DOMESTIC PRIVATE FINANCING OF INFRASTRUCTURE AT THE SUB NATIONAL LEVEL: A STUDY OF AMA AND SELECTED FINACNIAL INSTITUTIONS

By

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Declaration

I hereby, declare that this submission is my own work towards the M.Sc. Development Planning and Management Programme and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgment has been made in the text.

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ABSTRACT

Cities are coping with the impact of three historical trends; globalization which requires the creation of competitive infrastructure to attract investment, rapid growth, mostly poor people whose contributions to the economy is rarely marched by their need for basic infrastructure services and decentralisation of responsibilities often not matched by the delegation of authority or resources. These trends also exist in the Accra Metropolitan Assembly and other MMDAs in the country, hence the need to source financing from new sources such as the capital market.

In Ghana, a window of opportunity is created to allow MMDAs to borrow; which was greatly underutilized because of the ceiling placed on it. The research is thus aimed at assessing the potentials, constraints, prospects and challenges of private financing of infrastructure developed by financial institutions. It also aims at developing appropriate financial, legal and institutional frameworks to promote this strategy in Ghana. The research is focused on the following specific research objectives; identify the various infrastructure projects that both the financial institutions and Assembly's would invest the funds, the financing vehicles available for infrastructure development in the capital market, the creditworthiness of the Assembly and cost recovery from the public's perspectives.

Through exploratory research approach, purposive sampling methods, with a combination of primary and secondary data collection techniques, and first and second level analysis, the following findings were arrived at; both the Assembly and the financial institution were interested in using the funds on financing infrastructure from revenue sources, the financing facilities available for infrastructure financing at the moment is the project financing model, which presents an opportunity for private participation. In the case of the credit worthiness of the Assembly, the research found some positives, which include own revenues increasing in real terms, prospect of increasing revenue from sources as

rates. There were also negatives such as high recurrent expenditure, recurrent deficit, corrupt practices at the local level, political interference, and non public declaration of assets and porous auditing process among others. Under the issue of cost recovery; majority of the people in the metropolis are willing to pay user charges and that purchasing power of those who are in dire need of the infrastructure are low.

The research recommended that in order to make the strategy of sub national borrowing work, the criteria for the selection of the projects should be guided by both social and economic returns. The financial institutions should also develop product to suit the peculiar needs of MMDAs. One major proposal is to index the ceiling for borrowing to performance in own revenue, reduction in expenditure and increase in government transfers. The Assembly is also expected to establish a sinking fund. In order to enhance the credit worthiness of the Assembly; leakages in the accounting system should be blocked, recurrent expenditure reduced, auditing systems be strengthened and political interference reduced by the election of the chief executives. Regarding cost recovery the Assembly should have price discrimination, which would cater for all income zones.

Assessing the credit worthiness of the Assembly against the borrowing requirements, and financial vehicles available in the financial sector, the Accra Metropolitan Assembly, at present, cannot borrow directly from the capital market. However with its stature, experience and prospects, the Assembly can participate in the market through other intermediaries, who have the financial and institutional stature to be able to repay loans or bare the burden of repayment. The Assembly can provide the infrastructure needs, equity and guarantee required and allow the private operators to take direct responsibility of borrowed funds. However, in order to ensure that the Assembly has direct access in some future time, some credit enhancement mechanisms must be applied.

Table of Content

CHAPTER ONE

GENERAL OVERVIEW

CHAPTER TWO

PRIVATE PARTICIPATION IN INFRASTRUCTURE: EXPERIENCES, CHALLENGES, BEST PRACTICES AND LESSONS

CHAPTER THREE

PROFILE OF ACCRA METROPOLITAN INSTITUTIONS AND FINANCIAL SECTOR

CHAPTER FOUR

PRIVATE FINANCING OF INFRASTRUCTURE IN THE ACCRA METROPOLITAN ASSEMBLY

List of Tables

List of figures

List of plate

List of Abbreviations

AMA	Accra Metropolitan Assembly
DAs	District Assemblies
EDG	Ecobank Ghana Limited
GDP	Gross Domestic Product
MDGs	Millennium Development Goals
MMDAs	Metropolitan Municipal and District Assemblies
MTDP	Medium Term Development Plan
NHIS	National Health Insurance Scheme
NIB	National Investment Bank
ODA	Overseas Development Assistance
PPI	Private Participation in Infrastructure
UN	United Nations
UNIDO	United Nations Industrial Development Organisation
GSS	Ghana Statistical service
BOT	Build Operate and Transfer
BOO	Build Operate and Own

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CHAPTER ONE

GENERAL OVERVIEW

1.1 Background of Research

Infrastructure, along with supportive economic and financial policies, has long been recognized as a key element of the enabling environment for economic growth … and has recognized that promoting infrastructure development can reduce poverty and contribute to the achievement of the Millennium Development Goals (MDGs) (Briceno-Garmendia et al, 2004). Hence in the efforts of countries, local governments or organizations to develop, conscious effort is made at investing in the building, expansion or the maintenance of infrastructure. One of the reasons for the slow growth in most developing countries is the low levels of infrastructure.

The onus of infrastructure provision formally lies on the government for the basic reason that almost all infrastructures are public goods and have very large and extensive positive externalities. In developing countries, central governments especially, are constrained, due to the demands from other sectors of the economy. This coupled with poor fiscal positions of governments make it difficult to respond to the ever increasing demands.

In recent years there has been a surge in the demand for private financing of infrastructure. Among the reasons advanced for this shift are the following: lack of government financial resources and level of investment necessary for provision and management of infrastructure services, decline in concessional aid both bilateral and multilateral sources, inefficient public management of infrastructure services and the demand of sophisticated spectrum of infrastructure services (UNIDO, 2001).

The private sector is hence filling the gap, by attempting to finance, provide and manage infrastructure that was hitherto provided by the state. There have been several examples of projects that have been provided by the private sector around cities and villages around the country. These levels of infrastructure provision through the private sector is dominated by the international financial institutions (IFIs) supported by government guarantees. Despite the strides made by private financiers at national levels in the first halve of the 1990s, the volume of private finance for infrastructure has dipped since 1997, when it peaked. (PPI Database, World Bank, 1990-98) This decline can be associated with the various types of risk that is associated with external borrowing. These include: low purchasing power of end users, exchange rate risk, Political and economic risk and the social risk of the project being rejected (UNIDO, 2001).

In the face of the declining private sector financing for infrastructure, many cities have been faced with rapidly expanding infrastructure demands. Newly elected local governments were under pressure to expand and improve services, and were open to reaping the fiscal benefits of shifting some investment responsibilities to private operators (Annez, 2006).

The research is thus aimed at exploring the prospects of domestic private financing of infrastructure projects at the district level in Ghana; focusing mainly on borrowing from financial institutions.

1.2 Problem Statement

The increasing population in metropolitan areas has generated an ever increasing demand for both social and economic infrastructure. One billion people are without access to safe water, two billion people are without access to adequate sanitation, and four billion people discard their waste without treatment. Twenty percent of the urban population and 60 per cent of the rural population in developing countries are without power (Panayotou, n.d). In Sub-Saharan Africa infrastructure investment and operations and maintenance needs are at least 12 cents a day per person or $44 a year— a lot given that more than half of the region lives on less than $1 a day (Estache, 2004). Water supply, sanitation, power, and transport infrastructure alone would need funding in excess of $100 billion by the year 2000 and $250 billion by the year 2010. With population growth, urbanization and income growth, the demands on infrastructure are growing at an average rate of 7 percent per year, and the gap between demand and supply is ever widening. Financial resources of this order of magnitude are far beyond the capacity of cash-trapped public utility agencies to provide or of the state sector to finance (Panayotou, n.d: 47, 48).

The urban growth phenomenon is not different in Ghana. According to the 2000 Population and Housing Census, urban areas host about 37 per cent of the total population of Ghana and continue to grow at a rate of 3.4 per cent annually. With this growth, infrastructure development cannot match up with the rate and the volume of population.

These metropolitan bodies (sub national bodies), who are tasked with the responsibility of providing these infrastructure, depend heavily on central government funds (for example 54 per cent of total revenue according to the 2002 Trial Balance). Government subventions are mostly too little or too late to respond to the rate and the volume of demand. The problem is compounded by the inability of MMDs to utilize their income generation powers to fill the inadequacies; solely blamed on the low capacities of metropolitan assemblies to collect the rates and fees.

Cities are therefore in the mist of coping with the impact of three major historical trends; globalization, requiring the creation of competitive infrastructure to attract investments, decentralization of responsibilities often not matched by the delegation of authority or resources, and rapid population growth, mostly poor people whose contributions to the economy is rarely marched by their requirement of access to basic infrastructure and services (Pawlukiewicz, 2005). **These systemic developments have resulted in the creation of a financing gap in terms of infrastructure development.**

In the face of the inadequacy in financing of infrastructure, there is a window of opportunity provided by the Act of Parliament that established the District Assembly (Act 462), allowing local government authorities to access funding from private sources for development. In addition to this, the District Assemblies also have a limited power to borrow under **Section 88 of Act 462.** This research is thus directed at exploring the feasibility of sourcing financing for infrastructure development from private financial institutions in Ghana.

1.3 Research Questions

The research was aimed at answering the following questions;

- Is the concept of private financing of infrastructure at sub national levels feasible in Ghana? Are there successful cases?
- What type of financing is required and for what kind of infrastructure?
- Under what conditions will the financing be made and how can it be recovered
- Is the Sub national body credit worthy?
- What are some of the constraints and the possible challenges that would be encountered by both the financiers and recipient in accessing this source?
- What are the ways of improving this source and make it a viable source of development financing?

1.4 Research Objectives

The above listed questions would be answered by focusing on the following objectives;

General

- To assess the potentials, constraints, prospects and challenges of assessing private financing of infrastructure development by financial institutions at the subnational level (MMDAs) and to develop the appropriate financial and institutional framework to promote this strategy in Ghana

Specific

- To identify the various types of infrastructure projects that the financial institutions would be interested in financing at the District level. And why?

- To identify and assess the potential financial vehicles available for financing for infrastructure development in the capital market.
- To also identify the borrowing requirements demanded by the financial institutions.
- To assess the credit worthiness of the metropolitan assemblies in terms of borrowing and the prospect of recovery from end users.
- Identify the possible constraints and challenges in the pursuit of borrowing from financial institutions
- To propose appropriate financial, legal and institutional reforms to promote the strategy in Ghana

1.7 Justification of Research

As development effort cashes in on the experiences and the ideas of the private sector to deliver people from poverty and deliver wealth, happiness and peace to mankind, the public sector and its structures also needed to thrive on information about the opportunities the private sector provides. At the end of this research, a wealth of information would be available on the opportunities that private financial institutions offer regarding project financing at the District level. In addition to this, the research would also produce information on how sub national bodies can position themselves to benefit from these opportunities. This would include the institutional and legal reforms that would be needed. On the side of managers the Metropolitan Assembly, they would have access to information on the kinds of projects private financial institutions would be want to finance. The contributions to literature would be mainly used by academicians who want to conduct further investigations into the subject matter; Politicians and government officials for their public relation communications.

Private financing of infrastructure at the district level would require some institutional and legal reforms which in effect would change governance at the district level; transparency, accountability and efficiency would be improved. Secondly the yawning infrastructure gap at the District level would be filled by these interventions and that would free public funds for other projects. The decentralization process would be deepened since its core, fiscal decentralization, would be strengthened in the process of lending from private sources.

The findings from the research would be useful for policy formulators, and hence would come handy to Parliamentarians, officials in the government ministries, credit rating institutions undertaking credit assessment of MMDAs and credit evaluators of financial institutions.

With the above listed benefits the research would bring to infrastructure development and the socio economic lives of inhabitants, there is reasonable justification to allow, support, promote and finance a research in this direction.

1.5 Scope of Research

1.5.1 Content

The research focused on Accra Metropolitan Assembly; its financial obligations in terms of the provision of infrastructure, the range of infrastructure the Assembly would seek financing for the private sector, the credit worthiness of the assembly in accessing the capital market, cost recovery issues.

There are various sources of credit for infrastructure, (such as municipal bonds, private individual investors, International Financial Institutions) but this research focused on sources within domestic financial institutions providing long term financing. The constraints and challenges to be encountered would also be explored.

1.5.2 Spatial

The study would be conducted within the Accra Metropolitan Area; AMA is made up of thirteen Sub Metros namely Okaikoi North, Okaikoi South, Ashiedu Keteke, Ayawaso Central, Ayawaso East, Ayawaso West, La, Nungua, Teshie, Osu Klotey, Ablekuma North and Ablekuma South and Ablekuma Central Sub Metros.

The metropolitan area hosts the national capital, with a population estimated at 1.65 million during the 2000, Population and Housing census. The Metropolitan area is regarded as one of the fastest growing cities in Africa with the annual growth rate of 3.36 per cent and a population size estimated at 1.96 million in 2007. The area serves as a primate city performing administrative, educational, commercial and industrial functions. (AMA MDTP, 2006)

1.6 Research Method

The method to be used in this research is exploratory. This is because the focus of the research is to investigate the possibility of sub national borrowing from the private sector for infrastructure development. Despite the exploratory nature of the methodology, the research is focused such that it captures the necessary variables; the views of all the stakeholders directly or indirectly involved. The process of research included the following steps; general scan of literature and reconnaissance survey, research proposal development, literature review, questionnaire design, sampling, data collection, data analysis and presentation and report production. The Sampling, Data collection, Data Analysis are discussed below:

1.6.1 Sampling

The sampling method generally used in the research was purposive; this process is through a selection premised on the objectives and the focus of the research. As the study is largely an Institutional study, the major institutions to be studied were arrived at by using specific characteristics. The research is focused on Sub National Institutions and Financial Institutions providing long term financing. In Ghana, the sub national bodies are Metropolitan, Municipal, and District Assemblies (MMDAs) and among these bodies, four have been identified as those that have the financial and fiscal capacity to access the capital market. This informed the selection of Accra Metropolitan Assembly, one of the four as the Focus of the study. The other three include the Kumasi Metropolitan Assembly, Sekondi Takoradi Metropolitan Assembly and Tamale Metropolitan Assembly.

The Departments of the Metropolitan Assembly were selected based on their relevance to the Research Objectives; hence the Finance, Budget and Planning Offices were selected. Officers interviewed from these departments were also selected on the bases of the information they have.

Regarding the Banks, the institutions were selected based on the preliminary survey, which revealed their focus and the readiness to avail information. The two institutions were also chosen on to give a fair view of the financial sector hence: one indigenous development bank and the other sub regional bank.

In sampling for the primary data collection, a multi stage sampling method was used. The four Sub Metropolitan Councils that were investigated were selected according to the four income zones in the metropolis. A uniform quota sampling was used in allocating the number of units to be interviewed within the various sub metropolitan councils; the unit was further sampled using the proportions of 10:8:7 of Households, Market Centre and Other Public Spaces. The decision of whom to interview on the field, the researcher used convenience sampling.

1.6.2 Data Categories/ Variables

In order to achieve the objectives of the research the following variables/ categories of data were collected. These include; information on the interest of the lenders and borrowers in terms of the infrastructure they would want to invest in and the financing vehicles that would suit the infrastructure financing. In addition information on the Lending Requirement from financial institutions were obtained. Specifically requirements on credibility, risk mitigating, and repayment among others were obtained. Data was also obtained on the credit worthiness of the Assembly using the criteria of fiscal performance, financial position, political commitment, legal framework and accounting and reporting systems. Information was also collected on the cost recovery, information on the willingness to pay, ability to pay and the essentiality of the infrastructure.

1.6.3 Data Collection Techniques

The Research proceeded by developing interview guides, which covered the entire variables to be investigated. The data collection process is in two forms, the primary and secondary data collection.

The main primary data was obtained through administering structured and open ended questionnaires to the officials of the various departments at the Assembly. The officials include the Planning, Finance and Budget officers. Under the Finance Department other officers like the Revenue Accountant and Revenue officers were also interviewed.

The Researcher also obtained some primary data from the financial institutions by administering questionnaires and interview guides. Officials Interviewed at the two financial institutions are long term credit or loan officers. In obtaining data on Public's cost recovery status, semi structured questionnaires were administered to rate and fees payers in the Metropolis.

Secondary data were also collected from the Assembly and other decentralized agencies. The Medium Term Development Plan and the Trial Balances of the Assembly were obtained from the Assembly. Secondary data were collected through the presentation of a checklist. Apart from the data collected from the offices of the Assembly, other sources were also useful; they include the AMA website on the Ghana Districts Portal and other Research publications on AMA commissioned by organizations like the World Bank. Documents from the Ghana Statistical Services on Poverty levels, Incomes and Household Expenditures were also obtained.

Obtaining primary information from the Financial Institutions were difficult, hence documentary sources were largely used. The data include financial reports of the Banks, policy direction, focus and their visions. These were obtained from documentary sources from the head offices of the Banks and also their official websites. Data were also obtained from the researches conducted by institutions such as the Pricewater House

Coopers. Documents were also obtained from the Ministry of Local Government and Rural Development.

1.6.4 Data Presentation and Analysis

The Data Analysis stage made use of both quantitative and qualitative techniques. The quantitative data obtained form the secondary sources were analysed using various descriptive methods of analysis. The data on the financing of the Assembly were analysed using percentages, averages and more pictorial forms such as the lines and bar charts to show trends and performances. These results were obtained with the help of the Microsoft Excel. Other statistical descriptions, such as the coefficient of variations were obtained.

The primary data from the household surveys were collated and analysed using the SPSS software, and from which tables were generated. Frequencies and cross tabulations were also developed to determine relations between various variables. A second level analysis such as elaboration and interpretation were also used. Inferences were also made into the data that were presented. The qualitative data were also summarised and presented as obtained from the primary sources and inferences made in relation to the subject matter being investigated.

1.7 Limitation

A major limitation of this research is the difficulty in obtaining information from the financial institutions. This limitation was minimized through the used through the use of secondary data.

1.8 Organisation of Research Report

The Thesis report is organized into five chapters; the introductory chapter which contains the problem statement, objectives, research questions, research method, the scope and justification. The second chapter is a literature review on relevant literature relating to private financing of infrastructure at sub national level; The third chapter would look at the profile of the area and the financial institutions; The fourth chapter captured data presentation and analysis, including infrastructure needs, financing vehicles, credit worthiness and cost recovery; the fifth chapter includes the findings, recommendations and conclusion.

CHAPTER TWO

PRIVATE PARTICIPATION IN INFRASTRUCTURE: EXPERIENCES, CHALLENGES, BEST PRACTICES AND LESSONS

2.1 Introduction

This section addresses the general issues in private infrastructure provision and management; Public infrastructure provision and management, Private participation in infrastructure provision and management, private financing of Infrastructure in developing and developed countries, private participation in infrastructure at the sub national level, fiscal decentralisation in Ghana and its relation with private participation in infrastructure, sub national borrowing and summary of emerging issues.

2.2 Infrastructure and Development: The Nexus

2.2.1 Infrastructure and Development Defined

Infrastructure is defined as the physical structures that form the foundation for development (Ontario, 1994). Infrastructure are regarded as the physical structures that must be present in order for a country or area to function as an economy and as a state; and this also include the capital needed for transportation, communication, and provision of water, power, and the institutions needed for security, health, and education. (Umich, n.d) These facilities are offered for public use- as against facilities of private nature.

On the other hand, Development represents a *transformation* of society, a movement from traditional relations, traditional ways of thinking, traditional ways of dealing with health and education, traditional methods of production, to more "modern" ways. (Stiglitz, 1998). In this situation, development would be equated to economic growth and poverty reduction. Economic growth includes growth in GDP per capita, productivity, and returns to investments. Poverty reduction, would also be assessed in terms of access to good health care, education, sanitation conditions, increase income, good nutrition among others. Development as expressed in the Millennium Development Goals (MDGs) is to halve poverty by 2015; About 80 percent of the goals under the Millennium Development Goals are directly on poverty reduction; they include halving the percentage of people living on $1 a day, ensuring universal primary education and ensuring gender equality in both primary and secondary school education, reducing under five and maternal mortality, combating HIV/AIDS, malaria and other diseases; improved access to water and sanitation (ECA, 2005).

Along with supportive economic and financial policies, infrastructure—including electricity to power industry, telecommunications to support commerce, and roads, railways, and ports to transport goods—has long been recognized as a key element of the enabling environment for economic growth. More recently, the development community has also emphasized that by promoting growth; reliable and affordable infrastructure can reduce poverty and contribute to the achievement of the Millennium Development Goals (MDGs) (Briceno-Garmendia C, et al, 2004).

Infrastructure relation with development would be discussed within the framework of development as economic growth, as poverty reduction and with the current dispensation, as the achievement of the Millennium Development Goals (MDGs).

There exist a strong positive association between the availability of certain infrastructures and per capita GDP, which is the Gross Domestic Product per person in an area (UNIDO, 2001). Cross-country growth regressions utilizing physical measures of transport and telecommunications infrastructure published by the World Bank suggest an inverted-U shape relation between infrastructure and the rate of economic growth across countries, with most countries in the upward sloping segment of the curve (Bougheas et al, 1996). This shows that for most of the countries studied, infrastructure investment has had a positive effect on economic growth.

Research into individual public investments suggest an economic returns on investment projects averaging 30–40 per cent for telecommunications, more than 40 percent for electricity generation, and more than 200 percent for roads (although when the outliers are excluded, the average is about 80 percent for roads (Estache, 2004).

There have also been logical inferences into the relation between infrastructure provision and the attractiveness of a country or an area for foreign direct investment. This also determines its competitiveness in the global market. The "quality of communication and transport systems, in particular have become more important in the light of the complex strategies increasingly being pursued by transnational corporations" (UNIDO, 2001).

There is also empirical evidence to support the claim that poverty reduction is attained by the provision of infrastructure. World Bank infrastructure projects that had at least 95 percent of loan commitments disbursed between 1999 and 2003, the average economic return was 35 percent, with a spread ranging from 19 percent for water and sanitation projects to 43 percent for transport (Estache, 2004).

As the poor are defined as those who are unable to consume basic quantity and quality of water, live in unsanitary surroundings, lack mobility and communication beyond their settlement, then access to the essential criteria is a sign of welfare (UNIDO, 2001).

There have also been adverse findings of the relationship between infrastructure investments and economic growth and poverty reduction. Access to infrastructure can have little effect, however, if services are not affordable, (Briceno-Garmendia C, et al, 2004).

Also there have been suggestions that the returns to infrastructure investment are probably highest during early stages of development, when infrastructure is scarce and basic networks have not been completed. Returns on infrastructure investment tend to fall—sometimes sharply—as economies reach maturity (Briceno-Garmendia C, et al, 2004)

2.4 Private Participation in Infrastructure Provision and Management

2.4.1 Options of Private Participation in Infrastructure

The need, poor performance and mismanagement characterizing most publicly-owned and operated utilities gave the impetus for considering private sector participation (Panayotou, n.d).

Participation in the private sector can be discussed under two major headings, the provision and management. Roger (1999), writing on the trends in private sector participation , indentified the options as follows; operation and management, operation and management with major capital expenditure, Greenfield investment and Divestiture;

- *Operations and Management contract*: A private entity takes over the management of a state-owned enterprise for a given period. This category includes management contracts and leases.
- *Operations and management contract with major capital expenditure:* A private entity takes over the management of a state-owned enterprise for a given period during which it also assumes significant investment risk. This category includes concession-type contracts such as build-transfer-operate, build-lease-operate, and build-rehabilitate-operate-transfer contracts as applied to existing facilities.
- *Greenfield project:* A private entity or a public-private joint venture builds and operates a new facility. This category includes build-own-transfer and build-own-operate contracts and many others.
- *Divestiture:* A private consortium buys an equity stake in a state-owned enterprise. The private stake may or may not imply private management of the company.
- *Sub contracting;* public service provider directly engages local staff or subcontracts to a local firm for technical and commercial services. Public service provider owns all assets and remains responsible for costs, revenues and profits contractor is only responsible for won labour costs.

- *Administration services contract;* public service provider carries out all investment and collects revenues; contractor is responsible cost only related to defined services.
- *Leasing Contract:* public service provider carries out all investment: leases or rents assets to contractor. Contractor is responsible for costs and revenues, therefore has responsibility for operating profit as well as maintenance of assets.
- *Cooperative* the cooperative is responsible for all investment, cost and revenues its corporate aim is non-profits making to encourage local participation (World Bank, 2005).

The various options for private sector participation are provided in Appendix 4a. Selected cases around the world are also provided in Appendix 4b and 5.

Private participation in infrastructure provision reduced after it had peaked in 1997, and the optimism that was expressed around the prospect of private investments into infrastructure and its consequent impact on economic growth and poverty reduction, busted. Project finance commitments for infrastructure showed 50 per cent reduction in both developed and developing economies in the first half of 2002 compared to the previous year's figures annual flows to private infrastructure projects in developing countries were down (PFI, n.d). The number of new private infrastructure projects was down by around half.

These reductions were attributed to certain problems that occurred at the time; they include the renegotiations of private infrastructure projected due to uncertainty around initial negotiations and private participation models; the cancellation or renationalization of projects, showing the failure in the private sector; signs of population discontent against private participation in infrastructure especially regarding price and the thought of private sector making excess profit at the expense of the end user or the ordinary citizens (Harris, 2003).

The core problems that culminated into the decline were due to the twin problems of pricing and cost recovery.

- *Pricing:* because infrastructure services are consumed widely in society and are often considered essentials, governments in developing countries are forced holding prices below their economic cost.
- *Cost Recovery:* cost recovery was also poor, except for the telecom sector which recorded 160% cost recovery, other sectors recorded very poor levels. For example gas recorded 80%, power recorded 60% and 20% in the water sector (Harris, 2003).

2.4.3 Lessons

The ups and downs in the private sector have taught a few lessons which would be useful for future efforts at involving the private sector infrastructure provision and management. The lessons from over 20 years of privatization and liberalisation of infrastructure are follows;

- The government must address the issue of pricing and the question of who pays for the service.
- Government should allow for a range of service options when developing private participation.
- Competition can reduce prices and expand access.
- Regulation is as important and must be acceptable to both investors and end users
- Financing issues particularly exchange rate risk must be managed. And all the other risk including political risk, should be guarded against (Harris, 2003).

2.5 Private Financing of Infrastructure in Developed and Developing Countries

2.5.1 Infrastructure Financing Sources

Infrastructure is financed from three main sources: the public sector, ODA and the private sector. In developing countries (according to DFID calculations) during the 1990s, government or public utilities financed 70 per cent of actual total infrastructure spending from own resources—which included cost recovery and subsidies—while official development assistance (ODA) financed only around 5-10 per cent. The private sector contributed during the 1990s roughly between 20-25 per cent of investment in the sector. Currently, the public sector, the largest contributor to the financing of infrastructure, is spending roughly between 2 per cent (in high middle income countries) to around 4 per cent (in low income countries) of GDP on infrastructure. For the low middle income countries, this is up to 3 per cent lower than the estimates of their investment needs (Panayotou, n.d).

2.5.2 Infrastructure Financing Need

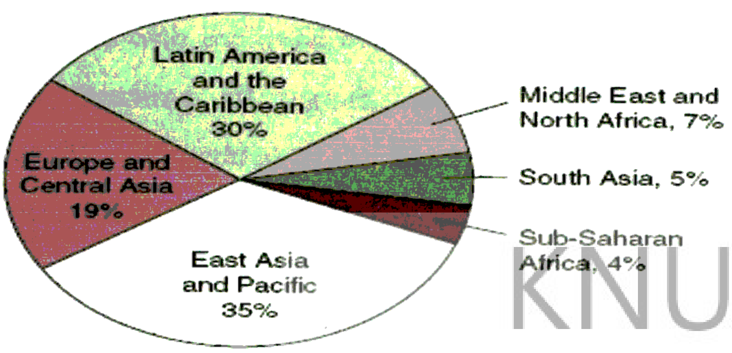
The demand for infrastructure in developing countries is enormous; one billion people are without access to safe water, two billion people are without access to adequate sanitation, and four billion people discard their waste without treatment. Twenty per cent of the urban population and 60 per cent of the rural population in developing countries are without power (Panayotou, n.d:). Ongoing work by Jeffrey Sachs's UN team is providing a useful reality check for the poorest countries. In Sub-Saharan Africa infrastructure investment and operations and maintenance needs are at least 12 cents a day per person or $44 a year— a lot given that more than half of the region lives on less than $1 a day (Estache, 2004). It is estimated that environment-related funding needs for the world will rise from $100 billion today to $640 billion by the year 2025. Water supply, sanitation, power, and transport infrastructure alone would need funding in excess of $100 billion by the year 2000 and $250 billion by the year 2010 (Panayotou, n.d). Financial resources of this order of magnitude are far beyond the capacity of cash-strapped public utilities to provide or of the state sector of developing countries always emerging from chronic fiscal crisis to provide.

2.5.2 Trends in Developed and Developing Countries

Global capital markets have the depth, maturity, size, and sophistication *potentially* to fund all viable investments and projects in developing countries' infrastructure. That they have failed to do so, and that the flow of private finance to infrastructure has declined so dramatically in recent years, is a reflection of several factors. From 1992 to 2003, total international investment in developing countries' infrastructure is estimated to have been

$622 billion—an average of $52 billion a year and 3.8 per cent of total gross domestic investment in the developing world. The investment was unevenly distributed. The figure 2.1 below shows the distribution of infrastructure investment among the regions in the world.

Figure: 2.1 Regional Composition of investment in Infrastructure, 1992-2003



Sources: Dealogic Bondware and Loanware and World Bank staff estimates.

What is worth noting in the trend is that, Sub Saharan Africa, where developmental challenges are perceived as the most intractable, is the lowest region receiving private capital flow.

2.6 Private Financing Methods at Sub national level in Developing Countries

2.6.1 Urbanization and Infrastructure Needs

The trend of rural urban migration is escalating population sizes in urban areas, putting pressure on the already stretched infrastructure. It is estimated that the world population will expand from 6.1 billion to 7.8 billion between 2000 and 2025 and 90 percent of this growth will occur in urban areas of less developed countries. It is also estimated that by 2020, a majority of the population of less developed countries will live in urban areas.The urban population is expected to nearly double in size between 2000 and 2025 from almost 2 billion to more than 3.5 billion. Urban is projected to surpass the rural population by 2020. The rural population is projected to stop growing after 2020 at about 3.1 billion, while the urban population will continue to grow, causing further increases in the level of urbanization(UN, 2000).

About 900 million people live in urban slums, an estimated 1 billion lack access to adequate water supply, 2 billion do not have access to adequate sanitation, and 4 billion live without adequate wastewater disposal (Etudes, 2004). The infrastructure, coupled with low income levels due to unemployment, accounts for the increasing urban poverty.

2.6.2 Experiences and Challenges

Concurrent with the trend toward greater PPI, decentralization expanded rapidly in the 1990s, touching all regions, albeit in different forms specific to each country. Decentralization added to the fiscal pressures to find alternative sources of finance for urban infrastructure.

While political will and populist politics have often been cited as reasons for the persistent poor performance in cost recovery, problems of affordability in low income countries may also account for the inertia in reducing subsidies for residential water. The impact will vary from country to country, depending on water and sanitation coverage among the poorest households, which in regions like Africa is quite low, consumers would have to cope with poor service, and the scope, often unexplored, to restructure tariffs to cross subsidize poor consumers.

Annez, (2006), indicates that working with local, rather than national governments, brings with it an additional layer of risk for the private supplier for a variety of reasons;

- The first risk is that local governments have their limited scope of authority. Private investors are likely to view contracts with sub-national governments as particularly risky for this reason. Local governments may be subject to various pressures or direct intervention from higher levels of government, and thus less predictable, less capable of making credible commitment than national governments.
- International investors for concessions would be faced with exchange rate risk. Infrastructure projects are especially vulnerable, since providers or core urban services do not typically earn foreign exchange.

- A strong devaluation can have a substantial impact on demand and willingness to pay for services as well. An increase in the cost imported inputs due to devaluation or an oil price shock can raise the cost of profile for a local utility in an environment where rate increases will be particularly unwelcome.
- Thus macroeconomic shocks are a threat to urban infrastructure PPIs. On the other hand, local governments do not manage macro policy, and are much less able to offer comfort to a private investor when these difficulties arise.
- Political alliances and election calendars also present high risk for private sector participation.

Baeto and Vives (2003), writing on private infrastructure investment at sub national levels in emerging economies identified the following challenges;
A first obstacle to private sector participation in sub national services is the lack of clear and consistent regulation.

- Another institutional challenge is the lack of private operators ability to manage local services and offer sufficient technical and financial guarantees.
- Another argument against the private provision of services is the possibility of large lay-offs as the public firm is turned over to private management.
- Another way of fostering social dissent. The fear of the authorities of loosing an essential tools for redistributing income, hence a powerful instrument for capturing votes. This accounts sometimes for the lukewarm attitude of managers of local areas to pursue private sector participation.

The risk involved in the provision of private infrastructure at the sub national level, has obvious limited finance towards this end. One obvious way of encouraging the participation of private sector in the participation and management of infrastructure at this level, is by lowering the risk profile of these areas. This can be achieved by mobilizing more public finance, be it in user charges or taxes, to give the private sector the assurance they need to get involved in private provision of services (Annez, 2006).

2.7 Decentralisation in Ghana: Fiscal Decentralisation and Private financing of Infrastructure

2.7.1 Background of Decentralisation in Ghana

Decentralization, the transfer of authority and responsibility for public functions from the central government to intermediate and local governments or quasi-independent government organizations and/or the private sector, is a complex multifaceted concept. Ribot (2001) defined decentralisation as "any act in which a central government formally cedes powers to actors and institutions at lower levels in a political-administrative and territorial hierarchy". Three main types of decentralisation are commonly identified:

- *Administrative decentralisation* or *Deconcentration* i.e. the re-location of branches of the central state to local areas, entailing a transfer of powers to locally-based officials who remain part of, and upwardly accountable to, central government ministries and agencies;
- *Fiscal decentralisation* i.e. the transfer of fiscal resources and revenue-generating powers, inclusive of authority over budgets and financial decisions, to either deconcentrated officials and/or central government appointees or to elected politicians;
- *Political decentralisation or Devolution* (of power) i.e. the transfer of powers and resources to sub-national authorities which are "(a) largely or wholly independent of the central government and (b) democratically elected.

2.7.2 Fiscal Decentralisation and Private Sector Participation: Experiences and Challenges

Fiscal Decentralisation involves devolving revenue sources and expenditure functions to lower level of government. This is expected to boost public sector efficiency, accountability and transparency in service delivery and policy-making (Awiatey, n.d).

MMDAs have two major revenue sources: The sources can be further divided into two categories, which are the government transfers and sources from internal efforts of the local government institution. This can be further divided into four which includes, Government transfers; and internal sources including– generated (traditional) sources of revenue, Central, Private Sector funding of services and Loans (Appiah et al, 2000).

Currently, autonomy is limited under this because more than 75 per cent of expenditures to be made from the transfers are determined by the central government. Hence, the MMDAs can only be set towards the path of autonomy by ceding more revenue-raising powers.
As revenue from the central government continues to be a major part of the revenue streams of MMDA and the revenue from local tax sources have proven to be unreliable, the prospect of fiscal decentralisation seem to be bleak. This problem however, there are other sources that could be fully exploited. These include the private sector participation in infrastructure provision, investments and loans.

As stated earlier private sector is involved in service provision; some have oversold the value of fully privatised service/goods delivery/production systems, while others have refused completely to consider their potential value. (See appendix for example of private participation in infrastructure provision in Ghana)

Apart from these the private sector can also be involved in borrowing from the capital market. Despite the empowerment to borrow Act 462 (Section 88) they have limited autonomy regarding external finance decision-making. (Appiah et al, 2000).

Commercial lending institutions are not willing to lend to the DAs because they are considered as having high credit risks. In order to be able to access the market a number of conditions would need to be met. Such conditions include:

- Government guarantees may be given for financing selected DA capital projects, with initial focus on revenue-generating projects.

- DAs should meet project selection criteria jointly established by government and the DAs, which would encourage efficient use of resources and cost recovery.
- DAs should prepare medium term development plans clearly identifying their investments and funding priorities (Appiah et al, 2000).

3.8 Sub national Borrowing

3.8.1 Decentralised Borrowing: The Rationale and Options

In recent time, sub national governments are accessing the capital market and some other's considering the possibility of accessing it. This possibility is premised on the rational that its embedded in the growing urban phenomenon, the arguments of inter temporal linkages in terms of project financing and the improvement it might bring to the governance system at that level.

The first reason, as discussed earlier, is that the growth in urbanization is exceeding the capacity of urban services and local infrastructure systems (Magrassi, 2000). It would be imprudent to finance lumpy government spending through straight forward methods such as increasing taxes, but rather proceed to the capital market where there is adequate capital supply, which could take care of the demands.

It is advised that since the benefits emanating from such investments exist over decades, then the payment for capital investment should be amortised over the technical life of the project (Ahmad, 1999).

Liu, (2006) indicated that the participation of sub national groups in fiscal market would expose the sub nationals to market discipline, reporting requirements and fiscal transparency. The result of this exposure is a general improvement in governance. Long-term financing for infrastructure is more efficient than relying on pay-as-you- go-schemes. Investment in infrastructure may be suboptimal without long-term financing (Leiderer and Liiebig, 2006).

In most countries people save through contractual savings for life insurance and pensions. Investing in municipal infrastructure enlarges their options and can stimulate the domestic capital market through the demand for good quality long term debt (Jackson, 2006).

There are various types of sub national borrowing options. These include through borrowing via the central government that is on lent to sub national tires, public financial intermediaries, direct borrowing and market decentralisation of public services (Liu, 2006).

The choice of the options are based on several objectives when weighing the merits of each channel, including political allocation of credit the reduction or elimination of liabilities and strengthening the capital market (Ahmad, 1999).

3.8.2 Challenges

There are several risk involved in allowing sub national government entities to borrow from the capital market. In developing countries where the demand is overwhelming, there would be the temptation to borrow excessively; the risk of bankruptcies; there is the risk of presenting a good fiscal position to borrowers, by presenting over ambitions position, ambitions and unrealistic revenue projections, multiple pledging of collaterals , jeopardizing public services in times of default (Jackson, 2006).

3.8.3 Borrowing Controls

The challenges that are presented when borrowing from capital market are enormous. In order to ensure that sub national bodies play by the rules of the market, and maintain some market discipline, the following tested control measures have been proposed. According to Ter Minassion, (1997), Plekhanova and Singh R, (2005), the control mechanisms include;

Market Discipline: this control measure allows the market to regulate itself. For example a free and open market, adequate information on borrower's liabilities, proper debt carrying capacity assessment should be enough to inform the players in the market and guide their actions accordingly.

Rule Based Control: In some cases, the central government might try to contain sub national borrowing by imposing a fiscal rule.

Administrative Control: Unlike the rule based the administrative control is flexible. The control may take the form of setting of annual limits for individual sub national jurisdictions, review and authorization of individual borrowing and the central government borrowing and on-lending to the sub national entity.

Cooperative Arrangement: This approach involves the participation of the central government in setting the purpose, limits and amount of funds to be sourced.

2.8.4 Criteria for Credit Worthiness

The concept of creditworthiness is important since it provides information on both the borrowers and lenders participating in the capital market. The most important information is at the outcome of a credit worthiness test is a credit rating.

In the simplest sense, credit rating is an opinion by an independent specialist on the chances that a borrower will repay a loan as promised- on time and in full. (Jackson, 2006) A rating is essentially an opinion on the ability and willingness of an issuer to pay its debt obligations on a full and timely basis. Stated differently, a rating measures the risk of default over the life. (Leyman, n.d)

There are several agencies, with different criteria for assessing the creditworthiness of sub sovereign, they agree on some major underpinnings. The major factors and ingredients are summarized below (Leyman, n.d: Freire et al, ed., 2004: Jackson, 2004);

Economy: there is the assessment of the fiscal health of the economy of the sub national government. The analysis takes into consideration the diversity in the activity of the economy, and also the competitiveness of its key sectors. Demographics are also important in assessing the strength of the economy.

Fiscal performance: In analyzing the fiscal performance of the entity, attention would be given to its revenue and expenditure patterns.

Financial position: This looks at the Assets of the Assembly and the ability of the Assembly to cover its operating cost.

Legal framework: the presence of clear laws, legal precedent, or an effective judicial system regarding borrowing.

Accounting and Financial Reporting: The basis and quality of financial records are examined, and prompt, consistent reports are a positive.

Political Commitment or Dynamics: it examines the institutions, and the political and social climate under which the sub-national operates.

2.8.5 Credit Enhancement Strategies

Credit enhancements strategies are designed to mitigate the risks associated with lending and also to foster the growth of the overall municipal credit system. Baeto and Vives, 2000 writing about private infrastructure investment at sub national levels provide the following options;

- *Intercept Mechanisms:* This mechanism provides the opportunity for lenders to be able to intercept government transfers to the debtor.
- *Credit Guarantees:* This credit guarantees can come from both internal and external sources. Central governments, international and multinational financial institutions are involved in the provision of the guarantees. (RTI, n.d).
- *Bailouts* by central governments because the service or infrastructure involved is regarded as overly politically important.

There are other methods of credit enhancements structure or mechanisms that are rarely used at sub national levels these include the Co-financing and Subordination (RTI, n.d).

2.9 Summary of Key Issues

- It must be noted that government would remain the main provider of infrastructure in decades to come. Governments must be prepared to gradually shift their role from being the principal financier and operator of infrastructure and service provision to being the overseer and regulator.
- There is a wide spectrum of options and arrangements for private sector participation ranging from service and management contracts (that involve private investments and intermediate levels of risk) to BOOT and divestiture that involve higher levels of investment and risks but also potentially higher benefits. Governments of poor countries, with limited prior experience in private sector participation in infrastructure and public service provision, may want to begin with service and management contracts and negotiated entry and progressively move to concessions and privatizations through competitive bidding as they acquire experience, confidence, and credibility and build local constituencies in support of greater private sector involvement.
- Increased private sector participation in public service monopolies calls for tough governments that hold the private sector accountable but, allow it the freedom and flexibility to figure out the most efficient way to provide a service of specified quantity and quality.
- It is necessary to strike a balance among various needs of the private sector to earn a reasonable rate of return, of the public sector to extract fees and charges, and of consumers to receive a high quality service at affordable rates.
- Private Participation at the sub national level is regarded as riskier compared to the national level. Hence private participants are careful when dealing with sub national levels.
- The decentralization system in Ghana provides a window of opportunity for the private sector to participate in infrastructure provision. The legal frameworks

establishing the decentralisation seem perfect, but the institutional arrangements and practices do not provide the environment for enhanced private participation.

- The main reason for borrowing for infrastructure provision is that, the benefits from such investment exist over decades, then the payment for capital should also be amortised over the technical life of the project. That is, as there are generational benefits, it makes public policy sense to spread the payment for the public infrastructure over generations (i.e. generational equity).
- There are also several options of accessing the market through, direct borrowing that is on lent to sub national ties, public financial intermediaries, direct borrowing and market decentralisation of public services.
- There are also several challenges that come with borrowing for infrastructure investment; these include bankruptcy risk, excessive borrowing, and jeopardizing important public services.
- In order to arrest these challenges, borrowing controls such as Market discipline, Rule based control, Administrative Control, Co-operative Arrangement Measures must be applied.
- In accessing the credit worthiness of sub national government, the following criteria an assessed; Sovereign Rating Ceiling, Economy, Fiscal Performance, Financial Position, Legal Framework, Accounting and Financial Reporting, Political Commitment and Debt Profile.
- In order to enhance the credit levels of sub national bodies as borrowers, policy formulators and implementers can make use of Intercepts and Credit Guarantees.

CHAPTER THREE

PROFILE OF ACCRA METROPOLITAN INSTITUTIONS AND FINANCIAL SECTOR

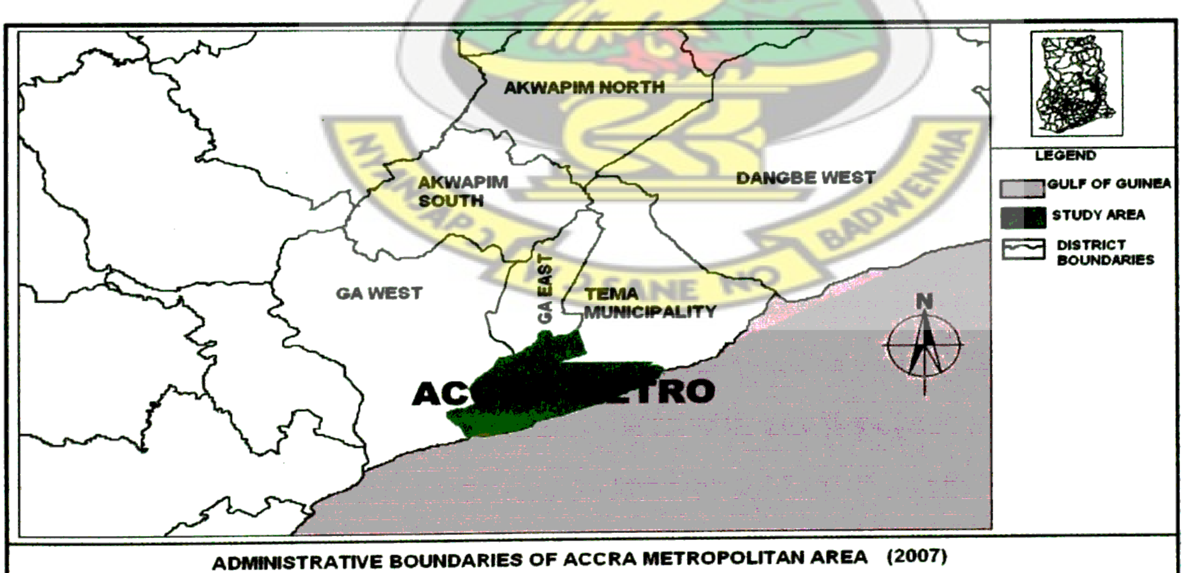
3.1 Introduction

This chapter discusses the profile of participants in the subject of sub national borrowing. It includes the Accra Metropolitan Assembly and the financial sector in Ghana. On the side of the Metropolitan Assembly, the demography, location, economy, fiscal performance and the political organizations would be discussed. On the supply side, the financial sector especially the banking sector would be discussed; with focus on the two financial institutions and summary of emerging issues.

3.2 Sub Sovereign Government: Accra Metropolitan Assembly

Accra has been Ghana's capital since 1877 and is today one of the most populated and fast growing Metropolis in Africa. It is located within the Greater Accra Region and is line on the southern border by the gulf of Guinea. Figure 3.1 shows AMA in both the regional and national context.

Plate 3.1 Accra Metropolitan Assembly in the Regional and National Context



Source: Centre for Remote Sensing on Information and Geographic System

3.2.1 Demographic Characteristics

With an estimated 2006 mid-year Population of about 1,915,983 million people as projected from 2000 National Population and Housing Census by the Ghana Statistical Service, Accra has an annual growth rate of 4.3%. The growth of Accra is due to the rapid industrialization and expansion in the manufacturing and commercial sectors between the 1960s and 70s, the decline agriculture in rural communities in Ghana and coupled with the boom in the service sector. This propelled immigration to Accra.

Table 3.1: Population and population growth Rate of 1960-2007

	1960	1970	1984	2000	2006*	2007*
Population	338,396	636,667	969,195	1,658,937	1,915,983	1,960,462
Pop. Growth rate	-	6.32%	7.51%	4.3%	4.3%	4.3%

*Source: 1960, 1970, 1984 and 2000 National Population Census * Projected.*

The current population figures do not take into consideration the daily population generation, which is around 2.5 to 3 million people in terms of socio-economic activities as captured by the 2000 Census. The primacy of Accra Metropolitan Area as an administrative, educational, industrial and commercial centre in attracting people from all over Ghana, continues to be the major force for rapid population growth, with migration contributing to over 35 per cent of the population increase.

The highest densities in the country were recorded in the Accra Metropolis with an overall average of 69.3-person per/ha.There are a lot of factors responsible for the highly populated density. They range from social, cultural to economic. These densely populated settlements shows high level of poverty and development has virtually eluded them in all spheres of endeavour. Examples of communities with low populated settlements, which are also the First Class Residential Zones, are Legon, Airport Residential, and Roman Ridge among others. The communities with the high population areas include Chorkor, Sabon Zongo, and Sukura among others. This increasing demand puts pressure on the limited social and economic infrastructure found in these localities.

3.2.2 Economic Characteristics

The economy of Accra is vibrant with commerce and service very dominant. According to the Ministry of Local Government and Rural Development and Employment, 68 per cent of the populations are in the economically active age group. And about 13 per cent are unemployed. Also 34 per cent employed are commercial sector workers, and the private informal sector engages 60 per cent of employed. Nevertheless, comparative analysis of city figure to national points to relative higher standard of living in the Accra. It is estimated that AMA's GDP is $915.09, the National Gross Domestic Product (GDP) of $350.

In reference to varying characteristics and income levels of residents, Accra has been stratified into 4 income zones to enable determination of level of poverty. (Details are provided under cost recovery in chapter five).The stratification is based upon housing characteristics and environmental conditions of the residential suburbs of the city.

The poverty in the metropolis is also increasing. People leaving in extreme poverty increased from 8.2 in 1991/92 in 11.8 per cent 2005/2006 (GSS, 2006). People in extreme poverties can be found in slums and communities found in third and fourth class zones. It is also revealed that the poor in Accra are not just agglomerated at specific areas. Pockets of poverty exist in affluent residential areas regarded as first class residential zones.

The diversity of the economy in terms of the high levels of production, commercial and high incomes on one hand and lack of economic opportunity and extreme poverty on the other hand, presents a challenge to the Assembly in the management of the Area. One major challenge would be the difficulty of levying taxes and also charging user fees in the case of very extreme ends of the economic divide; the poor and the rich.

Another challenge that the Assembly is presented with, is the poor infrastructure levels in the residential areas with lower incomes. As those in dire need of the infrastructure, would not have the capacity to pay for infrastructural facilities if is provided.

3.2.4 Governance

The Accra Metropolitan Assembly like any other MMDA is a corporate body and the highest political and administrative arm of the Government at the local level. There are various arms of the Assembly which enables it to perform its mandatory functions. The Assembly through the Local Government Act 1993 462 (section 10 sub sections 1,2,3,4 and 5), carries out the legislative, deliberative and executive functions of Government. The functions of the Accra Metropolitan Assembly are outlined in the Legislative Instrument (L.I. 1500) which established the AMA.

These functions are summarized as follows: the provision of sound sanitary and healthy environment, provision of educational infrastructure for first and second cycle schools, provision of markets and lorry parks within the Metropolis, the planning and development control of all infrastructure within Accra, activities bordering on the maintenance of peace and security within the metropolis and the provision of public safety and comfort.

To assist the Assembly in performing its functions effectively and efficiently, the Assembly has a legislative arm and an executive arm which is supported by a general administration. The General Assembly, the legislative arm is composed of 104 Assembly Members, 36 of them are government appointees and 68 are elected. The Executive Arm of the Assembly is headed by the Chief Executive, who is appointed by the national president.

There are also departments that are responsible for mobilizing and managing the Assembly's finances. These include; the Finance Department, Budget and Rating Department and checks provided by the internal and external audit department. These Departments in the Assembly would play central roles if the Assembly is given the opportunity.

There are also departments that are involved in planning, provision and management of infrastructure in the metropolis; they include Metropolitan Planning Co-ordinating Unit, Town and Country Planning Department, Waste Management Department, Metropolitan Roads Department, Community Development Department and Metropolitan, Metro Health and Education Departments.

3.2.5 Fiscal Performance

The two main sources of revenue to the Accra Metropolitan Assembly are the Internally Generated Fund (IGF) and external funding. The main revenue under the external revenue is the Grants. Trend analysis of the Trial Balance indicates an increasing volume of both internally generated and external revenue. The external revenue constitutes averagely 57.09 per cent of the Assembly's funds (between 2002-2006).

The expenditure pattern of Accra Metropolitan Assembly can be classified under current and capital. The revenue-expenditure relationship indicates that, the Accra Metropolitan Assembly experienced deficit only in the year 2002. It implies that, the total revenue generated for the year 2002 could not meet the expenditure for the year. It also implies that without grants, particularly the District Assembly's Common Fund, it will be very difficult for the Assembly to implement it plans. In the subsequent years the Assembly rather had a surplus (the detail analysis is in appendix 1-4).

3.3 Financial Sector in Ghana

The financial market is made up of money market and the capital market. The sector includes Commercial, Development and Merchant Banks. Others include Non Bank Financial institutions, Building Societies, Leasing Houses, Finance Houses, Mortgage financing Houses, Trust Companies, Insurance Companies and Reinsurances Houses; and Rural Banks.

In the case of long term financing the institutions that can get involved include the commercial banks, Finance Houses, Mortgage Financing Houses, Trust Companies and Insurance Houses. However, in this research the focus would be on the banking sector and whether they would be able to provide long term financing for infrastructure development.

3.3.1 Banking Sector in Ghana

The banking sector is the largest contributor to Ghana's financial sector. The banking sector has remained one of the best performing sectors in the Ghanaian economy. Despite increasing competition and declining margins, the sector has continued to record significant growth and increased profitability over the years. This has led to an increase of banks from 18 in 2002 to 25 at present (2007) (Price water, 2007).

In recent time some factors have led to the growth in the enthusiasm and the capacity of the banks to advance short, medium and long term loans (Eco Bank Ghana, 2006).

- The profitability of the banking system shrunk. This was because reduction in the discount rate of short term investment vehicles from 25 per cent to 10.7 per cent. To replace the income that used to come from Treasury bill, banks are lending more.
- Within the period of 2002 to 2006 trended down from 15.2 per cent at the beginning of 2002 to 10.8 per cent by the end of 2008. The low inflation rate was also an advantage to both borrowers and lenders, since cost of borrowing were low.
- Also the reduction in the domestic debt to GDP ratio from 11.2 to 4.9 per cent also would free liquidity to be available for borrowing by potential creditors, be it short, medium or long term.
- The abolishing of the secondary reserve ratio also freed up liquidity to be available for lending. These macro economic issues have created a good credit environment making it lucrative, and viable option to borrow especially for long term investment.

- Competition within the industry is expected to intensify as banks introduce new products and services to capture low cost deposits and increase their market shares. Margins are also expected to come under increased pressure due to lower inflation and government borrowing.
- The push to increase profitability through the development of new products and enhancement of loan advances provides a good platform for the Sub national

bodies or Metropolitan Municipal and District Assemblies (MMDAs) and the financial institutions to meet; The financial institutions meeting credit and investments drives, whiles the MMDAs also meet their infrastructure demand.

3.3.2 Study is Focus: Eco Bank Ghana and National Investment Bank

Eco bank Ghana: Eco bank as a regional bank is focused on partnering governments and the private sector. It is a regional bank that is perceived as the model of integrating African private sector into the scheme of development in Africa. In 2003 it obtained a universal banking license from the Bank of Ghana and embarked on a branch expansion programme to increase its reach (Ecobank Group, 2006). EBG is one of the major players in the formal banking industry, which constitutes the core of the financial sector in Ghana. The sector comprises twenty-one (21) banks (Ecobank, 2006).EBG's total assets and deposits have since 2002 grown by 70 per cent and 81per cent respectively compared to the industry's growth of 64 per cent and 74 per cent respectively. As at December 2004 EBG ranked 6th among Ghanaian banks in terms of total assets and 4th in terms of total deposits. EBG's overall market share of total assets and total deposits for the industry were 7.7 per cent and 9.4 per cent respectively (Price water House, 2007).

National Investment Bank: It first started as a Development bank, but is now involved in universal banking. According to the Ghana Banking Survey, the Bank has 24 branches dotted around the country. The Bank's deposits grew from 233.45 billion (almost 2 per cent of the market) to 1,697 billion (4.8 per cent). It improved per branch deposit and moved form 16^{th} of 18 banks to 13^{th} in 20 banks. The NIB grew its industry share by 2.3 per cent. National Investment Bank's (NIBs) deposits growth was driven by the implementation of an aggressive branch network expansion strategy over the period (Pricewater, 2007). Currently the National Investment Bank is now involved in Insurance Banking. This would get the Banks to be able to have access to long term deposits and hence would be capable of making long term credit, for infrastructural projects.

3. 4 Summary of Emerging Issues

- The increasing population in the metropolis creates an increasing pressure on the existing infrastructure and hence demands for expansion or provision of new or improved ones.
- The diversity of activities in the Metropolitan area means not only an increasing demand for infrastructure but the increase in the complexity or the sophistication of infrastructure.
- The poverty levels, which are linked partially to lack of access to infrastructure shows an urgent need to provide a mix of social and economic infrastructure including the water, access roads, sanitation facilities among others, arrest the poverty trends.
- Again the poverty level puts the Assembly in a difficult situation where the Assembly has the responsibility of providing infrastructure, without a corresponding potential or opportunity to raise local revenue for this expenditure.
- The structures of the Assembly as provided by Local Government Act, Act 462, the Act establishing the Metropolis seem perfect, however, some of the Assembly's department such as sub metro councils, the community department are not functioning well.
- The financial sector is vibrant and most performing sector in the economy of Ghana. The most profitable venture of the financial institutions is the incomes from loans advanced to clients.
- The vibrant economic environment in the metropolis is good for revenue mobilisation. However the over dependence of the market on commerce makes it vulnerable to shocks in the system, hence despites the advantage it provides as a source for revenue mobilisation, the long term stability is in doubt.
- The financial institutions have the drive to develop products to meet the ever increasing and changing demands of their clientele. Hence would not have difficulties develop new long term debt instruments to meet this financing Gap.
- All the financial institutions, with the exception of Agriculture Development Bank are universal banks. This provides a range of options for MMDAs to

explore if the opportunity is given to access long term debt for development. These include the long term financing vehicles.

- National Investment Banks currently has the opportunity to mobilize long term deposits through its collaboration with insurance firms. The NIB Bank Insurance project is thus an opportunity to increase the capacity of the bank to be able to advance long term loans.
- Eco Bank for example, just like other financial institutions or subsidiaries, is recapitalized from international financial markets. This gives a guarantee against internal bankruptcy crises if there is a default. This in some cases can also lower the cost of borrowing. In this case the issue of exchange rate risk would loom over transactions, and in the event of exchange rate crises, the advantages provided by the low cost of borrowing might be negated.

CHAPTER FOUR

PRIVATE FINANCING OF INFRASTRUCTURE IN THE ACCRA METROPOLITAN ASSEMBLY

4.1 Introduction

The chapter is focused on the infrastructure needs of the Metropolitan Area, the convergence of the potential borrowers' and the lender's preferred infrastructure to seek funding for and support respectively, the major borrowing requirements of the prospective lenders and the Credit Worthiness of Accra Metropolitan Assembly; In addition the chapter would discuss the financial vehicles available for financing infrastructure and cost recovery of end users have been discussed.

4.2 Overview of Infrastructure Needs in the Accra Metropolis

As stated in chapter three, increasing population due to natural growth and migration is putting pressure on the already inadequate infrastructure in the metropolis. The following are a brief overview of infrastructure needs and the financial investments needed to be made by stakeholders, particularly the Metropolitan Assembly:

Roads: According to the Metro Roads Department, the Accra Metropolitan Assembly has 1,455.37km of which about 300-400 km are not engineered. This is in addition to surface works and repairs. The Assembly is also supposed to spend GH 40.55 billion for road expansion, repairs and construction within the medium term of 2006-2009.

Water: The current access figures from the Poverty Trends Surveys in 2006, shows that only 50.8 per cent have access to piped water in their houses. About 46.1 per cent access water from vendor services, neighborhood and private and public stand pipe. It is estimated by Ghana Water Company Ltd that the Assembly and government of Ghana would need GH 52 billion to meet the demand.

Sanitation: (Toilet) The Poverty Trend report shows access to improved toilet facilities (KVIP and Flush toilet) is low, with 57.2 per cent using Pan and Bucket Toilets. The low levels of accessibility and conditions of available infrastructure shows the level of needs.

Solid Waste Disposal: The Environmental Protection Agency in 2002 estimated waste generation to be 0.5 kg/ per person per day; by this the current waste generation is 980,231 kg/ per day. The World Bank also conducted a research into waste generation rate and cost of collection and concluded that the collection rate is 63 per cent of waste generated in 2004 and would be 75 per cent by 2010; this gives a clearer view about the waste situation in the metropolis. The Assembly would have to mobilise currently GH¢ 7.108 million to support waste collection and disposal. Currently the Assembly is using GH ¢ 2.7 million on waste management within the 2006-2009 period.

Health: According to the Metropolitan Health Directorate the health facilities in the Accra Metropolitan Area numbers 218. These facilities include 28 hospitals, 130 Health Centres /Post and 60 others including CHIPs Compounds and Maternity Homes. These figures looks impressive at a glance, but considering the population of close to 2 million people, and demands from adjoining districts, referral cases from other regions and the sub region of West Africa, the facilities are inadequate. The poverty survey conducted in 2006, confirms the fact that access to hospital is low. The survey shows that 37.9 per cent of the population does not consult any health facility. And as high as 24 per cent have access to quasi health facilities such as chemical stores and pharmacies among others. Only 28.1 per cent had access to hospitals. With the introduction of the National Health Insurance Scheme (NHIS), hospital attendance is on the increase, the pressure on the limited facilities keeps increasing; justifying the need for new health facilities or the expansion of existing ones.

Education: According to the Ghana Education Service, the educational facilities available in the metropolis are not evenly distributed. Areas such as Teshie, Nunuga and La, have the lowest concentration of Primary Schools and Junior High Schools. With 40.4 per cent of the population currently under 15 years, the present and future demands on educational infrastructure is high. Given the rapid growth of the school going population, the city will need more school infrastructure in the years to come. Projections show that, without investment in education, there will be a backlog of 213 primary schools in the city by 2007. The Assembly had planned to spend more than GH C1.7 million by the end of the 2006-2009 medium term periods. The cost included the cost of construction of new blocks and the rehabilitation of damaged and old ones. The Assembly would need GH C24.5 million to provide classroom for the current need and about GH C42 million by the year 2010.

The overview shows a high level demand for basic needs in the metropolis; hence the need to invest in infrastructure to meet the demands that come with the increase in population and sophistication of lifestyle. Among the various needs, the Assembly has oversight and funding responsibility for sanitation, water, education and health. Despite the fact that the Metro Roads is under the Assembly's structures, a major part of the investment into roads comes from the Road fund. Investments into health, education, and roads would be difficult to recover through user charges; however it would be much easier with water and sanitation. Hence the discussion will be centred on the types of infrastructure that the Assembly has oversight and funding responsibility for and where cost can be recovered.

4.3 Private Financing: Borrower's and Lender's Preferences

The Assembly has its needs, in this case financing needs to meet and the participants in the capital market also have the areas they want to invest in order to remain in business and also make a reasonable level of profit. This cross road would be examined by looking at the Lenders' and Borrower's Preferences in terms of infrastructure provision.

4.3.1 Borrower's Preference

The informants at the assembly; the Planning, Budget and Finance officers, intimated that despite the gap in the provision of social infrastructure, the Assembly would be advised to use funds sourced from the capital market for infrastructure projects that have direct financial returns. This suggestion is based on the fear of the burden of repayment. Therefore the Assembly would be interested in the projects that can produce the returns to be able to finance the current projects. Prominent among the projects the Assembly want to source such financing for are the Accra City Hall, markets, shopping malls, public toilets and baths among others.

The officials admitted that the social needs, such as health, education and sanitation are more pressing and widespread, and admitted that they also need some level of funding. They therefore advised that these kinds of infrastructure should only be financed using borrowed funds, if the own revenue streams of the Assembly improves. The officials of the Assembly supported the idea of borrowing with the following reasons; that the infrastructure demand of the Assembly would be met and that the infrastructure that are supposed to be funded would generate the necessary incomes to cover repayment.

4.3.2 Lenders' Preference

Interviews with credit and risk managers at the two financial institutions revealed that the Banks would be interested in financing projects that would generate direct economic returns. This means they would be interested in projects that can generate the necessary revenue stream to defray the debt. The informants at the financial institutions also mention some specific infrastructure they would be interested in funding; among them are parking lots, shopping malls, public sanitation facilities and markets. It was also intimated by the informants at the financial institutions that financing projects through these means is much easier, especially when it comes to the time of repayment. The informants also suggested that, they might not be sure of the income streams of the particular local government that is borrowing, and hence could only advance credit facilities on those bases. Another reason that was advanced was the fact that the transaction is less risky.

The banks have had experiences in the financing of this infrastructure through the project financing facility. Examples of this include shopping malls, private school buildings, and student hostel facilities among others.

Matching the preference list of lenders against that of borrowers, there are common issues such as the markets and shopping malls; however some mismatch regarding preferences and focus of the two players. The borrower (the Metropolitan Assembly) is much faced with social needs (which generally not economically viable), whiles the lender (the financial institutions) are more interested in funding projects with high economic return.

4.4 Borrowing Requirements

The financial institutions have certain requirement that would qualify a prospective borrower. The funding needed for the infrastructural projects would fall under the project finance categories of the financial institutions. Under this category of borrowers are required to provide necessary information's about their institutions and also information about the proposed project.

The borrowing requirements for projects, depends upon the specific issues surrounding the project. A prospective borrower needs to provide the following;

- *Requirement Regarding Credibility of the Borrowing Institution*: in this the institution that is borrowing would have to submit institutional information that makes them viable borrowers. Requirements such as the audited reports of the institutions, the financials overtime and the human resource capacity to be able to manage the facility will be required.
- *Requirement Directly Related to Repayment*: A major issue in the project financing is repayment, hence the lender in this case the banks would conduct risk test on the institutions, audited financials as it was required in the credibility test, the feasibility study of the projects that needs to be carried out.
- *Owner's Equity:* One of the major requirements for project finance is the Borrower's Equity or owner's equity; which is the amount of money that the owner is able to invest or has committed into the project. This does not however hold for all projects. In the case of projects with low risk and in areas where the returns would be high, the Banks finances the whole project and does not require owner's equity.
- *Marketability of Projects*: The borrowers are also supposed to provide a strong marketing plan for the project or service they are providing.
- *Risk Mitigating Requirements:* There are several risk mitigating packages of the financial institutions. These are non-project assets of the borrower and the project as an

asset. The non- project assets must be assets that are changed into liquid form in the case of default. This must be provided at open market value and force sale value.

4.5 Credit Worthiness Analysis

4.5.1 Fiscal Performance

The Assembly has limited tax sources; which excludes the lucrative taxes such as sales, corporate and income taxes. The tax source include; the rates, licenses, fees and fines, investments among others.

Growth of Revenue Sources and Stability: The Assembly's own revenues have been increasing steadily both in nominal and in real terms. The growth of the own revenue, has been significant with annual percentage change of between 14 per cent in 2003 to 33.2 2007. The growth in real terms is impressive. The growth in the total own revenue, notwithstanding, various revenue heads are very volatile. The trend of growth and stability of revenue items are provided in Appendix 2c.

Assessing the share of the various revenue sources, the fees and fines contribute the largest share to the incomes; the average share of the fees and fines is 34.99 within the period of 2003-2007. The third source, rates, which currently has potential of raking in GH C 6 million, if the real estate re-evaluation programme is implemented to the letter (see appendix 1a). One potential is the basic rates, which is levied on all adult inhabitants above 18 years. With the metropolitan area, recording over 1.6 million inhabitants and ever increasing population, the Assembly stands to gain from this revenue source.

Own Revenues and Government Transfers: The trend in the Revenue Generated Internally and government transfers is stable. Looking at the share of total revenue of the Assembly, Central Government transfers makes the higher proportion. The Internally Generated Funds have an average share of total revenue of 43.36 per cent, whiles the Government has an average of 56.64 per cent. The highest proportion of Assembly's own financing to the Assembly is 2006, which is 46.7 per cent. This is not good for an assembly which wants to participate in the capital market where its fiscal strength would be assessed on its own strength, but not the grant it enjoys. (See Appendix 1b)

4.2.1.2 Expenditure Patterns

The Assembly's expenditure components include personal emoluments, travel and transportation, general expenses, maintenance and renewals, miscellaneous and capital expenditure. Personal emoluments accounts on the average of 22.14 per cent of total expenditure for the five year period of 2003-2007(see appendix 3b). The share for personal emoluments to the total expenditure shows some level of inefficiency. Currently central government is covering almost halve of the personal emoluments.

In the 2006-2007 periods, the share reduced from 24.9 per cent in 2006 to 17.9 per cent. The reduction is a good trend, which would in the long run, lead to efficiency in the management of Assembly's recurrent expenditure.

Recurrent expenditure makes up an average 70 per cent of total expenditure and capital expenditure of 30 per cent. The recurrent expenditure has increased from 60.06 per cent in 2004 to 81.8 per cent is 2007. With the increasing demands on the Assembly, spending half the resources of the Assembly is a sign of inefficiency and lack of priorities.

The capital expenditure reduced from 39.89 per cent in 2004 to 18.2 per cent. Within the five year period the Assembly on the average spent 28.21 per cent on infrastructure. A reduction in the proportions spent on capital expenditure is in effect a reduction in the share spent on infrastructure projects. This is not good for the image of the Assembly that is faced with huge infrastructure demand and also claims to be committed to the provision of the core services to its citizenry. Majority of the investment into core services of the Assembly are made under the capital expenditure, and if that takes only 30 per cent, then the commitment of the Assembly towards delivering development to its people is doubtful. (See Appendix 3b)

4.2.2 Financial Position

In the determination of the financial position of the Assembly, the existing marketable assets and recurrent ratio would be discussed.

Assembly's Existing Marketable Assets: The public accounting system does not present an account of assets of the assembly. Investments into assets are rather treated as expenditures on the Income and Expenditure statement. This means that the investment into assets is treated as a liability.

The analysis would thus take into consideration non-current assets that are marketable and would arouse little or no public agitation if the ownership changes to private sector. This means that fixed assets in the educational, health and water sectors would be excluded. The assessment would thus include the list of some existing non-current assets.

The Assembly has a stock of marketable assets. They include markets, lorry parks, parking Lots, shopping malls and public toilets among others. These infrastructures can be liquidated, and by their nature can be managed by the private sector. Currently there are about 16 markets, 53 Parks and Parking Lots, 51 Public Toilets among others. These marketable assets can be used in providing collaterals for long term lending. These assets can also provide evidence of good or bad management and also evidence of viability of projects that funding is being sought for.

Recurrent Ratio; An important ratio in the determination of the financial position of the Assembly is the Recurrent Surplus or Deficit. The Recurrent surplus or deficit is arrived at by marching the recurrent expenditure against the Assembly's own revenue.

The Assembly in three consecutive years (2005-2007) recorded surpluses on its income and expenditure sheet summarized in Appendix 3c. This means that the Assembly is able to cover its cost obligations, and in addition has a surplus. This was due to the high government transfers that have augmented the Assembly's revenue. This image of the

Assembly, shows a promising financial status, hence a positive sign for potential financiers.

Table 4.1: Recurrent Surplus or Deficit (Own Revenue and Recurrent Expenditure)

Items	2005	2006	2007
Own Revenue	5,563,631.04	7,151,230.05	10,797,99.37
Recurrent Expenditure	10,389,812.58	11,076,847.57	16,036,119.2
Surplus or (Deficit)	(4,826,181.54)	(3,925,617.52)	(5,238,125.83)
Surplus or Deficit as % of Revenue	28.6	35.4	32.7
Surplus or Deficit as % of Expenditure	40.2	54.9	48.5

Source: AMA 2005, 2006 and 2007 Trial Balance

However, if the assembly is to be assessed on its own resources, the story would be different. As shown in Table 4.1, the Assembly recorded deficits for all the three years. The Assembly's deficits are 40.2, 54.9, 48.5 per cent expenditure and 28.6, 35.4, 32.7 per cent of expenditure in 2005, 2006, and 2007 respectively. For example in 2007, the Assembly could not cover 48.5 per cent in excess of its total expenditure; which is also 32.7 per cent of its own revenue. This image, using the Assembly's own revenue, shows a very bleak borrowing future, since the Assembly is not able to cover its recurrent cost over the period. This means that when the Assembly is given the opportunity to borrow it would have difficulty covering its debt obligations, since interest on loans is usually captured under recurrent expenditure. The deficit recorded would record a negative for the Assembly in terms of the ability to meet its debt obligations, hence puts the credit worthiness of the Assembly in doubt.

4.2.3 Reporting and Accounting System

In Assessing the Reporting and Accounting system as a criteria for assessing the credit worthiness of the Accra Metropolitan Area, specific issues to be looked would include;

Accounting System at both the assembly and grassroots level, Auditing System and Financial Reporting Practices.

Accounting System: The finance department as mentioned earlier is vibrant. The Budget, Finance and Revenue accounting officer perform their mandated duties. Entries are made into Sun Accounting software which is able to generate outputs monthly, quarterly and annually.

The Budget department also has the ability to estimate revenues to be collected. This records a positive for the Assembly, since it has the capacity to estimate long term expenditures and revenues with some level of accuracy. This expertise is needed in planning for projects to be financed by the private sector.

The Accounting system has a number of leakages. Concerning the revenue collectors, the revenue accountants noted that under declaration of collected revenues is rampant. Officials of the Assembly in connivance with sales persons over-invoice and hence inflating the cost of purchased item. This makes procurement and public purchases high. The negative practices at the lower level of the Assembly's accounting system would, increase cost of running the Assembly, whiles reducing the Assembly's revenues. These situations would put the Assembly into a fiscal difficulty, since it would not be able to cover its planned expenditure. The inability to cover ones expenditure due to these practices would make the Assembly an unworthy borrower.

Auditing: There is an internal Audit Department which progressively audits the accounts of the Assembly. The existence of the capacity to audit and the opportunity to engage external auditors is positive for the Assembly as a potential market participant. This is because a financier would only want to invest in the activities of organization that have minimal levels of corruptions. Even in situations where corruption is endemic or widespread, there is the requirement for mechanism and the capacity to detect, prevent or eliminate it.

The recommendations and queries of the external auditors are usually shelved. In some situations the officials involved are allowed to make amends or correct the mistakes instead of punitive measures. This therefore renders the Assembly's audit process a mere procedure; a way of meeting administrative requirements. This puts doubt on the effectiveness of the Audit process and hence a negative dent on the Assembly's Audit system and its ability to check corruption and other leakages.

Financial Reporting: The Assembly's financial reports are presented quarterly. However these reports are for internal consumption and not for external use. However the Annual Balance is presented to the corporate assembly, which is constituted by the representatives of the people. This presentation could be taken as public. This assertion, however, depends on the contact time of the Assembly's persons with members of her electoral area. Participants in the capital market require the declaration of the potential participant's financial status and position. This would reduce the tendency of tempering with figures to impress assessors, and would also ensure that the Assembly presents the accurate figures, since it is under public scrutiny.

4.2.4 Political Commitment

The important structures include the corporate assembly, the executive arm, the finance department, the budget and revenue offices and the various sub metro offices. These structures effectively perform the Assembly's core functions of planning, revenue mobilisaton, execution of projects, monitoring among others.

The existing capacity, the legal backing and the high motivation to plan provides the Assembly a positive image, in terms of the ability to do long term planning. This positive image is however dented by the poor attitude towards the preparation of the plan and commitment towards it implementation.

The lack of political will to implement decision arrived at shows the Assembly's weakness in managing planned projects. Financiers would be careful in advancing loan facilities to an organization, which cannot conform to its own plans and implement. This is also an important issue since the funds borrowed can be diverted to other uses.

Despite the roles the Assembly plays, they are limited in their powers. Government directives especially during election years create distortions in the implementation of the plan. In principle, there is commitment towards development, however the politics and practices surrounding development issues at the local level distorts the process.

4.2.5 Legal Framework

The legal framework as a criterion is necessary, since the corporate world is guided by and managed with legal provisions. These include the legal provisions binding the client, concerning the transactions and also guiding the service provider (in this case the financial institution). This is also important in times of defaults and conflicts.

The Assembly as earlier noted is, established by the Local Government Act, 462. The Act gives power to raise funds and also make expenditure. This same Act under section 8 provides the Assembly the power to be able to borrow. The provision however gives limited areas of revenue. In terms of borrowing, the Assembly has the power to borrow below GH C2, 000 and above that would have to be approved by a higher authority.

The Assembly's unique location also gives it an advantage, in terms of access to the legal system. The Assembly has access to the newly established commercial courts, which adjudicate in commercial disputes. It also has access to the private legal firms that are found in the national capital. This is positive for the Assembly; if only the Assembly is able to take advantage of the physical proximity and access the various services provided.

Apart from the external advantages that are available to it, the Assembly has a legal unit, which is mandated to provide legal advice and represent the Assembly in legal matters. The department is made up of a solicitor, an assistant solicitor and supporting staff. Other functions performed by this unit include the preparation of legal documents, drafting bye laws, assisting other department to enforce laws and prosecute defaulters. This internal arrangement is positive, since the Assembly seems to have the capacity to deal with legal issues.

In analysing how the Assembly satisfied the credit worthiness criteria and lending requirement of the financial institutions, as shown in the Table 4.2, the Assembly cannot borrow directly from the financial institutions, unless there legal, financial and institutional reforms.

Table 4.2 Criteria: Summary of Borrower's Requirements and AMA's Status

Criteria	Lender's Requirement	AMA's Status
Fiscal Performance	Good Financials	- Dependence of Central Government Transfers, since it makes up more than 50 per cent total Assembly's Shares - there is potential for increase in future revenue with Internal Revenue is Increasing and potential of mobilising more revenue from rates -there is inefficiency in the Assembly's management since the Assembly's recurrent expenditure is 70 per cent of total expenditure -there is also a sign of misplaced priorities with about 30 per cent of expenditure is spent on capital expenditure.
Financial Position	Collaterals Guarantees	-The Assembly has more than 100 marketable Assets, which can be used as collaterals but documented -The Assembly cannot cover its debt obligations, since its recurrent ratio is in deficit.
Accounting and Reporting System	Auditing Financial Reporting	-leakages due to corrupt activities in revenue collection and in purchases. - Ineffective audit system, as there is the capacity to do internal and external auditing,. the recommendation of the auditing process are not implemented -The financial Reports are presented to the Assembly but not to the public
Political Commitment and Dynamics	Capacity to Manage Resources	-There is political interference at the local levels -There are also Assembly's structures to carry out the activities of planning, implementation, managing monitoring and evaluation
Legal Framework		-There is an opportunity to borrow, but with a limitation. -There is provision for approval. -The assembly has the legal capacity to deal with all negotiations and conflicts -There is also the legal backing to mobilise more revenue.

Source: Field Survey, 2008

4.5 Financing Vehicles for Infrastructure Financing

The section analyses the financing vehicles that are available at the financial institutions, their suitability and reliability in meeting the demands of the Assembly. Also included are the possible financing models that can be fashioned with the private sector to ensure good management and repayment.

4.5.1 Financing Facilities

According to the financial institutions, the Metropolitan Assembly can borrow, however, with current conditions and financing environment, the Financial Institutions can only finance c the preferred projects, with the available financing facilities; the two facilities mentioned by the long term credit managers of the two institutions are the Project Financing Vehicle and Consortium Financing.

Project Financing Vehicle: Project financing, as explained by the officials of the bank and from financing literature, is a financing vehicle which is used to finance capital projects, is repaid from the cash-flow of that same project. In contrast to an ordinary borrowing situation, in a project financing the financier usually has little or no recourse to the non-project assets of the borrower or the sponsors of the project. In this situation, the credit risk associated with the borrower is not as important as in an ordinary loan transaction; what is most important is the identification, analysis, allocation and management of every risk associated with the project.

The Banks used these facilities to sponsor projects such as hotels, shopping malls, market stalls, building of educational and health infrastructure among others. This facility at a glance looks appropriate and less risky to the Assembly; however the projects that are financed under these facilities must have high levels of viability, especially the returns to invested capital.

Also since the financing vehicle has little or no recourse, the financier bears the greatest risk; the financing institutions can only start recouping its invested capital when the project starts operating and in the event that the project fails, the financier would lose its invested capital. Due to the high risk involved, especially on the part of the financier, the cost of financing is higher taking into consideration, the human resource that is expended to manage the risk associated with the project.

Consortium Financing The bank could finance the project under the project financing model single handedly or through a consortium. The consortium would involve a number of other financial institutions, and it is regarded as useful especially when the investment needed for infrastructure is large. This financing also happen when the risk is too heavy to be borne by one institution. The Assembly under this condition would have to engage the private sector in managing these facilities. The financial institutions would under this project financing model would have to make use of the private sector participation models. These would include two major models;

- Operations and management contract with major capital expenditure: under this the private entity would take over the management of the facility and also take the large part of the investment risk. Hence the private operator would mange and pays back the cost of investment. This can also take various forms like the Build-Lease-Operate and Build-Rehabilitate-Operate and-Transfer.
- Another model which is possible with the current vehicle is the Greenfield. In this case the private entity would provide the facility or would allow it to be provided through the private-public joint venture. The sub national government in this case might also take part of the risk of payment.

Under these categories of participation, there is supposed to be financial closure. In the case of Greenfield Projects, and for Operations and Management contracts with major capital expenditure, financial closure is defined as the existence of a legally binding commitment of equity holders or debt financiers to provide or mobilize funding for the project. The funding must account for a significant part of the project cost, securing the construction of the facility.

The discussion shows that the financing facility of financial institutions can provide towards the development of infrastructure development is the project financing facility, and that greatly depends on cost recovery, rather than the credit worthiness of the borrower.

4.6 Cost Recovery: Public Perspective

The cost recovery from the public is dependent on three major factors; willingness to pay user charges or taxes, the ability to pay charges and taxes and the essentiality of the facility (that is whether the facility will meet current needs of the public).

4.6.1 Willingness to Pay User Charges and Taxes

The ability of the Assembly to recover cost depends on the ability to recover cost from end users either through taxes or user fees. The cost recovery from the public depends on their willingness to pay either user charges for the use of the infrastructure or the general property and business taxes that are levied by the Assembly.

The field survey indicated that the willingness to pay user charges for infrastructure is high. Out of 100 respondents 86.4 per cent are willing to pay user charges as shown in Table 4.3

Table 4.3: Willingness to Pay User Charges for Needed Infrastructure

Responses	Frequency	Percentage
Yes	73	86.4
No	11	13.6
Total	84	100

Source: Field Survey, 2008

The willingness to pay user charges is further confirmed by their respond to the question of preference between user charges and taxes levied by the Assembly. With that, 77.6 per cent of the respondents prefer user charges to taxes levied by the Assembly. The result is shown in Table 4.4

Table 4.4: Preference between Payment of User Charges and Taxes Levied By Assembly

Responses	Frequency	Percentage
User Charges	74	77.6
Taxes	11	22.4
Total	95	100

Source: Field Survey, 2008

The preference of the end user of infrastructure shows their resolve to contribute towards the provision of public infrastructure they need. The main reason for the high willingness level is that, the respondent are in dire need for the infrastructure, hence the drive to pay for its provision or its utilization. The preference for user charges over taxes was also premised on some reasons. These include;

- User charges are fair, since the one who pays for it enjoys the service; 56 per cent gave this as the main reasons for choosing user charges ahead of taxes.
- Other reasons advanced include the fact, that the payment of user fees makes the service providers more efficient than paying through taxes
- The choices for the user charges were also made because the charges were lesser than the taxes.

Table 4.5: Reasons for Choosing Taxes or Charges

Reasons / Choices	Efficient	%	It is easier to pay	%	It is lower	%	It is fair because its pay and use	%	It is a Public good	%	Total
User Charges	6	6.3	4	4.2	8	8.4	56	58.9	0	0	74
Taxes	0	0	2	2.1	4	4.2	0	0	5	5.3	11
	6		6		12		56		5		95

Source: Field Survey, 2008

The willingness to pay taxes were quite low; about 13.6 per cent of the respondent would prefer paying taxes, to be used to finance infrastructure he/she needs in her locality. The low willingness level is confirmed by the low number of respondent, whose preferences were taxes over payment of user charges. The low level of willingness to pay, taxes is due to the perceptions of the populace, that the Metropolitan Assembly does not use their taxes for the needed developments. Hence would prefer user fees where they can readily enjoy the service.

The main reasons that were provided for the choice of taxes is that infrastructure is a public good, hence should not be paid for through user fees. The argument continues that using user fees in accessing a facility would eliminate the poor. This would be severe due to the already high and increasing levels of poverty in the metropolis.

The Revenue Officer at the Assembly also rated the willingness of the public to pay user charges as high. This coupled with the high political will on the part of the Assembly to levy user charges through the fee fixing resolution would assure potential financiers that invested funds would be recouped.

4.6.2 Ability to Pay User Charges or Taxes

In examining the ability of respondents to pay, two major issues would be looked at ; the income levels of inhabitants which determines their purchasing power and also how they rate the current levels of taxes and user fees charged on infrastructure services (which would determine their limits of take).

Income Levels: The Accra Metropolitan Area has four income levels, which mainly correlated with the residential areas. With the high residential area, having higher incomes and poorly managed residential areas having low income.

In the first-class income zone, average annual income per capita was $1,519.89. Annual per capital income in these areas can be as high as $8,000. However, those who are found in the lower quartile have average per capita income of about $350 where as those in the highest quintile have an average annual income of about $4,000.

The second-class residential zone, which hosts the largest proportion of residents of Accra, has an annual average income of $883. About 65 per cent of in the zone fall below the annual average. Income distribution in this zone is uneven. Whilst the upper quintile has an average annual income of $1,100, the lower quintile has an average income of $195. About 65 per cent of the zone falls below the annual average income of the zone.

The third class residential zone has an average annual income of $793.80. The upper quintile has an average annual income or per capita income of $1,300 whilst the lower quintile has an average income of about $195.

The fourth class income zones income levels are very low. They have per capita income of $410.06. While 6 per cent of this income stratum earns income less than $126.15 per annum, the upper quintile earns an annual average of income of $817.22. Table 4.6 shows the details of the various income zones (AMA MTDP, 2006).

Table 4.6 Income levels in the Metropolis

Income Zone	Lowest Quintile	Highest Quintile	Average	Example of Communities
Firs Class	350	4000	1,519.89	Roman Ridge
Second Class	195	1100	883	Kotobabi
Third Class	195	1300	793.8	Mamprobi
Fourth Class	126.15	817.22	410.06	Sukura

Source: Accra Metropolitan Medium Term Development Plan (2006-2009)

High-income zones are characterized by well-defined sector layouts, high taxable property values and superb neighbour infrastructure. The infrastructure in the rest of the zones correlate with income levels, hence the fourth, the last zone, depicts very depressed conditions. This includes unplanned areas, which have poor or non-existent infrastructure or utilities.

It is also worth noting that expenditures on basic infrastructure such as housing, utilities, recreation, education, accounts for almost 20 per cent of the total household expenditure according to the Poverty Trend Survey in 2006. This statistics was taken in 2000, and that over the 7 year period, there have been over 200 per cent increases in utility tariffs like water and electricity and also fuel prices, the current expenditure on these services can be safely estimated above 25 percent of total household expenditure. Hence an additional, charges or increases in taxes would definitely be an additional burden to individual households.

The increase might burden the individual households especially the poor ones, who would not be able to pay user charges or fees. However, in some cases the provision of the infrastructure might reduce some of the cost that is involved especially, the cost of travelling to access the service at another place, the time spent at the delivery point, and the prices of the infrastructure (as in the case of water), the burden would rather be reduced. Poor households who were not able to afford the service would now have the ability to access it, since purchasing power is increased, due to reduction of per unit cost of providing the service.

Rating of Current Charges and Fees: It is also worth noting that the respondents who chose user charges, 63.6 per cent responded that the taxes they pay to the Assembly are satisfactory. And a little above 29.6 rated the taxes as high. Only 6.8 rated the taxes as low. This is shown in Table 5.18. The over 70 per cent rating of the taxes levied by the Assembly as satisfactory and low, is a sign of some level of current abilities matching levels of taxes. And coupled with the existing capacity of the Assembly to collect revenue, the assembly would be able to raise more from taxes such as property rates. However for the about 30 per cent responding as high, their income levels would be assumed that their current abilities are less than the current tax level and hence would not co-operate with any attempt by the Assembly to either increase taxes or institute new ones.

Table 4.7: Rating of Assembly's Taxes

Responses	Frequency	Percentage
Low	6	6.8
Satisfactory	57	63.6
High	26	29.6
Total	90	100

Source: Field Survey, 2008

The perceptions on the level of taxes would thus help its payment. Unlike the taxes, the survey population rated the User Charges as high, and 26.2 per cent as satisfactory and 19.7 per cent low as shown in Table 5.19. The rating shows that the current charges are high, marching their incomes with the charges. This means that the charges that are currently being collected are high for more than 80 per cent of the respondent. Hence, can be concluded, though arguably, that they have a lower ability to pay.

Table 4.8 Rating of User fees Charged by the Assembly

Responses	Frequency	Percent
Low	18	19.7
Satisfactory	23	26.2
High	49	54.1
Total	90	100.0

Source: Field Survey, 2008

The responses show that about 61 per cent of the respondents who would like to pay for the user charges rated the existing charges as high. Despite the perception of high user charges, respondents would still pay for user fees as an option of providing a particular infrastructure.

It is however an irony that, those who thought that it was not an option, about 70 per cent of them rated the current rates as low and satisfactory(as shown in Tab. 4.9). The two results show that the choice of the option of taxes or charges was not only affected by perceptions of the levels of current and future rates, but other considerations like efficiency and its pay-as-you-use feature.

Table 4.9: Rating of User Chargers by Public

Rating / Response	Low	%	Satisfactory	%	High	%	Total
Yes	12	17.2	15	21.4	43	61.4	70
No	6	30	8	40	7	35	20
Total	18		23		49		90

Source: Author's Field Survey, 2008

4.6.3 Essentiality of the facilities

As stated earlier, cost recovery depends on the recognition of rate or fee payers about the importance of the facilities in question. As indicated in the results of whether one would pay user charges, the driving force behind the choice of paying user charges, was the essentiality of the facility in question. In other words, whether the infrastructure to be provided would meet the basic or daily needs of the population is the focus of this section. The survey thus identified certain infrastructure services and facilities that end users would want to pay for without any difficulty. Table 5.21 shows the various needs of the respondents in the metropolis.

Table 4.10 Infrastructure Needs

Infrastructure	Roads & Drainage	Power	Health	Sanitation	Recreation	Security	Water	Education	others	Total
Frequency	23	10	3	18	2	9	27	1	5	98
Percentage	23.5	10.2	3.1	18.4	2.0	9.2	27.6	1	5.1	100

Source: Field Survey 2008

In the sampled communities and areas surveyed, water came up as the top most priority, and this is in terms of those who chose it as a need. This buttresses the current water supply problems around the city. Another infrastructure that ranked high is the sanitation; this include infrastructure such as sewerage system, toilet facilities and waste collection. This is evident in the filth that has nearly engulfed the city. Public toilets in communities and public places such as markets and lorry parks, forms a major part of the needs expressed by respondents. Roads, Power and Security featured prominently in the needs of the respondents.

The development of any of these would thus have the support of the inhabitants of the metropolis. It is however difficult to provide, certain facilities through the payment of user charges; an example of this is the roads and drains that are demanded by the respondents. The only viable means is the use of taxes.

It is thus worth noting that the respondents within the Metropolis are willing and ready to pay user charges for the services they need if provided. It is also obvious that there is an opportunity to expand the tax base, by introducing new ones or increasing existing ones, if and only if, the Assembly can meet the demands of the public. In order the words, if and only if , the Assembly is seen by the public as meeting their basic needs of water, energy, sanitation, education among others, there would not be any difficulty in raising taxes.

4.7 Conclusion

In analysing the borrowing requirements, financial vehicles, credit worthiness of the Assembly and cost recovery issues, faouvrable and unfavourable factors that would affect private financing of infrastructure as shown in Table 4.11 were identified. Despite the presence of some very favourable factors (both internal and external), the unfavourable factors seem strong and puts doubts on the Assembly's present credibility as a potential market, especially its image as a direct borrower. Hence at present the Accra Metropolitan Assembly does not have a good balance sheet, institutional software and legal bases to effectively participate directly in the credit market. However with, the same prevailing external and internal factors, the Assembly can still participate through some other intermediaries or private operators.

Table 4.11: Favourable and Unfavourable Factors for Private Financing of Infrastructure

Favourable		Unfavourable	
Internal	**External**	**Internal**	**External**
- Increasing revenue from own sources	-Drive of financial institutions to advance both medium and long term loans	- Leakages in the financial system	- Legal Ceiling on borrowing
- Vibrant metropolitan economy	-There are financial vehicles that can cater for the needs of Assembly	- Volatile revenue heads	- Tax source to Central Government
- Assembly's structures are working	- Central Government Commitment towards private sector engagement	- Dependence on government transfers for capital expenditure	- Political Interference
-There is the opportunity to raise more funding from bye laws	- Government Commitment towards investing in the capital city	-high recurrent expenditure	
- there is willingness to pay user charges		- Recurrent Deficit	
		- Poor auditing system	
		- Lack of inventory of Assembly's Assets	
		-Ability to pay user charges is low, due to the urban poverty	

Source: Author's Field Survey, 2008

CHAPTER FIVE

FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

The first section of the chapter contains the summary of the findings of the Research and the second section includes recommendations, which are presented on case-specific bases. The chapter ends with a conclusion, which is a summary of the various stages of the Research and timed recommendations.

5.2 Summary of Findings

The following are the findings from the research. These findings are tailored towards answering the research questions and also in fulfillment of the research objectives.

1. *Preference of Financial Institutions for Economic Projects:* The Assembly's mission statement is focused on the provision of basic services, such as education, health, sanitation and other social amenities. However the financing institutions are rather interested in infrastructure projects that have direct economic returns. This was premised on the background that these kinds of projects would be less risky to sponsor and the burden of repayment on the borrower would be low. The Assembly, despite its mission statement and needs, is also interested in investing borrowed funds in projects that have economic returns. There is some mismatch in the preferences from the two players.

2. *Financing Vehicles:* The available financial vehicles to support the capital outlay necessary for infrastructure provision are the project financing and consortium financing. These vehicles would be actualized through the models of management contracts with capital expenditure and Greenfield investment; the Build-Operate-Transfer, Build Lease Operate Transfers, or any other which suits the infrastructure being provided and the conditions at the time.

In the assessment of the credit worthiness of the Assembly the following major issues were identified;

3. *Own Revenue Share of Total Revenue:* The internally generated funds have an average share of total revenue of 43.36 per cent, whiles the Government has an average of 56.64 per cent. This is not good for an assembly which wants to participate in the capital market where its credit worthiness would be assessed on its own strength and not the grant it enjoys.

4. *Growth in Own Revenue:* The IGFs of the Assembly is growing higher in real and nominal terms. However the transfers are also growing in the same proportions. The growth in income is a sign of commitment towards raising future revenues to be able to meet infrastructure demand and also be able to cover its debt obligations if it borrows from the capital market.

5. *Performance of Revenue Heads:* The highest source of income is fees, charges and fines and also is the second most stable income source; this source is expected to increase over the coming years. In addition a potential area of revenue is the rent, which is the second highest. These sources include the basic rates, property rates and special rates. With Re-evaluation programme, this source is expected to rake in GH¢ 60 million in the coming years.

6. *Assembly's Recurrent Expenditure Share:* The Assembly also uses almost 70 per cent of its income on recurrent items, especially on salaries which forms more than 20 per cent of total expenditure. Any organization that cannot manage its recurrent expenditure is an unworthy borrower;

7. *Assembly's Capital Expenditure Share*: The Assembly rather uses 30 per cent of the revenue or expenditure on capital expenditure. Capital Expenditure includes the provision of infrastructure; hence a small share spent on capital expenditure shows less priority given to the provision of infrastructure facilities.

8. *Corrupt Practices at the Assembly:* Accounting practices at the lower levels of the Assembly's Finance Hierarchy; they get involved in under declaration of collected revenue and over invoicing in making purchases. This shows the extent of leakage within the accounting system of the Assembly.

9. *Reporting of Assembly's Finances:* In terms of reporting, the financial statement is read to the Assembly members annually. Despite the seemingly open attitude toward declaration of the Assembly's finances, the actual declaration of the Assembly's finances is just at the Assembly level.

10. *Auditing System:* The Accounts of the Assembly are progressively audited by the internal auditors of the Assembly. There is also additional opportunity for external auditing annually. However the recommendation to the Assembly is treated usually as queries and in worse case scenarios, the Assembly request a pay back rather than a punitive measure.

11. *Assembly's Assets:* the Assembly has a stock of marketable assets. They include markets, lorry parks, Parking Lots, Shopping Malls, Public Toilets among others. Despite their existence, there is no good inventory on them at the Assembly level. These infrastructures can be used as collaterals or guarantees for borrowing.

12. *Recurrent Deficits:* The Assembly recorded deficits in terms of covering its recurrent expenditure with its own resources. The Assembly's deficits are 40.2, 54.9, 48.5 per cent expenditure and 28.6, 35.4, 32.7 per cent of revenue in 2005, 2006, and 2007 respectively. This image shows a very bleak borrowing future, since the Assembly is not able to cover its recurrent cost over the period. This means that when the Assembly is given the opportunity to borrow it would not be able to or would have difficulty covering recurrent cost which is debt inclusive.

13. *Political Interference:* The head of the Assembly is a government appointee at the local level and hence promotes government decision and policies, whether good or bad. Government directives especially during election years create distortions in the

implementation of the plan. This level of central government interference is negative for the Assembly, since, it would be regarded as an institution that cannot take independent and difficult decision usually associated with management of infrastructure.

14. *Assembly's Legal ability to raise funds:* Under the provision to raise funds, the Assembly is given the chance to enact bye laws to support their fee fixing resolution and impose taxes. These bye laws can therefore be instituted to support new tax heads and other revenue sources. Despite this provision, the most lucrative tax avenues are taken by government whiles the difficult tax sources are given to the Assembly.

15. *Opportunity to Borrow:* In terms of borrowing, the Assembly has the power to borrow, up to GH ¢2, 000. The Assembly would borrow above this ceiling, through approval from national government. Looking at the amount involved, it is ridiculous to borrow such amount for an infrastructure development. At first glance, the Assembly and participants in the credit market regard the issue of borrowing as a non- starter.

16. *Access to Legal Advice and Services:* Apart from the external advantages that are available to it, the Assembly has a legal unit, which is mandated to provide legal advice and represent the Assembly in legal matters.

In the assessment of the possibility of cost recovery from end users, the following were identified:

17. *Willingness to Pay User Charges:* The field survey indicated that the willingness to pay user charges for infrastructure is high. About 86.4 per cent respondents are willing to pay user charges. The willingness to pay user charges is further confirmed by their respond about the question of preference between user charges and taxes levied by the Assembly. With that, 77.6 per cent of the respondents prefer user charges to taxes levied by the Assembly. The preference of the end user of infrastructure shows their resolve to contribute towards the provision of public infrastructure they need. The main reason for the willingness to pay is the essentiality of the infrastructure to them.

18. *Income Levels:* The Accra Metropolitan Area has four income zones, which are mainly correlated with the residential areas. With the high residential area, having higher incomes and poorly managed residential areas having low income. High-income zones are characterized by well-defined sector layouts, high taxable property values and superb neighbourhood infrastructure. The infrastructure in the rest of the zones correlate with income levels, hence the fourth, the last zone, depicts very depressed conditions. This includes unplanned areas, which have poor or non-existent infrastructure or utilities. It is also worth noting that expenditures on basic infrastructure such as housing, utilities, recreation, educations, accounts for almost 20 per cent of the total household expenditure. Hence an additional, charges or increases in taxes would definitely be an additional burden to individual households. An increase in fees might burden the individual households especially the poor ones.

19. *Essential Facilities of Inhabitants:* As stated earlier, cost recovery depends on the recognition of rate or fee payers and the importance of the facilities in question. As indicated in the results of whether one would pay user charges, the driving force behind the choice of paying user charges, was the essentiality of the facility. Water came up as the top most priority. Another infrastructure that ranked is the sanitation sector; this include, infrastructure such as sewerage system, toilet facilities and waste collection.

Main Finding: Assessing the credit worthiness of the Assembly against the borrowing requirements, and financial vehicles available in the financial sector, the Accra Metropolitan Assembly, at present, cannot borrow directly from the capital market. However with its stature, experience and prospects, the Assembly can participate in the market through other intermediaries, who have the financial and institutional stature to be able to repay loans or bare the burden of repayment.

5.3 Policy Recommendations

The following are some of the recommendation that have been advanced in order to make borrowing for infrastructure development a reliable financing source and also to enhance the credit worthiness of AMA as a potential borrower:

5.1.1 Interest Areas and Financing Vehicles

Allocation of Viable Projects to Financial institutions to Finance: The Assembly will have to provide viable projects to the financial institutions The Assembly would have to provide its financing list using the criteria of economic returns and social needs. Those that are ranked highest would be sponsored through the long term debts, whiles those below the hierarchy would be funded through the Assembly's own revenue and government transfers.

Development of New Financing Vehicles: The financial institutions should develop new products which allow the Assemblies to provide, some equity instruments, and the need and demand, while a private developer and operator takes the responsibility of borrowing from the financial institutions. The contracts would be negotiated according to the investment made by the various participants, and can adopt the BOT, BOO models, depending upon the existing condition.

A Desk at the Assembly to oversee Transactions: In order to provide the requirements of the financial vehicles, the Assembly should establish a unit that would oversee its transactions. This Assembly should have an officer with a finance background located within the finance department under the finance officer. The contact person would be in charge of preparation of proposals for loan request and all other documentations that go with it. The officer in charge should have an oversight responsibility of all the infrastructural projects in the metropolis that are being financed through the capital market.

5.1.2 Credit Worthiness

Improve Internally Generated Funds: A) The increasing trend of own revenues in real terms would have to be sustained. This would be effectively done by implementing the property re-evaluation programme that was instituted and also ensure the payment of basic rates. B) In order to maintain the trend in fees, charges and fines and even increase it, the leakages in the system especially at the collection points should be blocked. This would also require databases of rate payers and also other practice like random checks on the rate payers with recorded collections.

Reducing Recurrent Expenditure: The recurrent expenditure should be well managed and should be brought to reasonable levels. The recurrent expenditure should make up less than 50 per cent of total expenditure. The Assembly should also embark on streamlining its labour force and ensure that those employed and paid by the Assembly are actually working. Special attention has to be given to procurement in general and purchases in particular.

Public Declaration of Assembly's Accounts: The reporting systems at the Assembly level should be open and transparent. Apart from the reading that is done to the General Assembly level, the Assembly should also publish quarterly reports in at least two of the dailies, especially the ones that are widely circulated.

Implementation of Audit Queries and Instituting Public Accountability System: It is also recommended, that the accounts of the Assembly's especially the Metropolitan Assembly be audited and queries made publicly. The Public Accounts Committee hearings can be organized for the Assembly. This would deter people from engaging in corrupt practices at the Assembly level. Corrupt practices should also be punished.

Inventory of the Assembly's Assets: Inventory of the Assemblies assets should be immediately conducted. This inventory must include, the market and force prices of the asset, the technical life and whether is a social or economic assets(which will answer the question of whether it would quickly change hand without public agitation or suffering) This would be useful in times of borrowing and especially when there is the request of collateral.

Presentation of Assets and Liabilities of Assembly: Again to ensure that the assets of the Assembly are presented, the provisions guiding the financial reporting of MMDAs should be reviewed, to include the presentation of the Assembly's Assets and Liabilities, differently from the income and expenditure.

Election of Assembly's officials: As a remedy to the problem of political interference the Assembly should have plans of fiscal autonomy; as fiscal autonomy is attained, political and administrative would also be attained. The long standing proposal of the election of the head of the metropolis should be implemented. This would ensure that it implements decision that in the good interest of the citizenry AND not just for political expediency.

Strengthening the Legal Unit of the Assembly: the legal unit of the Assembly should be strengthened and staffed with corporate lawyers as well, to be able to handle Assembly's representations in times of negotiations.

5.1.3 Credit Enhancement Techniques

These measures would provide a cushioning for the Assembly, in its effort at sourcing funding from the capital market;

Promotion of Intercepts: Provisions must be made for intercepts as credit enhancement measure; in this case government transfers to the Assembly would be intercepted to pay for debts in times of delays or defaults.

Indexing the Ceiling for Borrowing Against Own Revenue and Total Revenue: The legal provisions providing for the ceiling for borrowing should also be reviewed or amended. There should be a ceiling, but should not be absolute figures, since the economy of Ghana is subjected to high levels of inflations. The formular for the borrowing ceiling should be a function of a percentage of own revenue, plus an additional per cent from reduction in recurrent expenditure, plus an additional percentage indexed to an increase in government transfers. For example the formular may be 20 per cent of own revenue, plus 2 per cent of every 5 per cent reduction in recurrent expenditure, plus 2 per cent for every 10 per cent increase in government transfers. The percentage changes should be calculated in real terms.

Establish a Sinking Fund: the purpose of this fund for redeeming debts, instead of paying from current revenues. This fund would draw its resources from own resources, percentage of the margins from public service provision and other windfall situations.

5.1.4 Cost Recovery

In order to be able to recover cost when borrowed fund are invested into projects, the following recommendations should be implemented;

Providing Infrastructure that is an Essential: The willingness to pay user charges is high for infrastructure. The provision of the facilities should not only be based on the financial returns but also the essentiality of the facility. This would ensure that the payment is made without hesitation. In addition, the Assembly should make investment into water projects and sanitation facilities as most people are need of them.

Price Discrimination in Charging Fees: As income levels are varied and are inversely proportional to infrastructure demand; that is the low income earners rather need more facilities. The recommendation is made that in charging fees on infrastructure, the Assembly should adopt discriminatory pricing system, where lower income groups pay lower charges, and high income areas pay higher charges.

Main Recommendation: As the Assembly cannot directly borrow from the capital market, it would have to make use of private sector intermediaries. The Assembly can provide the infrastructure needs, equity and guarantee required and allow the private operators to take direct responsibility of borrowed funds. However in order to ensure that the Assembly also has direct access some future time, some credit enhancement mechanisms be applied and the Assembly ensures that it reforms its fiscal system.

5.5 Conclusion

The study explored the concept of private financing of infrastructure at the sub national level and sought to achieve the following objectives; the potential infrastructure the private sector would be interested in financing; the vehicles that would be available for the financing are the project and consortium financing, the credit worthiness of the assembly, cost recovery, constraints and challenges that would be associated with it. The research also sought to provide recommendation that would make the source a viable and reliable source of financing infrastructure.

Through the research it was found out that despite the high social demand, the financial institution wants to invest in projects that have economic returns. It was also found out that the financing vehicles were suited for infrastructure financing. In accessing the credit worthiness of the Assembly it was found out that the internally generated funds are increasing in real terms. However, own revenue forms less than 50 per cent of total revenue, instability of the various revenue heads, there is also high expenditure on recurrent items, and there are also leakages in its fiscal system.

On the side of the of cost recovery, the inhabitant on the metropolitan area are willing to pay user charges. And also Income levels are correlated with residential areas, with low income earners leaving in very poor neighborhoods with fewer infrastructures. Hence those who need the facility have less economic capacity to assess it.

The following recommendations were also made to remove the legal and institutional barriers and also promote the financing source as a viable financing option. The major proposal is to provide the project on the bases of economic returns and societal pressing needs. Another proposal is for the financial institution to develop new products to satisfy the emerging demand from the public sector. The Assembly is required to set up desk in the Assembly to oversee this new source of financing. Regarding, the credit worthiness of the Assembly, the research recommends that efforts should be made in increasing own revenue sources, whiles progressively reducing expenditure. It has also been proposed that the financial reporting and audit should take public dimensions and corrupt practices should be exposed and punished. Also in order to deal with the Assembly's inability to cover recurrent cost, there should be credit enhancement mechanism to make up for a potential risk. Inclusive in this, is the indexing of borrowing ceiling to own revenue, reduction in recurrent expenditure and increase in government transfers. There should be provision of intercepts and also the establishment of sinking fund.

And finally in order to ensure cost recovery, the infrastructure that are provided must be socially demanded, thus would make it easy to collect charges especially in the case of water and sanitation. And also the fees charged on infrastructure facilities should be discriminatory, that is the level of the charges should be correlated with income levels and residential zones.

In conclusion, it is possible the Assembly can participate in the capital market to source funding for infrastructure. However the Assembly, with its financial standing cannot directly borrow from the capital market for infrastructure. The Assembly, in the short term, should provide the needs of the Metropolis provide some level of equity or guarantees and allow the private sector participants to take the major burden of borrowing and repayment. This can be graduated over a period of five to ten years, while the Assembly makes its financial, institutional and legal reform to move towards the point of a direct participation. It must be noted that there is no good place in the country to start with this, than the Accra Metropolitan Assembly.

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Appendices

Appendix 1

Appendix 1a: The Composition of Internally Generated Funds

Revenue Sources	2003		2004		2005		2006		2007	
	Amount (GH¢)	%	Amount (GH¢)	%	Amount (GH¢)	%	Amount (GH¢)	%	Amount (GH¢)	%
Rates	12551926684	28.76	11946039028	23.94	11832512835	20.52	1535100.18	20.9	1,925,090	17.4
Lands	532565611	1.22	380097400	0.76	414398000	0.72	15159.2	0.002	23,084.32	.002
Fees and Fines	14961521473	34.29	18339120415	36.75	21937465486	38.04	2501218.73	33.97	3,523,270.29	31.9
Licenses	7940090288	18.20	9390819050	18.82	14164572612	24.56	2113691.07		4,175,295.42	37.8
Rent	2527646518	5.79	314970.1400	6.31	4631664000	8.03	982663.1	13.3	1,138,785.42	10.3
Investment income	204394490.8	0.47	32282233.78	0.06	2655517497	4.60	3397.77	0.004	12,467.27	.001
Misc	4918583569	11.27	666098.4652	13.35	2033581199	3.53	210883.58	2.8	259,918.51	2.3
Total IGF	4363672.8634		4989904.4178		57669711628		7,362,113.63		11057911.88	

Source: Trial Balance: 2003-2007

Appendix 1b: Comparison of the IGF and Central Government Grant

	2003	%	2004	%	2005	%	2006	%	2007	%
IGF	4,363,672.8634	43.1	4,989,904.4178	45.3	5,766,971.1628	37.6	7,362,113.63	46.7	11,057,911.88	44.
Central Government Transfers	5,752,624.0442	56.9	6,034,391.3672	54.7	9,585,509.8419	62.4	8,404,446.99	53.3	14,018,589.49	55.[illegible]

Source: Trial Balance 2003-2007

Appendix 2

Appendix 2a IGFs in Nominal and Real Terms

	2003	2004	2005	2006	2007
Nominal Terms	**4363672.86**	**4,989,904.42**	**5,766,971.16**	**7,362,113.63**	**11057911.88**
Real Terms	**3333846.07**	**4,401,095.70**	**4,913,459.43**	**6,589,091.70**	**9,648,028.12**

Source: Trial Balance, 2003-2007

Appendix 2b Growth of IGF in Nominal and Real Terms

Type of Change	2004	2005	2006	2007
Nominal	**14%**	15.6%	**27%**	**33.2%**
Real Term	32.01	**11.64**	**25%**	**46.42%**

Source: Author's Construct

Appendix 2c: Growth rates of Revenue heads

	2003	2004	2005	2006	2007
1. Rates	38%	-5%	-1%	22.92%	20.26%
2. Lands	95%	-29%	9%	-173.36%	34.33%
3. Fees and Fines	21%	23%	20%	12.29%	29.01%
4. Licenses	-15%	18%	51%	32.99%	49.38%
5. Rent	50%	25%	47%	14.05%	13.71%
6. Investment income	416%	-84%	8126%	-7715.48%	72.75%
7. Miscellaneous	-24%	35%	-69%	3.57%	18.87%

Source: Trial Balance, 2003-2007

Appendix 3

Appendix 3a: Coefficient of Variation of Internal Revenue Items.

Items	Coefficient of Variation
Rates	44%
Lands	44%
Fees, Charges and Fines	34%
Licenses	73%
Rent	70%
Investment Income	18%
Miscellaneous	65%

Source: Author's Construct

Appendix 3b: Composition of Expenditure

Source: AMA Trial Balance, 2003-2007

Items	2003		2004		2005		2006		2007	
	Amount (GH¢)	%	Amount(GH¢)	%	Amount(GH¢)	%	Amount(GH¢)	%	Amount(GH¢)	%
Personal Emoluments	19,323,207,955.90	19.3	25,985,579,729.14	24.4	33,302,794,508.57	24.2	3,518,357.14	24.9	3815265.65	17
Travel & Transport	5,387,316,769.57	5.38	5,701,829,471.32	5.36	8,514,540,779.22	6.19	1,196,025.47	5.9	810,524.29	6.
General Expenditure	3,698,067,726.28	3.69	4,910,550,095.10	4.62	7,047,054,002.81	5.12	1,719,302.09	3.6	900,192.47	8.
Maintenance & Renewals	1,124,877,309.57	1.12	1,466,339,996.53	1.38	3,665,453,226.03	2.66	441,878.83	32.6	550,846.34	2.
Miscellaneous	32,926,427,037.45	32.89	25,864,218,272.64	24.3	51,368,283,308.23	37.33	9,160,555.67	32.6	5,000,018.82	46
Plants & Equipment	2,390,340,295.25	2.39	3,454,469,339.81	3.25	0	0	0	0	0	0
Capital Expenditure	34,501,788,835.49	34.46	38,467,311,259.78	36.2	33,702,770,568.13	24.49	3,575,024.91	27.7	4,237,431.57	18
Other Capital (Dev) Exp.	761,865,137.50	0.76	471,171,294.75	0.44	0	0	0	0	0	0
Total Expenditure	**10,011,389.1**		**10,632,146.95**		**13,760,089.64**		19,611,144.11		15,314,279.14	

Appendix 3c: Recurrent Surplus or Deficit (Total)

Items	2005	2006	2007
Total Revenue	15,352,481.00	15,766,560.62	25,076,501.37
Total Expenditure	13,760,089.64	15,314,279.14	19,611,144.11
Surplus or (Deficit)	1,592,391.37	452,281.48	5,465,357.26

Source: AMA 2005, 2006 and 2007 Trial Balance

Appendix 4

Appendix 4a: Private Sector Participation in Infrastructure Provision Typologies

Private Sector Participation Option	Service Contracts	Management Contracts	Lease Arrangements	Concessions	Build-Own-Operate-Transfer (BOOT)	Reverse BOOT	Joint Ownership (mixed companies)	Outright Sale or Divestiture
Financing of investments	Public sector	Public sector	Public sector	Private sector	Private sector	Private sector	Private sector	Private sector
Financing of working capital	Public sector	Public sector	Private sector	Private sector	Private sector	Private sector	Private sector	Private sector
Contractual relation with users	Public sector	Private sector	Private sector	Private sector	Private sector	Private sector	Private and Public sectors	Private sector
Duration (years)	1-2	3-5	5-10	20-30	Time needed to retire debt	Time needed to retire debt	Indefinite or fixed	Indefinite
Responsibility for setting rates	Public sector	Public sector	Contract	Contract	Contract	Contract	Public / private	Regulated private
Method of payment	Work done/ unit price	Cost-plus and productivity bonus	Rates price	Rates	Rates	Rates	Rates	Rates
Method of recovering public expenditure	Rates	Rates	User overcharge	Not applicable	Not applicable	Annual fees by private firm	Rates	Sale price
Main objective of PSP	Improve efficiency	Improve efficiency	Improve efficiency	Mobilize private capital	Mobilize capital and efficiency	Improve efficiency	Mobilize capital and efficiency	Mobilize capital and efficiency
Ownership	Public sector	Public sector	Public sector	Public sector	Private then public	Public then private	Private and public	Private sector
Financing	Public sector	Public sector	Public sector	Private sector	Private sector	Public sector	Private and public	Private sector
Management	Public sector	Private sector	Private sector	Private sector	Private sector	Private sector	Private and public	Private sector
Risk	Public sector	Public sector	Public and private	Private sector	Private sector	Public and private	Private and public	Private sector

Source: Copied from (Panayotou, n.d): Partially based on Idelovich and Ringskog (1995).

Appendix 4b

Georgia: Impact of Private Participation in the Power Sector

Tbilisi the capital of Georgia experience constant supply when private sector took over its power supply. Blackouts which were rampant during the time had been managed publicly. The efficiency in service production improves the quality, for example water is likely to get contaminated when the flow is constant, than when it is intermittent. The efficiency mentioned early would reduce re-investment which is usually from government coffers, reduces expenditure on emergency investment (in terms of water and electricity) and leads ultimately to the reduction of the pressure on the fiscal resources. The private sector can improve collection performance even in very difficult situations. In Georgia, the privatized utility serving the capital Tbilisi, has seen losses fall and collections, as well as bills paid in cash, rise since privatization. At the same time, the collection performance of the remaining publicly operated utilities has continued to decline (World Bank, 2002)

Appendix 5

Box: Argentina, Private Participation

Argentina, Buenos Aires Concession for Water Supply and Sanitation- The greater Buenos Aires water supply and sanitation system, operated by a public company was plagued through the years by problems common to public water utilities throughout the developing world. Coverage was only 70% for water supply and 58% for sanitation, while only 5% of the waste water received any treatment before dumping into natural water bodies. The service was of poor quality and unreliable. Infrastructure was poorly maintained and unaccounted-for water was as high as 45% of the water produced. At the same time, population growth and urbanization were expanding the demand for additional coverage. The cost of rehabilitation of the deteriorating system and expansion to reach 100% coverage was estimated at several billion dollars over the next 20-30 years, which was clearly beyond the capacity of both the utility and the state to mobilize. In 1993, the government of Argentina privatized water and sewage services for Greater Buenos Aires as part of a massive privatization program that began in 1990, with World Bank The private sector participation option chosen for water and sanitation was a 30-year full concession that allowed the assets to remain under public ownership while the operation, maintenance, rehabilitation, expansion, and wastewater treatment were transferred to a private concessionaire. After a successful process of preparation and bidding, the concession was awarded to *Aguas Argentinas*, a consortium of foreign and local firms led by *Lyonnaise de Eaux-Dumez*, that offered a 27% discount to the prevailing public water tariffs. During the first three years of operation, accelerated rehabilitation of the system led to a reduction of water losses from 45% to 25%, and coverage increased by 10% with no increase in production. The population receiving sewage services increased by 8%. Prices were reduced initially by 27% but increased by 13.5% in 1994 to further accelerate rehabilitations provided in the contract clause; still, water prices are 17% lower than those charged by the public utility. Crampes and Estache, 1996, Idelovitch, Emanuel and Klas Ringskog, (1995), and Annez, (2006).

Appendix 6

Cases of Private Participation in Infrastructure at Sub National Levels:

Ghana: Private Participation in Water and Sanitation at the Sub national level

Private Participation in infrastructure has been limited in Ghana; however there have been a few strides in that direction. At the municipal level sanitation and waste management is done by the private sector. Currently the Zoomlion has taken over most of the contracts of waste management all over the country. The finances of these activities are normally done through the central government, usually from the government transfers. Other private operators are involved in the provision of toilet and waste disposal services in the cities and urban areas. In some cities, private individuals provide toilet and parking lots or spaces. These private individual investors are private provide the initial capital, capital for expansion and maintenance and charge user fees. The relation they have with the local governments is regular inspections and also the payment rates to the Assembly. In rural districts and small towns the private sector are involved in the provision and management of water supply systems. This is called the small town's water projects. The private participants provided with management contracts which is subjected to review.

INTERVIEW GUIDES FOR PRIMARY DATA COLLECTION

Accra Metropolitan Assembly-Planning Officer

- What is the infrastructure need of the metropolis? Demand Against Supply
- Have you ever borrowed for infrastructure provision?
- Do you think the Assembly can borrow for infrastructure?
- What kind of infrastructure would you advice the Assembly to use the borrowed funds on?
- What do you think are the urgently needed infrastructure in the Metropolitan Area?
- How do you think such infrastructure should be planned for?
- How should it be operated and maintained?
- What is the commitment of the Assembly toward involving private sector in service provision?
- What are the examples of private participation in infrastructural service provision?

Accra Metropolitan Assembly-Finance Department

- Have you ever borrowed for infrastructure provision?
- Is there a possibility of borrowing for such a use?
- Have you considered it?
- Do you think it would be viable?
- Which infrastructure would you advice the funds is used for? What are the reasons for your choices?
- Do you have an infrastructure which is being managed privately?
- What are the levels of returns? What do you think accounted for this?
- What financial institutions are potential financiers?
- Can the Assembly with their level of revenue and expenditure patterns support borrowing?
- What are your experiences with charging user fees?
- Are they willing to pay? Reasons for attitude towards payment?
- Does the Assembly's internally generated fund cover operating cost?
- What are the assembly's total assets?

- What is the legal provision relating to borrowing?
- What are the borrowing ceilings?
- What other provision are there?
- What are the processes of approval?
- How long does the approval take?
- Have you ever gone through the process of approval?
- What dealings do you have with financial institutions?
- Who are the Assembly's Bankers?
- What services do they provide the Assembly?

Financial Institutions

- What types of infrastructure would your institutions want to finance in metropolitan areas?
- What are the main reasons for the interest area?
- What are the financing vehicles available for financing the preferred infrastructure?
- Do you have programme towards the credit enhancement of institutions you regard as potential borrowers?
- What are the upper limits you have?
- What are the borrowing requirements?
- Would you prefer lending with government guarantee or lending on the strength of the Assembly? Give reasons for choice
- How do you monitor such projects?
- Do you want to keep all in debt or have equities?
- What role would the institution want to play in management of the projects they fund?
- Do you have a history of financing such infrastructure be it at the national or sub national levels?
- What challenges do you foresee in borrowing to the metropolitan Assembly for Development?

Rate Payers in Metropolis (Cost Recovery)

1. What infrastructure do you need in your area?
2. Would you want to pay for it through user charges when is provided?
3. Do you pay for any public infrastructure in your locality?
4. How do you rate the charges? High or Low
5. Which of the taxes do you pay for to Assembly? Property Tax, Business Taxes etc
6. How do you rate the Taxes? High or low
7. Would you want to pay for the infrastructure through user charges or through general assembly taxes? What are the reasons for the choice?

CHECKLIST FOR SECONDARY DATA COLLECTION

Data from Accra Metropolitan Assembly

- Trial Balance as at December (2002,2003,2005, 2006 and 2007)
- Revenue Projections
- Performance of Revenue Heads
- Inventory of Assembly's Assets
- History of dealings with private financial institutions
- Financial reporting systems
- Other responses to be obtain through interviews with Planning, Finance and Budget Officers, and any other officials the Assembly concerned.

Data from Financial Institutions

- Infrastructure financing history of the institution at the national and sub national level in the country
- Financing vehicles available for financing infrastructure such as, Parking lots, Markets stalls, Water Systems, Power Plants, Sanitation Facilities, Recreational Facilities, Educational Facilities, Health Faculties and many others
- Borrowing requirements in assessing financing for the above
- Foreseeable constraints and challenges in borrowing to a Metropolitan Assembly
- Policy advice to Metropolitan Assemblies on how to position themselves to assess finance for infrastructural development
- Other responses to be obtain through interviews with some specific officials of the Institution.