronted by nearly intractable problems with many different challenges. The concept of sustainable development provides a way of starting to think about how governance can proceed in a Megacity. What this thesis will pursue is how critical it is to ensure there are urban management processes that cover the whole EMR. In the next section we will examine what is driving this acceleration to governance of Megacities.
CHAPTER 3 MEGACITIES: GOVERNANCE AND EXTENDED METROPOLITAN REGION (EMR)

Megacities by their population size and unique physical characteristics, as well as their history, present a challenge. This chapter begins with the issue of Megacities governance and their Extended Metropolitan Region (EMR), definitions of urban management and governance and their contexts. It also discusses the issue of city size and the challenge to management to see what forms of governance could help meet this great challenge. A set of ten principles is developed based on the literature on Megacities management/governance that will become the basis of the rest of the thesis.

3.1 Governance and the Extended Metropolitan Region of Megacities

Megacities are constantly needing to change. They respond constantly to the changing global economic agenda and because of their size and growth, to the need for social and environmental change. In order to change and respond appropriately to these challenges Megacities need to have an effective governance system.

Laquian (1995, pp.239-241) has suggested that the core issues for Megacity governance are:

- To what extent is mega-urban region governance focused on their rapidly growing extended metropolises? - The rapid growth of mega-urban regions has significant implications for urbanization patterns. The growth of population has brought diversified sectoral growth which has expanded the cities from core areas often taking land in the EMR of a Megacity. Better understanding is required of why these areas have developed and are needed for the future economy of the city. This will inform
policy which should therefore be applied to mega-urban region governance in an integrated way across the whole.

- **What is the proper scope of area-wide jurisdiction in mega-urban region governance?** - In many instances there is a tendency to limit regional jurisdictions to the built-up areas of mega-urban regions, without making any effort to include the EMR in Megacity governance. This is because neither local government nor national government agencies want another level of government operating through special functional authorities for regional governance, as they fear loss of power. They are suspicious of regional governance approaches or anything that would appear to carve too wide a territory or take over too many functions from them. However, Megacities have grown so quickly and are now so significant that it would suggest the need for certain services with reasonably wide jurisdictions, encompassing both urbanized and the immediate surrounding rural areas and allowing more room for development.

- **What is the proper balance between central government and local government authority in mega-urban region governance?** - In most of the countries where the Megacity is the national capital, central governments do play a dominant role in mega-urban regions because of the sovereign powers they exercise and the importance of the city to the national economy. While most of the central government interventions might lead to efficient delivery of services, they are not so effective in ensuring popular participation and mobilizing community and local efforts. On the other hand local government has closer community consultations but no regional context. Therefore, one of the challenges of mega-urban region governance is the proper allocation of urban services and functions to all levels of government: central, regional, metropolitan, city, town, district, and urban neighborhood.
• **How can the role of the private sector in mega-urban region governance be optimally harnessed for development?** - In many mega-urban regions, an active private sector already exists to provide some urban services more efficiently, to respond more flexibly to changing conditions and needs, and to make urban services possible in a more regular and sustainable way. However, they need a government framework in which to work. It is an important function of mega-urban governance to look more seriously at the possible role of the private sector in efforts to achieve socio-economic development, deliver basic urban services, and arrive at environmental sustainability.

• **How can civic, community-based, and non-government organizations be more thoroughly involved in mega-urban region governance?** - Ethical issues surrounding urban governance such as the extent of poverty, inequalities related to transport, housing, pollution, the provision of health and community services, all require participation of civil society to resolve them at a fundamental level. Arrangements for area-wide regional governance are likely to achieve higher rates of development and more efficient delivery of urban services, when they involve civil society in the decision-making process. One major challenge in mega-urban regional governance is to establish participatory mechanisms, which need to be supported by the policies that explicitly assist distant and disadvantaged groups in articulating their views and integrating these into the policy-making process.

• **How economically and environmentally sustainable are mega-urban regions?** - Current levels of energy and water consumption for basic urban services, and the ever expanding populations of very large urban areas exert so much pressure on the environmental and resource bases of their regions that sustainability often seems
out of the question. At the very least the full urban region impacted by the city should be incorporated in governance initiatives to deal with sustainability and resource management.

Whether the governance of the mega-urban region is responding to the above questions is of great importance for Megacities governance. This raises the question of what is urban governance. This will be the focus of most of this chapter and the next, leading to the development of a set of principles for Megacity governance.

3.2 Urban ‘Management’ or ‘Governance’?

3.2.1 Urban Management

The concept of urban management varies according to the researcher’s views but, from the management point of view, it has to be efficient, integrated and holistic to achieve the objectives or goal of a city. Mattingly (1994) considers ‘urban management is taking sustained responsibility for actions to achieve particular objectives with regard to a particular object.’ He further explained ‘this responsibility is to determine what needs to be done, to arrange that it be done, and then make certain that it is done’ for the city’s development. Mattingly assembled the actions into tasks and processes to get the job done. He then further explained that ‘tasks are seen as areas of city life that require management of any sort, while processes are seen as the means of implementing management through, for example, planning, operating, financing, maintenance, and evaluation functions (p.202).’

According to Mattingly (1994), urban management is:

‘...public administration or growth management or organisational management (pp. 201-205).’
Sharma (1989) builds on this when he says:

‘…Urban management is a set of activities which together shape and guide the social, physical and economic development of urban areas. The main concerns of urban management are to intervene in these areas to promote economic development and well being and to ensure necessary provision of essential services (p.48).’

Lee (1987) noted that urban management has to be functionally linked among the institutions. He suggested that-

‘…Urban development is not a sector like any other traditional sectors involved in the development of urban areas. The merit of urban development is the opportunity it affords to coordinate and integrates...various components on an area basis. An issue is whether such coordination and integration are possible and practical, and whether there is a limit to such endeavor. In the formulation of a program and a project however, it is not only functional linkages that matter but also institutional arrangements (p.30).’

Cheema (1993) stressed the need to engage non-government organizations (NGOs) in the management process. Moreover, he considers that urban management is a holistic concept:

‘…It is aimed at strengthening the capacity of government and non-government organizations (NGOs) to identify policy and program alternatives and to implement them with optimal results. The challenge of urban management is thus to respond effectively to the problems and issues of individual cities in order to enable them to perform their functions (p.7).’

Amos considers that urban management is the responsibility of the municipal governments, but he did not agree that all the services should be operated by the municipal government. According to Amos (1989):

‘…Urban management is concerned with all aspects of urban development, both public and private. It is in no way confined to the services operated by the municipal authority... Good urban management depends on the power to co-ordinate the activities of a variety of agencies at national and local level (p.208).’

McGill (1998, p.464) raised the question of where urban management begins and ends. According to him urban management embraces:

- First, is it just a government concern (dispensing resources) or is it a matter for all players in the city building process? The question therefore seems to be who or what should be the driving force of urban management?

- Second, the institutional dimension in the sense of organization or the sectoral thinking versus the inter-sectoral nature of the city? The question here seems to be, is there a way to ensure an institutional complexity to match the urban complexity it is dealing with?

Therefore, urban management is still not adequately defined, because it is a process and/or framework of study to achieve an objective or a goal for a city. It is important to consider that for sustainable development of a city, there should be some strategic imperatives to share. In the process the municipal government may be the main responsible institution in urban management. However, municipal governments should recognize that the private sector and NGOs are also a part of the urban management
process and that government is not the only player in managing urban development. The distinction between a strategic and operational intervention should be explored in a coordinated way using more than the resources of government.

3.2.2 Urban Governance


‘the manner in which power is exercised in the management of the economic and social resources for development (p.2).’

McCarney (1996, p.13) stated about the above definition that ‘it does not mention anything specific addressing the local level of government.’ She noted however that the issue has been much discussed within the World Bank and related more to local government, covering aspects like ‘community action’ and engagement.

According to McCarney (1996, pp.4-6) ‘urban governance stems from a definition of governance itself though good and workable definitions of governance have been difficult to find’. However, she considers that ‘existing usage seems to fall into two traps’:

- First – governance is simply equated with government; and
- Second – governance often focuses on the state, concentrating on accountability, transparency and management, and thereby ignoring the role of groups in civil society in the governing relationship.
McCarney, Halfani and Rodriguez (1995) examined the dimensions of urban governance and defined governance as:

‘Governance, as distinct from government, refers to the relationship between civil society and the state, between the rulers and the ruled, the government and the governed.’

McCarney (1996) adds that:

‘….when this definition is applied to local level, a notion of urban governance helps to shift thinking away from state-centered perspectives which have predominantly focused on urban management to include elements which, in conventional terms, are often considered to be outside the public policy process. These include civic associations, private sector organizations, community groups and social movements, all of which in fact exert an impact on the features and development of urban centers.’

McCarney (1996) argued that:

‘….the concept of urban governance allows us to reconsider local governments as more than just a technical or administrative arm of central government in the developing world. In the context of urban developing world’s urbanization, governance permits an understanding of local government as more than just a bureaucratic structure with new autonomous powers and functions. When the urban governance is introduced as the relation between the actors in civil society engaging with local state structures, new territory is opened up for reviving local government.’

McCarney et al. (1995, p.101) point to the notion of governance stating that ‘it has far-reaching political and technical implications when applied to the analysis of developing country urban development’. They clarify the notions of urban governance making three points:

- In the first place, it calls for an understanding of the role of the city in the process of national development and the need to address the implications of the defined role in terms of its morphology and operation;
• In the second place, governance requires capturing an integrated profile of the city in terms of its structural parts, as well as its actors and activities operating within the total complex. A fragmented perspective of the city misses the effect of interactions among its various parts;

• In the third instance, governance involves transcending the formal bureaucratic institutions and forging linkages with agencies of civil society. The politics which emerge in this new level of engagement become part and parcel of the governance process. Similarly, urban communities are treated neither as subjects nor as objects of management. Their interests, institutions and resources are organic components of governance.

Porio (2000) argued that ‘conventional definitions of governance focus on government structures and institutional state processes, where politics and power are at the heart of governance; urban governance is thus the political relationship between the state and the different stakeholders/groups in society (p.88).’

UN-HABITAT (Concept Paper released in March 2002) defined urban governance based on operational and substantive expertise:

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

Robinovich (2005) sees ‘urban governance’ as stemming from governance and his point is:

‘…urban governance implies more than the simple localization of development concerns. Urban areas present specific opportunities and challenges, requiring specific responses in terms of
providing for the needs and enhancing the assets of the urban space and preserving and
regenerating the environment. Urban governance emerges as a promising approach to handle
these challenges (p.1).

3.3 Megacities Governance: Challenge of Size?

Using micro-economic theory Alonso (1971) suggested as shown in Figure 3.1: ‘urban
benefits increase with city size in a less than proportional way. Urban costs increase with
city size in a more than proportional way. There comes a point at L where urban costs
are greater than urban benefits, this point defines an optimal city size S1’. According to
Alonso (1971, pp.68-83) ‘beyond that point, cities are too big’.

Prud’homme (1996, p.100) has countered that Alonso’s argument ‘completely omits a key
factor – management’. He further noted that ‘urban benefits and costs are not merely a
function of city size. They are also a function of city management. It is true that certain,
probably many, cities in the world are too big relative to their managerial capabilities. But
some of these oversized cities are in fact quite small’. He also stated that ‘we all know of
cities with 100,000 or 200,000 inhabitants that are too large. Similarly, we know of
Megacities that are under control and are not too large’.
Therefore, Prud'homme (1996, p.100) claimed (in terms of Figure 3.1) that ‘the use of efficient policies can move the benefit curve up and/or the cost curve down. With appropriate management, point L can be moved to the right to XL, and consequently the optimal size of a city can be increased from S1 to S2. Because management can constantly shift the benefit and cost curves and therefore the optimal city size, there really is no optimal city size and the concept itself is not very useful. What counts is not the size of a city but its management. Moving the benefit curve upward and the cost curve downward could be defined as the main task of urban management’.

Borja and Castells (1997, pp.27-33) assert that: ‘Megacities are rather more than gigantic territorial agglomeration of human beings’. But they emphasize that size is not really the defining factor of Megacities. They have to be seen more as nodes of the global economy and centres of the most powerful nations: ‘Concentrated in their territory are the higher functions of planetary management, production and administration, political power
centres, control of the media, and the symbolic capacity of creating and spreading the dominant messages’.

Not all Megacities are dominant centres in the global economy- Dhaka and Lagos, for example, are not - yet in all cases ‘they connect processes and functions affecting hundreds of millions of people in the global economy’.

Therefore, Borja and Castells (1997) stress that:

‘... what makes Megacities a new urban form is their being established around their connection to a global network, of which they are fundamental nodes, while being internally segmented and disconnected in social and spatial terms. Megacities are a spatial form characterized by functional links established over a broad territory while at the same time evincing great discontinuity in their land use patterns. Their social and functional hierarchies are confused, organized in segregated territorial units and scattered with territorial fragments, functional spheres and social segments (p.28).’

Borja and Castells claim that Megacities’ size may not be the key factor determining their governance but what Megacities are doing in terms of global and national context should prove the importance of their governance.

Castells (1998) further argued Megacities are in the forefront of governance challenges, with implications for human civilization:

‘Megacities are not just cities of large size but they are distinctive spatial forms. They have a strong internal coherence. The functions and activities performed in their territory are spatially interconnected. They are not a juxtaposition of different areas, even if we can differentiate analytically spatial subunits. They are one single area in a very fundamental sense: they constitute a complex unit of production, a single labor market and a specific system power,'
beyond their extreme cultural and social differentiation. Their territory, even if it is of gigantic size, is used daily by millions of people within the boundaries and extended regions of the Megacity. As for the rest of the country it increasingly becomes the hinterland for the functions and power that emerge from Megacities and Megacities are the nerve centers of our interconnected global system. If the Megacities become dysfunctional and non-livable settlements it would signal the beginning of a disaster of human civilization (p.1).’

Newman and Kenworthy (1999) emphasize that large cities are more efficient than small cities (Table 3.1).

Table 3.1 Characteristics of Small and Large Cities

<table>
<thead>
<tr>
<th></th>
<th>Smaller City</th>
<th>Larger City</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy and Materials</strong></td>
<td>High energy, Low efficiency</td>
<td>Reduced energy, high efficiency</td>
</tr>
<tr>
<td></td>
<td>Waste of nutrients and materials</td>
<td>Recycling of nutrients and materials</td>
</tr>
<tr>
<td><strong>Economic Diversity</strong></td>
<td>Emphasis on producers, less on manufacturers, little on services</td>
<td>Balance of producers, manufacturers, and services</td>
</tr>
<tr>
<td></td>
<td>Low functional diversity</td>
<td>High functional diversity</td>
</tr>
<tr>
<td><strong>Spatial Efficiency</strong></td>
<td>Low spatial efficiency-dispersed</td>
<td>High spatial efficiency-compact</td>
</tr>
<tr>
<td></td>
<td>Low structural diversity- small, lateral, little variety</td>
<td>High structural diversity- small and large, lateral and vertical, large variety</td>
</tr>
<tr>
<td><strong>Information and Organisation</strong></td>
<td>Low community diversity</td>
<td>High community diversity</td>
</tr>
<tr>
<td></td>
<td>Low community organisation- few networks</td>
<td>High community organisation- many networks</td>
</tr>
<tr>
<td><strong>Environmental Control</strong></td>
<td>Weak protection from environmental perturbations- resources poorly managed, vulnerable to changes in the physical environment</td>
<td>String protection from environmental perturbations-resources tightly managed, more able to buffer and cope with changes</td>
</tr>
<tr>
<td></td>
<td>System instability</td>
<td>System stability</td>
</tr>
</tbody>
</table>

Source: Newman and Kenworthy (1999, p.15)

Large cities have functional and spatial structural/vertical diversity, and they have diverse manufacturers and services. Large cities have organizational diversity and stability to cope with changes. Large cities have more diverse communities than smaller cities. However, Newman and Kenworthy did not say anything about whether it is expensive to live in a large city or not. In fact it is a matter of debate how expensive it is to live in a large city. But the most important issue is how the city is being managed for the liveability of its
citizens. The challenges of Megacity management and governance are discussed in the next section.

It has been noted in Chapter 2 that the Asian form of urbanization around Megacities cannot be understood without the concept of the EMR as a Desakota region, as this differentiates Asian urban expansion from that of other regions. In this regard, Einsiedel (1999) stated that:

‘...Urban development and management strategies used elsewhere in the world are not significant to Asia. The EMR phenomena of Asia’s Megacities have far-reaching implications on governance and on relationships and processes between levels of government as well as among the local governments covered by EMRs. Most EMRs comprise several autonomous local governments, including what may be called the premier city, which plays the dominant role. Coordinating the implementation of area wide or common infrastructure services such as water supply, transport and waste treatment and disposal facilities among these local governments is not an easy task. Neither is the enforcement of environmental regulations, which, by their nature, should not be constrained by administrative boundaries (p.125).’

According to Einsiedel (1999):

‘...the challenge facing Asian-Pacific Megacities is to manage the above problems on a sustainable basis and to improve conditions so that Megacity economies can offer better living standards for their residents. This requires massive sustained and coordinated efforts among Megacity stakeholders. At the heart of this challenge is governance - the relationships and processes between the state (government) and civil society (the governed) (p.123).’

The absolute size of Megacities necessitates metropolitan region-wide spatial organization if they want to make the city livable and to remain efficient. There is a simultaneous need for polycentric, decentralized development and coordinated regional development. This
requires management intervention, which can only be done through coordination by a
metropolitan-wide regional authority having strategic vision. Municipal governments
cannot cope with the metropolitan-wide regional problems that spill over jurisdictional
boundaries. Metropolitan regional level authorities are probably the most effective
institutional tool to deal with the problems of Megacity growth. There may be serious
obstacles in the way of efficient and cooperative coordination with pre-existing levels of
government, both central and local governments. However, the case is there for a single
focus to preside over the development management of the Megacity and to coordinate the
local, regional and national government agencies. How this should be constituted and the
core functions it should take on are the subject of the next section

3.4 Megacities Governance: Core Functions and Principles of Operation

The preceding sections on Megacity governance argue for some metropolitan structures
and that some new visions have already been emerging. These are (i) a shift from a
monopolistic style of service provider/governance to facilitator; (ii) a move toward
decentralization and strengthening of local governments; (iii) a move from command to
coordination of development; (iv) an emerging awareness of the need to enhance
metropolitan region-wide governance; (v) a consolidated participatory decision-making
and implementation process involving civil society and NGOs; and (vi) scope for growing
public-private partnership in service delivery.

What is most notable is that whatever the structure of governance existing in the city, the
fundamental gaps between the demand and supply, related to management to increase the
livelihood of the city, are of major concern today. But how to evolve the structure of
governance appropriate for Megacities and its extended region has remained a contentious
issue.
In this thesis Metropolitan Regional Governance (MRG) is not being suggested as a new level of government but merely creation of new government opportunities. It is suggested because certain integrative functions are not happening in the governance of the Megacity. Despite the need for management flexibility, some important urban management principles have emerged. So far this chapter has identified the need for the following functions to be considered as essential in Megacities:

- **Strategic planning** – to locate where best to direct development in a strategic way that achieves sustainability outcomes;
- **Statutory planning or development control** – to ensure each step of development helps achieve this strategic plan and has sustainability ‘common good’ guidance at its base;
- **Development facilitation** – to help create the partnerships required and the local validation of each project as well as investment coordination;
- **Local engagement** – to bring civil society into planning and development;
- **Coordination** – to ensure horizontal and vertical coordination in the MRG;
- **Financing** – to ensure mechanisms are there to create the ability to implement MRG.

This list suggests that it is possible to develop some core principles of Metropolitan Regional Governance for the Megacities of the Asian region. A set of ten principles lie at the heart of this thesis and have been set out in Box 3.1. The basis of these principles is developed further below and will be applied throughout the thesis.

Einsiedel (1999, p.136) argued that the extent of urban management in Asia’s Megacities will be strongly conditioned by the following factors:
- the particular traditions of decision-making in the country concerned;
- the overall political climate, for instance interventionist vs. *laissez-faire*;
- the income/resource base of the city and its degree of dependence on central government fiscal transfers or grants; and
- the extent to which the Megacity is exposed to global economic forces.

These principles have to be applied carefully with consideration for the local context. An example will be given later of how the ten principles can be applied to Dhaka.

**Box 3.1 Core Metropolitan Regional Governance Principles for Megacities**

1. Must have a geographical area of responsibility that covers the Extended Metropolitan Region.
2. Must have a strategic planning function that can provide a vision for how the city can address its land use problems sustainably.
3. Must have a statutory planning function that can control development to ensure ‘common good’ outcomes consistent with the strategic plan.
4. Must have a development facilitation function that can provide investment coordination, partnerships for infrastructure and a local validation structure.
5. Must have an Urban Redevelopment Authority (URDA) to guide and monitor further development in the core built-up areas in the city.
6. Must have a transparent local process that can help define the ‘common good’ sustainability outcomes from development with all stakeholders.
7. Must have a coordination mechanism to ensure planning and development are integrated.
8. Must have a way of raising the finance for the above process including from land development.
9. Must have a strong link into the national government system to enable good political support.
10. Must have new professional skills in sustainability and local participation.

This section will now analyse and further develop the ten core functions or principles of operation that underlie good governance in Megacities. These will be outlined in turn and will be used as the basis for assessing other Asian Megacities and then Dhaka.
3.4.1 Principle 1: Must have a geographical area of responsibility that covers the Extended Metropolitan Region

Significant analysis has already been presented on this principle. According to McCarney et al. (1995, pp. 120-121), the metropolitan areas’ present distinctive problems are due to their administrative complexity, and to the jurisdictional conflicts associated with metropolitan authority. They also stated that the metropolitan areas in many parts of the world are in crisis due to the fact that, over time, no administrative law has established any correlation between the social, economic, cultural and territorial reality generated by urban dynamics and the territorial structures. They further noted that, as population growth occurs, urban sprawl causes people to move beyond the existing political and administrative boundaries of a metropolitan authority causing problems of financing services and maintaining city, metropolitan and regional representation on issues of common concern.

McCarney et al. (1995, pp. 120-121) add further that problems of coordination seriously affect the delivery of public services: different authorities of the same city cause administrative overlap and lead to uncertainty about areas of jurisdiction, contributing to inefficiency and seriously restricting the productivity of large cities. Different territorial authorities, and an uncoordinated array of private and public service companies within the same city, contribute to increased inefficiency. Further, metropolitan areas face environmental problems because of lack of environmental regulation and enforcement, leading to problems of traffic bottlenecks and congestion and deterioration of the city’s infrastructure. Among the most critical issues are the quality of air, the provision of drinking water, sewage disposal, and the treatment of industrial and domestic waste.
McCarney et al. (1995, pp.120-121) further add that the problem of governing metropolitan areas is further compounded given the inherent political complexity. This complexity involves a reduction in the powers of central, regional and municipal governments, and the consequent transfer of some of these powers to a metropolitan authority. Therefore, the inter-sectoral and inter-institutional coordination between different administrative levels and government through a metropolitan authority is not a technical problem, but it is essentially a political problem.

Hall and Pfieffer (2000, pp.188-189) noted that even within the boundaries of a single small city, the problems of good governance and decentralization can be highly complex and are complicated further by the growth of agglomerations within Megacities. According to them the overlapping of boundaries from urban to sub-urban and even neighbouring Megacity complexes, creates complex and acute problems of coordinating activities and services. Such agglomerations consist necessarily of a multitude of local governments. They further outlined that within such growing urban systems, conflicts of interest between core cities and suburban areas, and between cities of different size, income level and economic function, are endemic. An increasing number of people no longer limit their daily activities to one town or city but they live and work across local borders, where democratic control and representation become insignificant. In most cases this is disempowering political responsibilities in a Megacity situation, which remain either national or local, and hence there is a general lack of regional political organizations.

Hall and Pfieffer (2000, p.189) also argued that this is the great democratic deficit which is common in rich and poor urban regions alike, and which has to be overcome through a reorganization of responsibilities. They did agree that some problems can be solved locally, however they stressed that there are some issues which need the wider view of a region and which can only be solved at the regional level. Therefore they stated some
degree of integration and coordination of small authorities within the larger fabric is essential in the interests of all. A typical solution is creation of Metropolitan Authorities, designed to overcome fragmented responsibilities in interrelated systems.

Hall and Pfieffer (2000, p.190) expressed their concern that central legislation and regional scale governance must create solutions to the regional problem. They further stressed that central legislation and regional scale governance will need to find a balance between different interests, taking account of the facts of overspill and negative externalities. Hall and Pfieffer suggest that defining and formulating these tasks and rules may seem somewhat idealistic, with few real consequences for everyday political life, but regionalism, decentralization and local empowerment can become strong forces if they articulate strong existential needs and form alliances with people who want to control their environment, their neighbourhoods, their school systems or their local transportation system (Hall and Pfieffer 2000, p.190).

According to Hall and Pfieffer (2000, p.190), there are two inter-related key points that should be taken into consideration in designing such solutions:

- The need to create regional bodies responsible for region-wide tasks (mass transit, waste disposal, traffic management, strategic planning, and guidelines for statutory planning) to avoid disruptive inequalities or spatial segregation;

- Without a strong regional influence, the suburb or city that maximizes livability and welfare for its own population, while ignoring the reality of inequality and creating a homogenous local society served by low-cost labour from other communities, will not easily give up its privileges.

Self (1982, p.3) considered the ‘metropolitan region’ to be at ‘a political and organizational crossroads’. He defined the character of ‘metropolitan region’ from a standpoint of
government interventions and plans in order to achieve the political and organizational conditions for effective planning.

But, how are we to define ‘metropolitan region’ for the purpose of this thesis? *First,* we are concerned here specifically with large urban regions, those with 10 million inhabitants or more. More specifically we are concerned with the planning systems of the urban regions, and examples are chosen for their relevance to this objective. *Second,* it is obviously difficult to set graphic limits to our concept of the ‘metropolitan region,’ but one consideration is important, namely that effective planning needs in some measure to embrace the urban frontiers as well as the urban core. The economic forces are continuously reducing population within urban cores and producing rapid growth in peripheral areas. Planners have to look beyond the urban fence not only to the sites of new development but also for many facilities required for the urban complex as a whole, such as land reserves for recreational, agricultural, and other purposes; water supplies; airports; and many other facilities. The transportation framework needs to comprise and serve areas of growth as well as core zones. The same points apply to measures of pollution control. Equally there is interdependence in terms of social and fiscal policies, since urban growth policy should attempt to help with deprivation in the older areas as well as providing a good environment and facilities for residents in new areas. These interdependencies are a fact of life, whether or not public planning consciously copes with them, and, if it does not, the results seem likely to be unnecessary inefficiencies as well as increasing environmental inequalities (Self 1982, pp.3-4).

The meaning and scale of ‘metropolitan region’ depends to some extent upon whether and how it is planned. For example, a city can look well ahead, it can reserve substantial zones of green space for recreation and agriculture, it can push out the poles of growth through the designation of a new town or other nucleated settlements, and it can envisage
major developments in transportation and other infrastructure. If it does this it will inevitably comprehend a much wider area than a city with a plan which is incremental and conservative over its assumptions or intentions about urbanisation. The problem of many Megacities is that decisions have been made to plan incrementally but they have been overwhelmed by the sheer size of the growth and it has completely absorbed all their incremental growth capacity. City boundaries are one way of Megacities recognising their need to think bigger and differently about their growth (Self 1982, p.4).

A final definition cannot be offered for the ‘metropolitan region’, but ‘Metropolitan Region’ could be adopted based on the need for some degree of comprehensive planning. Three aims of such planning can be briefly listed (Self 1982, p.5):

1. The integration and coordination of the three major determinants of urbanisation patterns: the location of residences, the location of employment and major service facilities, and the transportation network;

2. The planning and conservation of the resource base of the urban region, including land, water, air and energy;

3. The improvement of the urban environment, and the allocation of the environmental costs and benefits, across a zone of high interdependencies in terms of locational possibilities and relationships.

According to Self (1982, p.5), for the first purpose, the daily urban system is a good guide to what exists now, and what is necessary to future requirements. For the second and third purposes, the character and density of land uses and the volume of social and economic interactions are important guides. But for operational purposes, the nature of public powers and kinds of planning systems, which exist or could be created, are critical factors.
The ‘Metropolitan Region’ can therefore be advanced only as a basis for special institutions of the public and political decision-making process. Some metropolitan regions are so closely adjacent or overlapping that it becomes a question of judgement and also of planning policies as to whether they should be treated as one or more units. Many ‘Asian City Regions’ incorporate largely rural and remote areas distinct from major centres. Yet these more rural areas might possibly be incorporated within a metropolitan region framework since they look to some centre for specialised services and would retain a more local form of government as well (Self 1982, p.79).

Megacities typically experience rapid population growth and an expansion of economic activities, both of which have strong locational impacts that spill over the boundaries of the core city or cities into an ever expanding metropolitan region. It becomes difficult if not impossible to govern or manage development in such regions within the institutional framework of traditional municipal administrations. There is some debate about whether municipal authorities should be involved in implementation tasks, ranging from land development, housing and infrastructure provision to economic development projects and policies. On the other hand, in many developing countries this is not relevant as metropolitan authorities are either weak or overburdened or they do not see they are responsible for such metropolitan regional issues. There are conflicts in some cases between metropolitan planning and development authorities and so they do not get involved with municipal authorities due to differences of focus.

In most cases, key urban services and/or major metropolitan investments are the responsibility of the central government sectoral ministries instead of a metropolitan regional authority where the Megacity is concerned. With respect to institutions and political structures of a country it is probably wrong to favour a particular institutional solution for all cases. However, regardless of the institutional arrangements, governance
and development management should be formulated at the level of a metropolitan region with some mechanism for coordinating inter-sectoral investments within the region. These functions could be the responsibility of the central government, a regional government, or a metropolitan authority, but they could not be delegated to a municipal administration because its territorial coverage would be narrow (Brennan and Richardson 1989, pp. 126-8).

What has been stressed above is to create or strengthen metropolitan-wide institutions for a large metropolitan region. According to Prud’homme (1996, p.126) these institutions can be either general or specialised, that is specialised in transportation, water supply, planning, education, economic development, environmental protection, or yet other functions (Table 3.2).

Table 3.2: Two Types of Metropolitan-Wide Institutions

<table>
<thead>
<tr>
<th>Issue</th>
<th>General</th>
<th>Specific</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>All or many functions</td>
<td>One function</td>
</tr>
<tr>
<td>Number</td>
<td>Only one</td>
<td>Several</td>
</tr>
<tr>
<td>Area</td>
<td>Entire metro area</td>
<td>Varying perimeters</td>
</tr>
<tr>
<td>Nature</td>
<td>Political</td>
<td>Technical</td>
</tr>
<tr>
<td>Governing body</td>
<td>Elected</td>
<td>Appointed</td>
</tr>
<tr>
<td>Finance</td>
<td>Taxes</td>
<td>Contributions</td>
</tr>
<tr>
<td>Approach</td>
<td>Administrative</td>
<td>More businesslike</td>
</tr>
</tbody>
</table>

Source: Prud’homme (1996, p.126)

Whereas Metropolitan Regional Governance (MRG) as a general institution covers the entire metropolitan area with its extended region, as discussed in Chapter 2, the specific institution might cover an ad hoc area, usually smaller than the metro area, but could in certain cases be larger than the metropolitan area - an area that varies with the function considered. The governing body of a general institution is in most cases elected. The institution is often a sub-national government, usually with the status of a province or region. In some cases, the smaller local governments that compose it, just like the confederate government in a confederation, will create the general institution. In that
case, the elected representatives of the constituting members might appoint its governing body. The local governments that have created the specific institution will usually appoint the governing body of a specific institution. Both kinds of institutions can be financed by user fees and by borrowing, but general institutions are usually granted the right to taxes (Prud’homme 1996, p.126).

The optimal geographical area for the provision of the various services by specific institutions will differ depending on the service. For instance, it is smaller for garbage collection or for recreation than for transportation or water supply. This means that no single perimeter - any general institution – will be adequate for the management of all services. Specific metropolitan-wide institutions are like clothes made to measure, while general institutions are more like ready made clothes. But this greater flexibility has a cost in terms of internal coordination. If there are four or five strong specific institutions in, for instance, transportation, housing, water, and environment, it will be necessary to co-ordinate their activities. Internal coordination is difficult enough to achieve within one single institution. It will become very difficult if it involves different institutions operating in different areas (Prud’homme 1996, p.127).

The most significant principle of the ten principles of urban governance is the geographical focus on the Extended Metropolitan Region. This links to all the other principles and without this focus the other principles will fail to achieve the kind of urban governance needed, especially in Megacities.
3.4.2  **Principle 2: Must have a strategic planning function that can provide a vision for how the city can address its land use problems sustainably**

Strategic planning is where cities develop integrated policy statements and land use plans to guide the provision of infrastructure and development for the future. Strategic planning is frequently about centres and corridors between them. According to the HABITAT report on Human Settlement 1996 (p.297) the characteristics of strategic planning are:

- Cross-sectoral coordination and integration
- Financial feasibility
- Agreement on comparative advantage of public and private sectors in urban development and management
- Enabling role of public sector in support of private sector
- Inter and intra sectoral choice mechanisms
- Linkages to and from national policy issues
- Concern with rural-urban relationships
- Resolution of conflicts among participants
- Regular monitoring and evaluation

The above HABITAT report adds that:

‘…strategic planning is increasingly seen as a participatory approach to integrated urban development to achieve growth management and remedial actions at both the city-wide and local scales. It is not only a process to just a physical development plan for the city but a set of inter-related strategies for city development which includes among others, land, infrastructure, finance and institutions. The strategic planning aims at enabling all public and private initiatives to promote economic growth, provide basic urban services and enhance the quality of the...
environment. At the city-wide scale the process involves multi-sectoral coordination of spatial planning, sectoral investment plans, financial resources, and institutional frameworks to meet inter-sectoral city development objectives over a longer period of say 10-15 years—strategic planning. The particular form of integrated urban development will vary according to the country and city context. The critical variables will include the degree of decentralization of decision-making and financial autonomy, the relative roles of the public and private sector and the health of the macro-level economies (p.297-8).'

Megacities are unable to govern and/or function efficiently if they retain their original mono-centric spatial structures. The spatial extension of any metropolitan region under conditions of rapid population growth spontaneously creates at least a few sub-centres. From the governance or management point of view it is necessary to develop polycentric structures or sub-centres in varying numbers in a Megacity. The key point in any spatial strategy discussion of a Megacity is that once cities reach the Megacity scale a polycentric strategy is not only sensible but inevitable. Persisting with a mono-centric structure would result in intolerable congestion and a major breakdown in metropolitan efficiency. However, a metropolitan region with polycentric structures requires a strategic plan that can enable development management to occur. And it requires institutional arrangements at a regional level (Brennan and Richardson 1989, pp.121-122; Einsiedel 1999, p.135).

Borja and Castells (1997, p.187) give another perspective on why strategic planning is needed. They suggest that each metropolitan region has a kind of ‘branding’ that is set by the governability of the central city. Thus strategic planning not only assists with how the whole region works but with how the style of the city is communicated from the central city out to its fringes.
Most people writing about cities (and Megacities particularly) stress the value of strategic planning. Thus a large regional urban territory demands a Strategic Planning Authority (SPA). Self (1982, pp.136-137) suggests that the following points may help to define the possible functions of the Strategic Planning Authority (SPA) of a large city:

1. ‘The SPA would be concerned (as corporate planning is in principle) with general community objectives. The SPA would advance its goals through the best organizational means available. Thus it would utilize smaller local governments, voluntary organizations, Non-Government Organizations (NGOs) and other private organizations for this purpose wherever practicable.

2. Its direct operating functions would be limited and related clearly to its goals. It would thereby gain a more objective and balanced approach to coordinating development plans and policies of other agencies. It would have strong powers to review (and then to accept, modify or reject) the physical projects and financial plans produced by all major agencies within its region.

3. It would have powers to provide local governments and other bodies with financial and technical assistance. It would use these powers to help local communities that were poor or had special problems and to provide support facilities which might include certain specialized services requiring large-scale provisions.

4. It would prepare a general regional plan and would have special power to intervene to aid in the plan’s realization by means of advance land acquisition, industrial and economic promotion, the authority to undertake development projects by local government, and other measures.

5. Its exercise of financial powers would be critical. It should have general powers to approve and coordinate all major investments within its area and to operate an equalization scheme between local governments. It would be able to borrow for its own purposes and to operate a special fund for discretionary assistance. It would preferably draw upon an independent source of taxation.

6. The SPA would need to have an effective political base. Therefore it should presumably be directly elected, or if not it must at a minimum possess the full support of higher levels of government’.

82
Self (1982) adds that –

‘...the kind of planning which an SPA should perform would be concerned equally with social, economic, and physical (environmental) goals (p.137).’

Self (1982) further adds that it would be utopian to envisage a full integration of all public policy making, but some moves in this direction should be possible if policy issues can be effectively redefined, political support can be amassed for a new approach, and professional techniques can be synthesized. These requirements are the necessary basis for any successful administrative reform for a large city.

The above points are no more than the general roles which a Strategic Planning Authority (SPA) of a large city might play. The acceptability of the powers of such an organization or the possibility of the creating of such an organization depends upon the politics in each country. However it is hard to imagine a Megacity governance system without some sense of strategic direction that encompasses all parts of the city, from its core to its edges.

3.4.3 Principle 3: Must have a statutory planning function that can control development to ensure 'common good' outcomes consistent with the strategic plan

Strategic planning, while necessary, is not sufficient and must be complemented by statutory planning, which assesses developments in terms of how they fit into the strategic plan. This enables annual assessments to be made of how the strategic plan is being met. Statutory planning regulations, defined broadly to include prohibitions, authorisations, and permits, constitute a powerful mechanism of urban governance. This instrument continues to be useful, but is asymmetrical in the sense that regulations can prevent households or enterprises from doing what they would want, but cannot force them to do
what the planner wants. Enforcement can be difficult if plans are too far away from what people want.

Most municipal planning regulation will imply some sort of expenditure. The annual budget preparation, which consists of assessing all expenditures, is a good time to review all of these municipal actions, ensure that they are in line with the strategic plan, and compare them across sectors, thus providing a framework for inter-sectoral thinking and co-ordination (Prud’homme 1996, pp.107-114).

Municipalities and the cities within the territory of a Megacity are the organizations to perform statutory planning functions. Local governments have traditionally been given this power as they are closest to the places and people involved in the decisions, and the alternative would imply a large-scale bureaucracy that has really only been attempted in communist regimes. However there are a number of models where cities have created Metropolitan Planning Authorities where most statutory planning approvals and decisions are made at local level but they are linked back to the metropolitan strategic level through a referral process whenever something regional is implied. Thus a partnership can be created between the two levels of governance. Most statutory power is exercised by local government and this is where most planners are employed, but there is sufficient regional control to enable a broad statutory function to be maintained at the regional level.

Statutory planning functions are essential for any city but for a Megacity the necessary extra dimension is having a regional statutory function that enables the local approvals process to occur but still keeps control of regional issues.
3.4.4 Principle 4: Must have a development facilitation function that can provide investment coordination, partnerships for infrastructure and a local validation structure

Development facilitation steps in where planners cannot go, i.e. to the area where a city seeks to set out, at least in demonstration form, what it wants to see happen. Government development functions cannot go too far beyond what the market is suggesting but they can change the direction of things through showing what is possible. Development facilitation is the basis of New Towns and is often evoked by cities to help manage development on the urban fringe where there are some difficulties, e.g. low-lying land or conflicts over land use (see Sydney Metropolitan Strategy – http://www.nsw.gov.au where a Growth Centre Commission was created to manage a new land release area).

In Sri Lanka the Urban Development Authority (UDA) is a multi-disciplinary organization engaged in Urban Planning and Sustainable Urban Development. The UDA is responsible for the planning and development of urban areas. It also provides consultancy services to the Provisional Council and Local Authorities in relation to urban planning and development issues. The UDA safeguards strategic land for the needs of future development as well as the requirements of investors. It also supervises and executes major projects for client organizations (http://www.uda.lk – accessed on 18-11-2005).

The main activities of the UDA of Sri Lanka are to carry out integrated planning and physical development of declared urban areas; formulating and submitting development plans, including capital investment plans; undertaking the execution of development projects and schemes; formulating and implementing urban land use policy; developing environmental standards and preparing schemes for the environmental improvement of
urban areas; and providing technical planning services (http://www.uda.lk – accessed on 18-11-2005).

Chennai Metropolitan Development Authority (CMDA) of India prepares development plans, e.g. Master Plan or Detailed Development Plans for spatial development of Chennai Metropolitan Area, with a public consultation process. It identifies, formulates and implements projects including those envisaged in the plans. It also regulates development activity in accordance with rules. It coordinates and monitors projects executed through government agencies, non-governmental organizations and community-based organizations (http://www.cmdachennai.org – accessed on 18-11-2005).

Chennai Metropolitan Development Authority (CMDA) is engaged in improving environmental quality as well as quality of life in Chennai Metropolitan Area (CMA) through the planning process and implementation of plans and urban development projects. It coordinates with various agencies in implementing the designated projects. It controls and regulates the developments and thus promotes better living conditions. It provides and maintains an effective system of counseling and a consultancy service for the benefit of citizens of Metro Chennai. It answers all questions and queries raised by the public and civic associations on all eligible aspects of plans and projects. It provides a system of enforcement to monitor the developments to comply with the rules. It encourages the members of the public to express their views freely on the difficulties they face, which could enable CMDA to effect suitable changes in their system. CMDA provides planning approaches required by the Town and Country Planning Act (http://www.cmdachennai.org – accessed on 18-11-2005).

These organizations are typical of the development facilitation function in cities. They do not manage all development but by their demonstration role they can help set the
character of development and they can intervene where there are difficult development problems. Most Megacities need some kind of development facilitation function.

3.4.5 Principle 5: Must have an Urban Redevelopment Authority (URDA) to guide and monitor further development in the core built-up areas in the city

It was mentioned in Chapter 2 that the major cities are characterised by: (i) a city core built-up area - often the city administrative unit, (ii) a metropolitan ring often significantly built-up, and (iii) an Extended Metropolitan Region (EMR) which is characterised by few clear boundaries between urban and rural settlements, a dispersed pattern of manufacturing plants and some commercial functions, as well as a dispersed haphazard pattern of new informal housing developments and individual construction (McGee 1991).

Much of the focus of development in Megacities is either in (a) the city core where a whole raft of new modern buildings tend to have been built across the world with the same kind of symbolic and practical set of functions related to finance and government; or (b) on the city fringe where so many new housing and industrial estates have burgeoned in recent decades. However, a new challenge now faces all cities, both large and small, as they face the realities of decline in many of their inner and middle areas. For these areas a function is required in urban redevelopment.

A large city with different development issues in different parts demands different development facilitators for different functions. Thus it has often been seen to be necessary to create an Urban Redevelopment Authority to address any issue relating to the redevelopment of already developed areas.
Development facilitation for redevelopment is generally more complex than on the urban fringe. It often involves dealing with contaminated land, requires land packaging, considerable community engagement and usually requires considerable up front capital to enable the process to overcome all these problems and enable redevelopment to occur.

The Urban Redevelopment Authority (URA) of Singapore is Singapore’s national authority for land use planning. URA prepares long-term strategic plans, as well as detailed area plans, for physical development, and then coordinates and guides efforts to bring these plans to reality. With a limited land area of 699 sq km, URA faces immense challenges in land use planning to house the needs of a nation state. However, prudent land use planning has enabled Singapore to enjoy strong economic growth and social cohesion, and ensures that sufficient land is safeguarded to support continued economic progress and future development. URA of Singapore has to take into consideration not just the needs of the city but all the needs of an independent nation and provide sufficient land for economic growth and future development. Given the small area of land, URA of Singapore has been judicious in land use planning which is critical for the nation’s future and this generally has meant some kind of redevelopment.

URA’s mission is to make Singapore a great city in which to live, work and play. It carries out its mission by planning and facilitating the physical development of Singapore, in partnership with the community. The main challenge of URA of Singapore is to find smart solutions so that there will always be space for all the needs of Singapore (http://www.ura.gov.sg –accessed on 18-11-2005).

The Development Control Division (DCD) is a frontline arm of URA of Singapore. The DCD is the core business division of URA which evaluates and grants planning approval for development projects in the public and private sectors. In approving development
applications, it is the aim of URA to facilitate orderly development according to the planning intentions as stipulated in the statutory Master Plan and the prevailing control parameters. URA strives to deliver service as URA works in partnership with building industry professionals and the general public to facilitate development (http://www.ura.gov.sg –accessed on 18-11-2005).

The city of Auburn in California established the Auburn Urban Development Authority (AUDA) in 1987 and adopted a Redevelopment Plan for the Auburn Redevelopment Project in 1987. Redevelopment is a tool used by cities and counties in California to revitalize blighted areas. Through redevelopment, a project area receives financial investment to:

- Reverse deteriorating trends
- Create jobs
- Revitalize the business climate
- Rehabilitate and add to the housing stock
- Gain active citizen participation and investment

The AUDA is a separate and distinct legal entity from the city of Auburn with a Board comprising the five city council members. The city manager seems to be executive director of the AUDA (http://www.auburn.ca.gov –accessed on 18-11-2005).

The focus of urban development in the past fifty years has been on the fringe and city centre but as Newman and Kenworthy (1999) noted there has been an inexorable shift towards redevelopment in recent decades. They suggest this is because of the Marchetti constant which is the constant travel time budget of around one hour per person per day. Cities which have reached this limit to their growth outwards are now redeveloping as otherwise the growth just adds to the dysfunction of the city.
Megacities are the ones that are most likely to be reaching these kinds of limits to growth outwards and hence are likely to most be in need of an urban redevelopment function to help in their Megacity regional governance.

3.4.6 Principle 6: Must have a transparent local process that can help define the ‘common good’ sustainability outcomes from development with all stakeholders

McCarney et al. (1995, pp.128-30) discussed about urban governance, underlying the importance of civil society and most importantly its relationship to the state. They argue that the inseparability of civil society from the process of governance is not simply a functional construct which has emerged as a style of management. It is indeed critical for any really useful or sustainable outcome. They state that governance should recognize the existence of a complex civil society and the magnitude of its impact on the process of urban governance agendas. They assert that it brings into play the social and political dynamics which are generated in the process of development. Urban governance has to capture this political facet through the exercise of power and authority to direct and regulate urban dynamics.

The political dimension of urban governance includes the building of profiles of the civil society and analyzing the growth (and maybe decline) of popular institutions such as civic organizations, voluntary associations and non-governmental agencies. Governance should identify the role of non-formal institutions in community development and explore the factors which promote and hinder the growth of such institutions and the internal dynamics of such groups. When the state fails, the informal sector institutions may deliver employment and the social services. Given the above arguments McCarney
(1995) et al. further state that governance should underscore the organic linkages between bureaucratic activities and the action interests and aspirations of civil society.

Governance requires concentrating on the tools, techniques and procedures of planning, organizing and executing socio-economic activities, yet the centrality of the human dimension has to be maintained. It is important that governance should search for the means of creating linkages between civil society and the state, while local government systems and metropolitan authorities are important actors in these processes. Here the state should create the conditions and space for the growth of civil society. The state can do it through legal instruments, social and economic infrastructure, resource assistance and the devolution of power and authority. Good governance attributes consolidate this enabling process. The state should be involved in the process of the growth of the civil society and its capacity to engage the state in the decision-making process. If this happens civil society would be able to complement the state as well as to act as a countervailing force when the interest of the ‘common good’ is not catered for.

Porio (1996) stressed that:

‘…the challenges of urban governance in Asia have assumed centre stage because of the rapid economic growth of this region. The increasing polarization of social classes, the increased pressure upon city governments, and the dynamic character of civil societies in this region present enormous challenges and opportunities for both the state and groups in civil society. To make cities livable and sustainable, these groups need to forge more creative and effective linkages between policy interventions, market forces and community responses facilitated by NGOs/UPOs (pp.79-80).’

According to Porio (1996, pp.80-81) there are two strategies available to meet the above challenges:
First – ‘State support for beneficial policies and programs must be broadened. The social development advocacy of civic associations, development-oriented NGOs and people’s organization have centered on progressive social reforms. The current middle class character of social development movements also points to the need to include elites and business groups in the process of urban development in addition to NGOs (Non Governmental Organization)/CBOs (Community Based Organizations)/UPOs (Urban People’s Organization). The challenge, then, for civil society in its efforts to engage state bureaucracies is to push for broader political and economic reforms which have a greater distributive potential. Similarly, creative policy, structural supports to industries and human resource development, are needed to broaden access to jobs among the poor. The remaining challenge is in how institutional partnerships between groups in civil society and the state will be forged and how broad interest in creating quality and sustainability in urban life – through shelter, jobs and livelihood – will be maintained.’

Second – ‘Solidify the state’s role as moderator and facilitator in this larger process. The modes of sustaining urban settlements have been changing and the role of the state must be redefined. Owing to dwindling state resources, recognition of the capabilities of the private sector, and of people and communities, state institutions and bureaucracies must continue to create collectivities informed by strategic partnerships with the private sector and community organizations. Only these efforts will respond effectively to the increasing demands for housing, services, and economic opportunity in an urban area.’

The UN Urban Governance Initiatives (TUGI) stresses the importance of an engaged community and a transparent process for core urban governance decisions. Only in this way can corruption, nepotism, unbalanced and uncompetitive corporate greed, the needs of the poor and weak and the significance of the environment be addressed in major and minor decisions (TUGI, personal communication).
Engaging the local community in development decisions is no longer a soft option in cities. People want to help create their own futures in the cities of the world so they are not going to be left on the side watching as major capital or big government ride over them. Hence, Megacities are going to need a local participation process to be built into the Megacity governance system.

3.4.7 Principle 7: Must have a coordination mechanism to ensure planning and development are integrated

ADB (Annual Report 1996, p.35) noted that, historically, Megacities have been governed under a variety of structures - consider the strong central control in Shanghai, the special provinces of Jakarta and Bangkok, the tier system in Manila and Tokyo, the development authorities in Delhi, Mumbai, Dhaka and Karachi, and the inter-municipality arrangements in Calcutta. These structures are complemented by a variety of parastatal agencies for particular services, such as water and sewerage. Deficiencies in these institutional structures include poor coordination between government agencies and between such agencies and the private sector in planning, sectoral investment, operation, and maintenance responsibilities; poor internal organization and management structures; deficient monitoring of sectoral performance.

Einsiedel (1999, p.133) noted that in most of these cases, the roles of the city government, the metropolitan authority, the state or provincial government (as in the case of Mumbai and Calcutta), and the national government are not very clearly delineated in operational terms. Thus there is overlapping of functions and duplication of effort or, in many instances, inaction on critical issues due to unclear responsibilities.
McGill (1998) raised an important point that:

‘…looking at cities in a holistic way offers an indicator for the institutional question but does not, of itself, answer the question about what should be the driving force for urban management. With a common strategy, irrespective of organization, all the players can participate in the urban management process, by way of coordinated city building. The players range from central to local government and on to the private sector. The private sector includes both the formal and informal components. This captures the requirement for both the horizontal and vertical integration. Therefore, integration is very important when attempting to organize institutions for urban management (p.464).’

McGill (1998, p.467) suggests that the integration here is both horizontal (across sub-sectoral boundaries) and vertical (strategic and operational), i.e. it occurs at both levels of government.

Sivaramkrishnan and Green (1986) strongly argue from the Asian experience that:

‘... to meet minimum organizational needs, emphasis should be placed on the formation of networks of existing institutions, in both the private and public sectors, to channel information and policy proposals to a metropolitan management team for overall planning purposes, and subsequently, to recommend related development projects and programs to it for metropolitan review, selection and financing (p.83).’

This highlights the need for sound inter-agency arrangements. However, such arrangements are only a means to an end. In this immediate context, the end is a common planning process.
Clarke (1985) cites an example from Jakarta:

‘…given the evident fragmentation of decision making and the difficulties in project implementation for both levels of government, a more integrated approach was stressed through better coordination between the socio-economic, financial, physical and institutional planning sectors (p.44).’

This is the same idea that is now being developed by the sustainability agenda except that the integration is being forced by the need to reduce the urban ecological footprint as discussed in Chapter 2. The sustainability agenda for cities stresses the need to be holistic and integrated (Newman and Kenworthy 1999).

Stren et al. (1992) argues that intervention in the urban system for governance has to be both holistic and integrated. According to Stren et al. (1992):

1. ‘Urban policy must be formulated holistically and multidisciplinary (in terms of sectors and in terms of the relationship between the urban and rural environments) and the approach should recognize the diversity of the urban experience and ways in which different sectoral policies affect the urban areas.

2. The environmental approach must involve a higher level of inter-sectoral co-operation because it impacts over many sectors and boundaries.

3. The multi-dimensional dynamism and diversity in the city life must be reflected.

4. The complex interactions of elements that make a city dynamic should be brought into the approach of any strategy to bring some coherence into the urban policy field because all human activities are closely linked, as the urban systems concept itself implies.
5. Air, water and wastes in the urban economy are a good example of the importance of viewing urban problems in an integrated and spatially coherent manner.

Cheema (1987) considers the challenge of the urban management process to be coordination. According to Cheema (1987):

‘Two types of co-ordination problems are discernible; horizontal, among the central, regional and municipal level agencies, respectively, in the city; and vertical among related activities of several levels of government and administration concerned with urban development (p.154).’

There is no disagreement that coordination is a critical dimension of Megacity management. Because of the nature and scale of the Megacity, especially where it is developing in the form of an EMR, there is a strong need for horizontal coordination of public and private actions using metropolitan-wide institutions with general or specific sector functions, through more formal groupings of local governments involved in the EMR and other forms that allow public and private interest groups, including NGOs and CBOs, to work together on EMR issues. Similarly, Megacity/EMR development highlights the need for vertical coordination between central and/or regional and local governments in matters such as the macroeconomic impacts of the Megacity/EMR, allocation of central government funds, sharing of taxes, and policy guidance. Underlying questions of vertical coordination is the wider issue of responsibility for managing Megacities. Given their vital and growing contribution to national economic development, how much central government involvement is appropriate and how many functions should be the responsibility of local or metropolitan governments in the Megacity/EMR? At the very least there must be coordination between Megacity
governance and national governance (Prud'homme 1996, pp.107-124). This is developed further in Principle 9.

What matters is that the Megacity area is divided or subdivided into many small jurisdictions or local governments. In most cases, there is one local government, usually located in the centre of the area and often referred to as the city centre, which dominates all other local governments in terms of population, employment, and functions, although not always in terms of area. Horizontal cooperation is a quasi-impossible task. In one sense, all the local governments of a Megacity are in the same boat and will jointly suffer or benefit from the fortunes of the area. But in another sense, these local governments are engaged in a competitive and even antagonistic relationship with each other. Therefore, an Extended Metropolitan Region (EMR) of a Megacity needs area-wide interventions (Prud'homme 1996, pp.123-124).

There are a number of instruments and options to meet the contradictory objectives of having many, small local government’s concurrent with metropolitan-wide action. A first solution is to create or strengthen metropolitan-wide institutions. The institutions can be either general or specialised. The specialised institutions can deal with transportation, water supply, planning, education, economic development, environmental protection, or yet other specialised functions based on the special problem the Megacity faces, like flooding in the case of Dhaka. The general institution, often called metropolitan government, covers the entire extended metropolitan region – an area that has been defined in Chapter 2. The general institution may act with sub-national government status over a region (Prud’homme 1996, p.126).

All the above coordination will have to be achieved in a regional administrative setting for a Megacity. For this we need to define the ‘Metropolitan Region’ of a Megacity in order to find some definitive regional setting for Metropolitan Regional Governance (MRG).
Metropolitan Regional Governance (MRG) can be regarded as a priority setting and rule setting agent for internal, vertical and horizontal coordination at the Extended Metropolitan Region (EMR) level of the Megacity. Metropolitan Regional Governance (MRG) will need metropolitan-wide coordination based on strategic vision. Metropolitan Regional Governance (MRG) is therefore a highly contested political exercise, though its need has never been more obvious.

Within a Megacity, there are a large number of actors, spatial issues, and other concerns that have to be coordinated for the city to work well and to develop without disparity. The most important is sectoral investment and functioning coordination. The various sectoral departments do not have the same relation to space: some, like the finance and to a lesser extent the economic department, look at the municipality as a whole. Others, like the land or the housing department, are much more sensitive to spatial issues. The net result is often a mismatch between the outputs of the various sectoral departments. But how could this inter-sectoral coordination be achieved? Prud’homme (1996) argued that:

‘...forward thinking or strategic planning as it is often called, is a must for urban management and the way to ensure inter-sectoral co-ordination (p.114).’

However it is possible to have a strategic planning function that is not well coordinated across various government functions. Often this coordination is a political coordination linking various functions and powers. Strategic planning is generally a public service exercise though it also can be political. Political coordination of functions across a metropolitan area is often one of the missing links in cities. Thus the extra function of co-ordination is added to the list of Megacity governance principles.
In many countries the local governments are mainly financed through transfer of funds from the central government. This raises the dependency and inefficiency of governance at the local level. As mentioned in the previous section issues of urban poverty or environmental degradation are often spatially defined and require intervention from government sources. This generally must come from formal taxation or rating – both at local and central government level. However, the need for financing projects through the Metropolitan Regional level of governance generally requires a special kind of financing mechanism. This mechanism is often linked to land. Growing Megacities have an in-built ability to tax land as their growth is always raising land values. A land tax can help with the kind of infrastructure that is needed for special projects such as slum development. Another financing mechanism involving land is value capture associated with increased land value around new transport that can be used to finance urban transport projects (Newman and Kenworthy 1999).

UNHABITAT (1996, p.174) noted that local governments around the world, especially in the developing countries, face problems to finance their functions, because:

- Local governments do not have scope to raise enough revenue to carry out the functions assigned to them, because of central government restrictions.
- Matters are getting worse rather than better because local revenues are not adequately responsive to changing needs.

Local government finance is important because, regardless of how large local government may be, in most countries they have an important role in the provision and utilization of local public infrastructure and public services. How local services are financed may have
McGee (1995, p.354) noted that ‘the establishment of a system of Mega-Urban regional governance relies upon adequate sources of financing and the need for effective fiscal management of taxes.’ He stressed that in order to accomplish the management of taxes, priority must be given to a strategic planning management approach in the region.

Financing urban development and services is a function of any city that wants to help shape its development rather than just leave it all to market forces. Most Megacities have adopted some kind of development financing function and most commentators want to see this function expanded, especially in the developing Asian Megacities.

3.4.9 **Principle 9:** Must have a strong link into the national government system to enable good political support

Megacities are so important that national governments have a right to intervene in them. This intervention is often called vertical coordination. Prud'homme (1996) emphasises that:

‘Central government intervention is needed to reduce disparities among the regions in a country. The main instrument utilised to reduce regional disparities is the central government budget. The redistributive functions of a central government budget can greatly contribute to erasing the regional disparities (pp.114-116).’

The reduction of disparities cannot be left just to regional and local governments. This is obvious for inter-regional disparities. A non-existent central government budget for a city means a spatial injustice. The more decentralised the system, the less re-distributive it is
between regions. Each local government can undertake its own re-distributive policies and reduce income disparities within its own jurisdiction but the overall perspective of a regional planning body covering the whole EMR can provide the necessary function of focusing resources on the more needy parts of the city.

This analysis shows that a certain degree of central government intervention in the provision of local public services in cities and even Megacities is unavoidable. The issue therefore is to coordinate this necessary intervention with metropolitan management.

Allport and Einsiedel (1986) identified major problems of urban management including institutional fragmentation. To overcome the problem of urban management in the cities of developing countries they have devised an annual cycle of activities linked to the national budgeting system. They suggest a new urban management which could:

'....only be achieved, either by giving the city government power (over government ministries) to dictate what should happen within its area or devising some form of inter-agency body comprising the city government and the major resource allocation and spending agencies, reliant for its effectiveness on persuasion (p.34).'

Einsiedel (1999, pp.135-136) suggests that 'Megacities management particularly where the Megacity in question is also the capital city, requires a voice at the highest level of government.' Megacities must by their nature be closely linked to the seat of power in a national government if they are to perform their increasingly important national functions.
3.4.10 Principle 10: Must have new professional skills in sustainability and local participation

UNHABITAT (1996, p.328) noted that a scarcity of adequately trained, qualified personnel – for policy, management and technical roles – has long been one of the main obstacles to the improvement of human settlements. This is especially the case at local (for instance district or municipal) level. The need to address this scarcity has become more pressing as a result of the paradigm moves to urban governance and development in the world during the last two decades:

- *The new roles and responsibilities placed on local governments as a result of decentralization and the new importance given to public/private partnership;*
- *The need for far more local responses to environmental degradation and to poverty (and, in many countries, to the social impacts of structural adjustments);*
- *The importance of integrating sustainable development issues into public policy and public-private partnerships;*
- *The need for responses to address housing, transport, settlement and environmental policies;*
- *The demands placed on governments at all levels by non-governmental organizations, community-based institutions, and the private sector for much broader participation in development decisions and actions.*

Given this justification for qualified and trained officials for cities and their governance, UNHABITAT stressed that neither the staff nor the elected officials of the organizations responsible for the management of cities, municipalities and districts are, by and large, prepared to meet this challenge. But even where they are, they often lack the knowledge. Addressing these issues requires new content and methods of training, as well as the obvious need to greatly increase the number of qualified personnel.
McGee (1995) stressed that:

‘...the emergence of Mega-Urban Regions is posing major problems for ASEAN national governments in terms of planning, administration, fiscal management, environmental degradation, and infrastructure provision. These developments also create a real challenge in human resource training. Most ASEAN Mega-Urban Regions lack trained personnel to undertake research and management. Although these needs can be met in part by local responses such as informal sector garbage collectors and by private companies, the dimensions of these regions and their need for water, sewage removal, adequate housing, and suitable transportation networks, among other things, demand some form of administrative, governmental mechanism for planning and implementation at the regional level (p.354).’

Mboi and Smith (1996, pp.224-5) noted that the concept of Urban Management has been increasingly recognized as the ‘missing link’ in Indonesia. They realized that urban areas in fact need to be managed; however, their problems cannot be solved if they are only on the receiving end of generic national urban programs. Urban centres need to be understood and viewed as population centers made up of a fabric of interlocking, overlapping, sometimes competing ecological, human, social, economic and political systems, i.e. authorities need to understand them and manage them to be more sustainable. Urban Managers have two critical tasks: (i) resource management - water, air, land, as well as finance and human resources; and (ii) service delivery – for people as well as for the economy, business and industry. If these tasks are done properly, a city can reduce its ecological footprint while improving its livability, as outlined in Chapter 2. Such integrated expertise is still rare, but essential if Megacities are to create a more sustainable future.

Research is needed to understand better the tasks of Urban Managers, and the skills and characteristics they must bring to their work, so that Urban Managers can be identified...
and trained appropriately. The Indonesian National Planning Board (BAPPENAS) recognized that ‘one of the most striking features of the present situation is that there is no “critical mass” of expertise in urban management in Indonesia’ (BAPPENAS 1992, V).

Local participation skills are needed to enable all major urban decisions to have backing from government, business and civil society. Only in this way can sustainability outcomes be assured. Deliberative democracy techniques are now well developed (see Sarkissian et al. 1997) but are not yet normal practice in urban management, especially in Asian cities.

Sustainability and local participation skills are critical for the new urban governance agenda. In reality these skills are best learned on the job as part of the urban governance process. Hence Megacities must have a strong focus on training in these areas as one of the principle functions assigned to Megacities.

### 3.5 Conclusions on Megacities Governance

Megacities present greater problems in development management and governance because of their size and spatial patterns. The problem of organizing spatial patterns of development management and governance requires a comprehensive approach because of its various administrative fragmentations at different local government levels. The need is to create a single voice on some key elements and to preside over the development management and/or governance of the city and to coordinate the national and regional government agencies. Otherwise the city may have little voice at all in national agency initiatives and may fail to achieve efficiencies in the distribution and servicing of activities.

This chapter has outlined ten principles for the governance of Megacities. They are clearly overlapping and interdependent. However, they constitute a vision for Megacity
governance in the 21st century. These will now be applied to four Asian Megacities to determine the extent to which they are being applied. They will then be used as the basis for assessing the future of Dhaka’s governance.
CHAPTER 4: MEGACITIES: GOVERNANCE IN ASIAN MEGACITIES

The background of the experience of four of the fast growing Asian Megacities in tackling problems of metropolitan organization is examined in this chapter on the basis of the governance principles developed in the previous chapter. The cities examined are:

a. Metro-Manila
b. Tokyo Metropolis
c. Bangkok
d. Jakarta

4.1 Governance and Development Management of Asian Megacities

Owing to the rapid growth of economies and population, Megacities in the Asian Region are facing governance challenges. At the same time they show evidence of some kind of framework of principles for governance and development management. Some of them already have a regional approach for governance, developed coordination and partnership mechanisms underlying civil society relationships under a state legislation structure, and some by practice. The following section highlights some of the key characteristics of Megacities governance in the Asian Region. These are viewed within the existing political structure and legislation of each country.

First the governance and development management setting of these cities are explained and summarized, and then the governance principles explored. This study is developed to both further examine the relevance of the ten Megacity governance principles, and to prepare for the next section as they are applied to Dhaka.
4.1.1 Metro-Manila

In the context of Metro-Manila, Laquian (2000, p. 77) has noted that governance can be defined as being made up of ‘the mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their difference’.

Laquian (2000, pp.77-78) has also noted that there are five levels of governance in Metro-Manila. At the highest level is the central government, which exercises considerable authority and power as Metro-Manila is the national capital. At the metropolitan level, governance is exercised by the Metro-Manila Development Authority (MMDA). MMDA is not a corporate unit of government but ‘a special development and administrative unit’ under the direct supervision of the President of the Philippines. These are also municipalities and Local Government Units called cities each headed by a Mayor with a City Council having its own statutory charter, and barangays or neighborhood units within Metro-Manila.

According to the Local Government Code (LGC) of 1991, the municipalities exercise a great deal of autonomy. They can enact ordinances controlling zoning and land use, impose user charges and fines, and operate public markets and other income-generating enterprises. Theoretically they can even borrow capital for infrastructure projects from financial institutions or float bonds.

A landmark change was introduced in the Philippines’ urban local governance under the legal provisions of the Constitution of 1987. The 1987 Constitution of Philippines was framed by the ‘people power’ revolution of that time and officially recognized the importance of civil society groups by the following provisions (Laquian 2000, p.97):
• Article II, Section 23 – The State shall encourage non-governmental, community-based, or sectoral organizations that promote the welfare of the nation.

• Article XIII, Section 15 – The State shall respect the role of independent people’s organizations to enable the people to pursue and protect, within the democratic framework, their legitimate and collective interests and aspirations through peaceful and lawful means.

• Article XIII, Section 16 – The right of the people and their organizations to effective and reasonable participation at all levels of social, political and economic decision-making shall not be abridged.

To give effect to the above provision of the Constitution, the Philippines parliament passed the Local Government Code (LGC) of 1991. This law provided scope for participation of NGOs, community based organizations and sectoral groups in the formal structure of legislative bodies, e.g. city and municipal bodies. It urged the inclusion of civil society groups in joint ventures and partnerships carrying out development projects. The government was also authorized to provide funds to NGOs and other groups to enhance their capabilities to contribute to economic and social development (Laquian 2000, p.97).

The LGC of 1991 of the Philippines devolved most of the responsibility for planning and provision of basic services to local governments as in most cities; however Metro-Manila has a special orientation to using civil society more and more to help deliver services. This builds on the belief that the urban poor were being overlooked by government officials (Porio 1996, pp.76-77). Landmark legislation was the Urban Development and
Housing Act of 1992 which further enabled NGOs and people’s organizations to assist in shaping urban development and politics. These Acts have created scope for government and the civil society to work together for the city’s livelihood. These laws were the result of UPO (Urban People’s Organization) advocacy and mobilization by NGOs which had started to assist UPOs to facilitate the delivery of basic services to the urban poor consistent with the strategy to empowering civil society.

Oreta (1996, p.169) noted that the statutory involvement of the private sector in infrastructure provision is becoming wider in Metro-Manila and in the urban development of the Philippines with the enactment of the Local Government Code 1992 and other relevant laws allowing the government to undertake public-private partnerships, access credit, develop different forms of privatization, and introduce innovative financing arrangements. MMDA in consultation with the local governments- in Metro-Manila can work together to mobilize resources. According to Oreta (1996, p.169), efforts like computerization of tax mapping; privatization of services; operationalization of accurate costing for services through proper pricing; opening up access to capital markets through bond floatation; and establishment of a Metropolitan Manila Development Bank are components where local government units are the main incorporators with MMDA. Thus it can be noted here that private sector involvement in the urban governance process in Metro-Manila is emerging and entering into social contracts.

4.1.1.1 Metro-Manila or the National Capital Region (NCR) of the Philippines

Metro-Manila or the National Capital Region (NCR) of the Philippines geographically consists of seven contiguous cities and ten municipalities. The total land area of NCR is approximately 636 square kilometres with a population of 8.94 million in 1994. It is the
world’s 18th largest metropolis with a population growth rate of 3 percent during the 1990s, accounting for 13 percent of the Philippine’s total population, at a density of more than 14000 per square kilometre. Encompassing an 8 km radius from the mouth of Pasig River in the post war period, the geographical area of Metro-Manila spread to an approximately 20 km radius in the 1990s. The physical growth of Metro-Manila is characterised by its linear pattern where development follows the major roadways. The city experiences severe traffic congestion, pollution, poor sanitation and inadequate solid waste management. Most of the public services are provided by several central government administered agencies and special purpose bodies. In addition 17 local government units, which exercise governance over their individual municipalities and cities, also implement programs and projects. However, the coordination of different programs of the implementing agencies falls on the Metro-Manila Development Authority (MMDA). The metropolitan-wide governing body for the National Capital Region (NCR) owes its existence to state policy recognition that Metro-Manila is a special development area and an administrative region, and that certain basic services are more efficiently and effectively planned, supervised, and coordinated by a metro governing body (Oreta 1996, pp.154-156; ADB 1996, pp.376-377).
Map 4.1: Metro-Manila Capital Region

4.1.1.2 Evolution of Metro-Manila Development Authority (MMDA)

Back in 1993 the Medium Term Development Plan (1993-1998) for the National Capital Region (NCR) pinpointed several issues of priority concern, which were ‘posing major challenges to the system of urban management’ (Oreta 1996, p.168). According to Oreta (1996, p.168) these issues were –

- The multiplicity of national, metropolitan, and local entities involved in the development of NCR has rendered coordination difficult. Most of these pursue their independent policies and programs and generally develop and carry out their projects without the benefit of intersectoral analysis or program planning. This fragmentation has financial consequences;
- Reconciling investments in capital assets with the capacity to operate and maintain them also poses difficulties. This is particularly severe where the central government agencies undertake construction but transfer the services to municipal authorities who may not have the capability, the inclination, and the resources to operate and maintain them.

The 1995 Metro Manila Management Study Report focused on the need for a central management body to undertake, coordinate, and monitor sectoral programs for the delivery of the various services in the NCR and to resolve the problems arising therefrom (Oreta 1996, p.168). The report emphasized that without a central body there would be no solution of these problems. The report states that there was a need for a metro body with adequate powers, personnel, and financial resources to address (Oreta 1996, p.168):

- The implementation of the various programs and projects;
- Coordination with national government agencies and the local governments;
- The lack of coherence and consistency in policy formulation and implementation; and
• Ineffective coordination among the metro organizations.

In 1995, the Congress of the Philippines passed a law setting up the Metro-Manila Development Authority (MMDA), and designating Metro-Manila as a special development and administrative region. Decision-making and policy-making powers were vested in an expanded Metro-Manila Development Authority. The MMDA was given the powers of metro-wide development planning, supervised and coordinated without prejudice to the autonomy of the local government units.

MMDA consists of Metro-Manila Council composed of the mayors of the seven cities and ten municipalities, heads of Department of Transportation and Communications, Department of Public Works and Highways, Department of Tourism, Department of Budget and Management, Housing and Urban Development Coordinating Council, and the Philippines National Police. The heads do not have voting power. The Chairperson of the Council and an appointee of the President are vested with the rank, rights, and privileges of a cabinet minister. The Chairperson is assisted by a general manager and three assistant general managers: one for Finance and Administration, one for Planning, and one for Operations. All are appointed by the President (Figure 4.1) (Oreta 1996, p.167).
The MMDA is authorized for planning, supervising, and coordinating certain metro-wide basic services, those have metro-wide impact and go beyond local political boundaries or involve massive expenditures which could not be practicable for the individual local government units comprising the metropolitan region (Oreta 1996, p.167). MMDA is providing the following services and MMDA can pass ordinances related to these services:

- Development planning
- Transport and traffic management
- Solid waste disposal and management
- Urban renewal, zoning, and land use planning
• Health and sanitation, urban protection, and population control
• Public safety

Furthermore, MMDA is authorized to formulate, coordinate, and regulate the implementation of medium and long-term plans and programs for the delivery of metro-wide services, land use, and physical development within the metropolis, consistent with national development objectives and priorities. Its council is also empowered to approve metro-wide plans, programs, and projects, and issue rules and regulations and resolutions deemed necessary by the authority to carry out state policy. MMDA is also responsible for the preparation of a Regional Development Plan for Metro-Manila through the office of the Assistant General Manager for Planning in coordination with the National Economic and Development Authority’s regional development coordinating staff (Oreta 1996, p.167).

Laquian (2000, p.89) observed that MMDA’s ‘strategic planning and area-wide actions are likely to enable Metro-Manila to control and regulate urban sprawl’. He noted the merits of a comprehensive development plan prepared by MMDA for the Manila-centred mega-urban region, which encourages growth in a number of development nodes. Laquian was optimistic about the activities of MMDA, saying that ‘all in all, planning and governance measures on a metropolitan and regional scale are slowly starting to improve conditions in Metro-Manila’.

In spite of the mandated responsibilities of the MMDA mentioned above, it has very little authority on the ground as it cannot override local of authorities and lacks financial
resources. While key metropolitan-wide functions such as comprehensive planning, land use control, traffic and transport management, flood control and drainage, and solid waste disposal have been placed under the jurisdiction of MMDA, the law has stipulated that these can be only carried out ‘without diminution of the local autonomy’ of local units. MMDA at present is a development authority without authority – it can only advise. What is needed is to give MMDA actual power and authority and financial resources to effectively carry out these functions. MMDA has to be a corporate body set up as a legitimate unit of governance.

Laquian (2000, p.89) recognized this weakness stating that ‘considerable time has been spent’ since the MMDA was established and yet ‘if Metro-Manila is to effectively meet its development challenges, broader and stronger metropolitan area-wide governmental mechanisms are needed and ideologically motivated advocates will have to recognize that fact.’

Thus the problem in Manila is that it can see what needs to be done but cannot do it. Land use has to be coordinated among the 17 cities in Metro-Manila, but the different cities act independently, so infrastructure coordination is poor. Air and water pollution respects no political boundaries; neither does traffic; neither does crime; neither does the stench of garbage. The individual Local Government Units (LGUs) cannot tackle these problems independently. Therefore, it can be argued that the ‘right mix’ between ‘MMDA and the autonomous LGUs in addressing the problems of coordination and delineation of responsibilities is still awaiting Metro-Manila’.

The bright side of Manila is its civil society engagement. Porio (1996, p.76) noted that the passing of the 1991 Local Government Code provided a blueprint for a comprehensive
decentralization program. These broad political reforms have carved out key roles for NGOs (Non-Government Organizations) in the Philippines and for Urban People’s Organizations (UPOs) in shaping urban development and politics. She also noted that the landmark legislation, contained in the Urban Development and Housing Act of 1992, was mainly a result of NGO/UPO advocacy and mobilization. According to Porio, the Philippine cities now have a vibrant civil society empowered by state laws and policies. She suggests therefore, that the Philippines now have ushered in a shift in NGO/UPO orientation and strategies and NGOs have continued their political advocacy in the decision-making process. This is a model for other Megacities.

The Asian Development Bank (2000, p.72) noted that Local Government Code of 1991 mandates local government units to promote the establishment and operation of NGOs and POs to become active partners in the pursuit of local autonomy. Their membership is mandatory in several special bodies where key policy decisions at the local administration level are made: Local Development Council, Health Board, School Board, and Peace and Order Council. ADB further noted that the Code also provides for ‘local government units to enter into joint ventures and such other cooperative arrangements with people’s and non-governmental organizations to engage in the delivery of certain basic services’.

Urban governance in Metro-Manila has been advancing in some areas; it is proving that metropolitan-area wide strategic planning is able to guide development, though it fails to deliver on the promise this has provided. However, Manila does show that civil society engagement can work. In terms of the ten principles of this thesis, Metro-Manila is good
on principles 1, 2 and 6 but not on the others. Thus, it could be stated that the MMDA’s activities have created the scope to further clearly define the responsibilities of MMDA as a corporate structure of governance for Metro-Manila, but it still needs to deliver on some of the other principles.

4.1.2 Tokyo Metropolis

The city of Tokyo and Tokyo prefecture were consolidated to form Tokyo Metropolitan Government (TMG) in 1943. The current metropolitan City of Tokyo (population 12 million) is governed by the Tokyo Metropolitan Government (TMG) (Vogel 2000, pp.131-32). The larger Tokyo Metropolitan Region consists of Tokyo and the three neighbouring prefectures Saitama, Kanagawa, and Chiba. However, the National Capital Region (NCR) includes these three surrounding prefectures and Gumma, Tochigi, Ibaraki, and Yamanashi prefectures (Yamashita, Asano and Kishita 1996, p.230), making a total population in the region of 34 million people.

The National Capital Region (NCR) has a population of about 34.29 million, with Tokyo Metropolitan Region making two-third (22.610 million) and Tokyo only making up about one-thirds (11.68 million) of the NCR. While the population growth in Tokyo remained steady after the 1970s and declined after 1995, in the Tokyo Metropolitan Region the population grew very rapidly during 1960s, 1970s and 1980s; however during 1990s it showed a steady growth (Table 4.1). The similar growth pattern is evident in the NCR. Thus the city grows rapidly and mainly by its extended metropolitan region.
Table 4.1: Growth of Population in Tokyo and Tokyo Metropolitan Region (figures in million)

<table>
<thead>
<tr>
<th>Year</th>
<th>Tokyo</th>
<th>Tokyo Metropolitan Region (Tokyo and neighbouring 3 Prefectures (Saitama, Kanagawa and Chiba))</th>
<th>National Capital Region of Tokyo (Tokyo and neighbouring 6 prefectures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>10.870</td>
<td>10.150</td>
<td>21.020</td>
</tr>
<tr>
<td>1970</td>
<td>11.410</td>
<td>12.710</td>
<td>24.110</td>
</tr>
<tr>
<td>1975</td>
<td>11.670</td>
<td>15.370</td>
<td>27.040</td>
</tr>
<tr>
<td>1980</td>
<td>11.620</td>
<td>17.080</td>
<td>28.700</td>
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<tr>
<td>1985</td>
<td>11.830</td>
<td>18.440</td>
<td>30.270</td>
</tr>
<tr>
<td>1990</td>
<td>11.860</td>
<td>19.940</td>
<td>31.800</td>
</tr>
<tr>
<td>1995</td>
<td>11.770</td>
<td>20.800</td>
<td>32.570</td>
</tr>
<tr>
<td>2000</td>
<td>11.730</td>
<td>21.790</td>
<td>33.520</td>
</tr>
<tr>
<td>2005</td>
<td>11.680</td>
<td>22.610</td>
<td>34.290</td>
</tr>
</tbody>
</table>

Source: Tokyo Metropolitan Government (TMG) - Urban White Paper of Tokyo Metropolis 1996
Adapted from Vogel 1997, p.130

Tokyo Metropolitan Region has developed into a megalopolis unparalleled in the world (Yamashita et al. 1996, p.230). Due to the huge concentration of various political, financial, commercial, industrial and other activities, the day time influx of population commuters to the city from the surrounding prefectures creates a great challenge for the Tokyo Metropolitan Government (TMG). Every day 2.72 million (Kanagawa -937, 562+ Chiba- 743, 932+ Saitama- 945, 945+ Ibaraki- 67, 285+ Gamma- 9,082+ Yamanashi- 8,919+ Tochigi-14, 938) people commute to Tokyo city from the surrounding region.

This can be visualized from Map 4.2.

Map 4.2 National Capital Regions (NCR) of Tokyo

The Tokyo metropolis is governed partly through its local governance system but the city of Tokyo is a Megacity in its own right thus local government is rarely bigger than most of urban regions. The Tokyo Metropolitan Government (TMG) is also a special authority with different settings than other local governments in Japan (see Table 4.2).

There are two types of local governments in Japan: ordinary and special. Ordinary local governments are prefectures and municipalities. The prefectures and municipalities have equal standing; however prefectures are superior to municipalities, because they maintain all communications with the central government. The 12 Designated Cities carry out many prefecture activities and communicate directly with central government. The 23 special wards located in Tokyo enjoy a special status unique in Japan, having an elected mayor like the municipalities. These wards are subordinate to Tokyo Metropolitan Government (TMG) with semi-independent status (Vogel 1997, pp.117-119).

4.1.2.1 Tokyo Metropolitan Government (TMG)

Tokyo Metropolitan Government (TMG) is a self-governing unit consisting of 23 special wards (Special Local Public Entities), 39 municipalities, 26 cities and 5 towns, and 8 villages. Tokyo Metropolitan Government (TMG) is a local government. The constitution and laws of Japan guarantee autonomy to local governments. Thus in theoretical terms there is no overriding Metropolitan Regional Government Authority in Japan.
Table 4.2: Local Government System in Japan

<table>
<thead>
<tr>
<th>General Local Public Entities</th>
<th>Number of Units</th>
<th>Functions or responsibilities</th>
</tr>
</thead>
</table>
| Prefectures                         | 47              | Prefectures are responsible for ‘upper tier administration’. Prefectures and municipalities have ‘equal standing’ so that municipalities are in theory not subordinate to prefectures. The responsibilities of prefectures are:  
  • Affairs which cover a wide area, such as preparation of overall development plans for regional, mountain and river development;  
  • Affairs which require overall uniformity, such as maintenance of the established standard of compulsory (and other) education, and the administration and operation of a police force;  
  • Affairs which relate to the liaison and coordination of municipalities, such as relations between the national government and municipalities;  
  • Affairs which exceed the level which municipalities are deemed to be capable of handling properly, such as the establishment and maintenance of senior high schools, laboratories and museums. |
| Designated Cities                   | 12              | Cities with 500,000 or more population are granted more authority by the central government. They perform some tasks normally carried out by prefectures. The designated cities are Osaka, Nagoya, Kyoto, Yokohama, Kobe, Kitakyushu, Sapporo, Kawasaki, Fukuoka, Hiroshima, Sendai and Chiba. |
| Nucleus Cities                      | 12              | Cities with 300,000 up to 500,000 may carry out activities that Designated Cities would undertake unless it is more suitable for the prefecture to carry out these responsibilities. |
| Cities                              | 669             | Cities with more than 50,000 persons and 60% of the population in the urban centers.                                                                                                                                              |
| Municipalities                      | 3232            | Municipalities are responsible for ‘local administration.’ The primary difference between cities, towns, and villages is population size.                                                                                       |
| Town                                | 1993            |                                                                                                                                                                                                                                |
| Villages                            | 570             |                                                                                                                                                                                                                                |
| Special Local Public Entities       | Number of Units | Functions or responsibilities                                                                                                                                                                                                 |
| Special Wards                       | 23              | Only found in Tokyo. Similar to a municipality with an elected mayor.                                                                                                                                                           |
| Cooperatives of Local Public Entities| 2822            | These allow municipalities and prefectures to jointly provide services.                                                                                                                                                         |
| Local Development Corporations      | 10              |                                                                                                                                                                                                                                |
| Property Wards                      | 4244            | These are created to manage property owned by cities.                                                                                                                                                                           |

Source: Vogel (1997, p.118)
Tokyo Metropolitan Government (TMG) has two wings of governance, one legislative and the other executive. It has an assembly of 127 members directly elected by the citizens for a four-year term. The president is elected from among its members. The president represents the legislative assembly, and the assembly has different committees for different matters. The assembly is the TMG’s fundamental decision-making body. It has the authority to enact, amend and repeal metropolitan ordinances, and certify settlement of the budget through resolutions of the assembly. The TMG also has a Governor, who is directly elected by the citizens with a four-year term of office. The Governor has the overall control of metropolitan affairs, and authority and responsibility for maintaining the collective integrity of the metropolitan administration (http://www.metro.tokyo.jp/ENGLISH/PROFILE/OVERVIEW/overview3.htm—accessed on September 28, 2005).

The organizational structure of TMG administration is shown in Figure 4.2.
Figure 4.2: Organizational Structure of Tokyo Metropolitan Government

Tokyo Metropolitan Government (TMG) has very specific principles of governance.

These principles are as follows:

- Revitalizing Tokyo
- Urban Renewal
- Pioneering Urban Renewal Project
- Promotion of Tourism
- Tokyo Culture
- The Asian Network of Major Cities 21
- Restrictions on Diesel Vehicles
- Environmental Action
The high concentration of service sector and central administration functions in Tokyo has given the city massive economic strength and tremendous assets in terms of the variety of urban services it can offer. But excessive centralization has impacted on the city with the following problems according to Yamashita et al. (1996, p.236):

- Rising housing costs due to land prices that have increased astronomically;
- Chronic traffic congestion during severe rush hours and long commuting times due to the distance between people’s homes and their work place (despite having the largest public transport system in the world);
- An increasingly serious waste disposal problem; and
- Destruction of community as business offices crowd out residential areas, reducing the population.
In other words Tokyo faces sustainability issues like all Megacities. Thus, one of the premier challenges of TMG is to improve this situation and ensure the sound development and orderly growth of the metropolis, according to the governance principles. The TMG has to respond to urgent housing, sanitation and environmental protection needs and work to decentralize the city by creating sub-centres, in order to achieve a balance between Tokyo and the other cities and municipalities (Khan 1996).

In order to achieve regional development for the National Capital Region based on the National Capital Development Act and Principles of Services of TMG, the concept of regional development for the National Capital Region has been pursued through developing established urban areas, sub-urban development and redevelopment areas, urban development areas and other areas. These include the following steps (Yamashita et al. 1996, pp.232-33):

- In Tokyo Metropolitan Region, the numbers of unipolar structures of dependence were to be reduced in favour of a multi-core, multi-zone regional structure made up of several core cities and zones. This has the effect of forming a polycentric structure in Tokyo to avoid excessive concentration of functions, to encourage development of core cities in the regions around central Tokyo, and formation of autonomous city zones around them where work places are close to residences and urban services are ensured, and the development of core business cities, secondary core cities and new axial urban areas connecting the core business cities and secondary core cities around central Tokyo, along with the development of area-wide traffic facilities;

- In the surrounding areas, the relationship between the regions has been emphasized and strengthened and regional autonomy has been developed. This has involved development of core city zones, development of the northernmost...
part of the region, and development of farming, forestry, and fishery regions and islands;

- The various functions such as business management and administration, international exchange, industrial production, universities and other higher education institutions, agriculture, forestry and fishery, and recreational activities are selectively decentralized to promote their appropriate distribution in the country;

- Traffic systems and telecommunications networks have also been integrated with the regional structure of NCR to cope with the structural changes.

The TMG has been given the mandate and strategic responsibility for the development of Tokyo and as well as to coordinate the activities of development. The point to note from the example of Tokyo is that TMG’s role is defined and is based on clearly defined specific principles; it has a strategic vision. However, TMG’s role in relation to Tokyo Metropolitan Region (Tokyo and three neighbouring Prefectures) or National Capital Region (Tokyo and six neighbouring Prefectures) is not clearly defined or mentioned in the list of principles.

Regional scale functions of the Tokyo Metropolitan Region or NCR rest on an annual regional summit (the metropolitan summit) of the Governors of Tokyo and the neighbouring prefectures. In spite of that, Vogel (1997, p.137) noted that there are four bodies to coordinate the region-wide functions. He also noted that there is considerable informal integration of functions between these bodies, encouraged by the national government. However, Vogel points out that the central government had to recognize the need for improved regional decision-making through a study to constitute a regional institute to enable better integration between the local governments (Vogel 2000, p.137).
To envisage a definitive form of government for Tokyo Metropolitan Region Vogel (2000, pp.139, 141-2) has suggested that the TMG is too big to be a city government, while its main attention is directed at providing municipal services. Therefore, he stressed the need for ‘greater consideration of how to promote coordination in the larger Tokyo Metropolitan Region while at the same time attaining more effective local government that is responsive to citizens’. He then focused on how to promote local government cooperation in the divided metropolises –in very fragmented and decentralised local governments. For this he proposed for Tokyo Metropolitan Region, rather than a single model, ‘a locally relevant strategy of governance that responds to the unique local government system, problems, history and culture of the area’. He proposed the solution to be more elaborate ‘compacts’ of metropolitan councils and better structured intergovernmental relations to institutionalise cooperation. Finally he hopes that ‘in the long term, through incremental steps, the metropolitan government will result not from unification but through the federation of metropolitan councils’.

Tokyo is therefore strong on many of the ten principles but has not yet found a mechanism for Metropolitan Regional Governance though it is much better than many cities as, having just four very big local governments.

4.1.3 Bangkok

4.1.3.1 Bangkok’s Regional and Governmental Spatial Structure

Bangkok is the capital of Thailand, the primate city of the country, and its administrative, economic, transportation, and education centre. It is located in the central region of the country on the low flat plains of Chao Phraya River.
Bangkok’s regional/governmental spatial structure consists of four levels. These, according to Robinson (1995, pp.90-1) and Pornchokchai (2003, pp.3-4), are (see Map 4.3):

(I) The Bangkok Metropolitan Administration (BMA), overseeing an area of 1,565.2 sq km with a population of 5.6 million (1999) is a legal and administratively defined structured authority of Bangkok.

(II) The Greater Bangkok Area (GBA) is another entity referring to the area covered by the BMA and three adjacent provinces of Nonthaburi, Pathum Thani and Samut Prakan. It covers an area of 4717 sq km. About 84% of the population of Bangkok Metropolitan Region (BMR) lives in the GBA. Many of the problems associated with rapid development within the BMR have occurred in the GBA, but there is no officially approved recognition of the area as a region.

(III) The Bangkok Metropolitan Region (BMR), which refers to Bangkok and the five adjacent provinces of Nonthaburi, Pathum Thani, Samut Prakan, Samut Sakhon and Nakhon Pathom, is now a widely used term. The BMR covers an area of 7,761.662 sq km with a population of 10.080 million. Bangkok Metropolitan Region (BMR) is a planning term, not an administrative one, as the five provinces retain their own administrations.

(IV) The Extended Bangkok Metropolitan Region (EBMR) is variously defined by different researchers and planners. The Thailand Development and Research Institute (TDRI) defines it as extending beyond the BMR to the north, to Ayuthaya and Saraburi; to the east, to Chonburi, Cha-Choengsao, and Rayong; and to the west, to Ratchaburi and Phetchaburi.
Bangkok Metropolitan Administration (BMA) does not have administrative jurisdiction or authority to govern the Bangkok Metropolitan Region (BMR) and or the Extended Bangkok Metropolitan Region (EBMR).

Kittiprapas (2001, p.394) noted that the ‘BMR is not a legal or governing entity; however, there are no regional governments in Thailand’. According to Pornchokchai (2003, p.4), the ‘BMR is a planning term, not an administrative one, as five provinces retain their own administrations’.

Kittiprapas (2001, p.364) noted that Bangkok and its extended periphery have undergone extensive transformations over the past three decades and the provinces most affected by the economic boom are contained within the Extended Bangkok Region (EBR).

Map 4.3: Bangkok Metropolitan Region (BMR)

The very rapid Growth of population in the BMR is seen from Table 4.3.

Table 4.3: Population growth in the Bangkok Metropolitan Region (BMR)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population of BMR (Bangkok+5 vicinity provinces) in million</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>3.293</td>
</tr>
<tr>
<td>1970</td>
<td>4.688</td>
</tr>
<tr>
<td>1980</td>
<td>6.871</td>
</tr>
<tr>
<td>1990</td>
<td>8.583</td>
</tr>
<tr>
<td>2000</td>
<td>10.080</td>
</tr>
</tbody>
</table>

Source: Pornchokchai 2003, p.3

4.1.3.2 Administrative Evolution of Bangkok Metropolitan Administration (BMA) and Bangkok Metropolitan Region (BMR)

In 1971, Bangkok and Thonburi Provinces were merged and are now known only as Bangkok. Since then Bangkok is no longer a province. In 1972 the Bangkok Metropolitan Administration (BMA) was established to administer Bangkok. The BMA is an autonomous local authority whose municipal area covers the whole of the former province’s administrative area. Under the present law, the Bangkok Metropolitan Administration (BMA) has a Governor (see Figure 4.3) who is elected by popular vote and four Deputy Governors who are appointed by the Governor for a four-year term. The Bangkok Metropolitan Council consists of elected members. There are 50 districts, for each of which a District Council is elected, each with at least seven members. The Bangkok Metropolitan Council and District Council each has a four-year term (Pornchokchai 2003, p.6).

Since 1986, Thailand has experienced unprecedented economic growth, which has transformed the country from an agricultural into an industrial economy. The province of Pathum Thani, which is the northern part of the Bangkok Metropolitan Region, is a
Figure 4.3: Organizational Structure of Bangkok Metropolitan Administration (BMA)

The BMA Service Commission

Office of the BMA Civil Services Commission

Office of the Secretary to the Governor of Bangkok

Office of the Secretary to the Bangkok Metropolitan Assembly

Governor

Department of Inspectors General

Department of Medical Services

Department of Education

427 Compulsory Schools

Department of Finance

36 Districts & 2 branches of Districts

Department of Public Works

Department of Drainage and Sewerage

Department of Public Cleansing

Dept of Social Welfare

District Council

Department of Communication Development

Source: Thavisin and Suwarnarat 1996, p.9
The region, particularly Klong Luang district, is experiencing rapidly dwindling agriculture and rapid industrialization often by high technology industries employing thousands of workers, a majority of them from rural areas. Economic development has been accompanied by a rapid urbanization of the fringe areas of Bangkok, which now extend far beyond the provincial boundaries of the Bangkok Metropolitan Administration (BMA) into the adjacent provinces of Nonthaburi, Pathum Thani, Samut Prakan, Samut Sakhon, and Nakhon Pathom. This entire area now constitutes the real Bangkok Metropolitan Region (BMR) (see Map 4.3), though the entire BMR is not governed by the BMA. Industrial and urban development is occurring mainly along the highways leading north, southwest, and southeast, because these corridors have access to Bangkok. Most of the extended region of Bangkok along the corridors is often outside the jurisdiction of any municipal authority (Sheng and Rahman 1995, pp.133-5).

4.1.3.3 Administrative and Organizational Structure: Need for Bangkok Metropolitan Region (BMR) and/or Extended Bangkok Metropolitan Region (EBMR)

In Bangkok, more than 50 agencies share the responsibility of planning, financing, and managing the various development programs, especially in areas relating to traffic and transportation, water supply, and housing for the metropolis. The traffic for example is known to be probably the worst in the world with an average speed of just 14 km/hour and a bus speed of 9 km/hour (just above walking and pace) (Newman and Kenworthy 1999). Therefore, plenty of scope still remains for improved coordination in planning, budgeting, and operating various development projects in Bangkok (Kaothien 1995, p.334). A national committee was assigned (during 6th plan) to look after development in Bangkok and its vicinity. It was assigned the task of organizing the direction and
formulation of the various investment programs of the related agencies, and has had considerable success. However, the committee could not conduct its work on a continuing basis, as it has to be dissolved when the government changes. It is therefore, of limited use in coordinating long-term projects (Kaothien 1995, p.335).

The reluctance of the national government to devolve powers to urban local governments is a phenomenon in Thailand. The central government has a strong interest in what occurs in the Bangkok area as it is the main source of economic growth. Consequently, central government dominance has been asserted over many urban functions such as the National Housing Authority (NHA), the Expressway and Rapid Transit Authority, the State Railway of Thailand. Bangkok has a municipal council that is part of the BMA but it has extremely limited powers. The BMA does not even have the authority to develop its own plans, as this functions rests with the central government agencies (Laquian 1995, p. 232).

The Bangkok Metropolitan Regional Development Committee (BMRDC) is a multi-ministerial coordination committee set up by the cabinet in 1986 to direct and oversee the development of the Bangkok Metropolitan Region. With regard to the management of the Extended Bangkok Metropolitan Region (EBMR), the Thailand Development Research Institute (TDRI) recommended in its report to the National Economic and Social Development Board (NESDB) on the Seventh Plan that a new national-level committee be established and charged with the responsibility of setting policy within the extended BMR and managing it. This could be upgraded to the Bangkok Metropolitan Regional Development Committee (BMRDC), which is already in charge of coordinating the urban policy of the BMR. The extended BMRDC (or EBMRDC) would be headed by the prime minister, and the committee would consist of high-level officials so that
decisions that affect the responsibilities of various government agencies can be effectively implemented (Krongkaew 1996, p.329).

In the Seventh Plan of Thailand, the National Economic and Social Development Board (NESDB) recommended establishing a development committee, at the highest level of government, to supervise the overall planning, management, and development of the Extended Bangkok Metropolitan Region (EBMR) (Robinson 1995, p.91).

Krongkaew (1996, p.329) suggests that, to be successful, the EBMRC needs to be assisted by a strong secretariat that has the capacity of (i) planning the integrated development of the EBMR; (ii) coordinating with various agencies having responsibility for development within the EBMR; and (iii) evaluating major infrastructure projects in the EBMR to ensure that they are socio-economically beneficial and are consistent with the desired development directions of the EBMR.

To the above list, should the principles of Megacity governance outlined in this thesis be added for Metropolitan Regional Governance (MRG) processes for Bangkok.

4.1.4 Jakarta

4.1.4.1 Jakarta Metropolitan Region (JABOTABEK)

Jakarta Metropolitan Region comprises seven administrative units: the Special Capital Region of DKI (Daerah Khusus Ibukota) Jakarta, the municipalities of Bogor, Tangerang, and Bekasi and the kabupaten (districts) of Bogor, Tangerang and Bekashi. The Metropolitan Region of Jakarta is also known as Jabotabek. The acronym Jabotabek is
taken from Jakarta plus Botabek. Bogor, Tangeran and Bekashi are referred to by another acronym as the Botabek region (Map 4.4) (Indira and Firman 1995, p.296).

Map 4.4: Jakarta Metropolitan Area (JABOTABEK)

![Map 4.4](image)

Source: Soegijoko 1996, p.387

The population of JABOTABEK is estimated to be 26 million in 2005. The population growth of the JABOTABEK region is very significant. The rate of growth is higher in the Botabek region than in the Jakarta region (Table 4.4), consistent with the Desakota concept. The Botabek region is outside the governance structure of the Jakarta region.

Table 4.4: Growth of Population in JABOTABEK Region (in 000s)

<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Jakarta Region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6481</td>
<td>8210</td>
<td>8964</td>
<td>9730</td>
<td>10,487</td>
<td>11,178</td>
</tr>
<tr>
<td><strong>Botabek Region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bogor</td>
<td>2494</td>
<td>3949</td>
<td>4805</td>
<td>5674</td>
<td>6533</td>
<td>7407</td>
</tr>
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<td>Tangerang</td>
<td>1529</td>
<td>2724</td>
<td>3570</td>
<td>4506</td>
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<td>6523</td>
</tr>
<tr>
<td>Bekasi</td>
<td>1144</td>
<td>2073</td>
<td>2697</td>
<td>3148</td>
<td>4066</td>
<td>4802</td>
</tr>
<tr>
<td><strong>Total: Botabek Region</strong></td>
<td>5167</td>
<td>8746</td>
<td>11,077</td>
<td>13,528</td>
<td>16,103</td>
<td>18,732</td>
</tr>
</tbody>
</table>

During the last three decades, the JABOTABEK Metropolitan Area has experienced rapid changing patterns of urbanization, changes in the type of socio-economic activities, and increased pressure on the environment. A number of factors have contributed to these changes: rapid economic growth, new towns, industrial estates, toll road development, and population mobility within and into the region. Change has brought problems and challenges, as well as opportunities for governments, the private sector, and local communities. The problems are huge as there is no formal water supply or sewerage system and a very small transit system based on buses; hence traffic is an enormous issue. New approaches and responses in the form of policies, strategies, and actions have directed development in the region (Indira and Firman 1995, pp.298-99).

In 1976, the national government established the Biro Kota Statistik Pusat (BKSP) JABOTABEK, an agency whose task is to coordinate activities of different agencies operating in the JABOTABEK region. This agency was able to produce a strategic plan for the region. However, the management of JABOTABEK is segmented and involves three levels of autonomous entities: the provincial level (the Jakarta Special Capital Region and West Java); the kabupaten (district) and kotamadaya (municipality) levels (Tangerang, Bekashi, and Bogor); and village level. Moreover, BKSP is a non-structural agency, and has not been given legal authority by the government. It therefore, lacks the power to implement the JABOTABEK Plan (Indira and Firman 1995, p.312).

4.1.4.2 Jakarta Metropolitan Area (DKI Jakarta) and its Governance Structure

In 1961, under a government regulation, the ‘local government of the special capital city of Jakarta Raya’ was established. In 1964, the city was declared the capital city of the Republic of Indonesia and given the name DKI Jakarta (Djamal 1996, p.97).
The Special Capital Region of Jakarta is Indonesia’s largest city. It has a status equal to a province in Indonesia (Soegijoko 1996, p. 386).

DKI Jakarta has a territorial area of 650 sq km. Between 1961 and 1980, the population of DKI Jakarta doubled (Table 4.5) and by 1990 was as much as 15 percent (8.2 million) of Indonesia’s urban population (Soegijoko 1996, p. 387).

Table 4.5: Growth of Population in DKI Jakarta

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (in 000)</th>
<th>Density (per sq km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961 Census</td>
<td>2973</td>
<td>5152</td>
</tr>
<tr>
<td>1971 Census</td>
<td>4579</td>
<td>7936</td>
</tr>
<tr>
<td>1980 Census</td>
<td>6503</td>
<td>9335</td>
</tr>
<tr>
<td>1990 Census</td>
<td>8222</td>
<td>12642</td>
</tr>
</tbody>
</table>

Source: Soegijoko 1996, p. 390 (BPS, Population Censuses)

DKI Jakarta is administered by the Governor, who is assisted by three Deputy Governors having specific tasks and responsibilities for Public Administration Affairs, People's Welfare Affairs, and Economic and Development Affairs (Figure 4.4). The Regional Secretariat supports the provincial administration in organizing the local governments in Jakarta. BAPPEDA (the Regional Planning Board) is a board under direct supervision of the provincial Governor of DKI Jakarta which supports the Governor in determining the policy of development planning within its territory and evaluating the implementation of the plans (Djamal 1996, pp.97-98).
Figure 4.4: Organization of Jakarta Special Capital Region Administration (DKI Jakarta)

Source: Djmal 1996, p.100
DKI Jakarta is an agglomeration of five City Municipalities (*Wilayah*), 43 Districts (*Kecamatan*) and 265 Sub-Districts (*Kelurahan*) (Table 4.6). Each City Municipality has a Mayor under DKI Jakarta’s Governor’s Office. Each City Municipality Mayor assists in the preparation of local planning and has various financial responsibilities (Djamal 1996, pp.98-99).

Table 4.6: Municipalities, Districts and Sub-Districts in DKI Jakarta

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Area in sq. km.</th>
<th>District</th>
<th>Sub-District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jakarta Pusat/Central</td>
<td>54</td>
<td>8</td>
<td>44</td>
</tr>
<tr>
<td>Jakarta Utara/North</td>
<td>140</td>
<td>7</td>
<td>35</td>
</tr>
<tr>
<td>Jakarta Barat/East</td>
<td>131</td>
<td>8</td>
<td>56</td>
</tr>
<tr>
<td>Jakarta Setan/West</td>
<td>147</td>
<td>10</td>
<td>65</td>
</tr>
<tr>
<td>Jakarta Timur/South</td>
<td>178</td>
<td>10</td>
<td>65</td>
</tr>
</tbody>
</table>

Source: Djamal 1996, p.99

As noted above Jakarta has the same administrative level as an Indonesian province, and its ‘Lord Mayor’ has the same status as the Governor of a province. However, the JABOTABEK region is neither an administrative nor a governance unit. The JABOTABEK region falls under the three different jurisdictions of the DKI Jakarta and the three neighbouring districts and municipalities. Hence, JABOTABEK as a region does not have any institutionalised governance structure.

### 4.1.4.3 Governance of JABOTABEK Region?

A strategic planning approach was used in the Jakarta city region (JABOTABEK) in the early 1980s (HABITAT 1996, p.298). The new approach followed a period in the 1960s and early 1970s in which planning for the city and region was dominated by physical objectives and the concept of a ‘closed city’. During the 1970s there had been a move to a sectoral project approach in water supply, sewerage, railways, toll routes etc. with no
coordination. The new strategic approach aimed to ensure linkages between different issues involved, i.e. economic objectives, urban growth dynamics, inter and intra sectoral choices, financial resources, the role of the community and implementation capabilities (Box 4.1).

**BOX 4.1: Strategic Planning in JABOTABEK**

The critical elements of the JABOTABEK strategic planning approach were:

- Agreement on key inter-sectoral objectives (e.g. upgrade defined inner-city areas using infrastructure, socio-economic and land-readjustment mechanisms) between departments and agencies at local, regional and where relevant at national levels.

- Development of city-wide structure plan with inputs by sectoral, financial, and institutional ‘actors’ in the public and private sectors. This plan emphasized the formulation of policies, plans and sectoral investment programs according to income groups, i.e. giving the opportunity for a more rigorous assessment of poverty impact. Thus, where city objectives stress the distributional impact of policies and programs, compromises between sectors may be made by delaying implementation in some areas and giving priority to those likely to achieve the greatest equity. Compromises within sectors may be made by designing for lower standards initially, to be improved incrementally as individual or city resources permit. Given that planning controls were very weak, the structure plan emphasized, for example, infrastructure development and limited land reservations rather than detailed land use zoning allocations.

- Agreement on the main roles of the public and private sectors in implementing the plan.

- Development of improved techniques for forecasting city revenues, coordinating central government allocations to local government, and prioritizing sectoral investments in relation to financial feasibility.

- Development of a capital investment program incorporating a 3-5 year ‘rolling program’ within a 10 year forecast of financial resources.

- The coordination and synchronization of structure plan policies and the capital investment program in a form which could be used as an agreed point of reference by central and local government departments and by external support agencies who wished to coordinate their work in the city and sub-region.

- The capacity to monitor both the progress of planned activity and changes in the external environment. In the former, monitoring was necessary to ensure that action was taken on time or that, pending this, corrective action was put in hand. In relation to the external environment, monitoring had to check constantly that the structure plan/capital investment program remained relevant to its environment.

Source: HABITAT (1996, p.298)
To implement a strategic planning approach, a modified institutional structure was established in the city government. The department previously concerned only with city finances, expanded its role to coordinate both the formulation and implementation of the spatial planning/capital investment program. To improve efficiency, seven inter-sectoral groups were established which brought the sectoral and spatial planning teams together for the first time, with direct access to the Governor of Jakarta (UNHABITAT, 1996, p.298).

Thus JABOTABEK as a region of ‘governance’ exists only within an element of the JABOTABEK Metropolitan Development Plan (Indira and Firman 1995, p.310). The Indonesian National Development Planning Board (BAPPENAS) (1992, V) noted that a ‘JABOTABEK Region management system and changing the status of the region from “dependent” to “autonomous” is long overdue and seems to be complicated’.

Indira and Firman (1995, p.312) argued that the wave of rapid urbanization in the JABOTABEK region raised a major question of institutionalised governance. They argued that the JABOTABEK region needs an institutionalised governance structure at least for three reasons:

(i) the changing roles of government and the private sector;
(ii) the increasing conflicts of interest among the governments, private sector, and communities; and
(iii) the inability of conventional mechanisms and measures to control such a dynamic development.”
Indira and Firman (1995, p.313) stated that the government faces four questions with respect to management of JABOTABEK mega-urban region:

- First, to what extent can the private sector be used to promote regional development while government capacity to mobilize funds becomes more limited?
- Second, how can new management approaches be developed that are able to anticipate and accommodate the dynamics of economic development/growth in the region?
- Third, what kind of administrative cooperation should be developed for governments, the private sector, and communities in order to minimise conflicts among the interested parties?
- Finally, what forms of decentralisation should be adopted by the kabupaten governments to increase their capacity to cope with the growing urban areas in the region?

Indira and Firman (1995, pp.313-314) noted that central government responses to the above questions have not been forthcoming therefore they have formulated some recommendations for further actions for the development of the JABOTABEK mega-urban region:

- The emerging mega-urban region of JABOTABEK or beyond requires region-wide governance and/or management mechanism in response to changing patterns of urbanization, environment pressures, and growing socio-economic activities. This mechanism will need to involve coordination of development and governance of the JABOTABEK region as a whole and also include analysis of the authority and capacities of the existing coordinating agency (BKSP) for JABOTABEK;
- Necessary legislation for legal authority of the new arrangements will be needed and also delegation of powers to kabupaten governments to enable them to respond efficiently and effectively to rapid urban development in their areas;
- New legislation for comprehensive policies and strategies are required to deal with the rapid transformation of prime agricultural land, including measures to increase the efficiency and productivity of both urban and agricultural land;

- The scope and responsibilities of the private sectors should be clearly formulated to take advantage of the increasing role of the private sector in urban development and the relation between governments and the private sector should be legislated;

- New legislation is needed to strengthen local government tax bases to increase local government income by expanding tax bases and levying user charges;

- New policies and approaches, strategies, and measures are needed to cope with the rapidly deteriorating regional environment, spatial plans to manage the new patterns of urbanization and population mobility;

- New mechanisms of public, private, and community partnerships should be developed that are appropriate for and conducive to the rapid changes’.

Thus Jakarta/JABOTABEK Region has a strategic plan for its development. However Jakarta needs for nearly all other nine principles of Megacity governance as outlined in this thesis.

Sections 4.1 to 4.4 have described the evolution of governance systems and the current changes for urban governance in the cities of Metro-Manila, Tokyo, Jakarta and Bangkok. Table 4.7 summarises the extent to which the ten principles of urban governance described in section 3.4 are observable in the institutions and governance settings of the four cities.
Table 4.7: A Comparative Analysis of Governance of four Asian Megacities

<table>
<thead>
<tr>
<th>Governance Principles</th>
<th>Governance Institutions/ Settings of Asian Megacities and their Extended Metropolitan Region (EMR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Metro-Manila Capital Region</strong></td>
</tr>
<tr>
<td>1. A Geographical Area with clearly defined responsibility of Governance that covers the Extended Metropolitan Region</td>
<td>Yes……Metro-Manila Development Authority (MMDA) is authorized for planning, supervising, and coordinating development and certain metropolitan services</td>
</tr>
<tr>
<td>2. Strategic planning function that can provide a vision for how the city can address its land use problems sustainably</td>
<td>Yes Metro-Manila Development Authority (MMDA)</td>
</tr>
<tr>
<td>3. Statutory planning function that can control development to ensure 'common good' outcomes consistent with the strategic plan</td>
<td>No 7 cities and 10 Municipalities have statutory powers but not at MMDA level</td>
</tr>
<tr>
<td>4. Development facilitation function that can provide investment coordination, partnership for infrastructure and local validation structure</td>
<td>No MMDA has some development facilitation powers</td>
</tr>
<tr>
<td>Governance Principles</td>
<td>Governance Institutions/ Settings of Asian Megacities and their Extended Metropolitan Region (EMR)</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5 An urban redevelopment authority to guide and monitor further development in the core built-up areas in the city</td>
<td>Parity – Urban renewal, zoning, and land use planning done by MMDA but can’t implement</td>
</tr>
<tr>
<td>6 A transparent local process that can help define ‘common good’ sustainability outcomes from development with all stakeholders</td>
<td>Yes NGOs/UPOs provide strong civil society presence</td>
</tr>
<tr>
<td>7 A coordination mechanism to ensure planning and development are integrated</td>
<td>Partly – MMDA coordinate metro-wide development planning and coordination but have no implementation powers so integration occurs in theory only</td>
</tr>
<tr>
<td>8 A way of raising the finance for the above process including from land development</td>
<td>No</td>
</tr>
<tr>
<td>9 A strong link in to the national government system to enable good political support</td>
<td>MMDA and National Economic Planning Department play an important role</td>
</tr>
<tr>
<td>10 New professional skills in sustainability and local participation</td>
<td>No</td>
</tr>
</tbody>
</table>

Note: Table compiled by author
4.2 Governance Structures and Experience in Asian Megacities

An analysis of the existing governance structures of the four cities in the preceding section reveal that they currently cover more than one local government area, but lack effective regional bodies to bridge the gaps between local governments and provide for services and activities that can not be provided by municipalities acting alone. An exception is Metro-Manila which has a development management structure with coordination of some basic services for the whole National Capital Region of the Philippines. However, few of the other functions in the ten principles are applied by this regional body. On the other hand Tokyo does not have a fully developed Metropolitan Regional Governance structure but does show evidence of most of the other nine principles in operation.

4.2.1 What does this mean for Megacity Governance Structure?

The above review of governance and development management of the four rapidly growing Megacities of Asia with reference to their extended growing regions yields four different types of governance structures. Based on Laquian’s ideas (Laquian 1995, pp. 223-4) the Megacities governance arrangements can be categorised as follows:

- **Self Governing Local Government:** Governance authority and powers are lodged in local governments (cities, towns, municipalities, wards) and they exercise considerable autonomy in planning, policy-making, legislation, and execution of governmental functions. The state legislation for local governments decides their affairs. This is the case of Tokyo Metropolitan Government (TMG) which has very specific functions and principles but not the required regional focus, though regional coordination is only a part of the annual meeting among the
neighbouring local governments’ Mayors and the city of Tokyo (with its 12 million people).

- **Regional Governance with Cooperation of Local Governments:** Several local government units entered into a confederation with cooperative arrangements where by specific area-wide functions are to be carried out at a regional level. However, the local governments retain their local powers empowered by the state legislation. In this case a special authority has been created to carry out the area-wide specific functions, but the powers of such a body are carefully enumerated and delimited. The current arrangement in Metro-Manila falls into this category having 17 cities with Mayors and local functions; however, area-wide it is coordinated by Metro-Manila Development Authority (MMDA).

- **Mixed System of Local Governance and Central Government’s Regional Initiatives:** This system is characterised by the mixture of different levels of governments (e.g. Provinces, National Government) who share powers with local governments in the performance of public functions, when it is beyond the boundary of the local government, e.g. Bangkok Metropolitan Administration (BMA).

- **Local Government with Provincial Status and Structure:** This system is characterised by a single metropolitan government of having provincial autonomy with municipalities and districts within its boundary to govern the area but the entire region is not under its control (often the most rapid growth is in this area). This system exists in Jakarta Metropolitan Region (JABOTABEK).

The regional governance approach chosen in different countries discussed above has the specific historical, cultural and political characteristics of that country. All of them have developed some form of Metropolitan Regional Governance mainly through planning and development though in the absence of a corporate body with a legitimate unit of
governance. The lessons from experience of the above governance structures suggest that limited incremental objectives are more likely to succeed than ambitious attempts at comprehensiveness and control. Comprehensiveness is not likely to succeed in an environment of organizational fragmentation and of a competitive and defensive management style among the agencies involved. However, there is so much to do it is a concern if incrementalism leads to little more than the status quo.

Prud'homme (1996, p.129) noted that in the Asian context, examination of the institutional dimensions of some of the Megacities management reveals there are so many actors: public and private; political and technical; formal and informal; small and big; local, regional, and national. Therefore, the institutional mechanisms needing to develop will always be diverse, complicated, and imperfect. They will also be transforming and varying over time, because adjustments and improvements will constantly be necessary, and also because problems, attitudes, technical possibilities, constraints, as well as the rest of the world, will also be changing and calling for new solutions. In a world of complexity and change, institutional design should aim at flexibility, rather than rigidly towards perfection. Cooperation among different sectors towards a bigger goal will generally be the main outcome to be hoped for.

Laquian (1995, p.219) observed that ‘the national government plays a dominant role in the mega-urban region in many countries’. As most large cities are national capitals, therefore, he stated ‘it is quite common to have special districts, or regions run by special commissions, or authorities governing mega-regions’. According to Laquian, the Tokyo Metropolitan Government (TMG), the Metro-Manila Development Administration (MMDA), the Bangkok Metropolitan Administration (BMA), the Special Capital Area of
Jakarta (Daera Khusus Ibukota, or DKI) are examples of central government efforts to govern mega-urban regions.

Brennan (1995, pp.262-263) has commented on the governance structure for Megacities, stating that ‘Megacities typically experience rapid population growth and an expansion of economic activities, both of which have strong locational impacts that spill over the boundaries of the core area into an ever expanding metropolitan region’. Therefore, she argued that ‘developing the appropriate institutional framework is a problem in managing the growth of Megacities and mega-urban regions. Municipal administrations cannot perform this task well because their jurisdictions are unbounded, and they are usually fully occupied with the day to day problems of routine administration, service provision, and finance’.

Brennan (1995, p.263) has taken note that some countries have established some structure for metropolitan-wide development and planning in many Megacities. However, she noted that ‘many authorities have tended to languish as weak institutions, with nothing to do and little to say’. According to Brennan (1995, p.263), ‘The Dhaka Improvement Trust (DIT)/Capital Development Authority (RAJUK), Bombay Metropolitan Development Authority, Karachi Development Authority and Bangkok Metropolitan Administration (BMA)’ are some of the examples. She further noted that ‘others have evolved into public works agencies, such as the Calcutta Metropolitan Development Authority and the Delhi Improvement Authority’. She also noted that ‘other Megacities, such as Cairo, Mexico City, Jakarta, Seoul, Buenos Aires, Rio de Janeiro, and Sao Paulo, do not have a metropolitan development authority’. Brennan (1995, p.263) stated that ‘in certain cases, key urban services and/or major metropolitan investments are the responsibility of the central or provincial governments instead of a metropolitan authority, as in Seoul, Metro-
Manila, Bangkok, and Jakarta. In other cases, conflicts have arisen between a metropolitan planning authority and the municipality, as in Bombay, Calcutta and Karachi, and when this happens the latter often turns out to be stronger as it has a political base.

Therefore, Brennan (1995) argued that:

‘…a metropolitan-wide governance authority may be an effective mechanism for managing Megacities, provided that its role is clearly defined (p.263).’

Brennan (1995) further argued that:

‘.limited territorial control of existing municipalities and extensive jurisdictional fragmentation usually mean that metropolitan problems cannot be handled at the sub-metropolitan level (p.263).’

Brennan (1995, p.263) also noted that it is nonetheless very important that the metropolitan-wide governance /development authorities do not usurp the functions of other agencies. Instead they perform functions that other bodies cannot do or at least do not do, such as identifying and promoting an appropriate spatial strategy (but not via heavy-handed government intervention), coordinating a capital investment budget for the metropolitan region, promoting economic development (e.g. giving strong political support for major economic infrastructure programs that could increase metropolitan economic efficiency), seeking consensus among existing bodies and agencies for regional approaches to problems, and finding mechanisms to increase public participation and access.

The purpose of this chapter is to draw out the underlying governance structure, emerging governance agendas for the process of urbanization, and the implications for future policy
formulation. The preceding sections made it clear that these arrangements are inadequate in the Asian Megacities. It is also clear that there is no delineation of responsibilities among national, provincial, metropolitan, city, and district governments. However, the need for a governance structure on the metropolitan regional scale has been stressed by the many commentators as indicated. The power of such an authority proposed by these authors could range from coordination to clear responsibility for administration. The flexibility of involvement of local governments and their relationship with various sectors and stakeholders, and how a metropolitan-wide regional organization coordinates all this is a matter for debate in each situation. But there is little doubt that a Metropolitan Regional Governance structure is required.

4.3 Conclusions

Megacity governance in Asia is very mixed. The four major Asian Megacities have been assessed for evidence of the ten principles of Megacity governance. None have all the principles in place but it is significant that those with the most in place are also the most developed. It can be argued that these urban governance processes are only possible after development has occurred (i.e. causality is from economic development to better governance). This thesis suggests that the trajectory is the other way: unless there is effective urban governance in place then economic development will not be optimal (i.e. causality is from governance to economic development). The next chapters will begin to apply these ten Megacity governance principles to Dhaka as a means of assisting in its development.
CHAPTER 5 MEGACITY DHAKA: PHYSICAL AND POPULATION GROWTH

This chapter is about the physical and population growth of Dhaka City. It describes the physical setting of the city and its topography in order to outline its physical constraints. This chapter explains the different area connotations and finds the Extended Metropolitan Region (EMR) of Megacity Dhaka. It also tracks the drainage systems, annual flooding patterns, ground water, urban floods and protection measure in Megacity Dhaka.

5.1 Physical Setting of Megacity Dhaka

Dhaka City, the capital of Bangladesh, is at the geometric centre of the country. Dhaka City at 90°24’ East longitude and 23° 43´ North latitude is located in the central region of the flat deltaic plain of the three large rivers, the Ganges, the Brahmaputra and the Meghna (see Map 5.1). The tributaries of these major rivers surround the city. The surrounding rivers are the Buriganga in the south, Turag in the north and west and Balu in the east. The elevation of Dhaka City lies between 2 to 13 metres above mean sea level. Dhaka west and part of north and south is protected from river floods by peripheral embankments (JICA 1991).

Much of Dhaka and its surrounding areas are prone to yearly floods. Flood prone areas have 2 to 4 metres of flooding that extends to the edge of the city thus forming a real urban boundary. Even within the city itself, which stands on relatively elevated land including the areas to the north of the city, urban development opportunities are constrained by a large number of re-entrant valleys. Thus the area of expansion of Dhaka has been governed largely by the physical configuration of the landscape in and around
the city, particularly the river system and the height of land in relation to the flood level (Islam 1996, pp.62-63).

Dhaka’s setting is the low-lying area all around and stretching from the Buriganga bank in the south towards the north practically to the Tongi River; a stretch of high land is flanked on either side by low-lying marshes and old riverbeds. Often these low-lying swamps creep right into the heart of the high areas (as in the case of the Mirpur to Cantonment depressions from the west to the east, and the Baridhara-Khilkhett-Uttara depression from east to west) and as a result the expansion of the city has not been
without difficulty. The hazards of flood and inundation haunt the Dhaka city-dwellers even to the present day (Chowdhury and Faruqui 1991).

Chowdhury and Faruqui (1991) described Dhaka as:

‘...one great wide-sweeping plain, low-lying and fertile, drained by some of the mightiest rivers of the east as they forge their impetuous way through many and ever-changing channels to the sea...[its] trim rice fields locked close in the embrace of countless streams and rivulets, luxuriant in every exquisite shade of green, like emeralds set in silver sheen.’

Dhaka stands on the northern bank of the River Buriganga, about eight miles above its confluence with the Dhaleswari River, and this river-side situation not only gives to Dhaka, with its minarets and spacious buildings, an appearance like that of Venice, of a city rising from the surface of the water, but at the same time affords command over the water-routes. Through the Buriganaga and the Dhaleswari Rivers, Dhaka is connected by navigable waterways with the River Padma, the Brahmaputra and the Meghna Rivers and thus has the convenience of water carriage to and from any principal place in the region. This is the historical and geographical reason for Dhaka being the main city in Bangladesh. Dhaka is also well placed for land communications, being on the southern edge of an old alluvial terrace considerably above the highest level of the surrounding rivers in ordinary seasons of inundation. The northern part of the city is on a laetrile terrace, which broadens out northwards. This high ground means that Dhaka has been able to take advantage of transport links in the age of motorised land transport (Chowdhury and Faruqui 1991).

Based on the flood control infrastructure, the city is divided into two parts: Dhaka West and Dhaka East. The Pragati Sarani (old DIT road) divides Atish Dipankar Sarak up to Jatrabari, Atish Dipankar Sarak up to Jatrabari to Demra Ferry Ghat. These roads were
raised after the devastating flood of 1988 to perform as road-cum-embankment. The combined area of Dhaka East and Dhaka West is named as Greater Dhaka for its flood protection program (DOE; IUCN 2000).

Most of the western part of Dhaka has become urbanised. The eastern part of Dhaka is on the floodplain of the Balu and Sitalakhya Rivers. Though it is a low-lying area, it is on the peripheral areas where quite considerable urban growth has already taken place outside the formal planning process and is likely to become intense in the future. Khan (1997) indicates that 62% of the Greater Dhaka City had been urbanized by 1996. If further flood protection can be achieved it is likely to accelerate urbanization in Dhaka East. Dhaka’s urbanised part mostly lies at an elevation of 6 to 8 m above mean sea level (JICA 1987). The land area above 8 m Mean Sea Level (MSL) covers only about 20 sq km, the land elevated from 6 to 8 m above M.S.L. covers 75 sq km, while 170 sq km of the area is less than 6 m. As tidal movements can be greater than 6 m this means that a large part of the city could be flooded during the monsoon period. Most of the eastern part of the city is a low-lying area having no peripheral embankment and is thus subject to regular flooding (DOE; IUCN 2000).

Variations in land levels in the tract bounded by the first ring of rivers have resulted in intermittent development trends in Dhaka. The first urban development took place on relatively higher tracts with an elevation between 6 to 8 metres above sea level. This land remains above normal flood level and experiences inundation of up to 2 metres during unusual flooding, as was experienced in 1988. Most of this high land within a radius of 15 kilometres of the city centre is already permanently built-up and occupied. However, there are basins of lower level land or water bodies within this high land. Most of these lands have remained undeveloped, although there are portions where development has been made possible by infilling. The second level of land with medium height, typically of
3 to 4 metres above sea level, is susceptible to flooding for short periods annually. Much of these lands still remain outside urban use, but semi-permanent dwellings exist in many areas, mostly because of infilling and the artificial raising of land levels. The third level of land between 1 and 3 metres above sea level is flooded annually. Settlements on such land are few and the land is used mainly for agriculture. Thus the Desakota mixture of scattered urban development and agricultural remnants has a strong physical base in Dhaka (Islam 1996, p.63).

5.2 Physical Growth of Megacity Dhaka

The creation of the sovereign state of Bangladesh in 1971 bestowed on Dhaka the fame and standing of the capital of a country. Thus it became the site for Bangladesh’s participation in the global economy which has led to Dhaka’s extraordinary growth since 1971 (Map 5.2).
The low-lying areas of the eastern side such as Jurain, Goran, Badda, Khilgaon, Rampura, and on the western side areas of Kamrangirchar, Shymoli, and Kallyanpur, came to be developed. Dhaka’s growth picked up at a tremendous pace and private initiative played the dominant role in its expansion, as Dhaka became the region’s link to the global economy. However, its role as the capital of government has also played a part.

The expansion of Dhaka City in the 1950s could be described as dawdling and steady; in the 1960s the speed picked up but in the period after the emergence of Bangladesh in 1971, it could be said to be extraordinary (see Table 5.1) because of its standing as the capital of a new country.
Along with its permanent residents the city has a very large floating population, the pressure of which has resulted in the growth of slums in all possible surroundings, occupying any conceivable vacant land. The recent phenomenon of high rise buildings, both in the commercial and residential sectors, is clearly manifested where the highlands within the city have been occupied; to cope with the ever-increasing pressure Dhaka has started going upwards, an inevitable and common phenomenon in all modern cities with a fast growing population. Dhaka is now on the verge of a change in its urban character, vertical growth taking the place of horizontal expansion as it has filled all the available high land in the bioregion (Chowdhury and Faruqui 1991).

The development of Dhaka has followed the dictation of nature, rather than planned growth. The development of Gulshan, Banani, Baridhara and Uttara was based on choosing the highlands on the main Dhaka-Tongi axis road and Mirpur on Dhaka-Savar axis road. Dhaka did not expand toward the south beyond Buriganga River, until the construction of bridges over the river Buriganga in the 1980s and 1990s. No serious effort at reclaiming land under a well-planned scheme to give the city a homogenous and cohesive growth is visible. Dhaka has grown on its own, in a haphazard manner and the topography of the area dictated the terms and direction of the growth. Since Dhaka became the capital of an independent sovereign country, the pressure on it has become enormous. The number of permanent inhabitants of the city registered a steady growth from 2 million to 10 million in 30 years (see Table 5.1).
5.3 The Growth of Population in Megacity Dhaka

The population at the various stages of Dhaka’s growth is shown in Table 5.1, and the growth in area of the city in Table 5.2 with both also expressed graphically (Graphs 5.1 and 5.2).

Table 5.1: The Population Growth of Mega City Dhaka since 1951:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dhaka Megacity</td>
<td>411,279</td>
<td>718,766</td>
<td>2,068,353</td>
<td>3,440,147</td>
<td>6,487,459</td>
<td>9,912,908</td>
</tr>
<tr>
<td>Dhaka City Corporation Area</td>
<td>276,033</td>
<td>368,575</td>
<td>1,403,259</td>
<td>2,475,710</td>
<td>3,612,850</td>
<td>5,378,023</td>
</tr>
<tr>
<td>Narayanganj Municipality</td>
<td>72,517</td>
<td>125,792</td>
<td>176,459</td>
<td>246515</td>
<td>276,549</td>
<td>230,294</td>
</tr>
<tr>
<td>Kadamrasul Municipality</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>126898</td>
</tr>
<tr>
<td>Savar Municipality</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>77,216</td>
<td>124,885</td>
</tr>
<tr>
<td>Tongi Municipality</td>
<td></td>
<td></td>
<td>67,420</td>
<td>94,580</td>
<td>168,702</td>
<td>281,928</td>
</tr>
<tr>
<td>Gazipur Municipality</td>
<td></td>
<td></td>
<td></td>
<td>96,717</td>
<td>123,531</td>
<td></td>
</tr>
<tr>
<td>Other Urban Areas</td>
<td>62,729</td>
<td>224,399</td>
<td>421,215</td>
<td>623,342</td>
<td>2,255,425</td>
<td>3,647,349</td>
</tr>
</tbody>
</table>


*The Population Census in 1971 could not take place due to the liberation war.

Table 5.2: The Area and Population Growth of Megacity Dhaka since 1951

<table>
<thead>
<tr>
<th>Year</th>
<th>Area in Sq Km</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>85.45</td>
<td>411,279</td>
</tr>
<tr>
<td>1961</td>
<td>124.45</td>
<td>718,766</td>
</tr>
<tr>
<td>1974</td>
<td>335.79</td>
<td>2,068,353</td>
</tr>
<tr>
<td>1981</td>
<td>509.62</td>
<td>3,440,147</td>
</tr>
<tr>
<td>1991</td>
<td>1352.87</td>
<td>6,487,459</td>
</tr>
<tr>
<td>2001</td>
<td>1530</td>
<td>9,912,908</td>
</tr>
</tbody>
</table>

BBS: Bangladesh Bureau of Statistics 2001

Dhaka City’s population growth and physical expansion is evident from the above Tables 5.1 and 5.2. Since 1951 the population of Dhaka City has increased by more than 30 times, yet the area of the city has expanded by 18 times. Like many Asian Megacities this means the city has grown out and up. Its density at around 66/ha is not as high as Hong Kong (about 300/ha) but in a city with few high rise buildings it is extremely dense.

5.4 Different Area Connotations of ‘Dhaka City’

*First* - Dhaka City Corporation (DCC) has a clear administrative boundary and its area can easily be measured. At present DCC has an area of 360 sq km. The population of Dhaka City Corporation (DCC) area (Map 5.3) in the 2001 Census was 5,378,023 (BBS August 2001). To most people, ‘Dhaka’ generally means the central city only, i.e. the jurisdiction of Dhaka City Corporation and some adjoining built-up areas (GOB 1996, p.101).

*Second* - Dhaka Metropolitan Area (DMA), the area defined by police administration for the maintenance of law and order. DMA is only slightly larger than the DCC area. DMA consists of 14 sub-units known as *Thanas* (lowest tier of police administration served by a Police Station) with an average size of 10 sq km ranging from 3 to 37 sq km and population ranging from 130,000 to 750,000 (Map 5.4) (GOB 1996, p.101).
Third - Dhaka Statistical Metropolitan Area (DSMA), which in 1991 had an area of 1353 sq km (Map 5.5). The population of Dhaka Statistical Metropolitan Area (DSMA) in the 2001 Census was 9,912,908 (BBS August 2001). It comprises Dhaka City Corporation (DCC) and the entire Narayanganj Sadar, Bandar, Keraniganj, Savar, Tongi and Gazipur Sadar Thanas (BBS: Bangladesh Census 1991). Bangladesh Bureau of Statistics (BBS) stated in Census Report (2001) that Dhaka is the only Megacity of Bangladesh and referred to this concept of the city (GOB 1996, p.101).

Fourth – The Capital Development Authority (or Rajdhani Unnayan Kartripakkha, RAJUK) area, which is in fact the planning area of RAJUK (Map 5.6). The planning area of RAJUK is larger than both DCC and DSMA. The present planning area of RAJUK covers nearly 1530 sq km (590 sq miles) (DMDP 1995). Within the area of RAJUK (or DSMA) there are five other municipalities apart from DCC, namely Narayanganj, Savar, Gazipur, Tongi and Kadamrasul. RAJUK also encompasses rural areas administered by Union Parishads (lowest tier local government unit in rural areas) in the three administrative districts- Dhaka, Narayanganj and Gazipur (GOB 1996, p.101).
Map 5.3: Dhaka City Corporation (DCC) Area

(Source: Banglapedia – accessed on 30-10-2005)
Map 5.4: Administrative Zones (Thana) of Dhaka Metropolitan Police (DMP)

Source: Dhaka Metropolitan Police (DMP)
Map 5.6: Planning Zones of RAJUK (Source: DMDP 1995)
Map 5.7: Zones of Dhaka Water and Sewerage Authority (Source: DWASA)
The *Extended Metropolitan Region (EMR)* of Dhaka is similar to the area of RAJUK. This covers nearly 1530 sq km (BBS, 1994) and includes a larger urbanized area adjoining the core city of Dhaka; with the surrounding five municipalities along with the peripheral *Desakota* settlements the city had a population of 9.9 million in 2001. The area has been recognised by the Dhaka Metropolitan Development Plan (DMDP) of 1995-2015. It is only a step to recognition of an area for planning purposes. According to Islam (1996, p.63) the Megacity Dhaka and its Extended Metropolitan Region (EMR) consists of the DCC (Dhaka City Corporation) area and four peripheral municipalities (see Map 5.8).

Map 5.8: Megacity Dhaka (Islam 1996)
5.5 Conclusions

Dhaka’s growth into a very large city has taken only one generation. A child born in 1950 would have seen it grow from less than half a million to 12 million people today. Dhaka’s role as a port and capital city for 120 million people has meant it has become the Megacity of the region, linking Bangladesh to the global economy.

The next chapter will show how government institutions have grown in Dhaka without really managing to address the fundamental problems of growth.
CHAPTER 6 MEGACITY DHAKA: PRESENT GOVERNANCE INSTITUTIONS

This chapter examines the present governance institutions and highlights the absence of metropolitan-wide institutions in the city and the lack of integrative functions that can provide strategic direction and development facilitation. A description is provided of the governance structure of Bangladesh followed by a survey of the existing institutions in Dhaka City.

6.1 Government Administrative Structures of Bangladesh

Bangladesh is a unitary state with a parliamentary form of government. The President is head of the state and the Prime Minister is the Chief Executive of the Republic advised by a council of ministers. Article 56(6) of the Constitution of the People’s Republic of Bangladesh confers on the President the power to enact the bills to law passed by the parliament for the allocation and transaction of the business of the government. There are 45 ministries/divisions in the government. A permanent secretary is the official head of each ministry and/or division. The country is administratively divided into 6 divisions, 64 districts and 466 sub-districts and about 10,000 union councils. Beside these administrative territories, 6 City Corporations and 293 Municipalities are administering the urban areas of the country. City Corporations administer large urban centres and work under the respective City Corporation ordinances or legislation enacted at different times. The Pourashava (Municipal) Ordinance of 1977 governs the Municipalities. The Local Government Act of 1997 governs the Local Governments in rural areas.

National Economic Council (NEC) is the highest body of the country as it makes decisions on all government spending and approves the Annual Development Program (ADP) for
the country. The NEC makes decisions on national economic planning including investments in the metropolitan areas but without any metropolitan focus. The Planning Commission advises the NEC and receives submissions on all development projects from all development agencies throughout the country. It is internally organised along sectoral lines.

The Prime Minister, the Council of Ministers and the Committee of Secretaries of Ministries/Divisions coordinate the activities of various government agencies. However, the coordination of investment at the metropolitan level is not a part of Bangladesh political history.

The country does not have any regional approach to any area specific problem and development management or governance issue except within projects. This will be evident from the following sections.

**6.2 Governance Institutions in Dhaka Megacity**

As will be shown below there is a plethora of governance institutions with responsibility for Dhaka in some way or other.

Special agencies created to undertake development of Dhaka Megacity and at the same time to provide essential services are: Capital Development Authority (RAJUK), Dhaka Water and Sewerage Authority (DWASA), Dhaka Electric Supply Authority (DESA), Dhaka Metropolitan Police (DMP), Dhaka Cantonment Board (DCB). The Capital Development Authority (RAJUK) (erstwhile DIT- Dhaka Improvement Trust) was created in 1956 under the Town Improvement Act (TIA) of 1953 and since its inception has been responsible for
the preparation and implementation of the Master Plan for Dhaka City. Its implementation powers include development control through the promulgation of the East Bengal Building Construction Act of 1952, which was framed to prevent haphazard construction of buildings. The Public Works Department (PWD) is responsible for all public building construction in the country including Dhaka Megacity. The National Housing Authority (NHA) is responsible for low-income housing in the country including Dhaka Megacity. Dhaka WASA (Water and Sewerage Authority) and DESA (Dhaka Electric Supply Authority) are responsible for services within the Dhaka Metropolitan Area. The DMP has the responsibility to maintain law and order, manage road traffic, and collect road taxes and issue vehicle registration in the metropolitan area.

Local level agencies concerned with the development management of Dhaka Megacity are Dhaka City Corporation (DCC), Tongi Municipality, Narayanganj Municipality, Savar Municipality, Gazipur Municipality and Kadamrasul Municipality.

The multiple institutions mentioned above belonging to different ministries are involved in the development management of Dhaka Megacity. The structural relationship among various institutions determining Dhaka Megacity development management is illustrated in Figure 6.1.
The structure of agencies with responsibilities for development management, service provision and control operating in the Dhaka Megacity Area (DMA) is shown in Table 6.1.

According to Pasteur (1995) the agencies may be classified as:

- central government resource management ministries (MOF, MOP)
- central government functional ministries (e.g. MOWR, MOLGRD&C, MOH&PW, MOH&FW)
- central government departments or directorates with a national scope of operation (e.g. DPHE, LGED)
- central coordinating organizations with a national scope of operation (WARPO)
- parastatal agencies with a national scope of operation (e.g. BWDB, TITAS Gas)
- parastatal agencies with a metropolitan scope of operation (DWASA, RAJUK, DESA, DTCB)
- central government departments with a sub-metropolitan scope of operation (Dhaka Metropolitan Police- DMP)
- urban local government authorities (DCC, DCB, Pourashavas)
- administrative structures of the central government (District and Thana)
- rural local government authorities (District and Union)

Table 6.1 shows a distinct lack of metropolitan scale institutions in Dhaka Megacity. The central resource ministries such as Ministry of Planning and Ministry of Finance do not have a metropolitan level focus for Dhaka Megacity. Dhaka Megacity needs a water management plan (as is evident from Chapter 5) at regional scale both for ground water and surface water management. But the Ministry of Water Resources does not have a metropolitan scale approach except at project level. The Ministry of Communication (Railways and Road Transport), Ministry of Land, Ministry of Health, and Ministry of Education do not have any organization to work at metropolitan scale. Ministries like Local Government, Housing and Public Works, Energy, Defence (Dhaka Cantonment Board), and Home Affairs do have metropolitan scale organizations (covering part of the Extended Metropolitan Region of Dhaka Megacity), however their jurisdictions don’t
coincide (see Maps 5.3, 5.4, 5.5, 5.6 and 5.7) and their business responsibilities are quite sector oriented having no room for coordination.
Table 6.1: Institutional Framework of Government in Dhaka Megacity and its Extended Metropolitan Region (EMR)

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>CENTRAL RESOURCE MINISTRIES</th>
<th>SECTORAL MINISTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINISTRY (POLICY LEVEL)</td>
<td>PLANNING</td>
<td>FINANCE</td>
</tr>
<tr>
<td></td>
<td>PLANNING COMMISSION MP</td>
<td>MP</td>
</tr>
<tr>
<td></td>
<td>MP.MR&amp;DAC</td>
<td>MHR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MHA/PFW</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MHR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MHR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MP</td>
</tr>
<tr>
<td>NATIONAL SCALE DIRECTORATE s</td>
<td>DIRECTORATE OF PUBLIC HEALTH ENGINEERING (DPHE)</td>
<td>DEPARTMENT OF ENVIRONMENT (DO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOCAL GOVERNMENT ENGINEERING DEPARTMENT (LGED)</td>
</tr>
<tr>
<td>NATIONAL SCALE PARASTATALS</td>
<td>NATIONAL SCALE PARASTATALS</td>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
<td>NATIONAL SCALE PARASTATALS</td>
<td>NATIONAL SCALE PARASTATALS</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>METROPOLITAN SCALE PARASTATALS</td>
<td>METROPOLITAN SCALE PARASTATALS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUNICIPAL LOCAL AUTHORITIES DISTRICT ADMINISTRATION RURAL, LOCAL AUTHORITIES</td>
<td>DHAKA CITY CORPORATION (DCC)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from DMDP (1995)
Governance in Dhaka is shared by a number of agencies. They can be divided into public sector (under the central government), the elected local (municipal) government (i.e. DCC), the private sector (both formal and informal), NGOs and other civil society groups. The structures of the various actors and their respective roles in the governance of Dhaka are discussed in the following sections.

6.2.1 National, Sectoral, Special and Local Institutions

The governance system of Dhaka includes components of national as well as municipal governments, the private sector and the NGOs. Dhaka, being the capital city, accommodates key offices of three organs of the state, i.e. the legislature, the executive and the judiciary. Also Dhaka is the headquarters of secondary and tertiary levels of civil administration, the Division and the District HQs. Public sector institutions (Table 6.2) actively involved in the development of Dhaka is broadly of four types, i.e. national, sectoral, special and local.

Table 6.2: Agencies for Development Management in Dhaka Megacity: Their Status and Major Functions

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>SI. Name of Agency</th>
<th>Administrative Ministry/Agency</th>
<th>Major Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>National Economic Council (NEC)</td>
<td>National Council</td>
<td>Approves Annual Development Program (ADP) of the Government</td>
</tr>
<tr>
<td>3</td>
<td>Deputy Commissioners of Dhaka, Gazipur and Narayanganj Districts</td>
<td>Cabinet Division / Ministry of Establishment</td>
<td>General Administrations of Dhaka, Gazipur and Narayanganj Districts</td>
</tr>
<tr>
<td>4</td>
<td>Urban Development Directorate (UDD)</td>
<td>Ministry of Housing and Public Works</td>
<td>Nation-wide Urban and Regional Planning</td>
</tr>
<tr>
<td>5</td>
<td>Rajdhani Unnayan Kartipakkhya (RAJUK)</td>
<td>Ministry of Housing and Public Works</td>
<td>Development Planning: Dhaka Metropolitan Area</td>
</tr>
<tr>
<td>6</td>
<td>Housing and Settlement Directorate (HSD)</td>
<td>Ministry of Housing and Public Works</td>
<td>Provision of Public Housing in Urban Areas.</td>
</tr>
<tr>
<td>7</td>
<td>Public Works Department (PWD)</td>
<td>Ministry of Housing and Public Works</td>
<td>Construction of Public Buildings and Maintenance</td>
</tr>
<tr>
<td>8</td>
<td>Deputy Commissioner of Settlements (DCS)</td>
<td>Ministry of Housing and Public Works</td>
<td>Land Lease, Title Transfer</td>
</tr>
<tr>
<td>9</td>
<td>Dhaka City Corporation (DCC)</td>
<td>Ministry of Local Government, Rural Development and Co-operatives (MLRD&amp;C)</td>
<td>Municipal Services in the DCC area</td>
</tr>
<tr>
<td>10</td>
<td>Dhaka Transport Coordination Board</td>
<td>Ministry of Local Government (MLRD&amp;C)</td>
<td>Coordination &amp; Management of Transport</td>
</tr>
<tr>
<td>11</td>
<td>Narayanganj Municipality</td>
<td>Ministry of LRD&amp;C</td>
<td>Municipal Services in Narayanganj Municipal Area</td>
</tr>
<tr>
<td>12</td>
<td>Tongi Municipality</td>
<td>Ministry of LRD&amp;C</td>
<td>Municipal Services in Tongi Municipal Area</td>
</tr>
<tr>
<td>13</td>
<td>Savar Municipality</td>
<td>Ministry of LGRD&amp;C</td>
<td>Municipal Services in Savar Municipal Area</td>
</tr>
<tr>
<td>14</td>
<td>Gazipur Municipality</td>
<td>Ministry of LGRD&amp;C</td>
<td>Municipal Services in Gazipur Municipal Area</td>
</tr>
<tr>
<td>15</td>
<td>Kadamrasul Municipality</td>
<td>Ministry of LGRD&amp;C</td>
<td>Municipal Services in Bandar Area</td>
</tr>
<tr>
<td>16</td>
<td>Dhaka Water and Sewerage Authority (DWASA)</td>
<td>Ministry of LGRD&amp;C</td>
<td>Provision of Water Supply and Sewerage Disposal</td>
</tr>
<tr>
<td>17</td>
<td>Local Government Engineering Department (LGED)</td>
<td>Ministry of LGRD&amp;C</td>
<td>Engineering services to the Local Government Authorities</td>
</tr>
<tr>
<td>18</td>
<td>Dept. of Public Health Engineering (DPHE)</td>
<td>Ministry of MLGRD&amp;C</td>
<td>Sanitation and Drainage</td>
</tr>
<tr>
<td>19</td>
<td>Registrar Co-operative Societies (Housing Sector)</td>
<td>Ministry of MLGRD&amp;C</td>
<td>Registration of Housing Co-operative Societies</td>
</tr>
<tr>
<td>20</td>
<td>Dept. of Environment</td>
<td>Ministry of Environment and Forests</td>
<td>Control of Air and Water Pollution.</td>
</tr>
<tr>
<td>21</td>
<td>Telegraph and Telephone Board (T &amp; T)</td>
<td>Ministry of Posts and Telecommunication</td>
<td>Provision of Telephone and Telegraph Services</td>
</tr>
<tr>
<td>22</td>
<td>Power Development Board (PDB/DESA)</td>
<td>Ministry of Energy and Mineral Resources</td>
<td>Generation and Supply of Electricity</td>
</tr>
<tr>
<td>23</td>
<td>Titas Gas</td>
<td>Ministry of Energy and Mineral Resources</td>
<td>Supply of Natural Gas</td>
</tr>
<tr>
<td>24</td>
<td>Department Roads and Highways (R&amp;H)</td>
<td>Ministry of Communication</td>
<td>Construction and Improvement of Highways, Major Roads, Bridges and Related Works</td>
</tr>
<tr>
<td>25</td>
<td>Bangladesh Road Transport Authority (BRTA)</td>
<td>Ministry of Communication</td>
<td>Issue fitness certificates to surface transports, driving licences and route permits</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>SI. Name of Agency</td>
<td>Administrative Ministry/Agency</td>
<td>Major Functions</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>26</td>
<td>Bangladesh Road Transport Corporation (BRTC)</td>
<td>Ministry of Communication</td>
<td>Provision of Public Transport Services (mainly bus)</td>
</tr>
<tr>
<td>27</td>
<td>Bangladesh Railway (BR)</td>
<td>Ministry of Communication</td>
<td>Expansion and Maintenance of Rail Transport</td>
</tr>
<tr>
<td>28</td>
<td>Civil Aviation Authority of Bangladesh (CAAB)</td>
<td>Ministry of Civil Aviation and Tourism</td>
<td>Development and Maintenance of Airports</td>
</tr>
<tr>
<td>29</td>
<td>Bangladesh Parjatan (Tourism) Corporation (BPC)</td>
<td>Ministry of Civil Aviation and Tourism</td>
<td>Provision of Facilities for Tourists (Hotels, Parks, Restaurants)</td>
</tr>
<tr>
<td>30</td>
<td>Bangladesh Inland Water Transport Authority (BIWTA)</td>
<td>Ministry of Port, Shipping and Inland Water Transport</td>
<td>Expansion and Maintenance of Water Transport</td>
</tr>
<tr>
<td>31</td>
<td>Dhaka Metropolitan Police (DMP)</td>
<td>Ministry of Home Affairs</td>
<td>Traffic Control, Collection of Road Tax and Licensing of Vehicles</td>
</tr>
<tr>
<td>32</td>
<td>Fire Service and Civil Defence</td>
<td>Ministry of Home Affairs</td>
<td>Fire Fighting and Ambulance Services</td>
</tr>
<tr>
<td>33</td>
<td>Dhaka Cantonment Board (DCB)</td>
<td>Ministry of Defence</td>
<td>Provision and Maintenance of Services in Cantonment Areas</td>
</tr>
<tr>
<td>34</td>
<td>Survey of Bangladesh (SOB)</td>
<td>Ministry of Defence</td>
<td>Land Records and Aerial Photography</td>
</tr>
<tr>
<td>35</td>
<td>Space Research and Remote Sensing Organisation (SPARRSO)</td>
<td>Ministry of Defence</td>
<td>Collection and Analysis of Satellite Data</td>
</tr>
<tr>
<td>36</td>
<td>Board of Investment (BOI)</td>
<td>Prime Minister's Office</td>
<td>Approval of Industrial Projects.</td>
</tr>
<tr>
<td>37</td>
<td>Small and Cottage Industry Corporation</td>
<td>Ministry of Industries</td>
<td>Development of Small and Cottage Industry</td>
</tr>
<tr>
<td>38</td>
<td>Directorates of Primary, Secondary and Technical Education</td>
<td>Ministry of Education</td>
<td>Construction, Maintenance and Supervision of Schools and Educational Institutes</td>
</tr>
<tr>
<td>39</td>
<td>Universities</td>
<td>Ministry of Education</td>
<td>Higher Education and Research Services</td>
</tr>
<tr>
<td>40</td>
<td>Bangladesh Water Development Board (BWDB)</td>
<td>Ministry of Water Resources</td>
<td>Dhaka Integrated Flood Protection</td>
</tr>
<tr>
<td>41</td>
<td>Water Resources Planning Organisation (WARPO)</td>
<td>Ministry of Water Resources</td>
<td>Coordinate Flood Protection Management</td>
</tr>
<tr>
<td>42</td>
<td>House Building Finance Corporation (HBFC)</td>
<td>Ministry of Finance</td>
<td>Provision of Loans for Housing Construction in the Private Sector</td>
</tr>
<tr>
<td>43</td>
<td>Bangladesh Agricultural Development Corporation (BADC)</td>
<td>Ministry of Agriculture</td>
<td>Provision for Marketing Facilities</td>
</tr>
<tr>
<td>44</td>
<td>Uddayan Unnayan Board</td>
<td>Ministry of Agriculture</td>
<td>Development of Horticulture</td>
</tr>
<tr>
<td>45</td>
<td>Sports Federation</td>
<td>Ministry of Youth and Sports</td>
<td>Promotion and Provision for Facilities for games and sports</td>
</tr>
<tr>
<td>46</td>
<td>Housing Estates</td>
<td>Ministry of Housing and Public Works</td>
<td>Provision for Land and Housing</td>
</tr>
<tr>
<td>47</td>
<td>NGO Affairs Bureau</td>
<td>Prime Minister's Office</td>
<td>Construction and Maintenance of Local Urban Services</td>
</tr>
<tr>
<td>48</td>
<td>Department of Land Records and Surveys (DLRS)</td>
<td>Ministry of Land</td>
<td>Land Management</td>
</tr>
<tr>
<td>49</td>
<td>Directorate of Health</td>
<td>Ministry of Health</td>
<td>Health Facilities</td>
</tr>
<tr>
<td>50</td>
<td>Department of Social Welfare</td>
<td>Ministry of Social Welfare</td>
<td>Community Development and Services, Income Generating Activities, Literacy Program</td>
</tr>
<tr>
<td>51</td>
<td>Department of Womens’ Affairs</td>
<td>Ministry of Womens’ and Childrens’ Affairs</td>
<td>Protection of Women's Rights and Development Projects concerning women's activities</td>
</tr>
</tbody>
</table>
Education, Ministry of Youth and Sports and finally the Ministry of Defence with exclusive territorial jurisdiction. The Planning Commission with the approval of National Economic Council plays an important role in investment programming, policy planning and management of Dhaka.

**Sectoral:** A number of sectoral agencies under various ministries provide extension services. For example, the Public Works Department (PWD) is responsible for constructing government offices and other public buildings; National Housing Authority (NHA) for the development and distribution of serviced residential plots and construction of medium-sized and multi-storied flats; Local Government Engineering Department (LGED) with DCC for low-cost sanitation, infrastructure and improving physical environment in slum areas and elevated overpasses; Department of Environment (DOE) for combating air and water pollution; and the Department of Social Welfare (DSW) for organising and providing community services and fostering community based organisations.

**Special:** The special development authority is the *Rajdhani Unnayan Kartripakkha* (RAJUK) or the Capital Development Authority. RAJUK is responsible for urban planning, land development and building controls throughout the Dhaka Megacity region, which is much larger than the DCC area. DWASA is responsible for building and maintaining water supply and sewerage in Dhaka. DESA is entrusted with the responsibility of distributing electricity to inhabitants of Dhaka. BT&TB provides a telecommunication and satellite network to the city-dwellers. Titas Gas Transmission and Distribution Company (Titas) supplies gas to citizens for domestic and commercial/industrial use. Bangladesh Road Transport Authority (BRTA) runs the roads and public transport system. DMP is a special purpose law-enforcement organization for maintaining law and order in the city. The
Dhaka Cantonment Board (DCB) is responsible for planning, maintenance and development of areas within the cantonment areas. Physically the cantonments exist as enclaves within the DCC area. Dhaka Transport Coordination Board (DTCB) coordinates some road construction and is also engaged in management of some mass transit systems and preparation of a Strategic Transport Plan (STP) for Dhaka.

*Local:* Dhaka City Corporation (DCC) is the urban service provider to the city dwellers under the Dhaka City Corporation Ordinance of 1983. It has an exclusive mandate to carry out specific roles within its boundary.

The public sector agencies listed in Table 6.2 have been categorised according to the discussion above as either national, sectoral, local, or special agencies. Table 6.3 indicates that sectoral agencies occupy a dominant role (66% of all agencies) in the development management process followed by local and special agencies. Local level institutions for urban development management are partly represented in Megacity Dhaka.

Table 6.3: Institutional Share in the Development Management of Megacity Dhaka

<table>
<thead>
<tr>
<th>Types of Institutions</th>
<th>Number</th>
<th>% Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Sector</td>
<td>34</td>
<td>66</td>
</tr>
<tr>
<td>Special</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Local</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Adapted from Mohit (1992, p.106)

Sectoral approaches are a problem for achieving integrated outcomes that simultaneously support social, environmental and economic outcomes in a Megacity. The over emphasis on sectoral aspects of development is a major reason for providing an integrated Megacity oriented authority. The above section noted that this is absent in Megacity Dhaka. The question therefore remains, how is this all coordinated?
6.2.1.1 Coordination Committee

A committee for coordination among different organisations of Dhaka City was constituted (Cabinet Division Circular No. MPB/SA.P/KA, PA, GA-6/96/62) in 1996 (October 07, 1996). The establishing order was later amended (Cabinet Division Circular No. MPB/ SA.P /KA, PA, GA-6/96/215) on October 27, 1997. The Committee members were as follows:

1) Minister, Local Government, Rural Development and Co-operatives - Convenor
2) Mayor, Dhaka City Corporation - Co-Convenor
4) Chairman, RAJUK - Member
5) Chairman, Bangladesh Water Development Board - Member
6) Chairman, T&T Board - Member
7) Chief Engineer, Public Works Department (PWD) - Member
8) Chairman, Dhaka Electric Supply Authority (DESA) - Member
9) Commissioner, Dhaka Metropolitan Police - Member
10) Chairman, Bangladesh Road Transport Authority (BRTA) - Member
11) Chief Engineer, Department of Public Health Engineering - Member
12) Managing Director, Dhaka Water and Sewerage Authority (DWASA) - Member
13) Director General, Department of Environment (DOE) - Member
14) Department of Social Welfare - Member
15) Deputy Commissioner, Dhaka District - Member
16) Managing Director, Titas Gas Transmission and Distribution Co. - Member
17) Civil Surgeon, Dhaka - Member
The Terms of Reference (TOR) of the Committee are as follows:

a) The Committee would ensure the entire management and supply of services in the Megacity Dhaka;

b) The decisions of the Committee would be regarded as the decision of the government /concerned Departments/Directorates/Autonomous Bodies (provided that it has legal and budgetary allocations).

It was mentioned in the order that the Committee would meet once a month and, if either the Convenor and/or the Co-Convenor desire, the meeting could be convened at a shorter interval. The Chief Executive Officer of the Dhaka City Corporation (DCC) would act as the Secretary of the Committee.

The Committee met 10 times between 1996 and 2001, i.e. just twice per year. Based on the minutes of the 10 meetings a good number of coordinated decisions in respect of city-wide management and service delivery were made. However, the Coordination Committee does not have any statutory regulatory authority; its power depends on the extent to which its members are prepared to work together.

By 2002 politics began to play a part and disputes occurred about who was more important and therefore who should be chair. In 2002 the government re-constituted the committee and the Mayor of Dhaka City Corporation (DCC) became the Convenor of the committee. However, now the issue became one of whether the national government would take the committee seriously. It will be interesting to see if any real agreement can be realised by the government agencies under the chair of a non-government person. This is a useful experiment to see if a coordinating mechanism can help run the city more efficiently but its record up until 2005 does not suggest it has much likelihood of
achieving the necessary integration. The lack of statutory power is likely to ultimately undermine its influence and its poor meeting record suggests it is not being taken very seriously.

6.2.1.2 RAJUK (Capital Development Authority)

RAJUK is an autonomous unit under the Ministry of Housing and Public Works. It is a special urban development body within the country’s urban administrative structure. It owes its origin to the Dhaka Improvement Trust (DIT) which came into existence in 1956 under the Town Improvement Act, 1953 (GOEP 1953) with a view to developing and expanding the town of Dhaka, Narayanganj and certain areas in the vicinity by opening up congested areas, laying out streets, constructing new roads, providing open spaces for purposes of ventilation and recreation, demolishing or re-constructing buildings, acquiring land for housing and for re-housing of persons displaced by recession or development schemes.

DIT was composed of a Board of Trustees comprising 13 members, to enable DIT to function under an institutional structure. Trustees were not given full time employment and, as they were busy with their own jobs, they could not devote enough time to DIT. As a result, structural limitations hindered the daily functional performance of DIT and the implementation of decisions regarding development plans. Under these circumstances, the Town Improvement (amendment) Act (TIA) was revised in 1987 and RAJUK was established on April 30, 1987. Instead of the Board of Trustees of DIT, an authority was formed consisting of full time members. A few more members were added to the approved manpower of the original structure of DIT.
The area of operation of the former DIT was 320 square miles which was increased to 590 square miles in 1987 under RAJUK. It is the only agency with clear responsibilities for planning and management at the metropolitan scale. RAJUK is entrusted with the responsibility of controlling the construction of houses and buildings in accordance with a Master Plan encompassing Dhaka City, Narayanganj, Tongi, Gazipur and Keranigonj. It has responsibility to allocate land and establish new industrial, commercial and residential areas in this greater area. It has to earmark open space for parks, widen the narrow old roads, make new planned roads, and remove congestion from overcrowded localities and to that end RAJUK is empowered to acquire fresh land and also pay compensation to the displaced people and rehabilitate them in other areas. RAJUK has occupied this central position (since its creation as the Dhaka Improvement Trust in 1956) by virtue of its powers of master planning, development and building control, and development through land and estate development, area improvement and major road improvement. It is important to take note that in its original legislation DIT was only a development authority; the planning powers were added by an amendment in 1958.

While still institutionally and legally central, RAJUK has not succeeded in maintaining its function (Table 6.4) of strategic planning over the period since the 1959 Master Plan, and its primary function has been that of a land development and development control agency.

RAJUK’s development activities are to a degree multi-sectoral and coordinated, but only at the project level, between project components within a designated project area. Its coordinating role at the city-wide scale, geographically and at the intersectoral level functionally, has declined with its declining role in the master planning function. It has exercised strategic influence through initiating major projects and determining their location,
<table>
<thead>
<tr>
<th>FUNCTION NO.</th>
<th>RAJUK OBJECTIVES</th>
<th>FUNCTIONS OF DEPARTMENTS/UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>To make provisions for the development, re-development, improvement and expansion of Dhaka and Narayanganj and certain areas in their vicinity by opening up congested areas.</td>
<td><strong>Town Planning</strong>&lt;br&gt;-Identification of problem areas, project areas;&lt;br&gt;-Conducting all kinds of surveys, i.e. topographic, land-use, contour, demographic, socio-economic for evaluation of existing conditions and preparation of base maps for planning&lt;br&gt;-Preparation of subdivision plans, road network plans, recreation area plans,&lt;br&gt;-Preparation of plans and designs of buildings (to be developed by RAJUK), roads, circulation system, drainage system;&lt;br&gt;-Preparation of land acquisition plans;&lt;br&gt;-Preparation of Master Plans, re-housing plans, zoning plans, street plans and open space/lake plans</td>
</tr>
<tr>
<td>FUNCTION NO.</td>
<td>RAJUK OBJECTIVES</td>
<td>FUNCTIONS OF DEPARTMENTS/UNITS</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>6.</td>
<td>To be responsible for preparation /revision of the Structure Plan, Master Plan and Detailed Area Plan and Urban Designs within its jurisdiction</td>
<td>Town Planning: Make arrangements for preparation of detailed area plans; Display plans for public opinions as per TIA Act provision for revision of plans based on review of public opinions received and arrange for gazette notification of the approved plans. Land: Same as function 4 Engineering: Same as function 4 Estate: Same as function 4 Finance and Accounts: Same as function 4 Legal: Assist in legal matters relating to plan preparation and plan execution. Development Control: Give approval to building plans / designs as per zoning provisions of plans.</td>
</tr>
<tr>
<td>7.</td>
<td>To control construction of buildings, excavation and re-excavation/filling up of tanks in conformity with the provisions of EBBC Act. 1952 and the Master Plan within its jurisdiction.</td>
<td>Town Planning: Same as function 4 Land: Same as function 4 Engineering: Assist in land acquisition during execution of development schemes undertaken as per plan. Estate: Same as function 4 Finance and Accounts: Same as function 4 Legal: Same as function 4 Development Control: Same as function 4</td>
</tr>
<tr>
<td>8.</td>
<td>To control the use of land in conformity with the provisions of the Master Plan within its jurisdiction.</td>
<td>Town Planning: Issue of land clearance to builders, developers and landowners, based on Master Plan zoning provisions. Land: Same as function 4 Engineering: Same as function 4 Estate: Same as function 4 Finance and Accounts: Same as function 4 Legal: Same as function 4 Development Control: Same as function 4</td>
</tr>
<tr>
<td>9.</td>
<td>To carry out research in connection with city planning and development within its jurisdiction.</td>
<td>Town Planning: Prepare research proposals and conduct research including survey, mapping and reporting. Land: Same as function 4 Engineering: Same as function 4 Estate: Same as function 4 Finance and Accounts: Same as function 4 Legal: Same as function 4 Development Control: Same as function 4</td>
</tr>
<tr>
<td>10.</td>
<td>Any other function assigned by the government from time to time.</td>
<td>Town Planning: Preparation of planning and development proposals, plans. Land: Same as function 4 Engineering: Same as function 4 Estate: Same as function 4 Finance and Accounts: Same as function 4 Legal: Same as function 4 Development Control: Same as function 4</td>
</tr>
</tbody>
</table>

Source: RAJUK (1995)
and continues to do so. But some of these initiatives have been contrary to metropolitan-wide physical and infrastructure planning interests, and generally in terms of policy and clientele they have not been directed at wider social interests. A further factor is that RAJUK has considerable freedom since it is only dependent on government funding for its major road improvement projects and not for its estate developments, which are self-financing. However this means it is focused on development projects rather than on comprehensive strategic planning.

RAJUK is now regarded as a land development agency. Other agencies take initiatives without reference to RAJUK and regard themselves as equal in status. This includes DCC as well as government directorates such as HSD and parastatals such as DWASA. In certain cases, though certainly not all, relationships appear to have deteriorated to the level of deliberate lack of cooperation, competition, defensiveness and lack of mutual respect. There is a particular problem between RAJUK and DCC arising from the differing rank of the persons heading the two organisations: the Mayor, elected by popular franchise, holds ministerial status and RAJUK is being headed by a high ranking government civil servant (Islam 2001).

(a) Organisational Structure of RAJUK

A board of government officials governs RAJUK. According to the Town Improvement Act (TIA) of 1987, the Kartripakkha consists of a Chairman and not more than five other members. The Chairman is the chief executive of the organisation responsible for overall management and administration. The Chairman and other members are full time officials of RAJUK, appointed by the government. These members look after their respective departments and make decisions on matters concerning the whole of the city. Sometimes,
in making major decisions or in case of their inability to make decisions, board meetings are called.

The present structure of RAJUK provides the members with the responsibility of managing various departments. The members manage the following departments:

i) Administration,

ii) Finance, Budget and Accounts,

iii) Planning and Architecture,

iv) Development and Engineering, and

v) Estate and Land.

- The administration wing is composed of two branches. One looks after personnel issues, the other is responsible for record-keeping and procurement.

- Finance, Budget and Accounts department deals with finance, and pay and allowances.

- Planning and Architecture department is vested with the responsibility of actual planning work, while,

- Development and Engineering Department looks after implementation. Transport, another component of logistic support, also is under Development and Engineering Department.

- The Estate and Land wing acquires land for new schemes and allocates RAJUK plots to applicants.

6.2.1.3 Municipal Government

Dhaka Municipality was created under the District Municipal Improvement Act of 1864. The city administration became a municipal corporation in 1978. In 1982 the adjoining municipalities Mirpur and Gulshan were absorbed in Dhaka Municipal Corporation.
increasing its area to 360 square kilometres. The Dhaka Municipal Ordinance 1983 provides the legal framework for the corporation. In 1990, it was renamed the Dhaka City Corporation (DCC). Since 1990, amendments have been made to the ordinance mainly to democratise the governance of DCC. Some of these amendments have enabled the direct election of the mayor and 90 ward commissioners, one from each of the 90 wards, and 30 women commissioners (one for every three wards) for a five-year term.

DCC is by far the largest local authority in area and population. It has in the past expanded to absorb peri-urban Pourashavas such as Gulshan and Mirpur. It is not necessarily an advantage for a metropolitan area the size of present and future Dhaka to be served by a single massive authority for the purposes of providing basic services and meeting the most local needs of communities.

DCC traditionally has been weak and its responsibilities are mainly for maintenance of basic services with very few planning and development functions. Dhaka City Corporation is thus not providing the kind of coordination at the area level that a local authority can normally provide interdepartmentally through the functions it controls and as the town planning authority.

This thesis contends that DCC, once its representative status is fully established, should take on major new responsibilities in the field of planning, service provision and development by absorbing RAJUK and DWASA. This will be examined later.
The Organizational Structure of the Dhaka City Corporation (DCC)

The structure and composition of Dhaka City Corporation is laid down in the Dhaka Municipal Corporation Ordinance of 1983 and the subsequent legislation and government directives and orders. The DCC has three levels, namely the Ward at the lowest step, the Zone at the middle and the Corporation at the top.

There are at present 90 Wards. Each Ward elects one Ward Commissioner and the 90 Wards elect 30 women Ward Commissioners, raising the numbers to 120. In 1990, by an executive order of the government the DCC area was divided into 10 Zones. This was later (1993) incorporated in the law through an amendment. A number of DCC officials, under a central government official designated as Zonal Executive Officer (on deputation), were put to work at the Zonal level, and they were charged with specific functions.

The Corporation is composed of the Mayor, who is directly elected, all the Ward Commissioners including the 30 women Ward Commissioners, Chairman RAJUK, Managing Director Dhaka WASA, Chairman DESA, Chief Engineer DPHE, and Director-General Health Services. As head of DCC, all powers rest with the Mayor. It is entirely up to the Mayor to decide how much he will delegate to the lower levels. He can also overrule the decisions taken in the Corporation meetings.

The DCC is required to form eight Standing Committees to deal with the following matters:

1. Finance and Establishment;
2. Education;
3. Health, Family Planning, Sanitation and Drainage;
4. Town Planning and Improvement;
5. Audit and Accounts;
6. Works and Buildings;
7. Water and Electricity; and

The Corporation may also constitute additional Standing Committees (with prior permission from the government) for such purposes as it deems fit. A Standing Committee is to consist of not more than six members, elected by the Commissioners from among themselves. No Commissioner is allowed to be a member of more than two Standing Committees at the same time. However, the Mayor is to be ex-officio member of all Standing Committees. A Standing Committee is to elect one of its members as Chairman and another as Vice-Chairman.

In discharging his duties, the Mayor is assisted by a Chief Executive Officer (CEO), who is appointed by the government and who is generally a senior civil servant, and the Departmental heads, who are all DCC employees. There are at present 20 Departments. The total number of DCC employees, both permanent and temporary, is more than twelve thousand (for the organizational structure of DCC see Figure 6.2).
Figure 6.2: Organizational Structure of Dhaka City Corporation (DCC)

Source: Islam (1996, p.66)
This description of the structure of the DCC does not tell the full story. There are a number of problems with the DCC; these are (Islam 1998):

Firstly, all powers are concentrated at the top. Since the Mayor is not required to delegate power under the law, he has preferred not to do so. As a result, without the signature of the Mayor or the CEO or the Departmental Heads, even the most routine matter cannot be finally decided. For example, even for an application form for a trade licence, a citizen has to visit the head office. Similarly, certificates relating to birth, death and marriage have to be issued by the head office. The same applies to permission for burial in the DCC graveyards. The concentration of political power and the lack of delegation of power ultimately translate into poor performance, inefficiency and lack of accountability, much to the detriment of good governance, since they put a workload on the Mayor that he is not able to bear. It also causes serious inconvenience to the ordinary citizens spread over 360 square kilometres of Dhaka city. The lack of delegation and power sharing is symptomatic of the lack of strategic guidance being provided to the DCC.

Secondly, the Mayor is not accountable to the Corporation, whose decisions he can overrule. He is head of the Corporation as well as the executive, which means combining the deliberative function with that of implementation in one person. In the process, this makes the Corporation weak and ineffective.

Thirdly, the Standing Committee meetings are held regularly, but this does not mean they function effectively. What is certain, however, is that they are generally ‘talk shop’ and their recommendations usually bear no fruit. It does not make sense to include the Mayor in all the Standing Committees, since he generally does not have the time to attend even one. There is ample scope in the existing law to
co-opt professionals from outside in the Standing Committees and ask them for an expert opinion. Similarly, the existing law does not prevent the involvement of the disadvantaged in the deliberations of the Standing Committees. However, there has not been any instance of such involvement.

Fourthly, the zonal level is ineffective. It started as a means of administration deconcentration. However, by bringing in a deputation from the central government, even these goals could not be fulfilled because of the opposition from DCC officials, who saw the former as a threat to their powers. Instead of opting for genuine devolution with an elected functionary taking charge of this level, the latest trend has been to take back to the head office more and more of the functions earlier delegated to this level, but at the same time not doing away with it altogether. Obviously, such a weakness has a negative impact.

Fifthly, the rationale behind the existing numbers of Wards and Zones is not at all clear. It can be said that these are not strictly based on the population criteria. This could mean under-enfranchisement for certain areas. Also, the Zones have no correspondence with other divisions of Dhaka City, for example the Thana (Police Station). Most important, with such a large population to deal with, it is almost impossible for the Ward Commissioners to be transparent and accountable to the electorate.
(b) The Functions of Dhaka City Corporation (DCC)

DCC is mandated to perform a large number of functions although a few of its originally mandated activities are now being performed by other agencies. Table 6.5 lists the functions of DCC.

Table 6.5: Functions of Dhaka City Corporation (DCC)

<table>
<thead>
<tr>
<th>Mandated Areas</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public health</td>
<td>Mosquito control, immunisation, control of infectious diseases</td>
</tr>
<tr>
<td>Birth and death registration</td>
<td>Registration of births, deaths and marriages.</td>
</tr>
<tr>
<td>Waste management</td>
<td>Collection of garbage, refuse and its removal to safer places.</td>
</tr>
<tr>
<td>Water supply and drainage</td>
<td>Supply of drinking water mainly through hand tube wells and drainage (as supplementary to DWASA responsibility)</td>
</tr>
<tr>
<td>Articles of food and drink</td>
<td>Inspection of food and drugs</td>
</tr>
<tr>
<td>Animals</td>
<td>Construction and maintenance of slaughter houses</td>
</tr>
<tr>
<td>Town planning</td>
<td>Local area development (non-functional, currently performed by RAJUK)</td>
</tr>
<tr>
<td>Traffic and transport</td>
<td>Registration of non-motorised transport</td>
</tr>
<tr>
<td>Building control</td>
<td>Non-functional (currently performed by RAJUK)</td>
</tr>
<tr>
<td>Street lighting</td>
<td>Providing and maintaining street lights (while making connections and supply of electricity is responsibility of DESA)</td>
</tr>
<tr>
<td>Public safety</td>
<td>Non-functional</td>
</tr>
<tr>
<td>Trees, parks, gardens &amp; forests</td>
<td>Part maintenance of trees, parks and gardens.</td>
</tr>
<tr>
<td>Education and culture,</td>
<td>Supports primary schools, libraries, gymnasiums, theatres</td>
</tr>
<tr>
<td>Social welfare</td>
<td>Supports CBOs and local NGOs</td>
</tr>
<tr>
<td>Development (roads, markets etc.)</td>
<td>Construction and maintenance of roads, markets, parks, overpass, under pass and bus terminals</td>
</tr>
<tr>
<td>Slum improvement</td>
<td>Initiates own projects or implements donor funded projects for improvement of environmental and socio-economic condition of slums.</td>
</tr>
</tbody>
</table>

Source: GOB 1983 /DCC Ordinance

In the 1983 Ordinance 13 functions were designated as compulsory for DCC, these are as follows:

1. Construction and maintenance of roads, bridges and culverts;
2. Removal, collection and disposal of refuse, wastes and rubbish;
3. Registration of births, deaths and marriages;
4. Provision and maintenance of graveyards and cremation grounds;
5. Maintenance and watering of public streets;
6. Regulation of private sources of water supply;
7. Construction and maintenance of private markets and shopping centres;

8. Plantation of trees on road sides;

9. Regulation of insanitary buildings;

10. Prevention of infectious diseases and epidemics;

11. Provision and maintenance of slaughter houses;

12. Control over traffic and public places; and

13. Control and regulation of milk supply.

However, the Corporation is obliged to carry out any function assigned to it by the central government from time to time. Despite 13 functions designated as compulsory in the Ordinance, DCC only carries out the following functions:

- Construction and maintenance of roads, bridges, culverts, etc.;

- Removal, collection and disposal of refuse, wastes and rubbish;

- Provision and maintenance of street lights;

- Construction and maintenance of municipal markets and community centres;

- Provision and maintenance of parks and gardens;

- Provision and maintenance of slaughter houses;

- Registration of births, deaths and marriages;

- Eradication of mosquitoes;

- Control over private shopping centres;

- Provision of public toilets; and

- Provision and maintenance of drainage.

In addition to these functions, the DCC is required to perform the following additional functions:

- Issue certificates relating to nationality, character and succession;
- Conciliate certain disputes under Conciliation of Disputes (Municipality Areas) Ordinance 1979 (such as contracts, including those regarding marriage, recovery of possession of immovable property, compensation for damage to movable property, etc.).

The Ward Commissioners perform the following additional functions:

- Formulate a development plan relating to the Ward, and submit it for inclusion in the DCC development program;
- Inspect DCC development works in the Ward and recommend payment of bills for such work;
- Sign the monthly salary bill of the muster roll conservancy staff within the Ward after checking their attendance and performance; and
- Issue nationality, succession and character certificates to citizens within the Ward.

The mixing of a high level integrative function like creating a development plan along with the miniscule details of certificates on citizens shows why these more strategic functions are rarely conducted well.

A Zone Executive Officer (ZEO) heads each zone. The Zone Executive Officer, at the zonal level, is required to control and coordinate all DCC officials and activities at that level.

The 90 wards of the corporation are clustered into 10 administrative zones (Map 6.1) and substantial numbers of DCC employees are assigned to work at the zone level. Ten middle and senior government officials were also recruited on deputation and put in charge of each zone.
At the time of creation of the zones, a good deal of thought was given to decentralisation, and how the zone officers would facilitate its implementation (Box 6.1).
Box 6.1: Duties of the Zone Officer in the Dhaka City Corporation (DCC)

- Acts as the Principal Executive Officer of the concerned zone. The zone office is a self-contained branch of DCC.
- Handles all administrative functions and coordinates zone activities.
- Supervises activities of all departments.
- Takes decisions on zone problems after consulting concerned departmental head and obtaining consent of the Chief Executive Officers (CEO).
- Liaises with the departmental heads concerning zone activities and, through the CEO, remains responsible to the Mayor.
- Presides over interdepartmental meetings of the zone.
- Approves salary and other allowance bills of section chiefs.
- Expends development funds, maintains accounts, and regularly submits returns on routine and development expenditures to the main office.
- Co-ordinates and supervises all transport in the zone.
- Prepares part of the annual report of zone section chiefs.
- Considers and sanctions casual leave to all officers and staff of the zone.
- Formulates annual development plan for the zone in consultation with concerned ward commissioners and section chiefs.
- Convenes the zone Tender Committee Meeting and approves work.
- Takes responsibility for delivery of all public utility service.
- Takes immediate action during emergencies and natural calamities.
- Supervises ordinary or special relief measures/relief projects.
- Develops markets and maintains them.
- By exercising delegated power, ensures imposition and collection of taxes and also proposes new sources of taxation.
- As representative of the Mayor, acts as member of the Zone Tax Review Council.
- Takes necessary steps for slum improvement, social welfare, health matters, etc., subject to instructions and approval of Head Office.
- Through CEO, takes effective steps for eviction and mobile courts.
- Coordinates inter-ministerial development and maintenance work.
- Supervises fund utilisation and implementation of zone component of development plans and ensures progress to higher authorities.

Source: Dhaka City Corporation (DCC)

This system was introduced with the objective of decentralising responsibilities. In each zone office, beside the ZEO, there is one Executive Engineer, one Transport Officer, an Assistant Health Officer, a Social Welfare Officer, a Community Organiser and a Slum Development Officer. The zone office is responsible for the implementation of development projects within that particular zone.
The issues of concern in connection with DCC’s functional responsibilities are (Islam1998):

First – splitting functions into compulsory and optional does not make any significant contribution to efficiencies because in practice DCC performs a mix of both compulsory and optional functions.

Second – DCC does not have focus on poverty alleviation and promotional activities for the informal sector. In order to carry out these two vital functions with any reasonable measure of professionalism, the DCC’s capacity for multi-sectoral planning has to be developed.

Third – Town Planning is not a function practised by DCC. The Town Planning function is narrowly confined to a unit in DCC and in a most inadequate manner. The lack of integrative functions for urban sustainability is very obvious in DCC.

Fourth - there is virtually no delegation of functions to the lower levels, rather the Mayor, the Chief Executive Officer and the Departmental Heads control most of the functions (even routine ones) centrally. With bureaucratic control not yet replaced by an elected functionary at the zonal level, delegation of power may not be feasible at this level, but there can be hardly any justification for so few functions to be handled at the Ward level. Development control and development facilitation will only work if they are devolved and transparent processes linked to a broader vision and process.
Fifth - for a number of functions, organizations other than DCC are also responsible either fully or in a parallel manner. For example, DCC has practically nothing to do with water, sewerage and drainage, this being the preserve of Dhaka Water and Sewerage Authority (DWASA), although in the statute book, it is still shown as a function of the DCC. However, DCC is responsible for the surface water drainage / rainfall runoff, but DWASA is responsible for underground drainage and sewerage disposals. The same applies to the town planning functions which were long ago taken over by the Capital Development Authority (RAJUK), or the traffic functions which are handled exclusively by the Dhaka Metropolitan Police (DMP), or the transport registration functions (except that of rickshaw-pullers) which is dealt with by the Bangladesh Road Transport Authority (BRTA) and the DMP. In respect of public health, animals, urban forestry, education, culture, social welfare etc., various central government organizations can play their role in Dhaka city independent of DCC, however the lack of clear definition of responsibility is making the city less than effective. Coordination is not a feature of DCC.

Sixth, as pointed out earlier, although the Constitution bestows a public order function on local government bodies, in either legislation or in practice, they have nothing to do with it. They cannot even inspect a Thana (Police Station) or a court or a prison or a public prosecutor’s office. Even though the roads are under DCC, it has no say in traffic control by the police. Many of the enforcement difficulties of DCC are, in fact, related to this lack of coordination with Dhaka Metropolitan Police (DMP).
Seventh, in enumerating the functions in the legislation, the policy makers were guided more by textbook prescriptions than actual personnel and financial positions on the ground. They also perhaps did not take into consideration the underhand motives of the functionaries (both elected and non-elected) involved in the discharge of those functions. Thus in some of the optional functions carried out by DCC (for example, construction of municipal markets), motivations other than public service can clearly be detected. A new sense of the ‘common good’ is required.

Eighth, the immediate jurisdictions of DCC and some other organizations over a particular function could be justified if a lead agency and the mechanism of coordination had been spelled out.

Finally, there is no attempt to link DCC functions with the overall objectives or goals sought for Dhaka city.

According to the MRG ten principles Megacity Dhaka’s Metropolitan Regional Governance will need to engage the municipalities (and DCC in particular) to resolve the above problems in its strategic planning, its statutory planning and its development facilitation. Only then can the DCC make an effective contribution to metropolitan scale development management.
6.3 Megacity Dhaka: Urban Development Management, Functions and Responsibilities

6.3.1 The National Planning Context

National Economic Council (NEC) approves the National Economic Plan. NEC is also responsible for the adoption of Five-Year Plans/Poverty Reduction Strategy Paper (PRSP) and Annual Development Programs. The NEC is advised by the Planning Commission, which receives capital expenditure proposals from individual ministries. The Planning Commission is divided into sections each covering one program area. Expenditure proposals by departments and agencies within the responsibility of individual ministries are passed through the respective ministries before submission to the Planning Commission.

Development projects for Dhaka Metropolitan Area are therefore submitted to the Planning Commission as part of ministry programs for the rest of the country. Only in the case of the few statutory bodies (described below), which are responsible for development in Dhaka alone, are development programs received by the Planning Commission, which refer specifically to Dhaka. Thus most development programs do not have a Dhaka focus.

6.3.2 Development Management for the Dhaka Metropolitan Area

For all practical purposes, the Rajdhani Unnayan Kartripakkhy (RAJUK) (Capital Development Authority) is the planning and land development authority for Dhaka Megacity.
Development control, in its planning sense, is exercised by RAJUK. It is a minimal system, requiring an application for the grant of an exception where it is proposed to use land in non-conformity with the Master Plan. These powers extend to the erection of buildings, as the sanction of RAJUK is required before the Dhaka City Corporation can issue a building permit. The sanction can be refused on reasonable grounds, which include conflict with the Master Plan. An official of RAJUK is also designated as the authorized officer for the purposes of the East Bengal Building Construction Ordinance 1952 which relates to the constructional aspects of buildings.

Even this minimal level of development control is no longer considered to be particularly effective. First, it is based on an outdated Master Plan of 1958 which has been superseded by the Dhaka Metropolitan Development Plan (1995-2015) so there are now more exceptions than there are rules. Secondly, there appears to be little control over the activities of public bodies, and non-conforming private development occurs by default because of a natural reluctance to take enforcement action.

For its land development function, RAJUK can compulsorily acquire land and frame improvement schemes with the consent of the Government. Improvement schemes can be prepared for dealing with an existing substandard area, for general urban improvements or for the planning and development of new areas. Most of RAJUK’s activities have fallen into the latter category. The huge problems of under-serviced areas with slum dwellings and terrible traffic problems are not seen to be their responsibility – or any one else’s.
Its powers are restricted primarily to the laying out, servicing and subdivision of land, although it can alter or reconstruct existing buildings and can build dwellings or shops for poorer families displaced from improvement schemes.

RAJUK can undertake projects which can be classified into nine categories, such as: (a) construction of roads, (b) construction of housing estates, (c) development of industrial estates, (d) development of commercial areas, (e) construction of shopping centres, (f) development of rehabilitation zones, (g) creation of recreation and service facilities, (h) construction and sale of flats, and (i) construction of building and staff quarters.

In addition to framing their own schemes, the RAJUK can be asked to consider possible schemes at the request of the municipality or others and, if it refuses, there is a right of appeal to Government.

As a land development agency for metropolitan Dhaka, RAJUK is severely limited by its system of funding and the conditions under which it must operate. For most of its projects, it obtains loans from Government to whom interest is paid. These funds are inevitably limited and are sanctioned project by project. The projects themselves have to be self-financing and RAJUK is prohibited from making a profit. It therefore concentrates its activities where land is cheapest, that is the urban fringe. This is usually remote from areas where the poorest families wish to live. It is mostly for middle to upper income families. RAJUK also develops industrial subdivisions where land can be more readily sold. But as it cannot make a profit, the land is often sold at below its market value, thus giving subsidies to those who need them least and preventing the build up of a reserve fund for less remunerative projects, such as minimum cost housing or redevelopment.
projects. Neither is the technique permissible of cross subsidization between projects, which might be directed at the same object.

A number of other agencies are empowered to carry out development schemes in the metropolitan area - though none of them are focused or empowered to cover the big problems.

The Municipalities (Pourashavas) have powers under the Pourashava Ordinance, 1977, to prepare Master Plans and Site Development Schemes in addition to more specific powers for the construction of drainage schemes, the establishment of markets, and the construction of streets and parks.

The National Housing Authority (NHA) of the Ministry of Housing and Public Works has specified duties to prepare housing schemes for members of the general public in addition to its duties to provide housing for lower paid government employees. Its wider powers are to acquire land and distribute plots to private individuals with the presumption that this should be for the benefit of the lower income members of the community.

The Public Works Department (PWD) also under the Ministry of Housing and Public Works has responsibility for land acquisition and construction of buildings for government officers (the higher paid) and government departments.

6.3.3 City-wide Urban Services

City-wide services in the metropolitan area are primarily provided by national organizations (government departments and statutory bodies) as part of their national
responsibilities. As shown in Table 6.1 only four bodies have been created with specific responsibilities for major services in Dhaka alone.

These are the Dhaka Water and Sewerage Authority (DWASA) with responsibility for the construction, maintenance and financial operation of water supply and sewerage services, and the Dhaka Electric Supply Authority (DESA) with responsibility for local distribution, maintenance and payment collection for electricity. The Power Development Board remains responsible nationally for generation and national distribution of electricity. A branch of the national police force, the Dhaka Metropolitan Police (DMP), is responsible for the maintenance of law and order within the greater part of the metropolitan area. This function includes a traffic police division. Dhaka Transport Coordination Board (DTCB) – is a body constituted by an Act (with the Mayor of Dhaka City Corporation as its Chairman) to coordinate among various agencies to implement transport related projects in Dhaka City, but without the power to implement any project.

6.3.4 National Organizations Supplying Major Services

The following national organizations supply the major urban services in Dhaka City:

- Roads and Highways Department - major roads
- Bangladesh Water Development Board - flood protection
- Bangladesh Inland Waterways Transport Association - ferry terminals, river maintenance
- Bangladesh Inland Waterways Transport Corporation - river services
- Bangladesh Road Transport Corporation - bus services
- Bangladesh Railway - rail services and stations
- Titas Gas and Transmission Company – natural gas supply
- Telephone and Telegraph Board - telephone and telegraph services
- Directorate of Fire Services - fire and ambulance services.

The organizations listed represent those supplying the main services most relevant to urban planning and development. They are, of course, supplemented by all other national organizations supplying other services (e.g. health and education) in the metropolitan area. They are also supplemented by other national organizations (e.g. the Department of Public Health Engineering which carries out functions outside the city corporation areas).

6.3.5 Control of Building Construction

Powers to control building construction are divided between two separate organizations.

Under the Town Improvement Act (as modified by an amending ordinance in 1958) the RAJUK has power to approve or reject proposals for building (including public building) which are not in conformity with the Master Plan / DMDP (1995-2015).

Pourashavas (Municipalities) are given building control powers in the Pourashava Ordinance, 1977. Under this legislation, Pourashavas are empowered to prepare for their own area (i.e. except the Metropolitan Area), a Master Plan and Site Development Schemes. When a Master Plan has been prepared, construction on sites exceeding a minimum size limit is prohibited except in accordance with a Site Development Scheme. As no Site Development Schemes have yet been prepared, these powers are not yet effective.
Also under the Pourashava Ordinance, 1977, Pourashavas are empowered to draw up building by-laws, to determine building applications under the by-laws, and to certify the satisfactory completion of buildings. Again, no building by-laws have been drawn up.

Under the East Bengal Building Construction Act, 1952, the control of building construction is delegated to an ‘authorized officer’. In the case of Dhaka, this authorized officer is located in RAJUK. Building control is therefore in practice carried out by RAJUK rather than by the City Corporation.

6.3.6 Finance for Urban Works

A brief review of the sources of finance for metropolitan development management identifies four principal sources:

- Central Government revenues (grants, loans and subsidies to statutory bodies, budget allocations to government departments)
- Statutory service agencies (recovery or partial recovery of cost of services)
- Pourashavas (rates and other revenues for services)
- RAJUK (sale of serviced land to recover acquisition and development costs).

It will be apparent that all four sources have at least partial discretion over the quantity of finance raised, the method of raising finance, and the purpose to which it is applied. However, central government retains detailed control over approval of expenditure (even for funds raised internally by an organization, for example, RAJUK’s expenditure of resources raised from its own projects). Overall coordination of expenditure in the metropolitan area is, therefore, theoretically possible although not easy. The Planning Commission is currently the only body in a position to effect this coordination. Bringing
together planning, infrastructure development and financing would seem to be a necessary way forward for Dhaka.

6.3.7 Public Land Acquisition and Management

The central government representative, the Deputy Commissioner, handles land acquisition and management in the metropolitan area at the district level. The Deputy Commissioner is responsible for the acquisition of land for public purposes and for the negotiation and payment of compensation.

Decisions on the allocation of land to government departments and agencies and on the identification of areas to be acquired are taken by the District Land Allocation Committee. The Deputy Commissioner chairs this Committee and its members include the main planning and development agencies in the metropolitan area, for instance, the Urban Development Directorate and RAJUK.

6.3.8 Low Income Housing Development

The National Housing Authority (previously the Housing and Settlement Directorate) has responsibility for the preparation of low income housing schemes throughout the country. This responsibility is separate from its role in providing housing for lower paid government employees. NHA is the only national body with responsibility for providing low income housing to the public in general. As a government agency, under the Ministry of Housing and Public Works, its allocation of functions is determined administratively rather than by legislation.
The second body with responsibilities for low income housing in the metropolitan area is the RAJUK. Under RAJUK’s legislation, the Town Improvement Act, it has responsibility for the resettlement of households displaced by its improvement schemes. Additionally the RAJUK has, in the past, proposed redevelopment schemes in the existing city area with the intention of providing new housing for low income residents.

The Public Works Department’s responsibility for housing is limited to construction, primarily of flats for public servants. It does not have responsibility for public housing in general.

6.3.9 Summary of Roles

The National Economic Council makes decisions on national economic planning including investment in the metropolitan area.

The Planning Commission advises the NEC and receives submissions from all development agencies throughout the country. Its own internal sub division is on a sector basis, including a Physical Planning and Housing Section, which have national responsibilities.

RAJUK is responsible for the preparation and implementation of specific development schemes within its area and for the preparation and implementation of a master plan for Dhaka. Its implementation powers however are limited to the regulation of building development throughout its area in accordance with the master plan/DMDP.
Provision of services is divided geographically. The Dhaka City Corporation (DCC) and Narayanganj and Tongi Pourashavas have responsibility for the maintenance of a range of urban services and for the provision of most, although not all, of these services. Financing of the services is partly by rate and licence fee collection, partly by direct charges and partly by central government subsidy.

National Housing Authority (NHA) and the Public Works Department prepare and implement schemes for public housing development throughout the country including the Dhaka Metropolitan Area.

DWASA, the Dhaka Electric Supply Authority (DESA), Dhaka Metropolitan Police (DMP) and the Dhaka Transport Coordination Board (DTCB) provide services, solely within the metropolitan area.

Other national agencies provide services within the metropolitan area in accordance with national priorities and in response to requests from metropolitan development management agencies and social requirements in the urban area.

The Deputy District Commissioner and the District Land Allocation Committee make decisions on land to be acquired for a project or projects and its allocation to public bodies, and handle acquisition procedures for development agencies.

The institutional functions and responsibilities in the process of Megacity Dhaka’s present management and governance discussed above are set out in Table 6.6. The geographical space of Dhaka’s Extended Metropolitan Regional (EMR) is under the jurisdiction of different local governments, city-wide special authorities (not EMR wide) and sectoral
authorities with seriously inadequate arrangement for coordination of development management (e.g. Coordination Committee, Dhaka Transport Coordination Board, Dhaka Electric Supply Authority, Dhaka Water and Sewerage Authority). Though RAJUK has jurisdiction over some of the area of the EMR, it does not have any strategic plan for the EMR except a Structural Plan (1995-2015). No one has sufficient knowledge of investment programming, for its locational impacts to be evaluated by an EMR wide investment programming team.
### TABLE 6.6: URBAN MANAGEMENT AND SERVICE RESPONSIBILITIES IN THE EXTENDED METROPOLITAN REGION OF DHAKA
(Source: Adapted from “Report on Institutional Issues-DMDP, 1995”)

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<th>Sector</th>
<th>Function</th>
<th>DCC and Narayanganj area</th>
<th>DCC area</th>
<th>Dhaka city custom area</th>
<th>Narayanganj Municipal area</th>
<th>Kadamtola Municipal area</th>
<th>Tongi Municipal area</th>
<th>Savar Municipal area</th>
<th>Gazipur Municipal area</th>
<th>Uttar Centers</th>
<th>Union Council areas</th>
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<td>Strategic and Structural</td>
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<td><strong>Multi-sector</strong></td>
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<td>Industrial/commercial estates</td>
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<td>Education</td>
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<td>DFH</td>
<td>DH/POUR</td>
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6.4 Megacity Dhaka: Inadequate Political Space for Institutional Authority in the Rapidly Growing City

The rapid growth of Megacity Dhaka during the last 50 years has posed a major challenge for planners and policy makers; further this is compounded because urban development management in Bangladesh is sectoral, partial and uncoordinated. It is also generally project focused e.g., sewerage, transportation, or housing. Because of the lack of political commitment to implement the 1958 Master Plan (though it was not a comprehensive plan) effectively or even to reviewing the plan the Megacity of Dhaka now is suffering. Without a Plan and the processes associated with such a Plan, Dhaka lacks proper understanding of the problems and the potential of the rapid urbanization processes, and has not developed adequate planning and policy measures to cope with growth. Dhaka can thus be referred to as a Case Study of a Megacity without adequate institutional planning frameworks.

Afsar (2000, p.71) noted that Megacity Dhaka is the home to 40 percent of the urban population of Bangladesh and contributes more than its population size to GDP. Dhaka Metropolitan Development Planning (DMDP: 1995 -2015) with the physical plan outlined for the needs of the development of Dhaka city does not mention anything to integrate the needs of the urban poor, though the size is much larger than the other income groups. Afsar (2000, p.69) argued that in the absence of any explicit effective mechanism or a comprehensive plan to control land appropriation and provision of housing to the low income residents of Dhaka, the majority of residents have no prospect of owing land or housing within the metropolitan area without active intervention of the government. The government has not been able to solve the shelter problems for the lower income groups and urban poor in Dhaka City which has thus resulted in the proliferation of slum and
squatter settlements, which provide shelter to a very large population with a very unstable situation.

Dhaka’s growth has largely taken place outside the formal planning and development process. Though the special authorities (e.g. DWASA, RAJUK, DESA, etc.) were created to supplement the administrative, managerial, technical and financial capabilities to meet the growing demand for urban services in the Dhaka Metropolitan Area, however, no concerted and consistent effort for overall development of urban physical, social and/or community infrastructure was observed in Dhaka.

Afsar (2000, p.74) noted that from the pattern of expenditure and income of the Dhaka City Corporation, it is clear that the corporation remained tied largely to its traditional role of city cleaning and development of infrastructure. Important development activities, such as education receive the least priority in its budget, while employment creation and the provision of shelter and other basic amenities remain outside its jurisdiction. Afsar (2000, p.75) also noted that important services, such as law and order, judiciary, police, telephone and electricity are provided by the field administration or a special department/board of the central government having different geographic and administrative boundaries. She expressed her concern stating that ‘strong political interference, resource constraint, general negligence of human resource development for urban governance at the national level, inadequate capacity and authority of the Dhaka City Corporation for revenue raising, extreme shortage of management skills, lack of coordination between urban institutions, a proper development mandate and recognition of urban poverty as a national problem stand in the way of development of full potential of the City Corporation as an urban development institution (p.75).’

Acute problems from rapid growth accumulate as the growing demand for urban services continues under an existing uncoordinated service delivery system based on heavy control
from the central government and lack of authority and management capacity of Dhaka City institutions. Dhaka faces the challenge of governance in this rapid urbanization process.

Why is this and how can it be changed? The Mayor of Dhaka City Corporation is a political appointee so he cannot act independently if there was a major policy issue without the approval of the central government. Therefore, the political space for institutional authority is narrow in the Dhaka City’s Governance system. The demand for greater autonomy for Governance of Dhaka has already emerged from citizens, from the business community, from academics. But achieving greater autonomy through the political process has to come through central government. Until they say see the need for sharing power with a Regional Planning authority there will be no real progress on these issues.

These severe shortcomings are further discussed in the following section, which applies the ten Megacity governance principles to Dhaka.

6.5 Megacity Dhaka: Metropolitan Regional Governance?

This section considers the extent to which the present arrangement of responsibilities forms an adequate system to manage development of the Extended Metropolitan Region (EMR) of Dhaka according to the ten principles of Megacity Regional Governance (MRG).
Principle -1: Must have a geographical area of responsibility that covers the Extended Metropolitan Region

The present arrangement of institutions and functions has not been developed to operate as a specifically metropolitan development management system or governance covering the full extended metropolitan area.

A limited number of metropolitan institutions were grafted on to a system of governance and development management designed to operate at the national rather than the metropolitan level. There is a distinct lack of integrative functions that could help to create a metropolitan regional governance system.

According to Islam and Khan (2000, pp.29-30), urban governance in Megacity Dhaka is adversely affected by the simultaneous presence of a number of factors. The factors they noted were: First, too many different agencies are involved in urban development management. These agencies include ministries as well as numerous organizations operating at both the national and local levels. The consequences of such a situation are overlapping jurisdictions and lack of coordination. Lack of coordination in decision-making, planning, implementation and maintenance of services has been common in the urban governance in Megacity Dhaka. Second, in almost all cases municipalities and Dhaka City Corporation have not been able to perform planning and development management functions because their administrative, financial and technical capabilities have been rather weak. As a result, municipalities have been unable to play a decisive role in guiding and controlling growth of Megacity Dhaka. Third, in urban planning, considerations such as efficiency, equity, and citizen welfare have not been figured at all. Finally, urban development planning in Dhaka has suffered as in most instances there has not been any
meaningful integration between central planning on the one hand and local level requirements on the other for Megacity Dhaka as a single geographical space.

**Principle -2: Must have a strategic planning function that can provide a vision of how the city can address its land use problems sustainably**

The Planning Commission has not been able to carry out strategic planning for a number of reasons. It is a national planning organization so that its resources are devoted to national purposes. Its internal structure does not allow for concentration of attention on specific urban areas, and a conflict of interest would arise if parts of the commission had to argue for or against proposals favoring specific urban areas. The Planning Commission has to remain in a position where it can assess national priorities objectively.

On the other hand, the only metropolitan level planning authority, the RAJUK, is not in a position to effectively argue the merits of investment decisions outside its own particular field. As one agency amongst many, it does not have the necessary influence amongst the various implementation organizations operating in the metropolitan area to be able to determine strategic issues and it does not have the staff resources to attempt such a task in addition to its improvement scheme responsibilities.

The Urban Development Directorate has responsibility at the national level for physical planning, and this responsibility includes the interpretation of the location implications of national economic plans. Nevertheless, at present its responsibilities specifically exclude Dhaka and the other City Corporation areas.

It is evident that the above institutions have to date been unable either to prepare a metropolitan-wide strategy or to plan investment in the metropolitan area. Updating of
the strategy and particularly the planning and coordination of urban investments, has by its nature to be a government activity, which is absent within the present structure of the government.

A legal overlap exists in the allocation of master planning functions between RAJUK and the Municipalities (Pourashavas). Under the Town Improvement Act (sections 73 to 75) the Board of RAJUK is instructed to prepare a master plan for the area within its jurisdiction. Under Pourashavas Ordinance 1977, Pourashavas are empowered to draw up a master plan for the areas of their municipality. The Pourashava Master Plans are being done by the Local Government Engineering Department (LGED) or the Urban Development Directorate (UDD). The subject matter of each plan is broadly similar, with the emphasis in the RAJUK plans on land use, and in the Pourashava’s plans on the development of sites.

Such an overlap is not necessarily an obstruction to coordinated action (provided the parties see it as being in their interests to work together) but the overlap does make more difficult the task of both RAJUK and the Pourashavas in preparing master plans.

An overlap also occurs in the allocation of development control powers. Section 78 of the Pourashava (Municipality) Ordinance 1977 requires that applications for building development be submitted to the Pourashavas. Pourashavas may reject an application if the proposal does not conform to the building by-laws, the municipality master plan, or any municipality site development scheme.

So far as this system provides for Pourashavas to require applications to conform to the building by-laws, and provides for building applications to be submitted to RAJUK to ensure conformity with RAJUK plans, the provisions are logical and workable. However,
as there is no provision requiring municipal master plans or site development schemes to conform to the RAJUK master plan, the system has a built-in potential for the refusal of all applications by one or other body if the separate master plans are in conflict.

The discrepancies described above between local government (Pourashava) legislation and development authority (like RAJUK) legislation may be seen as an overlap between national and metropolitan legislation. The Pourashava Ordinance is no doubt consistent with planning and development intentions in urban areas not having a development authority like RAJUK. In major urban areas with improvement trusts, of which Dhaka is one, the conflict in the legislation requires some revision in the terms of reference of the planning and development bodies in these areas. This can be done with a statutory regulation through a strategic plan.

*Principle -3: Must have a statutory planning function that can control development to ensure ‘common good’ outcomes consistent with the strategic plan*

Comprehensive development control, whether for planning or building purposes, involves the submission of specific proposals by all individuals or corporate bodies to the controlling authority. In any situation, this requires resources and knowledge on the part of the applicant (to be able to prepare plans, have some knowledge of the regulations and know which authority is to be dealt with). It also requires a large professional bureaucracy to handle the potentially very large number of applications. Not least it requires a bureaucracy that is able to apply objective standards for the ‘common good’ rather than ad hoc considerations to the determination of applications. Even the application of common standards is almost impossible in a rapidly growing city of widely divergent standards of living and development.
It is realistic to conclude that the necessary preconditions for effective control of all building development along traditional lines cannot be attained in Dhaka under present system of governance.

In Dhaka a legislation gap exists in the provision for the preparation of local or area plans (which illustrate in more detail for specific areas within the provisions of the master plan). While the Town Improvement Act requires the preparation of a master plan it does not make provision for the preparation of area plans. The Act does nevertheless provide for the Chairman of RAJUK to approve individual applications for the use of land other than in accordance with the master plan.

In practice, a detailed application approval system is unlikely to be effective in the absence of area plans which interpret the master plan and which can be used as the basis for determining individual applications. A fully operational area plan/development control system is required for systematic development. Therefore, the point here is that, while the physical planning system should control individual buildings development, the system has also to make provision (both legally and in the provision of resources) for the preparation of area plans.

However, work on the detailed local area plan for Dhaka has started, and in July 2004 RAJUK was in the process of developing detailed area plans under the ‘Urban Area Plan 1995-2005’ (RAJUK, personal communication).

As the institution charged with responsibility for physical planning (one element of strategic planning), RAJUK has been unable to discharge its responsibilities for a number of reasons. The original master plan was prepared in 1958/59 by consultants, and has not
been comprehensively revised to accommodate the rapid changes since that date.

RAJUK’s revisions of the plan have been limited to incorporation of their own development schemes where these differ from the plan and to incorporation of the large-scale proposals of other development organizations where these have been approved without the benefit of an up-to-date overall plan. The Dhaka Metropolitan Development Plan (1995-2015) was an outcome of this demand.

The main reason for this shortcoming appears to be a possible conflict of interest, certainly a conflict of resources, within RAJUK. The Dhaka Improvement Trust (DIT) was established in 1956 as a development institution to carry out improvement schemes and was given a structure and staffing resources for this task. Only subsequently (1958), by the addition of four sections to the Town Improvement Act, was it given overall metropolitan planning and development control responsibilities. Its internal structure and planning establishment does not however appear to have been enlarged to cope with this additional role.

In a situation of conflict between the two functions of development and planning, RAJUK’s original remit of urban development, which carries with it greater financial responsibility, greater public acceptance and a more visible image, received almost all the limited planning resources available within the then DIT.

A secondary reason emerging for the lack of commitment at both national and metropolitan levels to revision of the master plan may be the nature of the plan itself. Master plans are a planning mechanism, imported from developed countries which were only partly successful and which have been largely superseded by other types of plans in those countries. In the Bangladesh situation of overriding national priority given to
economic development, the master-planning concept may be seen as too limited to physical infrastructure, too demanding of planning resources, and too inflexible to be able to keep up with changing national priorities.

RAJUK’s efforts to prepare more detailed plans interpreting the master plan have been limited (with the exception of its own development schemes) to six ‘zonal’ plans covering limited parts of the existing urban area. These areas were selected primarily in response to local demand and the plans were limited to identifying road lines and zoning permitted land uses. The plans in total make little contribution to solving the problems of effecting detailed control of development throughout the metropolitan area. The vast majority of the city remains without a development control system.

The nature of detailed development control is a major obstacle to its effective implementation in the Bangladesh situation. This characteristic in combination with the lack of area plans, may explain RAJUK’s (or any other institution’s) lack of success in this task.

RAJUK’s development control efforts have only been effective in their own development areas. In these areas RAJUK produced a local development plan so that the planners had a basis for detailed control. RAJUK also purchased the land and subsequently re-leased it subject to its own development conditions. The two preconditions of a local plan and effective control are met in these areas. Therefore, it can be said that principle 3 of the Megacity principles has been applied in RAJUK’s own projects but not in most of the city.

*Principle 4: Must have a development facilitation function that can provide investment coordination, partnerships for infrastructure and a local validation structure.*
Dhaka Megacity has no investment coordination. There is no development facilitation function; investment is made on a largely ad hoc basis. A strategic plan with investment priorities could resolve this situation by highlighting the kind of strategic partnerships for investment which are needed, linking programming with the public and private sectors. Investment needs strategic guidance for effective land use. A strategic plan for investment coordination with the development facilitation function is an essential element of governance. Dhaka Megacity currently lacks a strategic plan of any nature having only a structure plan without any linkage to the central government budget processes.

*Principle -5: Must have an Urban Redevelopment function for the core built-up areas.*

Dhaka Megacity does not have any Urban Redevelopment Strategy though the city has large core built-up areas which are ready for redevelopment. These areas need a strategic vision for more effective use of land in the area. Without a redevelopment strategy the city core areas experience large traffic congestion and livelihoods are declining in the absence of proper servicing of facilities. An Urban Redevelopment Authority (URDA) could focus on this issue and an area could be demarcated for the organization with strategic responsibilities to perform. Urban redevelopment in Dhaka needs to ensure the retention of cultural and historical values, address economic disparities and guide development of infrastructure to meet the needs of a burgeoning population and the changing technological context of a global Megacity.

*Principle -6: Must have a transparent local process that can help define the ‘common good’ sustainability outcomes from development with all stakeholders*
There is no local government code in Bangladesh which allows local participation in the local development process or management except through the one elected representative. The local community, non-governmental organizations and / or private sector investors do not have access to the process to help define local ‘common good’ outcomes. However, some local level efforts have been growing in Dhaka Megacity for garbage disposal and security as well as broader political questions. As the city’s education levels increase there will be a growing demand for inclusion and engagement in local decisions.

*Principle -7: Must have a coordination mechanism to ensure planning and development are integrated*

Investment coordination at the metropolitan level is currently within the remit of the Planning Commission but is of a different character and level of detail compared with the Planning Commission’s other responsibilities for national economic planning. The lack of a strategy for metropolitan development and the lack of an up-to-date physical plan make this task even more difficult. In practice, the Planning Commission cannot handle investment coordination at this level and a national economic planning body would not normally be expected to carry out this detailed role of bridging the gap between economic and physical planning for what is only one part of the country.

Physical planning coordination at the metropolitan level is the responsibility of RAJUK. However, RAJUK is only one statutory body amongst many operating in its area. Although the Town Improvement Act stipulates that all public as well as private developments have to be submitted to RAJUK, there is in practice no institutional body at a sufficiently high level to effect the required degree of public coordination. This coordination is also hampered by the lack of an up-to-date physical plan which has the
acceptance of other development agencies and to which they are prepared to commit themselves.

In most cases responsibilities for the various urban service and development functions are not significantly fragmented in the sense of a particular service being shared by several agencies giving rise to problems resulting from lack of coordination or from duplication. It is mostly a problem of confusing who is really responsible and how it all relates to an integrated ‘big picture’. The relationship of RAJUK’s major new road improvement activity with the road responsibilities of DCC are an example of this, with no one sure who really should be improving new road infrastructure and what the priority areas are.

There is an extent to which functional fragmentation and organisational complexity are inevitable in large urban areas. Over the years Dhaka developed a pattern common in Asian Megacities, in which the major development activities are in the hands of government directorates and parastatals responsible to a fairly wide range of ministries, rather than bringing together a significant group of such activities under the municipal authorities. This pattern is essentially a fragmented one without the focus of the EMR to help define the issues and priorities.

There is no superior level of coordination at either metropolitan or central government level in Dhaka at a public servant level or a political level. Major urban functions are divided between two ministries of equal status, Ministry of Housing & Public Works (MH&PW) and Ministry of Local Governments, Rural Development & Cooperatives (MLGRD&C), neither possessing lead powers in respect of urban development, but each controlling important functions: the former for urban planning and housing and the latter for local government and for water and sewerage.
Urban planning and management is thus fragmented and uncoordinated. Put differently, there is an almost total absence of strategic policy leadership to find the causes of problems in the city create a plan and then implement it through a coordinated development program relevant to the whole metropolitan regional area.

*Principle 8: Must have a way of raising the finance for the above process including from land development*

The Dhaka City Corporation can draw revenues according to its ordinance of 1983 and the municipalities can draw revenues from their inhabitants according to the Municipal Model Taxation Schedule of 1985. These are rates and neither DCC nor municipalities have any avenue for raising funds for local development. There is no code for local governments in Bangladesh which can help them to raise funds from land development. Development authorities that have been created for this function elsewhere are not yet in place in Dhaka. A mechanism for this function is clearly needed.

*Principle 9: Must have a strong link into the national government system to enable good political support*

Local governments have their linkages to national government through the Ministry of Local Government; all other concerned agencies working in the management process have their linkages to national governments through their individual Ministry. In general the link to national government in the Megacity is in fact so strong there is no real institutional process to enable the metropolitan regional scale of governance to work. The Megacity Dhaka as an individual public entity does not therefore have any structural or institutional relation with the central government. Dhaka’s growth and development has been mostly shaped by national government. The challenge now is to retain this link whilst having stronger metropolitan regional scale governance as well.
Principle -10: Must have new professional skills in sustainability and local participation

Planning in any Megacity requires the new skills of sustainability (long-term, integrated approaches) and local participation (to enable community values to guide development). Such skills are probably rare in most cities and are extremely rare in the governance institutions of Dhaka.

The reasons for these shortcomings in Dhaka Megacity are the conflict of interests in the governance system as well as lack of resources and staffing. Overcoming this staff shortage would have to include providing staff to carry out development control and facilitation of development and effective governance as well as staff for preparation of the plans themselves. This would require the concentration of a large proportion of all available urban and regional planners in Bangladesh on this task alone. Then they would need special training in these new skills.

The ten principles of Megacity governance have been compared with the existing metropolitan development management system in Dhaka. Certain parts of the system have been identified where either a lack of overall design, shortcomings in the legislation, or inability to provide the resources necessary to make the system work result in system performance deficiencies. Table 6.7 sets out the extent to which the Megacity governance principles are being applied through institutional arrangements in Dhaka and largely reveal that they are not very evident.
Table 6.7: Megacity Dhaka: Governance Principles and Present Institutional Arrangement

<table>
<thead>
<tr>
<th>Governance Principles</th>
<th>Evident in Present Dhaka Institutional Arrangement?</th>
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<tbody>
<tr>
<td>1 A geographical area with clearly defined responsibility of governance that covers the Extended Metropolitan Region</td>
<td>No</td>
</tr>
<tr>
<td>2 Strategic planning function that can provide a vision for how the city can address its land use problems sustainably.</td>
<td>Partly….RAJUK has a structural plan but without any comprehensive vision to effectively address land use problems</td>
</tr>
<tr>
<td>3 Statutory planning function that can control development to ensure ‘common good’ outcomes consistent with the strategic plan</td>
<td>No….RAJUK has been engaged to supplement its structural plan with a statutory plan/detailed area plan for its zones and projects. Local governments are not resourced properly for development control.</td>
</tr>
<tr>
<td>4 Development facilitation function that can provide investment coordination, partnership for infrastructure and local validation structure</td>
<td>No….Development facilitation is only being done by central government spending, partnership is not on the political agenda yet.</td>
</tr>
<tr>
<td>5 An urban redevelopment authority to guide and monitor further development in the core built-up areas in the city</td>
<td>No ….urban redevelopment and/or development come under the sole authority of RAJUK.</td>
</tr>
<tr>
<td>6 A transparent local process that can help define ‘common good’ sustainability outcomes from development with all stakeholders</td>
<td>No</td>
</tr>
<tr>
<td>7 A coordination mechanism to ensure planning and development are integrated</td>
<td>No…though a coordination committee (CC) is constituted, however it is without any statutory power. DTCB is another organization to coordinate some transport projects.</td>
</tr>
<tr>
<td>8 A way of raising the finance for the above process including from land development</td>
<td>No</td>
</tr>
<tr>
<td>9 A strong link in to the national government system to enable good political support</td>
<td>Yes, but to the extent that the national government runs much of Dhaka. No, in the sense that there is no single organization that has strong vertical linkage for EMR of Megacity Dhaka to the national government.</td>
</tr>
<tr>
<td>10 New professional skills in sustainability and local participation</td>
<td>No</td>
</tr>
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</table>
6.6 Conclusions

This chapter has analyzed the various governance institutions of relevance to Dhaka and finds them inadequate for the task of managing a Megacity. Strategic planning for the provision of infrastructure and investment planning to ensure implementation are fundamental to any city. Statutory planning then provides the detailed process to enable development to proceed for private gain and for the ‘common good’. Development facilitation creates partnerships a redevelopment authority would focus on urban renewal, and a transparent local process would provide the local validity for development to solve the multiple problems of the Megacity. Finance provides the fundamental resources for development, as does a strong link to the national government. All is held together by staff with capacity for long-term integrated thinking and community engagement. Although some structures for such planning and development exist, in reality there is nothing in Dhaka. There are too many national bodies without the focus and the planning orientation relevant to the Megacity. These integrative functions are the weakest part of the governance structure. The next chapter sets out why a governance structure of Metropolitan Regional Governance (MRG) is needed for Dhaka and then Chapter 8 shows how this can be done with an analysis of several options.
This chapter describes why Megacity Dhaka needs Metropolitan Regional Governance (MRG). The chapter examines the many reports that have already pointed out the lack of adequate governance structures in Dhaka. The absence of regional government and political recognition of the Extended Metropolitan Region (EMR) of Dhaka, mean that the reinforcing competitive strength of an urban region, which as a whole forms an ‘Integrated Urban Space’, will not realise its full potential in the future. Dhaka exhibits a fundamental lack of integrative functions: strategic and statutory planning, development facilitation and all the functions outlined in the ten principles of MRG.

7.1 Studies / Reports on Dhaka’s Governance

This section outlines the many reports that have already analysed the shortcomings of governance in Dhaka.

A UNDP (1981) report on Dhaka stated that the scarcity of resources, combined with the complexity and scale of the task facing those responsible for the planning and management of Dhaka, demands a careful approach to organization with continuity balanced against reform. The report also indicated that what was required was an interlocking system of responsible institutions, each having a clearly defined role which it can pursue in a single minded manner without being unnecessarily burdened with too many other responsibilities and tasks alien to its main function.
The report asserted that the main two functions to be performed by the public sector depend on identifying and allocating to some discrete organisation, whether existing or new, a core integrative role in the city. The two main functions are:

- Planning and investment co-ordination
- Project preparation and implementation

The integrative functions of planning and development facilitation need to take place within a visionary framework, i.e. a strategic plan.

The United Nations Centre for Human Settlements (UNCHS) undertook an Urban and Shelter Sector Survey in Bangladesh in 1992. The recommendations on metropolitan level management contained in the document were for:

- an Urban Policy Council with the Minister of Planning as Chairman and a secretariat in the Physical Infrastructure Division of the Planning Commission;
- an Urban Development and Investment Coordination Cell in the Programming Division of the Planning Commission;
- inter-agency coordinating bodies at the metropolitan and municipal levels.

The long outstanding issue of providing the capital city with institutional machinery for planning and investment coordination was pursued through this report, which would have a lasting influence on the pattern and quality of development as the city copes with the substantial growth that is inevitable well into the 21st century. However, nothing along this line has happened.

Mohit (1992, p.101) stated that the whole process of urban planning administration for the Dhaka Metropolitan Area could be conceptualised in the model presented in Figure
6.1. The model shows that the process is predominantly sector based as a majority of the development projects are undertaken by sector agencies. The dominance of the sectoral approach to planning gives rise to multiple agency involvement. The results of plurality to date have been a multiple area focus and various problems emanating from lack of coordination in decision-making, planning, implementation and maintenance aspects of urban development. The outcome has been uncoordinated and uncontrolled developments leading to wastage of resources in urban development administration and simultaneously generation of socio-economic and physical problems, particularly when the city is subject to rapid growth like Dhaka.

Pasteur (1995, p.6) claimed that the term ‘metropolitan management’ is used to describe the process which was missing in Dhaka and it is one of the main objectives of this dissertation to introduce. Pasteur (1995, p.6) stated that it could be achieved by the introduction of a new planning approach which was still in the process of refinement, and which would have a number of components, some of which would apply at metropolitan level and others at lower levels. He used the term ‘management’ in the wide rather than in the narrow sense, i.e. planning, coordinating, controlling (or influencing) and monitoring, but not necessarily executing (see Box 7.1).

Pasteur (1995, p.7) indicated that most of these tasks would need to be handled by the lead organisation for metropolitan management. Integrated action plans might be prepared by an organisation at the metropolitan level, but they might also in some cases be prepared by lower level agencies. Pasteur (1995, p.7) noted that none of these are apparent in Dhaka.
The ‘Bangladesh Urban Sector Strategy 2000’ prepared by the Asian Development Bank states that ‘management of Dhaka poses special problems’. It concludes that appropriate governance of the EMR has not happened (ADB 2000, pp.3-31) Further, some recent reviews of metropolitan governance in South Asian Megacities have argued that, because of excessive fragmentation of urban management, there is a need for locally accountable
political authorities that can take overall responsibility (Islam 1996; Sundaram 1998; and Pintoo 2000).

Islam et al. (2000, pp.135-159) mentioned that Dhaka City Corporation (DCC) lacks substantial authority to act as the voice of its constituency. The central government agencies control utility supply, sewerage, environment, traffic, law and order, city planning and development, and public housing. Again, there is a serious lack of co-ordination between the city authority and the various governmental agencies. No wonder the governance of the city, with a total population of nearly 6 million (DCC area), is weak and ineffective, with manifestations in multifarious problems, namely, water-logging, poor sanitation, irregular waste disposal, massive traffic jams, irregular and inadequate supply of drinking water, irregular supply of electricity and gas, inadequate housing, widespread poverty, proliferation of slums and squatter settlements, inadequate educational and health facilities, high degree of air and water pollution and a deteriorating law and order situation resulting in a higher incidence of crimes and violence.

Islam et al. (2000, pp.135-159) also noted that among others DCC does not have the legal authority to control government agencies. NGOs are active participants in the socio-economic development process of Dhaka but have no formal link to the governance system. The private sector is very active in the city building process but they also are only informally participating in the process.

Islam et al. (2000, pp.135-159) argued that to address the key problems Dhaka needs restructuring of its governance structures. According to them the possibility of formation of a metropolitan form of government for the city with more powers for the city’s elected
body is remote. However as a short term arrangement they stress the need to make the coordination committee more effective.

Afsar (2000) noted that it was believed special authorities were created to supplement the poor administrative, managerial, technical and financial capability of the City Corporations to meet the growing demand for urban services in metropolitan areas. However, Afsar (2001) argued that serious management problems were triggered by lack of coordination among various services and between those agencies and municipal bodies. The new agenda is to see now how MRG can provide the focus and coordination.

According to Afsar (2000) the local governance system in Dhaka is a constellation of various agencies. While there is plenty of scope for incremental reforms in metropolitan governance, there is no case for trying to improve governance by playing around with the structure, which could do more harm than good. There appear to be more important directions for reform such as:

- Use of coordinating bodies for special critical issues;
- Capacity building to strengthen all government functions relating to the Megacity;
- Measures to make statutory authorities more accountable and open;
- Use of public forums to try to build consensus on particular Megacity issues;
- Devolved statutory development control within a broad visionary framework;
- Partnerships in development opportunities, especially infrastructure.

These integrative governance directions are not happening because the institutional structures to enable them to occur are not there.
Afsar (2001) also noted that urban local governments in Bangladesh draw their powers from central government legislation, ordinances, rules, by-laws and regulations however, while the Constitution of Bangladesh safeguards their existence as units of self-government it does not specifically mention ‘Urban Local Government’ at different levels or tiers of administration. She also noted that local governments in the urban areas of Bangladesh have only narrow aspects of governance, limited to maintenance functions and rendering a few public services entrusted to them through the Municipal Ordinance of 1977 and City Corporation Ordinances.

Afsar (2001) argued that the broader aspects of urban governance which involves development, distribution and production of public decision-making with regard to city / town planning and management, especially issues related to the disadvantaged community, are kept outside local government responsibility in Bangladesh. Delivery of services such as education, health, water, electricity, telecommunication, law and order remain under several ministries and/or public bodies and thus do not have a local democratic focus.

All of these studies point to the following conclusions.

Dhaka is being governed by a variety of institutional structures, including national, local and development authorities. The institutions necessary to manage Megacity Dhaka are typically held back in their development by a lack of a clear definition of their area and focus of responsibilities, combined with a lack of necessary priority and skills in the integrative functions of strategic and statutory planning and development facilitation. It is often and widely argued that there is a need to strengthen the local government system in Dhaka as well, with a more transparent and engaging process. This will require sustained action, since the city is large, complex and has a broad range of responsibilities.
Dhaka has two spatial entities, the core area and the Extended Metropolitan Region (EMR). The increasing concentration of national economic development and urban population in the EMR of Dhaka suggests that there is a resurgence of interest in regional institutional structures. Because of the nature and scale of the Megacity where it is developing in the form of an EMR there is a strong need for horizontal coordination of public and private actions involving options such as metropolitan-wide institutions for specific sectors, more formal groupings of local governments, and other forums that allow public and private interest groups, including non-governmental and community-based organizations, to work together on the key issues. The adoption of a good governance policy, incorporating transparency, accountability, predictability, and beneficiary participation are becoming the governance issues to create a future for Dhaka.

7.2 Metropolitan Development Management: A Short History of Dhaka’s Inability to deal with its Governance Issues

Dhaka Municipality was created in 1864 (then called ‘Dacca Committee’- Dhaka was spelled as ‘Dacca’ till February 1987) under the District Municipal Improvement Act of 1864 in order to bring order to the then small District town. Under the Act direct election provision was made and then District Collector headed the Dhaka Committee. Elected Commissioners assisted him in the operation of the committee works. Dhaka had a piped water supply since 1870 when the ‘Dhaka Water Works’ was established in Chandnighat. Piped water was supplied to very limited areas. The first fully planned residential area was built in 1885 (named Wari areas after the then Collector, Fredrick Wyer) with broad roads and proper drains. Dhaka’s first electricity was supplied in 1901 from Paribagh powerhouse. The first report on town planning came in 1917. The report was the first document to describe Dhaka’s existing physical setting of human settlements and to
consider its possible extensions, creating open spaces, the possibility of using canals to prosper the city’s economic life, city cleansing and sanitation. The famous British Town Planner Professor Patrick Geddes prepared the report. Implementation of the recommendations of the report did not receive priority due to cost cutting exercises of the British Government after World War I. Instead of planning, the government spent its money on establishing the University of Dhaka (started functioning in 1921).

The East Bengal Building Construction Act 1951 was the first document in which ‘development control’ was introduced in Dhaka. The Act provided some code for building constructions. The Town Improvement Act (TIA) 1953 was a landmark in the development process of Dhaka City and the Dhaka Improvement Trust (DIT) was created under one of the provisions of the Act. Creation of the Dhaka Improvement Trust (DIT) in 1956 was another landmark event and DIT was the executive agency for preparation of the First Master Plan for Dhaka City. DIT started to build the new capital of Eastern Pakistan. The Master Plan Report of 1959 proposed renaming DIT (Dhaka Improvement Trust) as Dhaka Planning and Development Authority in order to indicate its increased responsibilities, since planning had been added in 1958. This was not implemented. No changes in powers were proposed. Several residential areas like Dhanmondi, Gulshan, Banani, Baridhara and Uttara were developed by DIT and the plots have been transferred to the purchasers.

After the independence of Bangladesh in 1971, to bring more order to the city the Dhaka Metropolitan Development Authority Ordinance 1974 was passed. That ordinance included a proposal to replace DIT with a much more powerful metropolitan development authority with strong planning coordination and directive powers. The ordinance was overtaken by political events.
In 1979 the UNDP undertook a project Dhaka Metropolitan Area Integrated Urban Development Project (DMAIUDP 1981). The project produced a report in 1981 which recommended setting up two authorities:

i. Dhaka Metropolitan Planning Authority (DMPA) with powers for strategic and structure planning, area/local planning, supervision over development control, land assembly and investment coordination. Development control would be transferred to the municipal level, under DMPA supervision.

ii. Dhaka Metropolitan Development Authority (DMDA) to replace the DIT and to concentrate on land development without planning.

In 1983 Dhaka City Corporation Act 1983 was passed. In 1993 an amendment was made to the DCC Ordinance which made provision for the election of a Mayor for the city. Since this time the city has an elected Mayor.

In 1987, Town Improvement Act (TIA) of 1953 was modified and Dhaka Improvement Trust (DIT) was renamed as Capital Development Authority (RAJUK). The Act changed the internal structures with officials having more power, i.e. permanent members instead of the temporary members under the DIT structures.

In 1992 the Government of Bangladesh undertook the Dhaka Metropolitan Development Planning (DMDP) Project to update the already old master plan of 1959 and RAJUK was the executing agency of the project. The DMDP Project had three objectives:

(a) To prepare a set of plans to replace the outdated 1959 Master Plan for Dhaka, in the form of a metropolitan growth strategy, a series of metropolitan structure plans, urban area and local development plans, and a multi-sector investment program (MSIP) for coordinated implementation;
(b) To develop the institutional structures, procedures and manpower to apply and
manage the above planning and coordinated approach on a sustained basis;

(c) To strengthen local training and research institutions.

(1995-2015)’ for Dhaka in two volumes to the Government:


In October 1996 a Coordination Committee was constituted with the Minister for Local
Governments as Convener and the Mayor of DCC Co-Convener in order to improve
metropolitan-wide services through coordination among the agencies that provide
services in the city. The committee is for the Dhaka City Corporation area only.

Heads of most of the agencies working in the city were made members of the committee,
including Members of Parliament (having parliamentary electorates within the City
Corporation jurisdiction). The Committee was able to meet only ten times since it was
constituted, after which its activities can not be traced. The agenda of the Committee
Meetings were not presented in an orderly manner. As there was no specific Terms of
Reference (TOR) for the committee, the agendas were full of requests from the
Parliament Members to implement the development projects in their respective areas.

The Coordination Committee (CC) does not have any authority to coordinate either
formulation or execution of the respective development plans of its members. Members
of the committee are not answerable to the Mayor of DCC under the present
arrangements; hence it is very difficult to provide effective service delivery for Dhaka City
in an integrated manner. Unless the Terms of Reference (TOR) of the committee are defined clearly and a Statutory Regulatory Order (SRO) is issued, the committee will not be effective enough to ensure metropolitan-wide decision-making.

The committee was reconstituted in 2002 and the Mayor of Dhaka City Corporation (DCC) was made the Convener.

According to Islam (1998, p.81) to make the committee effective -

- The leadership of the Mayor has to be accepted by the member organizations. The sectoral organizations whose jurisdictions were in conflict with other organizations, or need coordination should reach conclusions under the chairmanship of the DCC Mayor;

- Significant breakthroughs in terms of the relationships and cohesiveness of member organizations and the DCC will be required;

- Committee meetings should be held regularly (at least once a month) as required in the initiation order;

- Authority to coordinate either formulation or execution of development plans of respective member organizations should be included as one of the Terms of Reference of the committee.

A common thread running through the above history is the difficulty of reaching a consensus between the various sector Ministries and agencies and local authorities involved and rising above their own interests to find a solution that serves the 'common good' of the Megacity and the national interest. The existing governance system is not yet working.
7.3 Megacity Dhaka: Contemporary Problems

7.3.1 Inadequate Services and Management

Dhaka has become a quite inefficient city with inadequate, fragile, and unreliable infrastructure. The provision of basic utility services is in short supply and irregular, and allocation or distribution of these facilities is unequal. A very large section of the population does not have access or cannot afford some of these services, e.g. electricity, safe water, sanitary latrines, natural gas etc. Drainage and waste disposal is inadequate and inefficient. However, in some neighbourhoods there has been some improvement through some NGOs (Non-Government Organization) and community actions. Dhaka City Corporation (DCC) hardly services the neighbourhoods or settlements of the poor, meaning slums and squatter areas. Traffic congestion is one of the worst features of urban management in Dhaka. Many of the roads are occupied by hawkers. Vendors operate businesses on the footpaths and even on the streets and thereby narrow the traffic ways and pedestrian walkways. Journeys between residence and work place or between work place and work place have become longer, time consuming, more expensive and hazardous. The age old major vehicles contribute to airborne pollution of the city (Islam 1998, p.75).

The physical environmental in the city’s fringe areas deteriorated significantly where spontaneous settlements developed without the formal planning process and lacking minimum infrastructures. In most areas piped water is unsafe to drink directly. Air is polluted to hazardous level almost throughout the city. Noise pollution is at high levels. Uncollected garbage at places is the source of irritating odours. Open toilets in the city’s low lying areas are equally hazardous. The water of the surrounding rivers has become polluted due to outfall of most of the drains of the city (Islam 1998, p.76).

Dhaka City is 400 years old with polluted water in the surrounding rivers – The Daily Star (accessed on 07-09-2005)

Land for housing and other urban development purposes is in incredibly short supply in Dhaka. Hence land prices have recorded huge increases over the years. Within the DCC area, housing land at market price is affordable to no more than 5% of the city’s households. Even in locations outside DCC, build-able land is beyond the affordability of more than 80% of the city’s population. Ownership of urban land is highly unequal, with only 30% of the population controlling ownership of or use access to 80% of the
residential land while the other 70% have access for use of the remaining 20% of the lands. It is an increasing problem to supply housing to residents in Dhaka (Islam 1998, p.77).

The law and order situation in the city is bad and has become worse in certain areas. Social crimes and violence are widespread. Terrorism and extortion is common in business areas and on educational campuses (Islam 1998, p.78).

7.3.2 Reasons of Inadequate Urban Governance in Dhaka

The problems of Dhaka are the effects of a cumulative process and not the creation of the present or immediate past regimes only. The causes of problems are many. Islam (1998, pp.78-81) describes some of these:

(a) The population of Dhaka increased by 6.17% per annum between 1975 and 2000 making it the world’s fastest growing Megacity. Pressure of very rapid population growth is obviously a major cause of the creation and persistence of problems of various magnitudes. All cities in the developing world which experience such massive population growth have also faced similar or worse problems. Given the economic situation and environmental condition (with floods, cyclones and riverbank erosion etc.) of the country, it is impossible to restrict migration into Dhaka from its national hinterland. During 2000-2015 Dhaka will grow by 3.78% with the already more than 11 million population (UN 2003).

(b) Some of the key resources, like land, are in short supply for rapid economic and physical expansion. Infrastructure is weak.
(c) The city’s administration and development management lacks leadership. Inadequate or weak city planning and poor implementation of plan recommendations are also major causes of a failed urban system.

(d) Organizations like DWASA, DESA, Titas Gas, T&T, etc. provide significant services in Dhaka. However, none of these organizations have the capacity to serve the whole DCC territory let alone the Extended Megacity or even most of the citizens. They all suffer from institutional limitations and lack of coordinated efforts to achieve some common good outcome. There are serious problems of coordination and mutual interaction between the DCC, RAJUK and other governmental stakeholders.

(e) The Coordination Committee (CC) with the Mayor of DCC as its chairman does not have any authoritative power over other organizations. The effort of solving the problems of coordination, by forming a Coordination Committee, in most cases failed to achieve the desired results. Since October 1996, the CC has made only marginal impact. Its only significant achievement has been to facilitate the construction of the Gulistan underpass, and easing of water logging or water stagnation problems in some areas.

(f) The Coordination Committee (CC) does not have representation from the private sector, business, industrial community, community and NGOs or other members of the civil society. In particular there is no one to highlight the problems of the poor and disadvantaged.
7.4 Problem of Water Management in Dhaka City

7.4.1 Surface Runoff, Surrounding Rivers and Drainage System of Dhaka

As described in the early part of chapter 5, water is a major factor in the shaping of Dhaka and will be a key factor in any discussion on governance.

The annual average rainfall in Dhaka is approximately 2000 mm. More than 80% of the annual rain occurs during May to September. The average number of rainy days per month during June to August is 19 to 22. Runoff accumulates as a result of rainfall, in the low-lying areas and lakes. It then flows through canals and lakes and ultimately discharges into the surrounding rivers. The water level in surrounding rivers remains high during the monsoon. As a result, the drainage system of Dhaka City is under the influence of a backwater effect from these rivers (JICA 1991).

There were more than 40 canals in Dhaka City comprising three major canal systems (JICA, 1991):

1. Degun-Ibrahimpur-Kallyanpur canal system which drains to Turag river;
2. Dhanmondi-Paribagh-Gulshan-Banani-Mahakhali-Begunbari canal system which drains to Balu river; and
3. Segunbagicha-Gerani-Dholai canal system which drains to Balu and Buriganga rivers.

Dhaka West has 13 canals having a total length of more than 31 km while Dhaka East has 27 canals of total length about 60 km. Approximately 80% of the city area is drained through these channels to the surrounding rivers. The catchment area of the canals in the Dhaka West varies from 6 to 40 sq km. The length and the catchment area of the major canals are shown in Table 7.1. All of these canal systems are now encroached by the
settlements from either side narrowing the size of the basin causing frequent water logging in the city.

Table 7.1: Major Khals (Canals) in Dhaka City

<table>
<thead>
<tr>
<th>Name</th>
<th>Length (km)</th>
<th>Catchment area (sq km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dholai Khal(Canal)</td>
<td>4. 0</td>
<td>16. 8</td>
</tr>
<tr>
<td>Gerani Khal</td>
<td>3. 4</td>
<td>6. 7</td>
</tr>
<tr>
<td>Segunbagicha Khal</td>
<td>3. 5</td>
<td>8. 3</td>
</tr>
<tr>
<td>Begunbari Khal</td>
<td>6. 5</td>
<td>37. 7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17. 4</strong></td>
<td><strong>69. 5</strong></td>
</tr>
</tbody>
</table>

Source: JICA 1991

Further, severe floods in Dhaka City are mainly caused by spill from adjoining rivers namely the Turag River, Tongi Khal, Balu River and Buriganga River. These rivers are connected to the major rivers of the country and receive water discharges from the Brahmaputra-Jamuna River. Turag and Buriganga River are tributaries of the old Brahmaputra River and the Balu River is the tributary of the Lakhiya River while Tongi Khal connects the Turag River with the Balu River. Flooding is a regular event in Dhaka with most recent major events in 1988, 1998 and 2004.

Flooding in Dhaka City usually occurs during July to September when the surrounding rivers cannot accommodate the water flow in their main courses. The water levels in the surrounding rivers are affected by backwater from the Dhaleswari, Sitalakhya and Meghna rivers. The Balu, Turag and Buriganga rivers are under the influence of tides in the Lower Meghna and the recession of a flood is delayed if a peak flood occurs during spring tides.

Whilst it is possible to see that the ultimate problem of Dhaka’s flooding is at least partly due to over clearing of the catchment in the Himalayas, this thesis limits consideration of the flooding issue to how it is managed within the Dhaka bioregion.
7.4.2 Ground Water of Dhaka City

The aquifer system under Dhaka is recharged by infiltration of rainwater, floods, leakage from urban water distribution and sewerage systems and discharged by aquifer drainage to the rivers, direct evapo-transpiration, and ground water abstraction. During the dry season, drainage and evapo-transpiration are prominent, and they lead to a decline in the water table. During the monsoon period the vertical infiltration fills up the aquifer system. This pulse governs the piezometric fluctuation over a large portion of Dhaka City (BCEOM 1992).

Urbanisation has had a major impact on the water balance of the Dhaka City region. Demand for water has grown many times because of the rapid population increase. Natural recharge to ground water has been reduced by the increase in the paved area. In-situ sanitation and distribution losses from the water supply and the sewerage system contribute to recharging to some extent though such a contribution has hardly replaced the reduction in recharge by infiltration from rainfall and floods (BCEOM 1992). Thus the ground water level inside Dhaka City continuously declined, from about 0.3 m/year at Banani to about 1 m/year at Motijheel (EPC 1991). Almost the entire present drinking water supply for Dhaka City is met from ground water. Alternatively the surrounding rivers can be a potential source of water supply for the city (Islam and Chowdhury 1996). In 2002 the government commissioned the operation of a water treatment plant at Syedabad. The cost of making available one litre of water through the treatment plant has risen four times. Moreover the plant needs a dust free environment, which is almost impossible to achieve in the area. However there seems to be little alternative but to extract river water rather than ground water as the ground water level continues to decline.
Groundwater contours show (see Map 7.1) that distribution of ground water level and direction of flow is drawdown in city core built-up areas (50 metres below from the ground surface level) while in the peripheral areas near the rivers it ranges between 22 to 34 metres below the ground surface level.

One of the great paradoxes of Dhaka is that in spite of falling water tables during dry season, there are also areas of waterlogging developing in the city during the monsoon. Therefore, Dhaka is highly constrained by its hydrological context.
7.4.3 Urban Flooding in Dhaka

Section 5.3 described the significant urban growth Dhaka City has experienced during the last 50 years and the radical changes land use has undergone since 1971 when Dhaka
became the capital of the new sovereign state of Bangladesh. Changes in land use alter the physical characteristics of an area, which in turn brings changes in the hydrological regime. Khan (1997) indicates that there is a relationship between water logging and the geo-morphological setting of Greater Dhaka City, because the high and medium Madhupur terraces are more vulnerable to water logging and they are dominant sites of rapid, unplanned and uncontrolled urbanization.

Some of the factors that are responsible for modification in the hydrological responses of catchments of Dhaka are (JICA 1990):

- Increase in impermeable areas reduces infiltration, which in turn causes increase in surface runoff generated by rainfall. As a result, the capacity of the existing storm drainage system becomes inadequate and overflow of drains occurs during the rainy season.

- Construction of roads and other infrastructure modifies the pattern of drainage flow. As a result, some of the existing drains are subjected to increased inflow of storm water and fail to carry the increased discharge.

- Land filling reduces the water storage area and lessens the capacity to retain the excess runoff generated by heavy rainfall. Consequently flooding occurs particularly when the intensity of rainfall is high or the duration is long.

The impact of these factors on the flood regime is severe in Dhaka City because of its unplanned and uncontrolled urban development. There is almost no coordination between different agencies responsible for construction of drainage infrastructure and those for construction for road, residential, commercial and industrial buildings and other infrastructure. Consequently Dhaka City is facing an increased threat of flooding and
water logging at the same time as having a decline in ground water tables in general. This is not a technical problem it is a governance problem.

Along with the rapid urbanization in the city in the past years, many canals and lakes have been encroached upon by settlements. A number of canals have already disappeared. A study by JICA (1987) observed that many portions of the major drainage canals were subject to encroachment due to earth filling, deposition of city garbage and construction of buildings and roads. As a result water logging has become a common phenomenon during the monsoon. The city has experienced a severe problem of rainfall flooding for the last few years. This internal rainfed flood situation worsens when runoff generated from high intensity rainfall combines with a high water level in the surrounding rivers. Even moderate rainfall causes serious problems for some areas of the city, namely Malibagh, Mauchak, Shantinagar, Rajarbagh, Fakirapool, Puranapaltan, Motijheel, Green Road, Mohammadpur etc. Drainage congestion results in local floods with ankle to knee-deep water on the streets. This water logging problem creates environmental and health hazards in the city on a regular basis.

This section shows that there is an unmistakable need for a bioregional approach. Parts of the city have too little water and parts have too much water with no coordinated approach to solving the problem. Some level of management has been achieved (as set
out next) but the engineering only points to the need for a more systematic and holistic approach to the water problems of Dhaka.

7.4.4 Flood Protection in Dhaka City

Dhaka City experienced unprecedented floods in 1988 and 1998. The floods were caused by spill from surrounding rivers. After the devastating flood of 1988, Dhaka West was encircled by peripheral embankments, floodwalls and raised roads to give protection against flood. Important components of the protection measures were (JICA 1990):

1. Approximately 30 km of earthen embankments along Tongi Canal, Turag River and Buriganga River;
2. Approximately 37 km of raised road and flood walls;
3. A total of 11 regulators at the outfall of canals to the surrounding rivers along the embankment;
4. One regulator and 12 sluice gates on the canals at the crossings with Bishwa Road, DIT road, Pragati Sarani, Mymensingh road and the Railway line at Uttar Khan;
5. One pump station at the outfall of Kallyanpur canal to the Turag River and another one at the outfall of Dholai Canal to Buriganga River. These pump stations are for draining rainwater from some parts of Dhaka West.

Following the implementation of the flood control project in Dhaka West, unplanned and uncontrolled expansion of the urban area stretched rapidly towards the low-lying areas adjacent to the flood protection embankment in the east. These are deeply inundated floodplain areas close to the river. The residents of the houses in these low lands suffer from inundation due to accumulation of rainwater after heavy rainfall. Land development
through the land filling process in the low-lying areas is causing drastic reduction of water storage areas and more rapid flows into the less protected areas. Because of the rapid increase of population and the scarcity of land in Dhaka West, unplanned expansion is taking place in Dhaka East at the same pace. It has started from the eastern side of Pragati Sarani (old DIT road) and is gradually stretching towards Balu River. The areas where urbanisation has already taken place are Mugdapara, Manda, Bashaboo, Sabujbagh, Khilgaon, Goran, Rampura, Merul, Baiddertek, JoarShahara, Khilkhet, Dakhinkhan, Uttar khan etc. Some of these areas suffered the worst during the flood of 1998 (DOE/IUCN 2000).

Table 7.2 shows the inundation pattern of Dhaka City in the recent past before the construction of the city protection embankment and floodwall along the Turag and Buriganga rivers. Most of the eastern low-lying flood plains (about 80%) used to be inundated during the monsoon in any given year. Most of the western part remained inundated except some areas of Abdullapur, Baunia and Pallabi. This part comprises 20% of the western part of the city.

In 1988 when the flood hit the largely unprotected city, almost all of the eastern part and about 70% of the western part of the capital city went under water. In 1998 the city protection embankment and floodwall protected most of the western part of the city. Even then, during the peak of flooding about 23% of the western part of the city went under water – and the entire east (Table 7.2).
Table 7.2: Extent of Flooding in Megacity Dhaka

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent Inundated</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dhaka West</td>
<td>Dhaka East</td>
</tr>
<tr>
<td>Before 1988</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>1988</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>1998</td>
<td>23</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: DOE / GOB and IUCN 2000

An embankment carrying rail and road services is proposed for the eastern part of the city that will run along Balu River for a total length of 29 km. This will be constructed under Phase II of the Dhaka Integrated Flood Protection Project (DIFPP) and will protect the area between Demra Road and the Balu River along the right bank of the river Sitalakhya.

Annual water intrusion inside the periphery of Eastern Dhaka City (The Daily Star) (Accessed in the archives on 20-10-03)
7.4.5 Challenge of Water Management in Dhaka Megacity

The problems of any city growing so fast are exacerbated in the case of Dhaka by its setting in the delta to some of the world’s greatest rivers. The hydrological context means Dhaka will always be a *desakota* with intense agriculture mixed in with urban activity on the higher ground but with frequent and complex water problems. The city is beset with issues of either too little or too much water: ground water lowering, water logging and flooding. To solve such a problem requires a full bioregional approach. It cannot be resolved by different jurisdictions doing their own part without concern for other connected parts.

What is clearly needed is a strategic plan which shows how flood prone areas can be protected thus releasing further land for development, and how the full water cycle can be integrated into those areas which have ground water drawdown, enabling recharge to occur. Thus this introduction to the city shows that from the fundamental dimension of water, the city needs governance that is metropolitan-wide, indeed bioregion-wide.

7.5 Dhaka Megacity: Challenges of Governance

Dhaka is the largest and fastest growing urban center of Bangladesh and is the endorsed location for secondary and tertiary sector activities. Few cities in recent history have experienced a population growth as rapid as Dhaka. From a small city of only around 400,000 in 1951, it has now become a Megacity of over 12 million people, a thirty-fold increase in less than 50 years. The average annual growth rate of Dhaka City’s population during the last three decades has been over 7%, thus doubling its population every decade. The rate of growth continues to be high even now, at nearly 5% annually. The
nature of urbanism displayed by Dhaka is also different to many cities, with its peculiar mix of rural-urban traits and attitudes (Islam 1998, p.71).

Meanwhile, of course, the area of the city has also expanded from only 73 sq km in 1951 to the present 1530 sq km. This Extended Metropolitan Area (or the Extended Metropolitan Region) has been officially called the Megacity by the Bangladesh Bureau of Statistics in the 1991 Census. Megacity Dhaka is an agglomeration of Dhaka City Corporation, four other municipalities such as Narayanganj, Tong, Gazipur and Savar, several cantonments and a very large number of rural settlements, stretches of agricultural lands, wetlands, rivers, and even part of the Madhupur forest (Islam 1998, pp.71-72).

The gross density of population in the Megacity area is 6000 persons per sq km. The density is much higher in the old part of the city. Less than 40% of the Megacity area is built-up urban, the rest is non-urban agricultural, forest, rivers, water bodies and wasteland. Discounting these areas, the population density in urbanized areas will be more than 14,000 per sq km. This is quite high density, especially when development is mostly
horizontal, in pre-modern structures. However, vertical expansion is now showing a new wave of development in some key already developed areas of the city. Most Asian cities are in the density range of 10,000 to 20,000 people per sq. km. with some like Hong Kong being around 40,000 (Newman and Kenworthy, 1999). Thus Dhaka has a density similar to most Asian Megacities. The issue for Dhaka is not the density of the city but how these people are managed to enable ‘common good’ outcomes from such a force of population to exceed the negative externalities generated by growth (Islam 1998, p.72).

The area of jurisdiction of Dhaka City Corporation (DCC) constitutes 24% of the Megacity Dhaka, i.e. 360 sq km, but within this small area it has to accommodate a huge population of nearly 6 million, with additional 1 million or so commuters each day. Even within this small DCC territory of 360 sq km, there are areas of Desakota character due in particular to the water systems within which the city is built (Islam 1998, p.72).

By 2015 the Dhaka Megacity is likely to accommodate a projected 19.5 million people within its limits (of 1530 sq km). The growth of the population will take place through several processes (Islam 1998, p.72):

(a) densification of already built-up areas,
(b) extensions in the fringes or peripheries and
(c) fresh urbanization of non-urban areas.

The above population trends in Dhaka Megacity represent manifold challenges to its governance institutions. Several key problems characterize the institutional framework for governance of Dhaka.
7.5.1 Functional Overlap of Institutions in Dhaka

According to Mohit (1992, p.108) the involvement of about 51 institutions (see Table 6.2) to manage the growth of Dhaka has resulted in a gross overlap of functions and problems of coordination. Multiplicity of institutions generates plurality in the planning and development approach and this plurality results in uncoordinated efforts, which in fact create more problems than they solve. In order to identify the magnitude of overlap functions in the development of Dhaka, an activity functional role matrix has been constructed in Table 7.1. The lack of integration in the governance system is a significant problem when there are so many separate functions instituted in Dhaka. The multiple institutional frameworks for the development of Dhaka generate overlap of functional roles by agencies (Table 7.1).

The Table 7.1 shows that RAJUK is involved in six functions; DCC and National Housing Authority (NHA) are also engaged with four and five functions, overlapping in some instances. In many cases more than one organization are involved in the same type of functions, for example there are nine organizations engaged in Land and Housing, similarly in Road Construction and Maintenance functions.

Alam (1979) noted that in the absence of a strong coordinating agency, various socio-physical problems are inevitably not going to be addressed in Dhaka. According to Alam (1979) the problems are:

(a) lack of coordination at the level of decision-making;
(b) lack of coordination at the level of planning;
(c) lack of coordination at the level of implementation; and
(d) lack of coordination at the level of maintenance of services.
Table 7.3: Matrix of Institutions and Responsibilities in Dhaka Showing Functional Overlaps

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Source: Adapted from Mohit (1992, p.107)

Note: (i) 0 indicates that the agency is functionally engaged in the area.
(ii) for acronyms see page xii for explanation of the institutions involved.

Islam et al. (2000, p.156) noted that the poor outcomes of governance in Dhaka, in ‘federalization’ (in the case of the elected DCC), ‘de-concentration’ (in the case of the public officials seconded at DCC level) and ‘allocation’ (in the case of parastatals, i.e. DESA, DWASA, BT&TB, DMP, Titas Gas), are indicative of serious problems in the planning, coordination, implementation and evaluation phases of the development programs and projects in Dhaka.
7.5.2 Lack of Coordinated Vision to Develop Partnerships

Islam et al. (2000, p.156) argued that the limited capacity of the government to provide services efficiently and address urban poverty effectively has given rise to the involvement of other agencies such as NGOs and CBOs to complement the efforts of the central government and DCC. The situation has also encouraged donors to advocate greater NGO and other agencies’ involvement in governance and development programs targeting the urban poor. The private sector’s engagement in the education, health, transport and waste disposal operations in Dhaka City has already met with some success. A large number of private sector business houses recently participated in the beautification program of the city.

Islam et al. (2000, p.156) noted that it is obvious that the major hindrance to good governance at the city level is the lack of coordination among various agencies and elements of governance. Not only have Dhaka City Corporation (DCC) and the public sector agencies failed to coordinate among each other, but they have been less enthusiastic about co-ordinating with the private sector, NGOs, CBOs and the rest of the civil society. The efforts of the central government to develop a coordination mechanism in DCC also have not been very effective compared to the size and volume of the problems of Dhaka.

7.5.3 Lack of Human Resources for Governance

The inadequacy of human resources and lack of capacity of the institutions involved is another area of concern in Dhaka’s governance. Islam et al (2000, p.156) point out that almost all public institutions and bodies have been overwhelmed by poor human resource
intake, inappropriate assessment, a fragile or no training system, poor enthusiasm of the elected legislative body, officials and employees, lack of service orientation and weak institutional support systems. This has created an unwillingness to generate resources from within, misuse of power, and misappropriation of public resources for private gains.

As contemporary thinking in governance favours more autonomous and democratic local government, it is desirable that the elected leaders in the city council have reputations as persons of intelligence, integrity and commitment.

7.5.4 Lack of Participation in Governance

Governance in Dhaka is characterised by the absence of a participatory process except for the elections of DCC Mayor and the Commissioners. This has been exacerbated by the public sector agencies, e.g. RAJUK, DWASA and DCC, pursuit of a top-down approach in their planning and delivery of development programs and services.

Islam et al. (2000, p.157) stressed that the increasing effect of the various inadequacies and limitations is obvious in the poor governance of Dhaka and has resulted in the growth of a city with diverse problems. These problems range from lack of adequate housing, traffic congestion, basic utilities and social services to severe environmental degradation and increased poverty, crime and violence. A dehumanising process seems to have begun in which ‘common good’ outcomes continue to be neglected in the development process. In this apparently unpromising situation, is there any trace of hope?
7.6 Hope for Dhaka?

In spite of diverse problems, some opportunities and positive forces exist in Dhaka (see Box 7.2). This has been noted by Islam et al. (2000, p.157) who commented that ‘at least the civil society is finally reacting and trying to make the voice of the people heard and some actions to be taken’. They cite the roles of Bangladesh Paribesh Andolon (Movement for Bangladesh Environment) (BAPA), Save the Buriganaga River, the Coalition for the Urban Poor, the Centre for Urban Studies, the Bangladesh Environmental Lawyer’s Association (BELA), the Bangladesh Habitat Council and the media as notable in this context. The Bangladesh Rural Advancement Committee (BRAC), the largest NGO of Bangladesh has introduced a program for the poor in Dhaka, which covers households in slums of the city. CARE (Cooperation for American Relief Everywhere) also has a program ‘Shobor’ (or city) to build the capacity of the urban poor in Dhaka.

This thesis noted in Chapter 3 that urban governance cannot be made to work efficiently without partnership between the government and the civil society or NGOs, CBOs (Community Based Organization), UPOs (Urban people’s Organization). Thus the role of a strong civil society is extremely important for a Megacity. Islam (1998) noted that -

‘…this is now beginning to emerge in Dhaka City and Human Rights groups are active, women’s groups are more active too, slum citizens are slowly organizing themselves or with support from NGOs, professional associations are taking interest in Dhaka city’s problems and governance, environmental action groups are forming coalitions (p.75).’

The growth of an educated civil society that cares for the future of its city will be the main driving force behind the development of a new governance system in Dhaka. Herein lies the main hope for the future.
Top-down solutions are also needed and in recent years there have been many projects with potential to improve Dhaka. The Asian Development Bank, the World Bank, UNDP and other development partners have been engaged in the development process of urban governance in Dhaka for quite a long time. The Asian Development Bank supported a pilot project (Technical Assistance) in Management Reform for Dhaka City (initially in five wards). This project was able to encourage DCC to initiate local level participatory planning. The Asian Development Bank also funded a project (Dhaka Urban Infrastructure Project) for the development of housing land for the low and middle income citizens in Dhaka City. The Japanese government provided technical assistance
(as well as funding some projects) for the development of water drainage system of Dhaka City. United Nations Centre for Human Settlements (UNCHS) provided consultancy services for the preparation of a strategic structural plan - DMDP (1995-2015). The IMF and the World Bank conducted a study on the city’s traffic (DITS) in 1992. The IMF and the World Bank also funded the Dhaka Urban Transport Project (DUTP) to improve transport mobility in the city. A Strategic Transport Plan (STP) for 25 years has been prepared. The DUTP project was able to introduce a few mass transit projects in Dhaka which have been highly successful. The Japan International Cooperation Agency (JICA) prepared a Master Plan for Dhaka’s garbage disposal. The Asian Development Bank conducted a study to reform DCC, though the report has not been implemented. These externally induced initiatives will benefit the governance of the city only if the city authorities and various public sector agencies are sufficiently motivated and strengthened in the process.

Improving the governance of Dhaka will require addressing the key underlying institutional problems and exploiting the possibilities discussed above. While the long-term changes will demand a thorough restructuring of the governance system, possibly with the formation of a metropolitan form of government for the city with more powers for the city's elected body (as has been repeatedly demanded by the incumbent Mayor and his predecessor), short-term arrangements may also be needed. These are discussed in Chapter 8.

Hope for Dhaka will only flourish when its governance system is able to reflect:

(a) A Strategic vision of how the whole EMR can be developed in a coordinated and integrated fashion (resolving the flood control issues is part of this);
(b) A move toward decentralisation and strengthening of local governments within this broad vision;

(c) A process to tap the vision and energy of civil society through transparent community engagement processes;

(d) Provision of services such as water supply and public transportation on a profit-making basis, through public-private partnerships wherever possible;

(e) Development of access to private capital through better financial management, improved regulation of markets, and enhanced cost-recovery (especially in land administration);

(f) Management of development through the phased provision of infrastructure within well thought-out local strategic plans; and

(g) Structured legal status for urban development control to ensure ‘common good’ outcomes in all development proposals.

However, the system of governance envisaged here will also depend on leadership. This leadership requires vision, understanding, integrity and dynamism. The present political culture, though democratic, unfortunately does not promote the growth of such leadership easily. Thus, evolving an effective governance system for Dhaka remains a major challenge for the politicians, administrators, private sector leaders, development activists, professionals, academics and the people of Dhaka Megacity.

7.7 Conclusions

The governance, development and management setting of the EMR of Dhaka are under multiple organizational jurisdictions and responsibilities. Dhaka is the capital and largest
city of Bangladesh, a country with about 120 million people. The nation’s capital requires governance that reflects its importance to the country as a whole. Also the growing civil society is demanding urban reform – this provides the basis of hope for MRG in Dhaka. In the Constitution of Bangladesh is stated that ‘Dhaka is the capital of Bangladesh’ and law [article 5(2)] will determine [article 5(1)] the boundary of Dhaka. However, no law has yet determined the boundary of Dhaka. Further, who will take care of the boundary of Dhaka City has not yet also been determined. This is the problem and the opportunity now facing Dhaka Megacity.

This chapter notes that an EMR is already manifesting itself in Megacity Dhaka; however the institutions that exist to handle the problems of the region are not spatially EMR oriented. Nor is there enough emphasis on the integrative functions of urban governance. The governance system in particular is not handling strategic and statutory planning or development facilitation or any of the other core principles of MRG. Therefore, Dhaka needs a Metropolitan Regional Governance (MRG) system for its EMR. Options for how this can be done are provided next.
This chapter outlines some of the options for governance of the Extended Metropolitan Region (EMR) of Dhaka. The process of creating Metropolitan Regional Governance for Dhaka has been approached by emphasizing the whole EMR and providing governance for the currently absent integrative functions such as strategic and statutory planning and development facilitation. Ten core principles for Metropolitan Regional Governance (MRG) developed from the thesis are applied to Dhaka.

8.1 Introduction

The issue of integrating development management in the Extended Metropolitan Region (EMR) of Dhaka Megacity demands that the functions to be performed by the public sector should be identified, allocated to some discrete organization, whether existing or new, and coordinated to ensure that the priorities of the functions are followed and implemented with the maximum efficiency.

Scarcity of resources combined with the complexity and scale of the task facing those responsible for the planning and management of Dhaka demands a careful approach to organization, with continuity balanced against reform. What is required is an interlocking system of responsible institutions, each of which has a clearly defined role that can be pursued in a single-minded manner without being unnecessarily burdened with too many other responsibilities and tasks alien to its main function. However there must also be an integrative function that enables the separate functions to be given direction and coherence.
To meet one of the objectives of this dissertation the institutional structure options required for Dhaka Megacity governance are set out below, together with an outline designation of the principal responsibilities of each institution.

As far as possible, existing institutions have been used together with suggested extensions of their present responsibilities. The only exception has to be the proposal of an organization or structure that provides the missing links at the Megacity level. The missing elements identified so far are:

1. Focus on geographical EMR covering the whole of the functional urban region;
2. EMR wide responsibility for the strategic planning, statutory planning; investment facilitation and coordination of planning and development within the Megacity;
3. Urban Redevelopment functions in the core built-up areas;
4. Community engagement functions;
5. Finance raising functions; and
6. New professional capacity building skills in sustainability and local participation.

This thesis recommends that the area over which Dhaka metropolitan governance would be exercised should be similar to the Statistical Metropolitan Area (SMA) or the RAJUK planning area. Its boundary may be drawn to include the probable extent of the urban area in 2025 (or even more) and also the total area physically suitable for development which may be the object of land speculation. The area should provide for inclusion of rural areas with potential for recreation or drainage and irrigation schemes whose planning has to be coordinated with planning for the urban area. Physical features, primarily rivers,
which most appropriately delineate these areas, may be used to define the boundary where possible. For administrative purposes it may be necessary to describe the Megacity area in terms of administrative units but its overall strategic governance requires that the EMR be used.

Institutional alternatives for governance of Dhaka Megacity will be analyzed in the next section.

8.2 Four Options for Metropolitan Regional Governance for Dhaka Megacity

Four alternative approaches to integrated governance for the whole Extended Metropolitan Region of Dhaka are:

*Option A:* Create a new top tier Dhaka Metropolitan Regional Corporation (DMRC) with representation from the municipal authorities in the EMR of Dhaka but with extra power to perform the lead functions of planning and development control. Investment coordination and development would also be included here.

*Option B:* Create a Dhaka Metropolitan Regional Planning and Coordination Division (DMRP&CD) in the Planning Commission.

*Option C:* Create a Metropolitan Regional Planning Authority (MRPA) to provide the metropolitan lead functions of strategic planning.

*Option D:* Create a Metropolitan Regional Development Authority (MRDA) based on the present RAJUK as the lead organization to perform development facilitation only.
8.2.1 Option-A: Dhaka Metropolitan Regional Corporation (DMRC)

The rationale for a Dhaka Metropolitan Regional Corporation is to place the key metropolitan management functions at a higher level, representative local government body, which would be a statutory authority capable of providing leadership and coordination in the EMR of Dhaka. The organization would provide strategic and statutory guidance for the EMR of Dhaka. Its Planning Department would include divisions for:

- Strategic and Statutory Planning; and
- Multi-Sector Investment Programming (MSIP).

It would have a Policy Board, a Chief Executive Officer holding rank of (permanent) Secretary as a full-time board member, and membership drawn from officials of key ministries at Secretary level. RAJUK, DCC (Mayor), and Pourashava (municipalities) should be represented, with some strategic private sector, NGO and community representation. The authority would be supported by an inter-agency structure of officer committees or sub-committees covering the range of metropolitan agencies, local authorities, NGOs, CBOs and private sector. It would be a permanent organization with staffing to provide assurance of both continuity and adequate professionalism.

The Dhaka Metropolitan Regional Corporation could provide strategic and statutory planning. Local/area/action planning and development or building control could be wholly or partly delegated to RAJUK or to the municipal level but within the strategic planning framework of DMRC. Direct responsibility could be assured for a limited range of large-scale services such as water, sewerage, drainage, and electricity (taking over
DWASA, DESA and DPHE functions in the metro area) and refuse disposal. Investment planning and coordination would cover the DMRC’s own projects and those of municipalities to which it would channel central funds. The DMRC would provide advisory investment planning and coordination to the Dhaka Metropolitan Coordination Committee/Council and the Planning Commission in respect of central ministry and parastatal functions. Monitoring of the implementation schedule of investment programming would be in accordance with the strategic decisions.

8.2.2 Option B: Dhaka Metropolitan Regional Planning and Coordination Division (DMRP&CD) in the Planning Commission

This is based on the assumption that its strategic functions should be at a level above other executive agencies and working within the existing central government framework. The justification for location in the Planning Commission lies in the importance of the capital city and the need to clearly command sector ministry support.

The proposed Division (whose name could be ‘Urban Division’) would be under the Member (Investment Programming) of the Planning Commission. The Division would have sections for strategic and statutory planning and investment planning (MSIP).

The Division would make decisions on strategic and statutory planning for the EMR of Dhaka. Provision of a supporting secretariat for investment planning and coordination would be made. Its operations would include annually pooling and sifting investment proposals of specified sector agencies and local authorities, and checking them against the metropolitan strategy, structure and action plans for approval of the Planning Commission for ADP (Annual Development Program of the Government of Bangladesh)
allocations. The Division would monitor the implementation schedule of investment programming in accordance with the strategic and statutory decisions.

This option places power more directly with the national government though its focus is on MRG.

8.2.3 Option C: Metropolitan Regional Planning Authority (MRPA)

This option creates a new body with responsibility for planning the whole EMR of Dhaka Megacity. The organization would be vested with the key metropolitan planning and coordination functions as a new statutory authority at a level above the executing agencies and local authorities.

The organization would be responsible for local area/zonal/action planning, development control and building control, with power to delegate these to RAJUK or to local authorities, subject to guidelines and performance audit. It would conduct infrastructure investment planning and coordination by annually pooling and sifting proposals of ministries, parastatals and local authorities, checking them against metropolitan strategy, structure and action plans and providing advice to the Planning Commission for ADP allocations. The organization would monitor the implementation of the decisions.

Planning does not necessarily lead to the kind of proactive partnerships in development that have been suggested in this thesis as being necessary for a city like Dhaka to overcome its fundamental infrastructure, housing and other urban problems. The next option therefore highlights the development facilitation option.
8.2.4 Option D: Metropolitan Regional Development Authority (MRDA)

An independent Metropolitan Regional Development Authority would provide a powerful command structure for metropolitan development functions at the apex of the metropolitan system based on the existing RAJUK, with an inter-agency structure for development coordination.

The revamped RAJUK may also give more specific institutional focus to policies and programs for the urban poor of Dhaka City, preferably by creating a new department or interdepartmental task force for low income land development and related activities, with recruitment of suitably qualified staff. This should be backed by a review of the corporate policy and program formulation process which serves the Chairman and the RAJUK Board. There might be a new Dhaka Metropolitan Development Coordination Committee with appropriate working sub-committees. But the possibility of introducing some membership from government, private sector, NGOs, academicians and the community into the Committee should be considered for the purpose of increasing accountability (with a new Act). The committee should be statutory.

It would prepare local/area/action planning and monitor development implementation. It would assemble land and guide land development, including provision of affordable land with secure tenure to meet the needs of the urban poor. The organization would execute development projects (residential, commercial, industrial estate, area improvement), and facilitate private and informal sector developments, (which are likely to constitute the great proportion of growth. In particular it would form partnerships for development between government and private interests.
8.3 Evaluation of Options

It should be noted that detailed variations to the above suggestions for governance structure and responsibilities under the alternatives are possible, but these would not affect the main principles. Each of the alternatives has advantages and disadvantages. These can be assessed in the following way.

The DMRC as an all-powerful body is not likely to happen politically. If DMRC’s executive responsibilities are limited, then some kind of co-ordinating body is possible, but the implications of multi-party politics for planning in the capital city have to be taken into account.

A Metropolitan Regional Planning Authority (MRPA) is more likely to be politically acceptable and innovative, as it will make a new start with greater opportunity to bring in new staff. The Metropolitan Regional Development Authority (MRDA) will carry with it the inherited values and practices of RAJUK. The democratic base of the DMRC could support innovation, but with a more political base and a more technical emphasis. DMRP&CD would exercise influence but not forceful leadership, as it would be retained under central government control rather than exhibit the partnerships approach of the other options.

It can be noted that each of the alternatives involves similar, but not identical arrangements for an inter-agency structure for investment planning and coordination linked to the Ministry of Planning and the ADP (Annual Development Program of Government Spending). This is modelled on the arrangements in Manila, where they are called the Capital Investment Folio System. Further detail would need to be worked out.
for procedures for MSIP (Multi Sector Investment Programming) at metropolitan level and for the progressive development of integrated planning at municipal and community levels and for their inter-linkages.

The history of DIT/RAJUK confirms that combining responsibility for planning with development execution has led to the planning function being overshadowed by execution and to the possibility of a conflict of interest, e.g. between planning and revenue earning activity. At the same time, if the planning function is well maintained there is advantage in closely linking planning to development in terms of projects but not agency responsibility. An MRPA is more likely to succeed if it is a specialized planning organization, and if influence over capital investment is maintained then strategic planning could be effective. Thus, if the MRPA is given the planning function and the MRDA the development function, there would need to be a coordination mechanism and this could be the major role of a DMRC through its Board.

All three of DMRC, MRPA and MRDA would need a link to the national government through the DMRP&CD. Without effective links they would be ineffectual. Conversely DMRP&CD by itself would be too much of a top-down instrument of the central government.

Creation of MRPA and DMRC would require substantial new legislation, more so in the latter case; both would remove planning functions from RAJUK. An MRDA would require amendment and updating of the Town Improvement Act, which is relatively straightforward. To establish the DMRP&CD would require legislation to transfer planning functions from RAJUK to it.
While the establishment and incremental cost of the necessary planning staff is the same for both MRPA and DMRC, each would involve higher additional overhead costs than MRDA. However, the planning unit of MRDA would need to relocate either in MRPA or in DMRC. Locating DMRP&CD in the Ministry of Planning would also require professional planners like MRPA, MRDA and DMRC.

MRPA and DMRP&CD are more likely than MRDA to gain support, due to the current weak credibility of RAJUK. DMRC could also command support from central agencies provided it is given strong political backing, and it would automatically have support from the municipal level.

If the political and bureaucratic culture of Bangladesh is resistant to and suspicious of new institutions and is reluctant to give them support, MRDA and DMRP&CD are preferable to MRPA and DMRC.

Both broad alternatives involve the application of a degree of authority to the situation, rather than adopting the approach of attempting to achieve consensus entirely through teamwork using a committee approach, as has been adopted in some other Asian situations (e.g. Manila). The competitive/defensive style of agencies in Bangladesh appears to require the use of authority. MRDA and DMRP&CD are weaker in this respect.

In view of the different strengths and feasibilities of these four options a complete model is proposed which takes the best elements from the four options in the following way:

1. MRPA – to provide a new strategic planning function for the EMR (as in option C);
2. MRDA – to provide the development facilitation function (as in option D);

3. Municipalities – to provide statutory development control and management
   (linked to MRPA and MRDA);

4. DMRC – to provide a Board overseeing the whole process to ensure coordination
   of planning and development (with a secretariat only, not as in option A with a
   full bureaucracy);

5. DMRP&CD – to provide a national government link through the Planning
   Commission (with a secretariat only, not as in option B with a full bureaucracy).

One of the keys to making such a process work would be the existence of a transparent
local process. Municipalities would exercise development control but a more active local
process is suggested for large developments. It is suggested that this could be done
through Precinct Partnership Groups which would be formed around any new major
development and involve all stakeholders (including local people and NGOs).

The other missing link is a financing mechanism for the MRPA and MRDA and for this it
is suggested that a Land Development for Sustainability Levy be established and used to
fund planning and development and aspects considered important by the Precinct
Partnership Groups. This should be a property tax based on the size of a development.

An institutional structure incorporating the five elements which appears to address the ten
core principles of Metropolitan Regional Governance developed in the thesis is shown in
Fig. 8.1 below.
Another body, an Urban Redevelopment Authority (URDA) will need to be created under the DMRC to be engaged exclusively in the redevelopment of the core built-up areas of Dhaka City. This organization will be independent from MRDA which will continue to focus on urban development into new suburbs at the periphery.
8.4 Development of Municipal Level Government

All approaches involving the strengthening of central agencies could be seen as threats to the power of municipal government in the Extended Metropolitan Region. However the proposed structure is meant to improve the planning and development at both levels. The existing municipal institutions must be fostered by the MRPA and the MRDA through transfer or delegation of planning and development functions. The MRPA will devolve statutory development control to municipalities. The Dhaka City Corporation will need to be the first municipality given this power, as it is the largest and most important. The MRDA will need to create partnerships and local development groups that can bring local validation to all new proposals. The MRPA will need to provide to municipalities a model Area Plan Text that can be used as a basis for development control consistent with the Strategic Metropolitan Plan.

It is also suggested that a local mechanism be established to guide large local developments through the establishment of Precinct Partnership Groups. These would contain all stakeholders and local people to help ensure sustainability outcomes. A levy (called the Land Development for Sustainability Levy) could be collected and distributed partly by the Precinct Partnership Group. This would help promote a transparent planning process linking local plans to broad regional goals.

8.5 Transitional Arrangements

Special Acts will be required to establish the MRPA, to amend and extend the powers of RAJUK, and to transfer all powers of development and building control to the municipalities. The latter already have some powers of building regulation and control
and their general urban management remit could be implied to extend to upgrading projects, but this aspect might have to be specifically strengthened. The Act setting up the MRPA could be used to remove the master planning powers of the municipalities within the metropolitan area, as thereafter this function would be performed by the MRPA. Those processes could take a few years to implement and to become effective. In the meantime, the existing system should continue to operate but reflect the changes that will eventually take place.

One completely new authority (the MRPA) will be required with a whole new staff structure, including economists, planners, and engineers. The existing bodies will also need to be strengthened to meet the challenges of their new roles. The opportunity should be taken now to plan in detail the composition, strength and structure best suited to these needs. This applies especially to the municipalities who will be taking on important new tasks for which they are currently ill equipped, either financially or administratively. They will have to acquire new skills in the planning disciplines if they are effectively to exercise their powers of development control and building regulation. In addition, if they are to develop and pursue a comprehensive upgrading program, they will need to build up a special project preparation and implementation unit capable of undertaking the upgrade.

It would be unrealistic to expect the municipalities to achieve this through their own efforts. They will require direct help and financial assistance from the National Government. It is also recommended that technical assistance be sought to engage a number of key foreign experts experienced in the field to help set up the new system. The types of personnel required may be determined at the administrative level. Training is examined further in Chapter 9.
8.6 How does the Proposed Structure relate to the ten Principles of MRG?

The proposed combination of institutions is based on the need to provide the functions as set out in the ten core principles of MRG. They are set out below in Table 8.1 showing how the proposed model would provide the necessary function.

Table 8.1 Proposed Metropolitan Regional Governance Structure for Dhaka based on the Ten Principles

<table>
<thead>
<tr>
<th>Principles of Megacity Governance</th>
<th>Suggested Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Must have a geographical area of responsibility that covers the Extended Metropolitan Region.</td>
<td>EMR defined legally</td>
</tr>
<tr>
<td>2. Must have a strategic planning function that can provide a vision for how the city can address its land use problems sustainably.</td>
<td>MRPA</td>
</tr>
<tr>
<td>3. Must have a statutory planning function that can control development to ensure 'common good' outcomes consistent with the strategic plan.</td>
<td>DCC and Municipalities overseen by MRPA</td>
</tr>
<tr>
<td>4. Must have a development facilitation function that can provide investment coordination, partnerships for infrastructure and a local validation structure.</td>
<td>MRDA</td>
</tr>
<tr>
<td>5. Must have an urban redevelopment authority to redevelop already developed core areas.</td>
<td>URDA</td>
</tr>
<tr>
<td>6. Must have a transparent local process that can help define the 'common good' sustainability outcomes from development with all stakeholders.</td>
<td>Precinct Partnership Groups</td>
</tr>
<tr>
<td>7. Must have a coordination mechanism to ensure planning and development are integrated.</td>
<td>DMRC Board</td>
</tr>
<tr>
<td>8. Must have a way of raising the finance for the above process from land development.</td>
<td>Sustainability Levy for Land Development</td>
</tr>
<tr>
<td>9. Must have a strong link into the national government system to enable good political support.</td>
<td>DMRP&amp;CD/Planning Commission</td>
</tr>
<tr>
<td>10. Must have new professional skills in sustainability and local participation.</td>
<td>Training Program</td>
</tr>
</tbody>
</table>

MRPA - Metropolitan Regional Planning Authority, MRDA – Metropolitan Regional Development Authority, URDA – Urban Redevelopment Authority, DMRC – Dhaka Metropolitan Regional Corporation, DMRP&CD – Dhaka Metropolitan Regional Planning and Coordination Division, DCC – Dhaka City Corporation

8.7 How would Metropolitan Regional Governance (MRG) work in Dhaka?

The detail of the proposed MRG is expanded below outlining the characteristics of each key element.
The new *Metropolitan Regional Planning Authority (MRPA)* would:

- Provide a strategic vision for the future of the urban region and embed it into a legal Metropolitan Regional Plan;
- Devolve responsibility for statutory development control of all development to Municipalities but with a legal mechanism to ensure that it is consistent with the Metropolitan Regional Plan;
- Create a model Municipality Plan text that sets out all the ‘common good’ sustainability outcomes which are to be built into the development control process.

In order to ensure the planning process is funded and the development of ‘common good’ outcomes is incorporated in a locally transparent way, it is also suggested that a parallel but distinct *Metropolitan Regional Development Authority (MRDA)* be created. This would have responsibility to:

- Collect a levy on all land development (for example 10% of the value of the completed development) called the Land Development for Sustainability Levy;
- Hypothecate this levy into part funding the MRPA and MRDA but mostly into local urban upgrading in the precinct where the land development is occurring;
- Develop private-public partnerships for infrastructure that are needed across the whole EMR of Dhaka;
- Create Precinct Partnership Groups to foster local engagement in development and ensure the priority of funding from the levy goes into ‘common good’ outcomes such as open space, public transport and water (including sewage) management;
• Ensure the Precinct Partnership Groups include representation from the land developer, local people, and NGOs as well as the MRPA, MRDA and local Municipality. This could build on the present zone system;

• Report back to the MRPA annually on progress towards achieving the vision established in the Metropolitan Regional Plan.

In addition there will be overall coordination from the Dhaka Metropolitan Regional Corporation (DMRC) to ensure planning and development is integrated. The Board of DMRC would be as in option A (see Chapter 7). A link back into the national government through a Dhaka Metropolitan Regional Planning and Coordination Division (DMRP&CD), which would be a Division of the Planning Commission, is an essential part of the governance system.

This model will enable Metropolitan Regional Governance to be implemented across the Dhaka EMR. It will create partnerships with the private sector, a transparent process at local level ensuring ‘common good’ outcomes from development, a funding source, a coordinated approach to planning and development, a link to the national government and most of all a broad vision for how the Dhaka region can reach its potential as one of the world’s great Megacities.

There is a need for legislation to enact these institutional changes. It also provides an opportunity to better specify the integrative governance functions which are currently missing in Dhaka.
8.8 Legislation Required to Enact the Recommended Institutional Changes

Some key legislative issues will need to be examined if the recommendations of this thesis are adopted. Some of the recommendations will require enabling legislation or amendments to existing legislations. A checklist with some comments on important aspects of legislative requirements follows.

8.8.1 Planning Law

The changes will require the drafting of a new planning law, namely Bangladesh’s National Physical Planning Policy and Urban Housing Policy (may be constituted in cooperation with UNCHS). This can be one of the mechanisms to ensure the model for MRG is established in Dhaka, particularly for strategic and statutory planning.

The legislation could best take the form of a comprehensive general Act applicable to the whole of Bangladesh and reflecting all likely planning requirements for the foreseeable future. It could still be relatively simple with many detailed matters left to be elaborated by regulations prescribed under the Act that could be changed as circumstances themselves change. In addition, the Act could provide for different parts or sections to be brought into force at different times and for different areas by Government order. A similar procedure could be used for allocating responsibilities for different parts of the Act to particular authorities.

It would thus provide a single code of planning law with a high degree of flexibility for applying its provisions to planning different areas and to different authorities, depending on their stage of development and the capacity of institutions to deal with the problems in
different parts of the country. Thus it could enable strategic and statutory planning to be implemented in Dhaka EMR but would not require it in all cities.

Outline of Planning Law

A possible structure for such a law with short notes on what should be covered in principle in each part is described and outlined below.

Part I: Administration

This part should cover:

- Constitution of the supreme national planning body;
- power of Council to issue policy direction to subsidiary planning bodies;
- power to establish Regional Metropolitan Authorities;
- power to order commencement of the Act in stages related to different functions for different parts of the state and different cities, and allocation of responsibilities under different parts or sections to different bodies;
- residual powers to perform any role under the Act in the absence of an appropriate body or in default of a responsible body.

Part II: Strategic Plans

This part should describe and outline the various types of plan which could be prepared under the Act. The detailed matters to be considered in any plan and the form of maps, such as scales, colours, notation etc., could be governed by providing power to prescribe rules and to issue manuals for guidance. In particular it should cover:

- surveys of physical and socio-economic conditions;
• strategy and structure plans: describe their nature and extent and purpose, in general terms, and the material that should accompany them;

• Area Master Plans: outline of nature, extent and purpose, and supporting material based on a Model Municipality plan;

• Area Improvement Plans: outline of nature, extent and purpose, and supporting material for each relevant part of the city;

• designation of land as subject to acquisition, the conditions applicable, effect, further incorporated in strategy or structure plan or dealt with separately;

• procedures for approval of any plan or designation of land, including rights to object, appearance at enquiries, form of approval and effect of the plan or designation.

Part III: Statutory Planning or Development Control

This part should cover:

• definition of what is included and excluded from the meaning of development.

• need to apply for planning permission for carrying out development;

• powers to operate different degrees of control over different areas and for different classes of development;

• requirement to demonstrate ‘common good’ outcomes from development;

• power to make orders exempting certain classes of development from the need to apply for planning consent;

• matters to be considered on the application, and powers to refuse or grant consent subject to conditions;

• requirement that the central authority should publish details of the level of control to be applied in different areas and for different classes of development and to specify those classes for which automatic approval will be available;
• procedures to be followed in applying for permission and rights of appeal against adverse decisions;
• denial of any right to compensation for refusal of current development or approval subject to conditions;
• powers of enforcement to prevent unauthorized development and procedures.

Part IV: Acquisition of land, compensation and development levies

This part should cover:
• powers of planning bodies to acquire land;
• obligation to ascertain strategic land;
• application of acquisition powers in areas designated as subject to acquisition;
• special code of compensation applicable to assessment of market value in designated areas, and current use value;
• power to assess and collect a sustainability levy for land development on the difference between market value for development permitted and current use value, with provision for a detailed method of assessment, allowance for improvement, proportional amount of levy, time and method of payment;
• application of land development for sustainability levy principles to compensation assessments payable under the Acquisition and Requisition of Immovable Property Bill (ARIPB), insertion of amount due in arrears, and compensation paid net of levy;
• avoidance of payment of land development for sustainability levy more than once on the same value in relation to other capital taxes; e.g. where levy has been paid, then in assessment of future capital gains tax the market value for levy assessment should be used as the base value for assessing capital gains tax;
• powers to make orders setting out the method of payment of land development for sustainability levy, including payment by installments, interest on outstanding balance etc.;
• powers to make orders exempting certain classes of development from payment of the levy and for varying the proportional amount of the levy;
• denial of compensation payable for the allocation of any land for any purpose in any approved Area Master Plan or Area Improvement Plan as a consequence of its depreciation in value.

8.8.2 New Governance Institutions in the Metropolitan Area

Four new institutions are proposed to be established for the governance of the Extended Metropolitan Region. Their legislative requirements are discussed briefly.

_Dhaka Metropolitan Regional Corporation (DMRC)_

This requires new legislation following a political decision at the national level. Its role as a coordination body of the planning (MRPA) and development (MRDA) functions is not covered by any present law.

_Dhaka Metropolitan Regional Planning and Coordination Division (DMRP&CD) in the Planning Commission_

This body does not require new law to create it; however, an administrative order will be required.
Metropolitan Regional Planning Authority (MRPA)

If the planning law described in section 8.8.1 is introduced, then the statute setting up the MRPA could be confined simply to an outline of its general responsibilities, the definition of the Extended Metropolitan Region (EMR) and its constitution and operational procedures as a corporation. Its more specific responsibilities and the restrictions on them would be allocated by order or orders made under the planning law. Their primary role would be to create (and update) a Metropolitan Regional Plan that encapsulates a vision for development outcomes in each part of the EMR.

Metropolitan Regional Development Authority (MRDA)

The requirements of the MRDA could be dealt with by amendments to the Town Improvement Act 1953. Specific amendments would need to:

- rename the body;
- define the EMR of Dhaka for which it will be responsible;
- ensure it has no strategic planning powers, no development control or building regulation powers, except in its own approved projects.

At the same time, the Act should be examined in detail to consider any changes which would facilitate the operations of the authority to:

- collect the Sustainability Levy for Land Development;
- establish Precinct Partnership Groups;
- guide development of local ‘common good’ outcomes;
• Ensure the Sustainability Levy for Land Development is hypothecated for these functions.

8.8.3 Municipalities

Under planning law the power of development control needs to be transferred to Municipalities. However, they would be required to exercise this consistent with the Metropolitan Regional Plan and to ensure that each development can demonstrate ‘common good’ outcomes. A model Metropolitan Plan text would be provided to guide Municipalities by the MRPA.

The town planning powers should be repealed to set out the necessary powers the Municipalities would need in order to perform their role in development control and the Precinct Partnership Groups to ensure sustainable development outcomes.

8.9 Conclusions

Dhaka needs new governance of its Extended Metropolitan Region in order to achieve any kind of sustainability-based solutions to its growing problems. A Metropolitan Regional Governance structure is required and ten principles outlining what this involves have been identified. Options for Dhaka have been analysed and a preferred model based on a combination of the best features is suggested as the best way to bring new and effective governance to Dhaka Megacity.

In the following, concluding chapter, the hypothesis behind this thesis will be examined, and issues requiring further investigation are identified.
CHAPTER 9 CONCLUSIONS

This thesis recognizes that in an age of globalization, integration and interpretation of the global with the local requires institutions that would make them compatible. Nowhere is this more important than in the modern city, especially the Megacity. The hypothesis guiding the study has been that Megacities will require Metropolitan Regional Governance in order to overcome their multiple and interacting problems and create a sustainable future. This study examined Megacities in general and found this hypothesis to hold true. A particular case is made in this thesis that Metropolitan Regional Governance (MRG) for Dhaka should be first among the governance priorities of the country. Moreover, some of the general conclusions will be outlined before examining future research required. Finally political and training context will also be outlined.

9.1 Conclusions about Megacities

This thesis has demonstrated that Megacities typically experience rapid population growth (as in the case of Dhaka) and expansion of economic activities, both of which have strong locational impacts that spill over the boundaries of the core city into an ever-expanding metropolitan region. Governance is always slow to catch up with this rapid growth of the Megacity. There is not a single metropolitan regional authority for any of the Megacities of Asia (including Dhaka Megacity) with responsibility for implementing a comprehensive and integrated strategy of metropolitan development and its governance.

The second key issue this thesis has covered is that the major problem in managing the growth of Megacities is developing the appropriate institutional framework. Municipal administrations cannot perform this task well because their jurisdictions are ‘under
bounded’ and ‘under funded’ and thus they are usually fully occupied with the day-to-day problems of routine administration, service provision, and finance for their local areas.

The thesis examined a range of Megacities, Asian in particular, in terms of ten principles for Metropolitan Regional Governance. It found that no city exhibited all the principles at work. Thus Dhaka is not alone in having to seriously reconsider its urban governance. This thesis makes a case for strong Metropolitan Regional Governance for Dhaka.

The thesis notes that a Metropolitan Regional Governance Authority might be an effective mechanism for a Megacity provided that its role is clearly defined. The limited territorial control of existing municipalities and their extensive jurisdictional fragmentation usually mean that metropolitan problems cannot be handled at the sub-metropolitan level. However, it is very important that the metropolitan development authorities do not usurp the functions of other agencies. Instead, they should perform functions that other bodies cannot do or do not do, such as:

- identifying and promoting an appropriate spatial strategy;
- coordinating a capital investment budget for the metropolitan region;
- promoting economic development (e. g. giving strong political support for major economic infrastructure programs that could increase metropolitan economic efficiency);
- seeking consensus among existing bodies and agencies for regional approaches to problem solving; and
- finding mechanisms to increase partnership with industry and the community through public participation and access. This is the principle of subsidiarity whereby higher authorities devolve or cascade responsibility to lower levels as long as they fit within the framework of policy established by the higher level.
This thesis notes that the sheer size of Megacities necessitates spatially oriented organisations if they are to be efficient and effective. Therefore, Megacities should pursue polycentric spatial strategies within the broad urban region, but the question remains whether the transition to polycentricity and regional governance can be facilitated by public policy intervention alone. Polycentric spatial structures may evolve more efficiently if policy makers respond to market signals and support spontaneous locational adjustments rather than attempt to promote new preselected sub-centres at a high investment cost. Signs of this in Dhaka are obvious and the need to recognize emerging centres and facilitate their infrastructure is best met by an MRG-type strategic planning vision, which builds on the organic processes of the city.

Finally, establishing a metropolitan-level authority can enable the national government to cope with metropolitan problems that spill over jurisdictional boundaries. Geographically large metropolitan regions are necessary to ensure over-bounding to encapsulate future population growth. Whereas a Metropolitan Regional Governance (MRG) Authority may be the most effective institutional tool to deal with the problems of Megacity growth, experience suggests that there are severe obstacles in the way of efficient and cooperative coordination with pre-existing levels of government, both central and local.

9.2 Answers to Thesis Questions

Based on the hypothesis of this thesis and the research questions that framed the thesis the following general conclusions about Megacity governance can be made:
1. What Makes a Megacity?

Megacities are human settlements of more than 10 million population and most of them developed because of the global economy. They are centers of opportunity in the global economy. Megacities are mostly coastal; generally there is only one per economic region.

2. What is the future of Megacities?

Megacities are a new form of human settlement. There is little prospect of change to the fundamental economic forces of globalization and global urban culture. People will continue to seek out better opportunities and thus growth is likely to continue. However, local environmental and social or community issues must be considered in this growth. Megacities cannot continue to grow to accommodate larger populations and activities sustainably, unless a region-wide more sustainable kind of development process is instituted.

3. How are Megacities being managed?

No Megacities are yet managed on the basis of their Extended Metropolitan Region (EMR) boundaries. Yet so much growth, especially in Asian Desakota regions, is happening in these newer parts of the city. Economic issues have dominated Megacities in the past but environmental and social problems such as traffic are now out of control. This is forcing a rethink of how Megacities need to be managed to ensure liveability.
4. *What are the principles of Megacities Metropolitan Regional Governance (MRG)?*

The ten principles are:

1. Must have a geographical area of responsibility that covers the Extended Metropolitan Region.
2. Must have a strategic planning function that can provide a vision for how the city can address its land use problems sustainably.
3. Must have a statutory planning function that can control development to ensure ‘common good’ outcomes consistent with the strategic plan.
4. Must have a development facilitation function that can provide investment coordination, partnerships for infrastructure and a local validation structure.
5. Must have an Urban Redevelopment function for the core built-up areas.
6. Must have a transparent local process with all stakeholders that can help define the ‘common good’ sustainability outcomes from development.
7. Must have a coordination mechanism to ensure planning and development are integrated.
8. Must have a way of raising the finance for the above process from land development.
9. Must have a strong link into the national government system to enable good political support.
10. Must have new professional skills in sustainability and local participation.

5. *How do these core MRG principles apply to Asian Megacities?*
Four Megacities were examined and were found to be inadequate in relation to most of the principles, especially in Jakarta and Bangkok. In particular the Desakota regions of Megacities have emerged as requiring new governance relationships. Tokyo is closest to achieving the ten principles, followed by Metro-Manila.

6. What makes Dhaka a Megacity?

Dhaka is a coastal city, at the intersection of several rivers that make it the trading capital for the whole region of 120 million people of Bangladesh. It is also the geometric centre and national capital of Bangladesh and has most of the infrastructure, manufacturing and services that are lacking in the rest of the country. The relationship of the people of Dhaka with the surrounding water has influenced the history and the built form of the city; hence, river, coast and the management of water have shaped the city’s past.

7. How is Dhaka Megacity being managed?

Dhaka is inadequate in relation to the ten principles. The Megacity governance principles show that the existing metropolitan development management or governance system in Dhaka has significant performance deficiencies. Most functions are limited in scope and focus, there are shortcomings in the legislation, and there is inadequate provision of the necessary resources, including human resources to make the system work. There are too many national bodies involved, none of which have a Megacity-wide focus on planning and development. These integrative functions are the weakest part of the current governance structure.
The Extended Metropolitan Region (MRG) of Dhaka is where much of the Megacity’s growth is focused. Dhaka has huge problems such as exposure to flooding for large parts of the city, and the very large section of the population who do not have access to safe drinking water and connection with a sewerage disposal system. The drainage system is inadequate across the whole city, air pollution is high, waste disposal is inadequate and inefficient, and traffic congestion is one of the worst features of Dhaka. Even in the midst of these problems, Dhaka continues to grow as it provides so much opportunity for Bangladeshis to participate in the global economy and global urban culture. However there is a complete lack of coordination and focus in its governance institutions as far as the Megacity Region is concerned.

Given the poverty of institutions and multi-dimensional problems of Dhaka City, the task of its urban governance should be to try to achieve a Metropolitan Regional Governance (MRG) framework based on the ten principles. The concept of the Extended Metropolitan Region (EMR) will become the norm and management will need to evolve new forms of governance and public-private cooperation that can guide, if not lead, such growth.

Investment coordination at the metropolitan level is currently within the remit of the Government of Bangladesh Planning Commission but compared with the Planning Commission’s other responsibilities for national economic planning, is of a different character, and level of detail. The lack of a strategy for metropolitan development and the lack of an up-to-date physical plan make this task even more difficult. In practice, the Planning Commission cannot handle strategic and statutory planning at this level, and a
national economic planning body would not normally be expected to carry out such a detailed role of bridging the gap between economic and physical planning for one part of the country only.

Based on this thesis the following key points have been made about Dhaka Megacity:

a) Dhaka has grown rapidly and during the last 50 years the city has grown from a district town of 400,000 inhabitants in 1951 to a Megacity of about 12 million inhabitants in 2001. The physical setting and hydrological context reveals that Dhaka will always be a Desakota with intense agriculture mixed in with urban activity on the higher ground but with frequent and complex water problems. The city is beset with issues of water either being too scarce or over abundant: ground water drawdown, water logging and flooding are the major problems hindering the growth of the city. Nevertheless, Dhaka is a huge market for agricultural and industrial products having a specialised and expanding service sector as Bangladesh’s global city;

b) The present governance institutions recognise the poverty of organizations to govern Megacity Dhaka but there is an obvious absence of Metropolitan Regional Governance (MRG) in the EMR of Dhaka;

c) The Extended Metropolitan Region (EMR) of Dhaka has already emerged as an obvious geographical entity. However, the EMR has not yet been recognized by the political leaders of the country as an appropriate site for a special governance system;

d) EMR based Metropolitan Regional Governance for Megacity Dhaka should be the first among the governance priorities of the country. Accordingly some institutional changes have to be made to facilitate Megacity Dhaka’s governance;

e) Dhaka needs institutions for its EMR, in particular integrative functions to guide its growth and to provide strategic visions;
9. What are the options for MRG in Dhaka based on the core MRG principles?

The four options for Metropolitan Regional Governance (MRG) in Dhaka are:

- A Dhaka Metropolitan Regional Corporation (DMRC) in the EMR of Dhaka but with extra power to perform the lead functions of planning and development control. Investment coordination and development would also be included here;
- A Dhaka Metropolitan Regional Planning and Coordination Division (DMRP&CD) in the National Planning Commission;
- A Metropolitan Regional Planning Authority (MRPA) to provide the metropolitan lead functions of strategic planning;
- A Metropolitan Regional Development Authority (MRDA) as the lead organization to perform development facilitation based on the present RAJUK with a specially created inter-agency committee for investment coordination linked to it.

10. How can MRG be implemented in Dhaka?

Each of the four institutions described above has a role in Metropolitan Regional Governance which is suggested to provide MRG most effectively. Table 9.1 shows how the ten core principles can be best applied by these institutions.
Table 9.1 Proposed Metropolitan Regional Governance Structure for Dhaka based on the Ten Principles

<table>
<thead>
<tr>
<th>Principles of Megacity Governance</th>
<th>Suggested Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Must have a geographical area of responsibility that covers the Extended Metropolitan Region.</td>
<td>EMR defined legally</td>
</tr>
<tr>
<td>2. Must have a strategic planning function that can provide a vision for how the city can address its land use problems sustainably.</td>
<td>MRPA</td>
</tr>
<tr>
<td>3. Must have a statutory planning function that can control development to ensure 'common good' outcomes consistent with the strategic plan.</td>
<td>DCC and Municipalities</td>
</tr>
<tr>
<td>4. Must have a development facilitation function that can provide investment coordination, partnerships for infrastructure and a local validation structure.</td>
<td>MRDA</td>
</tr>
<tr>
<td>5. Must have a urban redevelopment authority to redevelop already developed core areas.</td>
<td>URDA</td>
</tr>
<tr>
<td>6. Must have a transparent local process that can help define the 'common good' sustainability outcomes from development with all stakeholders.</td>
<td>Precinct Partnership Groups</td>
</tr>
<tr>
<td>7. Must have a coordination mechanism to ensure planning and development are integrated.</td>
<td>DMRC Board</td>
</tr>
<tr>
<td>8. Must have a way of raising the finance for the above process from land development.</td>
<td>Local Development for Sustainability Levy</td>
</tr>
<tr>
<td>9. Must have a strong link into the national government system to enable good political support.</td>
<td>DMRP&amp;CD/Planning Commission</td>
</tr>
<tr>
<td>10. Must have new professional skills in sustainability and local participation.</td>
<td>Training Program</td>
</tr>
</tbody>
</table>

MRPA – Metropolitan Regional Planning Authority, MRDA – Metropolitan Regional Development Authority, URDA – Urban Redevelopment Authority, DMRC – Dhaka Metropolitan Regional Corporation, DMRP&CD – Dhaka Metropolitan Regional Planning and Coordination Division, DCC – Dhaka City Corporation

9.3 Further Issues for Research

A number of issues can be identified which have not been fully discussed in this thesis and which need to be further examined:

a. Issues relating to Dhaka

- **Poverty relief:** Will the proposed structure enable the urban poor to find solutions or will it exacerbate their problems? MRPA and MRDA are only likely to plan development for the poor if there is a marked change in priorities, values and perceptions. Staff in the MRPA and MRDA should be given this particular responsibility and the Metropolitan Plan should reflect this as a priority. Political leadership based on partnerships with civil society, and between agencies and municipalities, could provide a new force for such policy leadership.
• **Command and control versus consensus, teamwork and networking:** Which of these approaches is appropriate for making the MRG system work in the Bangladesh context? Will improving communication channels from expert planners work? Or will competitive/defensive behaviour and vested interest persist and have to be met with superior power? Can local government and bottom-up processes work? How can the process resist crippling politicisation?

• **New Institutions:** Will setting up new institutions like MRPA and MRDA work? Is this the best way to secure innovation? Will it be allowed to succeed?

• **Change:** Is it possible to change well-established institutions such as RAJUK? Are there necessary political will and leadership available? Are the participants capable of the change required?

• **Leadership:** What kind of organizational leadership will command support, respect and cooperation in the proposed changes? Political, professional/technical, administrative? In what combination?

• **Local Government:** How much importance should be given to building up local government? How much capacity does it have now to take on additional responsibilities, e.g. for planning and building control? What are the political implications?

• **Training:** What kinds of skills are needed for MRG to work? How best can training be accomplished?

**b. Issues relating to all Megacities**

• **Ten principles:** Are the ten principles sufficient to cover the major functions necessary for managing Megacities? Are some of them more important than others and thus should they prioritised?
Megacities futures: Are there trends that could undermine the importance of
Megacities and make them less significant in the future? Would this make the
MRG principles less important or more important as issues of decline set in?

These are many of the hard questions that follow the analysis in this thesis. Comments
on political change and training are made as a final set of conclusions.

9.4 Political Change

The process of establishing Metropolitan Regional Governance (MRG) in Dhaka, of a
kind set out in this thesis, is obviously not going to just depend on the rational
establishment of new laws. It will require political change. As suggested in a number of
places in this thesis such change is not easy, as it appears to threaten power at two levels:

(a) at the national level where senior bureaucrats as well as national politicians do not
wish to lose their control exercised through sectoral national agencies; and

(b) at the local level where the broader urban region’s needs may not be what is seen
to be the need of a local area.

Nevertheless it is possible to find a political opportunity for change. Such political
opportunity will occur when leadership is asserted in a way that can inspire the growing
Dhaka civil society to be closely involved in the urban reform agenda. This leadership will
also recognize the power of the private sector but will succeed in the agenda of creating
an MRG structure only when it is able to inspire broad scale political change through civil
society.
The regional problems of the Megacity will continue to deteriorate unless MRG is established and hence the political opportunity will always be there. The national bureaucracy and politicians will need to be engaged in the process of creating DMRC, MRPA and MRDA. The former will need to be involved in ensuring that the latter function well, and the local bureaucracy and politicians will need to be empowered not disenfranchised by the new process.

The political good will to create the new governance structure will still be a struggle but the thesis is based on the assumption that the first step at least is the establishment of the case for MRG.

9.5 Professional Training

Politics does determine most of the urban outcomes sought in this thesis. Nevertheless, professionals need to conduct their studies and then make their recommendations for policy. Throughout this thesis it has been obvious that the Megacity policy professional cannot afford to be just sectoral based. A new urban professional is required to ensure sustainability is pursued in the Megacity. This requires integrative functions for planning and development.

Professional training to ensure the model of Megacity governance occurs in a city like Dhaka is required at two levels:

(a) in broad level skills of integration of disciplinary understandings to enable strategic visions to be created; and
(b) in local participation and particularly skills to ensure that development control on
the ground can be meaningfully implemented with local engagement that ensures
‘common good’ outcomes.

This is not an easy task and has been recognised as complex even in established western
cities (Newman and Kenworthy 1999); it is indeed creating a new kind of urban facilitator.
In developing country Megacities like Dhaka, this may seem impossible. Nevertheless the
goodwill and values of Bangladeshi people can be tapped and directed into this new form
of urban cultural experience. The willingness and success of the Grameen Bank in
demonstrating how micro finance could be introduced into rural Bangladesh is an
illustration of the way that a cultural change creating rural hope can be rapidly adopted
(World Bank 2002). It is now time for urban hope and the development of an
empowering urban experience in Bangladesh’s global city, Dhaka.
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