

ASHESI UNIVERSITY COLLEGE

**AN ASSESSMENT OF THE APPROPRIATENESS OF THE PROPERTY
MANAGEMENT PRACTICES EMPLOYED BY THE URBAN ROADS SECTOR
IN GHANA: A CASE OF THE ACCRA METROPOLITAN AREA.**

By

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requirements for the award of Bachelor of Science degree in
Business Administration

APRIL, 201

DECLARATION

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:.....

Candidate's Name:.....

Date:.....

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by Ashesi University College.

Supervisor's Signature:.....

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Date:.....

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ABSTRACT

Property management is a concept that deals with the daily management of a real property to add value to it throughout its lifespan. Real property, including buildings, roads, and land, need to be appropriately managed to ensure the developers obtain maximum returns on investment. Roads are a public real property which not only serve as a means of transportation but also serves as a major tool for the development of an economy. This real property will thus need to be managed properly to ensure a nation optimizes benefits from its road network.

The road network in Ghana has been plagued with potholes, weak bridges etc. due to poor management. The question that arises is why this is the case. This research study was thus undertaken to evaluate the property management practices adopted by the Ghanaian urban roads sector. The scope of this research was urban roads within the Accra Metropolitan Area. The research was qualitative in nature and adopted an evaluative strategy. Data was from both primary and secondary sources and collection was done via a survey and document study. Analysis of collected data was done using descriptive and content analysis.

From the data, it was found that the main cause of the current state of property management within the urban roads sector was the lack of funds to undertake the required road management activities. Recommendations were made to assist the sector raise the necessary funding so the urban roads within the metropolis can be appropriately managed.

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CHAPTER 1

INTRODUCTION

1.1 Introduction to the chapter

A real estate property by definition is “Any property that is attached directly to land, as well as the land itself” (Investopedia Dictionary, 2011). Real estate properties include buildings, roads, railways, and natural resources like oil, gas, mineral resources among others. It is important for properties to be managed such that, its value is optimized throughout its lifespan. A way of ensuring this is by employing the management triad: Property Management, Asset Management and Portfolio Management (Miles et. al, 2007). This can be undertaken at the post-construction stage of the property’s lifespan where managing the property helps in improving their value.

Property management deals with the daily management of any particular property. Asset Management, on the other hand, is concerned with a group of properties while Portfolio Management looks at managing multiple properties at the strategic and dispositional level (Miles et. al, 2007). Property management has been established as a healthy way of increasing the value and benefits of real estate properties (Miles et. al, 2007), thus the need to have a functional property management system in place for any property owned by an individual, a group or a country.

Roads are a capital intensive publicly owned properties hence should be managed efficiently at the post-construction stage to ensure optimization in use. Roads have become more than linking channels between towns or cities; they have become a tool for development (International Road Federation, 2011). With the consistent evolvement of urban development from small convenient communities or settlements to well-planned towns and cities (Arbury, 2011), the essential role played by availability of roads cannot be downplayed. Roads during this urban development revolution have now become a development tool as they now “underpin the businesses, agriculture and trade which provide the jobs that lift nations out of poverty” (International Road Federation, 2011). There is therefore the need for efficient post-construction management to monitor the actual impact of this development tool, so as to ensure it is yielding the required socio-economic benefits and not problems.

Thus, this study has become relevant because the use of wrongful property management practices would reduce or eliminate the socio-economic benefits the economy stands to gain from its road networks.

1.2 Background

The management of roads in Ghana is the responsibility of the Ministry of Roads and Highways, which performs this duty through 4 main departments; namely the Department of Feeder Roads, Department of Urban Roads, Ghana Highway Authority and the Ghana Road Fund Secretariat (Ministry of Roads and Highways, 2010). The first three institutions are

responsible for the pre and post construction activities related to all feeder roads, urban roads and highways respectively. These departments of the Ministry manage their designated roads through the various metropolitan, municipal and district assemblies within the country.

The basic means of performing post construction management activities for roads is the Ghana Road Fund which was established by law in the year 1997 (Dua-Agyeman, 2006). Almost a decade after the establishment of this fund, an audit report of the fund shows a negative balance of ₵37 billion (Dua-Agyeman, 2006). As a result of the fund's inadequacy to support the roads sector, the sourcing of funds from various international bodies has become the order of the day (Kumasi Metropolitan Assembly, 2011). Although research by the World Bank Group (2008) has shown that transportation and its related sectors play a very significant role in social development, it has also been established that it contributes to the overall development of the economy. The lack of money limits the performance of many activities and that of road management cannot be eliminated.

Economic data from Trade Economics (2011) on Ghana indicates that transportation in Ghana is largely by vehicular movement which occurs on roads. The 2005 budget of Ghana recorded that 3% of the country's budgeted revenue of about ₵35,672.5 billion, would be allocated to the road fund in the year 2006. This emphasizes the fact that, though the funds allocated to the Road Fund may not be enough, some remittances are made

to the fund annually. It is expected that existing roads would be maintained properly so they do not develop potholes and cracks, yet it seems this is not being done. Observing the current state of roads in the urban centers, a question is raised as to what the ministry is doing about it.

1.3 Problem statement

Roads have over time become an essential part of every society and as well a meaningful resource for use by people. Ghana being no exception has instituted varied mediums to help her attain more from this sector. One such medium is the establishment of a government agency, the Ministry of Roads and Highways, to manage road developments nationwide. The Ministry has four departments: the Department of Feeder Roads, Department of Urban Roads, Ghana Highway Authority and the Ghana Road Fund Secretariat (Ministry of Roads and Highways, 2010), to aid with the execution of its functions.

To manage the challenge faced by roads in Ghana, past and present governments have put in measures to remedy this situation. An example of such an effort can be seen in the press statement released by the Ministry of Roads and Highways in February, 2010. In this statement, the government outlined its projects and programs regarding road networks in the country, which included road maintenance. Contrary to the outlined projects, very few of these projects were undertaken and these constraints were attributed to the lack of funds in the roads fund (Government of Ghana Official Portal, 2011). Although governments, past and present, have made some effort,

roads are still plagued with potholes, cracks, eroded sections of the roads, amongst others.



Figure 1: The story of bad roads in Ghana

In addition is the existence of deteriorated bridges that have now become death traps all around the country (Modern Ghana, 2009). This problem appears to go beyond the efforts being made by governments for funds to construct additional roads or rehabilitate bad ones in the country. The current condition of the roads and highways in Ghana has to be tackled from diverse areas, and property management is one of such areas.

This research is being conducted to address the problem in the Ghanaian roads sector. This research seeks to assess the efficient use of

property management practices in the sector, identify potential gaps hindering its progress, and make appropriate recommendations to this effect.

1.4 Research Questions

In addressing the identified problems, some important questions would need to be answered. These questions include:

1. What are the ideal property management practices that should be used in the road sector?
2. What kind of property management practices are adopted by the road sector in Ghana?
3. Are the property management practices adopted by the road sector adequate? Why?
4. What property management practices can be used within the road sector to bridge the identified gap between ideal practices and the present practices being used?

1.5 Aim and Specific Objectives

The aim of this dissertation therefore, is to assess the efficient use of property management practices within the public urban roads sector. In order to achieve this aim, the following specific objectives will be addressed:

1. To identify the ideal property management practices required in road management;
2. To identify the property management practices being used in the public urban roads sector in Ghana;

3. To evaluate property management practices of the Ghanaian urban roads sector; and
4. To recommend more appropriate property management practices that will help improve the management of urban road networks in Ghana.

1.6 Scope of the study

The practice of property management in the management of properties is one that cuts across both the public and private sectors within a society (Miles et. al, 2007). This dissertation focuses on the public sector of Ghana, with particular emphasis on the urban roads network within the Accra Metropolitan Area (AMA) of Ghana. The public sector was selected over the private sector because it will benefit the society at large. The research scope was further reduced to the Accra Metropolitan Area (AMA) because it covers a wide range of urban areas in Ghana, of which the nation's capital is included. Thus, this research focuses on; enhancing the country's aim of reducing the economic deficit of Ghana by assessing the management activities being used and remedying the inefficient and uneconomical activities with more efficient and economical solutions.

1.7 Research Method

Data was collected from both primary and secondary sources to help with the chosen research method which is an Evaluative research. The primary data outlined the current conditions and situations of Ghanaian Urban Roads through interviews while the secondary data reviewed existing

literature on the established road management practices as well as the study of some selected road documents. Primary data was sourced through a survey which comprised mainly of semi-structured interviews. Secondary data sources included economic reports on costs and revenues from the transportation sector. These reports included national budgets for Ghana and road documents of some urban roads within the Accra Metropolitan Area that contained information on pre and post-construction management activities implemented. Included in the secondary data, were documents on property management that outlined the ideal property management practices required in this sector.

1.8 Justification/ Impact

1. This research is necessary due to the potential strain the gap between the current practices of property management in Ghana and the expected practice of the sector can put on the economy.
2. It also provides the Ghanaian populace with adequate information about post-construction management within the road sector. This will help improve the policy formulation and decision making with respect to constructing and managing roads.
3. The Ghanaian economy is migrating from an under-developed economy, hence the need to adopt practices that can support this growth. Appropriate property management practices in the public sector will be key to such a migration. This research will educate the general populace on appropriate property management practices.

1.9 Thesis outline

This research would roll out in 5 main stages and these stages would be captured in various chapters, which are outlined as follows:

Chapter 1 Introduction: This chapter introduces this dissertation by giving a background to the research area. The questions, aim and objectives that guide the research is outlined. In addition, an overview of the proposed research method, scope of study as well as data collection tools is also given.

Chapter 2 Literature Review: In this chapter, a theoretical framework was developed from reviewing existing literature on what property management entails as well as its role in the roads sector. Again, it considered the current state of road networks in Ghana and how this is affecting the country. This framework also evaluated the possible benefits that the incorporation of appropriate property management practices into the sector would yield in the near future. Afterward, a conceptual framework was developed based on the theoretical framework to outline the problems this dissertation addresses.

Chapter 3 Methodology: This chapter introduces the various research methods adopted for this research. Included in this chapter are important operational definitions, the various data collection tools used, how to analyse research findings among other methodological related issues.

Chapter 4 and 5 Findings and discussions:

This section of the report identified the property management practices adopted in Ghana in two chapters. Chapter 4 contains findings on data

gathered through semi-structured interviews conducted with professionals within the urban roads sector. While chapter 5 reports and discusses the findings from reviews conducted on economic reports and budgets on provisions made on management practices for the roads sector. This helped with ascertaining the current state of affairs of the road sector and as well serve as a guide for making recommendations.

Chapter 6 Conclusions and Recommendations: This chapter contains a brief summary of the pertinent research findings from the previous chapter to serve as a guide to draw conclusions from the research conducted. Also, workable recommendations are made to aid the urban roads sector enhance its road management practices.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction to the chapter

Going through this chapter, the theoretical concepts for this research study are introduced and explained to provide the needed background to the purpose of this research. Also, some relevant theories used as the basis for evaluating the current property management practices used in Ghana against the ideal practices are introduced and further explained. In sum, this chapter introduces the theories on which this research paper is based.

2.2 Defining Property Management

Management is scientifically defined as the co-ordination of resources through the process of planning, organizing, directing and controlling in order to attain set organizational objectives (Gbadegesin & Ojo, 2011). With the diverse nature of management, it has become a universal concept that requires of every manager to perform identical functions (Gbadegesin & Ojo, 2011), in any formal organization whether profit-making or nonprofit-making (Robins et. al, 2002). The practice of management being universal makes it useable across the different disciplines of an organization.

Gbadegesin & Ojo, 2011, define the process of managing properties as involving the establishment of goals, objectives and policies and the

implementation of strategies to achieve the set goals and objectives with respect to a particular property. The achievement of the set goals and objectives are essential in property management because the development of the property is fundamental to the existence of life (Gbadegesin & Ojo, 2011). Managing properties involve a variety of activities to be performed by the property manager in order to reach the ultimate aim of adding on to or maintaining property value.

As outlined by Miles et. al (2007), the required roles of property management are tenant relation and retention, rent collection, managing operational expenses, financial reporting/record keeping, maintenance of property, crisis management, security and safety management, and finally public relations . These property management roles in tend form a measurement tool for evaluating whether or not a property is well managed.

2.3 Defining Property Management in the Roads sector

The application of property management as defined above relates to all kinds of properties. Property by definition is any real asset that is land, as well as developments on or attachments to the land (Investopedia Dictionary, 2011). Such properties include roads, which is the focus of this dissertation, buildings, bridges, natural minerals and many others. Thus, the application of property management cannot only be restricted to the management of buildings, but to every other type of real property.

The categories of property management practices employed within the roads sector across regions, municipalities or metropolis of Ghana are outlined as follows (Kumasi Metropolitan Assembly, 2011):

1. Conducting routine and periodic maintenance of road networks
2. Performing minor rehabilitations and upgrades of roads as necessary
3. Toll collection at the designated toll booths of the road networks
4. Provision of user services such as traffic management and control
5. Ensuring security and safety on roads through the erection of road signs and warnings, the construction of speed ramps, the provision and management of working traffic lights or wardens, among others.

2.4 The case of Property Management Ghana

The Property Management industry in Ghana is relatively young, and has recently started to pick up as a professional interest (Nyarko, 2011). Until recently, when the focus shifted to include the management of privately owned commercial and multipurpose properties, the management of public sector properties was the industry's focus (Nyarko, 2011). Though the industry's focus in the past was mainly on public sector properties, these properties are not managed any better. Roads are one public real estate property which should be managed properly due to the benefits to the national economy and contributions to national development.

The Property Management industry in Ghana though young and small, is rapidly growing and this is as a result of the continuous political stability and oil find of the country (Ampong, 2011). A factor like the oil find in Ghana

has increased the need for not just constructing new properties within the country but more importantly the management of existing ones. The need for managing existing properties is because it is more cost effective and efficient as opposed to the construction of new ones. The management of existing properties like roads reduces national problems such as congestion in and migration to city centers like Accra, Kumasi, among others.

Also, having well maintained roads will make it possible for investors to settle across the country and therefore evens out the spread of investments around the country (Broll Ghana, 2011). Having investments spread around the country also enhances the current stability the country enjoys and this gradually attracts bigger and multinational investors to both the industry (Ampong, 2011) and the country.

2.5 The case of the Ghanaian Roads Sector

The management of property in Ghana, especially roads, is not very well regulated (Agyepong, 2011). An example of this unregulated nature of management can be seen in how roads are managed under the Ministry of Roads and Highways. Within this ministry, there are three (3) different authorities that are tasked with the management of roads; that is the Ghana Highways Authority, Department of Urban Roads and Department of Feeder Roads. While the Ghana Highways Authority manages highways, the Department of Urban Roads and Department of Feeder Roads manage urban and feeder roads respectively (Heggie, 2010; Aidoo, 2011).

The current condition of the Ghanaian roads sector indicates that some property management practices are performed, but it is not giving back its optimum contribution to the economy. An article from the Ghana News Agency (2011), buttresses the insufficient return from the Ghanaian Road Sector. The article states that Ghana over a period has been accumulating huge debts on road construction, and currently has to rely on “long term financing options in-order to carry out maintenance works”. In addition to the debts being incurred by the country as a result of the poor management of funds allocated for road maintenance, the country also loses economically her potential income from other sectors. Such a sector is the agricultural sector which suffers the immobility of its agricultural resources and produce like cocoa beans and food stuffs to the market centers (Duffour, 2009).

2.6 Theoretical Framework

A key output of a research by Angelides (1999) on investigating the ineffective ways by which organizations operate within the public sector, was the “Traditional Business Model”. This model basically outlines the three unhealthy orientations through which the manner in which a business is run can harm the progress of the business or organization. He discussed three orientations: Production orientation, Fragmented Control and the Sequential approach.

The production orientation involves concentrating on the resources of the business with a sole focus on production. As part of this business orientation, very little attention is paid to other aspects of the business which

may be of necessary to its growth. The second orientation deals with the problem of excessive delegation, which makes it difficult to regulate the affairs of the business. The Sequential approach comprises the existence of varied systems within the business organization which through which work is done. According to this model, having such a variety of systems in place limits the standards of getting work done; especially the limitation of identifying possible constraints that affects the effective running of the business organization. (Angelides, 1999).

The Ghanaian urban roads sector would be assessed to determine which business orientation is present in the sector.

2.7 Conceptual Framework

From the reviewed literature above, roads have been established as a major contributor to economic development. Yet the case of the Ghanaian roads sector does not reflect the true value this sector is expected to contribute. This problem can be attributed to a diverse number of causes, which this research study seeks to find out. In understanding the actual causes of the present gap in the sector, research had to be conducted to evaluate the level of delegation within the sector as well as the current practices being used in performing its activities.

This dissertation would probe to establish the applicability of the fragment control orientation of the Traditional Business model to the urban

roads sector; as well as the potential causes of the current gap hindering the activities of the sector.

2.8 Conclusion

This dissertation will borrow from the theoretical position of Angelides (1999) and Gbadegesin & Ojo (2011), to evaluate the Ghanaian urban roads sector for potential gaps in its activities. This evaluation is to identify the gaps existing between the current road management practices used in Ghana and the ideal management practices required of the sector. This evaluation is being done in order to define a means for the Ghanaian Roads Sector to break away from the vicious cycle the sector finds itself in and improve upon its property management practices as a body.

CHAPTER 3

METHODOLOGY AND METHOD

3.1 Introduction to the chapter

This chapter introduces the research strategies adopted for this research study as well as the research tools and methods used. Justifications for the selected research approach, methods, and etcetera are elaborated upon. Also, the mode of data collection and analysis, as well as how the research sample was selected are all discussed in detail.

3.1 Operational definitions of variables

The relevant definitions that this study makes use of are as follows:

Property: Any structures or improvements attached to land which are not movable are considered real property. Such improvements or constructions found on land include roads, housing structures, and office complexes among others. Natural resources such as oil, gas and timber also qualify, because they are considered to be part of the land, (Investopedia Dictionary, 2011). The focus of this study is roads which are a real property. This classification of roads as real property is because roads are not just an immovable part of the land, but relevant improvements on the existing land that make inland passenger travels possible.

Property Management: Property management is the day-to-day administration of the operations of property, either on or off the site of the property. Such operations include rent collection, tenant services, leasing renewal negotiations, maintenance of the property, security and adherence to regulatory requirements and in some cases, the marketing and leasing of the property (ING Real Estate Investment Management, 2011). In managing roads, activities that need to be undertaken include: toll collection, provision of road-user services such as traffic management, routine and periodic maintenance of the roads, minor and major upgrades of roads and road security and safety issues such as erection of road signs and warnings, construction of speed ramps, etcetera.

Urban road: This class of road forms the primary network for the urban area as a whole and has high vehicular movement, restricted access and fairly high speeds. Also, all long distance traffic movements to, from and within the city are focused on such roads. (Annexure, 2011).

3.3 Research Strategy

There are four (4) main study strategies that can be adopted in conducting and analysing research studies. They are descriptive, explanatory, exploratory and evaluation researches. In this section of the chapter, a brief description of each method is given with the chosen one for the study selected and justified.

Descriptive research is conducted for studies that aim at documenting existing conditions about a specific topic or area (Trochim, 2005). According

to this author, the research conducted gives a vivid description of exactly what is happening in a chosen area and eliminates any strings of subjectivity from the researcher. With this research method, research tools such as observations and data studies are used to achieve this goal (Trochim, 2005).

Using the exploratory research strategy involves identifying relations between two or more variables and how they impact each other (Trochim, 2005). Using this method helps in determining the relationships that exist between the variables involved in the research and what reasons are behind this relationship. In exploring the various variables to establish the necessary relationships existing, tools like surveys, questionnaires, or case studies can be used (Trochim, 2005).

When conducting an explanatory research, the aim is to enlighten end users on the cause and effect relation between two or more variables (Trochim, 2005). Using this method requires that the research establishes whether a variable or more is a cause of the other or more variables in the research. This method is also known as the Casual Studies (Trochim, 2005).

In evaluation research, the study is to assess or value a situation to identify information about what really occurs within the area being studied (Trochim, 2005). With this type of study, a diverse range of methods can be used to achieve the set aim of the research. Since different evaluations would require different tools, it becomes more relevant to have the research details define the required tools.

3.4 Choosing a Research Strategy

The research strategy chosen to conduct this research is the evaluative research strategy. This research strategy was chosen purposefully based on the element of assessment found in this study. This study purposes to conduct an assessment of the property management practices employed by the public urban roads sector in the Accra Metropolitan Area. Assessing these practices defines the success or failure of the present practices being used, and assist in the structuring of future sustainable practices for the study scope; and hopefully for the entire sector.

Under this strategy, two research methods: document study and a survey, specifically interviews, were employed. The Document study was conducted through the review of 'road plan' documents on some urban roads and specific documents on road management within the Accra Metropolitan Area (AMA), collected from the Department of Urban Roads. Also reviewed were the 2008 – 2012 national budgets of Ghana. The review of the national budgets was aimed at finding the annual allocations made to the sector and the respective revenue contribution from the sector to the country's economy annually.

The 'road plans' reviewed included details of the road design, pre and post road construction management, and the contractors and authorities responsible for these roads. The purpose of this review was to identify the provisions made for the management of these urban roads before and after construction. Using this specific research method aided in determining the

plans and provisions made for road management activities before and after these urban roads are constructed.

The second research method, interviews, was aimed at gathering information on the ideal property management practices that would be of benefit to the Ghanaian Urban Roads Department from respondents. Semi-structured interviews were conducted with the sampled respondents from the population of experts in both the property and road management sectors. This research method adopted assisted in reaching specific solutions to be recommended to the responsible authorities to help remedy the observed mis-management of urban roads in the Accra Metropolitan Area.

3.5 Target population

With the specific focus of this research study, the targeted population for this study included all Property Management and Urban Roads Management experts in Ghana. These 2 sectors were chosen due to the population range: experts, needed for this study. This range of experts was selected so as to help select a representative sample eventually for this paper.

3.6 Sampling Strategy

The sampling technique used was Snowball Sampling, under the Purposive Sampling strategy (Trochim, 2005). Purposive sampling strategy was deemed as ideal because respondents were selected based on their knowledge in the area of study: property management, urban road

construction and management, or both. With this specific purpose, the sampling started with the selection of an expert in the urban roads sector for an interview. From there the Snowball Sampling strategy rolled out by feeding on the expert knowledge and networks of the identified respondent to recommend other seasoned experts and/or professionals to interview.

The initial sample selected was from institutions in the Urban Roads sector: the Department of Urban Roads and its parent ministry, the Ministry of Roads and Highways; as well as renowned property management companies in Ghana. These professionals provided information to help in identifying the current practices being used as well as their efficiencies and inefficiencies to the Ghanaian economy. This information also touched on the ideal property management practices related to the Ghanaian Urban Roads sector; and selecting the most efficient, sustainable and economical property management practices for the Ghanaian Urban Roads Sector and economy at large.

The experts from the property management sector formed a part of the sample because this study sort to find out not just the best property management practices but those that would work and thrive within the Ghanaian context. This is to help in properly defining recommendations at the end of the dissertation.

3.7 Data Collection

In collecting primary data for the research, semi-structured interviews were conducted. A semi-structured interview ensured that, though there was

an interview guide, the interviews were not limited to just the structured questions. Additional relevant information which was realized during the interviews was asked. The main tool for collecting data therefore was the interview guide contained in Appendix 1 of this report.

As part of the data collection process, nine (9) professionals across both the property management industry and the urban roads sector were sampled. Out of this total, one (1) of the sampled respondents was from the Ghanaian property management industry and the remaining eight (8) from the urban roads sector. This bias toward the urban roads sector occurred due to the technicality of the study focus, as well as further recommendations being directed toward the urban roads sector as opposed to the property management industry. Out of nine (9) respondents obtained for the scheduled interviews, only six (6) were available for the purposes of this research study; out of which five (5) respondents were from the roads sector and the remaining from the property management sector.

3.8 Data Analysis

In analysing the data collected, the following analytical methods were used: Descriptive Analysis and Content Analysis. Descriptive analysis is an analytical approach used in describing conditions, populations or a phenomenon of a qualitative research study. Using this method of analysis involves the identification of distinct patterns, relationships or themes describing the research subject being studied (Hall, 2012). Content analysis on the other hand, is used in the analysis of documents and texts seeking to

quantify qualitative research data systematically using predetermined categories of the research study (Bryman, 2004).

These methods of analysis were chosen based on the nature of the research: an evaluation of the existing road management practices using ideal property management practices of roads as the benchmark. These methods helped facilitate reporting on and evaluation of the practices within this sector. In order to give a better report on what is being done within the Accra Metropolitan Area, a description of the research findings would be the best examination of the actual conditions in the sector; hence the descriptive analysis.

The choice of Content Analysis was for the purpose of finding out more details of the existing gap and not just to report on the data gathered from the sampled respondents. This is to enhance the evaluation conducted on the findings of this research. Content analysis was used in analysing the various themes in this research study to aid in comparing the current practices used in the sector against the ideal practices; which allowed room to make accurate and doable recommendations as solutions. These solutions would be designed for the Ghanaian Roads sector, especially the Urban Roads sector. Thus, the choice of Descriptive Analysis and Content Analysis as the ideal data analysing methods for the data gathered in this research paper.

CHAPTER 4

FINDINGS AND DISCUSSIONS OF PROPERTY MANAGEMENT PRACTICES OF URBAN ROADS SECTOR IN GHANA

4.0 Introduction to the chapter

In this chapter, the data obtained from the interviews conducted are outlined and discussed in relation to the various aspects of the research aim. An evaluation is conducted in this chapter by comparing the existing practices to the ideal practices identified in the literature search and conclusions drawn. The chapter summarizes the nature of property management in Ghana and the Urban Roads Sector as was gathered from the primary and secondary sources, as well as how it can be enhanced to meet future systems and demands.

4. 1 Existing Property Management practices in the Urban Roads Sector

4.1.1 Understanding of Property Management

The general understanding of Property Management (PM) among the respondents is the management of real estate properties by either an individual person or a contracted firm besides the owner. As part of performing PM practices, the practice of maintenance on the property is one crucial role that has to be performed. In PM, the property managers are not

just responsible for the management of a single client's property, but may manage more than one client's properties.

4.1.2 Understanding of Urban Roads Management

The management of urban roads, just like that for any other property or asset, is aimed at managing and maintaining for optimized usage. As part of urban roads management, systems and policies are drawn up and put in place in order to ensure that the most effective management practices are adopted. Some authorized bodies or authorities, in this case, the Department of Urban Roads (DUR), are put in charge to ensure that the best is obtained from the management of these roads.

4.1.3 Responsibility of the Urban Roads Sector

The urban roads sector is under the auspices of the Ministry of Roads and Highways. It has the responsibility of ensuring that, urban roads are in the best of conditions for use. The responsibilities of this sector include:

1. Overseeing urban roads construction;
2. Setting up safety policies to manage urban roads;
3. Adopting practices to maintain and manage urban roads;
4. Monitoring the urban roads to ensure they are in safe conditions for use; and
5. Conducting maintenance exercises on the existing urban roads.

4.1.4 The management practices adopted by the Urban Roads Sector

4.1.4.1. Practices employed nationwide

The current management practices employed by the Ghanaian urban roads sector generally covers the assigned responsibilities of the sector as well as some others. As the responsible authority of urban roads management, the DUR currently undertakes a number of management practices nationwide. These practices include:

1. Administering the construction of urban roads across the country;
2. Repairing road damages and ensuring that the urban roads are in good usable conditions;
3. Institution of traffic road safety measures for user safety at significant locations on the urban roads;
4. Education of the road users on the effective use of roads and road signs;
5. Performance of periodic checks and updates on the urban roads around the country and also updated on the country's road map(s);
6. Responsible road maintenance.

The DUR uses mediums like seminars, advertisements, and many other sensitization and advocacy programs in their efforts to educate users on the various regulations; as a part of their responsibilities. However, the DUR performs many other relevant activities when the need arises. The DUR is dynamic and therefore responsive to change; in Ghana and the world at

large. Thus, the department improves upon its systems and processes with time, so it meets new standards within Ghana and beyond.

4.1.4.2. Practices particular to the Accra Metropolitan Area

Urban roads in the Accra Metropolitan Area (AMA) are by law, under the jurisdiction of the Accra Metropolitan Roads Department (AMRD) of the DUR. As a division of the DUR, it operates under the same regulations as the DUR and is responsible for carrying out such duties within the area. Besides the outlined practices in Section 4.1.4.1 of this report, the AMRD also conducts periodic traffic count surveys to ensure that the capacity of the urban roads meet the population or user demands within the metropolis.

4.1.5 The challenges facing the Ghanaian Urban Roads Sector

4.1.5.1. Challenges faced nationwide

Generally, the Ghanaian urban roads sector faces a number of problems which in themselves have become the root cause of other problems within the sector. These problems appear to be regenerative in nature and eventually destructive, hence the need for them to be addressed. The basic challenges the engineers interviewed identified are as listed below:

1. The lack of funds from the Government of Ghana to ensure that roads in the country are maintained;
2. The negligence of traffic regulation signals on urban roads by the road users which causes high records of accidents;
3. Increased rates of accidents resulting from the bad and damaged urban roads within the country;

4. Inadequate machinery and equipment coupled with inadequate remuneration for staff (especially those living in under-developed areas) to carry out effective maintenance;
5. Street hawking in major towns which is causing congestion on the urban roads;
6. High vehicular congestion in towns and cities with large populations which cause a lot of inconveniences such as traffic jams; and
7. The general over utilization of the urban roads by road users, which is drivers and pedestrians.

4.1.5.2. Challenges particular to the Accra Metropolitan Area

The major challenge identified within this area is the excessive pressure on and over utilization of the urban roads within this area. This is as a result of the Accra Metropolis being the hub of most industries and offices within the country, as well as harbours the nations' capital. Due to the centralization of activities within this area, there is excessive demand for urban roads, resulting in traffic jams across the metropolis. Also the problem of street hawking is very rampant and dominant within this metropolis and this has resulted in the ineffective use of the urban roads for their intended purposes.

The ineffective use of the roads, also contributes to the increasing numbers of road accidents being recorded within the metropolis. The final challenge the AMRD faces is road users' disregard for the required on-street parking systems, traffic safety policies and road user regulations. The final end result of all these challenges, as outlined, contributes to the sector's inability to properly manage the urban roads network within the country.

4.1.6 Proposed solutions by Experts

4.1.6.1. Solutions for Nationwide Challenges

When questioned about possible ways by which the major challenges identified above can be addressed within the Ghanaian society, the road engineering experts shared the following views. The first and major solution proposed by all of the expertise was the need for the Government of Ghana to first off stem up their funds allocated to the sector and second, to remit more often to the sector. This increased flow of funds would help in the sector in first maintaining the roads that are in very bad states currently, and then the use of the remaining funds carry out all other management activities required within the sector. The lack of monetary funds within the sector appears to be the main root cause of the many other problems within the sector, hence the need to address this problem first in order to tackle the others much more successfully.

The remaining solutions the experts proposed include the following:

1. The government should partner with the National Roads Safety Commission to raise more awareness on the need for road users to adhere to road and traffic regulations.
2. There should be an increase in the number of Police check points along urban roads within the country to check user adherence to regulations, especially that of drivers on the roads.
3. The government should make efforts toward decentralizing major towns and cities so as to be able to distribute industries and offices around the

country in order to reduce the problem of congestion on the urban roads within the country.

These solutions, from the experts' perspective are those urgent and most important solutions which should be implemented to tackle the problems facing the Ghanaian urban roads sector.

4.1.6.2. Solutions for AMA Challenges

The survival of urban roads within the Accra Metropolitan Area, from the experts viewpoint should be tackled similar to that of the nation, as discussed in Section 4.1.6.1 above.

The solutions outlined for the country are not limited to specific regions or areas hence can be applied to the AMA sector but with some modifications as outlined below:

1. The funds allocated to this area should be increased as the national funds apportioned to the Ghanaian Urban Roads Sector are increased.
2. All stakeholders and government agencies should partner with the AMA and the DUR to step up their exercises in decongesting the metropolis, in order to have free urban roads within the area.
3. Intensive efforts should be made by all responsible authorities, these are the AMRD and the DUR, in banning street hawking within the metropolis and relocating the hawkers to market centers. This will replace the problem of congested and excessively pressured roads with free flowing urban roads and reduced cases accidents within the area.

4. Policies and laws should be passed and implement by the A.M.A and parliament respectively, to ensure effective punitive measures are meted out on all road users who break any of the road, user or traffic regulations within the Accra Metropolis.

4.1.7 External national factors affecting urban roads

4.1.7.1 External factors affecting the nation's Urban Roads Sector

Currently, the established national policies or regulations that have impacted the role of the urban roads sector have been more favourable than harmful. The introduction of all these factors, though external to the sector's operations, has enhanced the duties of this sector in diverse ways. The exception to these favourable conditions is the problem of excessive political influence from ruling governments. Ghana's multiparty system from which ruling governments are selected, have over time limited the activities of the AMRD, as each political party that wins power, seeks a different agenda from the previous.

However, some favourable policies or regulation implemented by past and present governments include:

- A. The ROAD TRAFFIC (AMENDMENT) ACT 2008, ACT which has redefined the road traffic offences and their respective sanctions to be meted out to offending parties.
- B. The introduction of toll booths at vantage points along urban roads within the country. This is to collect user fees from drivers of the

various vehicles that use the roads in order to raise funds toward the management of the roads.

- C. The movement limitation placed on articulator trucks between the hours of 6pm and 6am. One outcome of this policy is the improved safety and reduction in accident records on the roads at night.
- D. Also, with the introduction of the renewed laws in the Road Traffic Act 2008, more road users, especially drivers, have improved upon their user behaviors on the road. Though not the direct solutions to the current problems within this sector, the implementation of these policies and regulations have changed the scene in which the Ghanaian Urban Roads Sector operates.

4.1.7.2 External factors affecting the AMA's Urban Roads Sector

Specific to the Accra Metropolis, some general policies and regulations have been implemented by the Accra Metropolitan Assembly Authorities (AMAA) which is outside of the roads sector; and this has enhanced the duties of the AMRD. The massive decongestion exercise carried out by the AMAA, the AMRD has helped in solving the problem of congestion in the urban roads sector within the area. This has therefore not just saved the AMRD time and other resources, but has also given both institutions more power to solve this problem in the best of their interest.

Another of such existing regulations that is currently benefiting the urban roads sector within the AMA is the setting up of Police barriers and checkpoints at vantage points along various urban roads within the area. With this action from the Police, though the original objective may be to

combat crime, their presence has also helped in some manner to improve road user behavior. This behavioral change is as a result of the Police being noted for law enforcement and order. Hence, the existence of external policies and regulations within the Urban Roads Sector of the AMA, have and are still of immense benefit to the AMRD.

4.1.8 The practicability of Property Management in the Ghanaian Urban Roads Sector now and in the future

4.1.8.1. The practicability of Property Management in the Ghanaian Urban Roads Sector

To measure the practicability of PM in the Ghanaian Urban Roads Sector, the experts shared thoughts on how practical PM would be in this sector as well as how effective PM is being used currently within the sector. Collectively, the interviewed experts are of the opinion that PM can be well practiced with the Ghanaian urban roads sector. The choice of PM for this sector's growth was captured by one respondent as "having led to the upgrading and construction of a lot of urban roads within Ghana by the responsible Department". Also they believe that currently PM practices are being incorporated into the activities of the sector as in Section 4.1.8.2. below. However, the current practices of PM in the sector do not measure up to the expected standards required.

4.1.8.2. The use of Property Management to improve the Ghanaian Urban Roads Sector

Setting out the future of this sector with PM as a key player, some suggestions were made on how to get PM into the urban roads sector in order to get it to grow much more rapidly and become more sustainable. Though the suggestions did not touch directly on how PM practices can be used to improve some of the already existing problems identified above; some innovative solutions were proposed.

These innovative solutions include:

1. The Department of Urban roads should work effectively to get estate developers involved in funding the construction and maintenance of urban roads. This will reduce the financial burden on the Government to fund these projects.
2. Estate developers should also incorporate into their schedule, road construction works to link their buildings to what?
3. Effective urban road maintenance policies should also be set by estate developers to enhance the effective use of urban roads and reduce the cost of damages placed on the government in undertaking such activities.
4. PM agencies and estate developers should also undertake sensitization programs on road safety within their catchment area to promote safety on roads.

CHAPTER 5

FINDINGS AND DISCUSSIONS OF THE PROPERTY MANAGEMENT PRACTICES PROVIDED FOR IN ECONOMIC AND FINANCIAL DOCUMENTS OF GHANA

5.1 Introduction to the chapter

In this chapter, data was obtained from reviewing a project appraisal on an urban road located within the AMA as well as budgets from 2009 to 2012. This data was reviewed to establish whether adequate provisions are made by the government and the DUR for the management of urban roads in the country.

5.2 A review of the project appraisal report on the Awoshie – Pokuase road and community development project (Ehouman et. al, 2009)

The Awoshie – Pokuase road and community development project is a project being financed by the Government of Ghana, in conjunction with the Agence Française de Développement (AFD) and the African Development Fund (ADF). This project is expected to provide a variety of national and community amenities for the people of the project area and the country at large. The Awoshie – Pokuase road project is a total road length of 15 kilometer road. It is designed in two parts; a 10 kilometers central dual carriage, bicycle lanes, walkways and the remaining as two single carriage

roads along the entire road, one on either side of the dual carriage. This particular road is expected to link the western part of Accra to the northern section of the city. Specifically, it is linking the Tema-Ouagadougou-Bamako corridor to the Trans-West African Coastal Highway. The total cost of the road project is estimated at GHC 16.503 billion with the following breakdown:

Table 5.1: Component and cost elements of the Awoshie – Pokuase road project

Component Name	Estimated Cost (GHC billions)
Road construction works	112.45
Community upgrading infrastructure	36.90
Capacity building and studies	4.39
Project Management	1.93
Compensation and resettlement.	9.35

Reviewing this project appraisal report showed no plans for the management of the road except for how to create user safety awareness for the community bordering the road and the maintenance of the road. This was raised in the report as part of the community development project being conducted and not under the umbrella of road post-construction management. Since the project is not solely for the construction of the road in the area, some other community activities added to the project in order to make it more beneficial.

The practice of maintenance is mentioned as a major mode of ensuring the sustainability of this road. The report estimates the annual maintenance

cost of the road at \$ 270,000 and an accumulated sum of \$4.5 million in 15 years after its construction. Again, the report states the Road Fund as the main resource for undertaking the above stated maintenance. Recalling from Section 1.2 of this report, that the Road Fund after 9 years of establishment is still making losses, hence it cannot an entirely reliable source of funding this road project and other projects in the country.

Generally, the appraisal report had little detail on how the property was going to be managed after ensuring all the right things were done at the construction stage, like using the right and quality materials, proper work supervision and monitoring among others. Having this shortfall, limits the lifespan of the road even before it is constructed. This could potentially result in the post-construction management activities being relegated to the background and not being given the necessary attention. This corresponds to what Angelides (1999) described as the 'Traditional Business' model, described in Section 2.6 of this thesis report. It further emphasizes the need for the Ghanaian society to employ more pragmatic and lasting solutions in PM rather than focusing on continuous road constructions.

5.2 A review of Ghanaian annual budgets (2009 - 2012) for PM provisions

As part of governing the Ghanaian economy, the country practices a system of annual budgeting that considers its revenues against its expenses every November. In these budgets caan be found various plans and provisions made by the government for the various sectors of the economy.

These sectors include the transportation, education, and health care sectors among many others. For the purposes of this research, the attention will be on a 4 year budget reviews focused at the transportation sector, especially sections regarding urban roads.

A general review of the annual budgets, showed that more attention toward provisions for roads and facility constructions as opposed to their management. Searching the budgets further revealed that the government's general efforts toward road management were limited; especially in sections relating to the urban roads sector. The following sub-sections will discuss this in detail.

5.2.1 Review of 2009 annual budget

In this annual budget, efforts made by the government in the DUR sector were very few, with majority being continuations of existing projects from the previous year, 2008. From the budget, the governments outlook under the DUR for 2009 numbered up to a total of five (5) major projects, located at different parts of the country. Two of these projects were urban roads within the AMA. They included:

1. Undertaking developments and maintenance to the Nsawam road (i.e. Kwame Nkrumah Circle – Achimota) Phase 2 which was 65% complete. As part of this project were significant works such as the Alajo by-pass and the Achimota Transport terminal extension.
2. Works were also being completed on the remaining 30% of roads in the Accra Central Business District by the DUR.

3. A design review of the on-going Awoshie – Pokuase road project, discussed in Section 5.1 was also conducted within this period.

The rest were centered mainly in the Ashanti and Brong Ahafo region. 10 regions cover the entire Ghanaian landmass, however, 3 out of the 10 regions were attended to by the government in an annual budget in terms of urban road construction and management. From the provisions made, the poor performance of the sector in 2008 comes as no surprise. However, the sector's performance in the year 2008, as per the 2009 budget included: "seven (7) per cent resealing, six (6) per cent partial reconstruction, twenty (20) per cent upgrading of roads, forty (40) per cent traffic light installations and five (5) per cent minor rehabilitation".

Again, the budget made provisions user safety awareness through the efforts of the National Road Safety Commission (NRSC). In the evaluation, the NRSC performed a variety of outreach programs across the country in various destinations to educate the citizens on road safety issues: "148 churches, 75 mosques and 253 lorry stations". Other forms the commission adopted in conducted this awareness was also through the use of media sensitization programmes and posters and handbills of 160,000 in total. It would be wrong to say that the government is not making any effort to boost the urban roads sector, yet the efforts are perhaps not the most adequate and effective for the activities of the sector.

In sum, the DUR received a fair level of attention from the government in the budget forecasts for the year of 2009; however, it was incapable of

supporting the department in meeting all of its required management practices.

5.2.2 Reviews of 2010 and 2011 annual budgets

The budgets of 2010 and 2011, appeared to be similar in a variety of ways, as compared to that of 2009 and 2012, hence the two years being reviewed together. The first and most common factor to both years, is the major absence of budget allocations made for the DUR sector and their related activities. Second on the list, is the consistency in extra attention paid to the Highways and Feeder roads sectors, as well as other transportational means like the Railways and Aviation sectors of Ghana.

While the 2010 budget generically talked about the expected improvement of roads especially in farming areas; the 2011 budget mentioned past works of various maintenance and rehabilitations carried out on urban roads across the country. This budget indicates the following data on urban roads: 700 kilometers (km) of urban roads were completed under periodic maintenance across the country and 1,680 km in routine maintenance. Out of this number, 77 km were related to the Accra Central Business District, and also all urban roads projects already existing in this area in the previous years were all duly completed.

Inherent in these facts from the 2 budgets, is the fact that, not much budgeting or planning was done for the urban roads sector in the year of 2011. With the 2011 budget basically reporting on what the urban roads sector achieved in November of 2010, there is very little evidence to prove

that the government actually planned for this sector in its 2011 outlooks. Unlike the 2010 budget, which concentrated fund allocations to 3 out of 10 regions, there are no such facts for the year 2011.

Though, these budgets show that the economy relies heavily on aids and loans from international institutions and neighbours to finance her economy; which indirectly limits the fund allocations to certain sectors. This is as a result of the 'terms and conditions' attached to these loans and grants given to the country. In reviewing the 2010 and 2011 budgets, it roads sector in Ghana appeared to be one of such sectors being affected by this international influence.

Again, the consistent reduction and or elimination of the urban roads sector from the country's budget, outlines clearly some of the reasons raised as to why this sector's performance is not at its best. From the interviews conducted in Section 4.1.5, lack of funds to support the activities of the sector, was outlined as the major problem facing the sector; and this is clearly indicated in the contents of the 2010 and 2011 budgets of the country. Finances have become very crucial in the performance of all the other activities of the department, such as traffic management and user awareness. Thus, it comes as no surprise that the current state of affairs of urban roads and its related sector in the country, offer very little back to the economy. Being a capital intensive sector, there is very little that the sector can roll out in terms of duties, should this budgetary allocations be consistently undermined yearly by the government.

5.2.3 Review of 2012 annual budget.

In contrast to the previous years of review, the 2012 annual budget had a much different approach toward budgeting for the urban roads sector. There was a more detailed and reflective reporting structure adopted in reviewing the past year and forecasting for the sector in the coming year. Using the data proved in the budget under the performance review section for 2011, less work was done by the DUR in terms of kilometers, as compared to that of 2010. While 1,680 km and 700 km of routine and periodic maintenance respectively were conducted in 2010; there was a drastic reduction in 2011 of 1,382 km of routine and 143 km of periodic maintenance being conducted by the department. Though not a bad effort, it surely cannot be said to be the best, if after such efforts, more road networks are still left unattended to. Perhaps, this reduction can be attributed to the problem of low funds budgeting and allocation to the sector as indicated in the 2011 budget (Section 5.2.2).

Reviewing the work done by the department in 2011, there appears to be more projects undertaken than any of the other years evaluated (i.e. 2008 - 2010). Across the country, there were a number of major projects undertaken by the department in addition to the above mentioned maintenance activities. The major projects undertaken across the country include:

1. A section of the Awoshie – Pokuase road contract (specifically the Anyaa - Pokuase) being awarded.

2. Various road projects targeted at beautification and traffic management in areas like Accra, Kumasi and Tema.
3. Again, there have been decongesting activities within the Accra Central Business District, such as widening the La – Teshie road, the rehabilitation of the Spintex road among others.
4. 21 km of spot improvement works done across the country.

The government's forecast for the sector included a variety of policies, activities and structures that would aid the sector in building up itself for the future. The first is a set of initiatives geared toward the department's objective of the provision of "better distribution and integration of the road network system". The set constitutes 4 identified initiatives: "maintenance of road asset, improving road maintenance financing through the road fund, improve disbursement under donor funded projects and facilitate Public-Private Partnership (PPP) in road construction.

The government of Ghana can use more of such partnerships in getting more work done on her roads especially in 2012 on 4 major links. In intensifying the use of PPPs in the urban roads sector, the government intends to establish more coordination and supervision within the sector. These initiatives are set in the right direction to improve the sector in its duties of appropriately managing Ghanaian road infrastructure

In addition to these initiatives, is the maintenance structure put in place by the government toward the same objective as above. The maintenance structure involves the practice of routine and periodic

maintenance, road safety and other works. Toward the achievement of this focused maintenance activities, the government has put measures in place to grow the Road Fund as a financial resources for this purpose.

The introduction of more electronic toll booths on some selected trunk roads in Ghana, is expected to be a major boost to the growth of the Road Fund. Kumasi – Techiman, Apedwa – Kumasi, Winneba – Cape Coast and Bamboi – Wa roads, are the selected trunk roads for additional toll booths. Though these selected roads are not necessarily urban roads, the revenue generation from them would be of immense benefit to the urban roads sector. This is especially because, urban roads are not sizeable enough to house toll booths as well as the heavy traffic on such roads; even though they seem to serve a much wider portion of road transportational needs in Ghana.

The final measure being instituted by the government to meet its objective, is the stricter implementation of the Axle Load Limit regulations as provided for in the Road Traffic Act of 2004. This law as instituted refers to the load limit, of especially heavy duty/load trucks, allowed on the roads within the country. This regulation is being implemented because of the role overloaded trucks are believed to play in the poor state of roads found in the Ghanaian society.

5.3 Conclusion

From the above reviews, it is evident that there is limited attention given to the urban roads sector as against others. Thus, if the limited

attention given to this sector in the annual budget of the country becomes a regular occurrence, then perhaps, the Ghanaian government can be said to be undermining the value proposition from this sector to its economy.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction to the chapter

This chapter highlights the key issues of the research study which contribute to the current gap existing in the urban roads sector of Ghana. In addition, appropriate recommendations for the key problems identified are outlined for the use of the sector.

6.2 Conclusions

After extensive evaluations of the urban roads sector and the AMRD, it is reasonable to conclude that, professionals in the Ghanaian urban roads sector know what property management constitutes and have the required practices integrated with their required activities. It is also relevant to note that, the sector over its period of existence has not fully utilized the ideal property management practices in their daily activities. Hence, the problem of bad roads in Ghana cannot be directly attributed to the absence of knowledge on property management practices, but to the inadequate use of these practices within the sector, as well as the lack of planning by the sector and government of Ghana.

The inadequate usage of the required property management practices within the urban roads sector can be attributed to a number of reasons; that

is part generated internally by the sector and some externally generated from the society. These external causal factors have over time been the most pressing of all the causal reasons hindering the sector's progress in activities.

These factors include:

1. Inadequate flow of funds to support the sector's activities;
2. Public sector policies on staffing which limits the sector's human resource pool; and
3. The lack of machinery and equipment to perform the required duties in the sector.

On the other hand, the internal causes of the inadequate use of property management in the sector include:

1. The absence of performance indicators that measure the work being done by the sector of various departments such as the AMRD, and
2. A low motivation or lack of incentive that encourage the staff to give off their best within the sector.

Thus, the 5 major problems outlined above constitute the current gap found in the sector which hinders the effective and efficient use of property management practices by the sector.

6.2 Recommendations

6.2.1 Recommendations for external causal factors

The role of the government in an economy is to rule in the best interest of the people and not to its detriment. The decisions made by past governments as well as the present government, from the documents studied and observations made, tend not to have fully benefited the urban roads sector. These may have resulted in the unfavorable external challenges facing the sector in its operations. There is still an opportunity for this sector to carry out its mandated functions as expected. As part of effecting this change, the following would be relevant in reaching the mark of excellence the sector has been lacking over the years:

1. **Increasing Flow of funds:**

Without a requisite financial backbone, it is practically impossible for any entity to survive, including the urban roads sector. It is obviously clear that the annual remittances from the government's budget to the sector is not enough; and the Road Fund established as a support is also not meeting expectation. Thus in solving this problem of gaining adequate funds for the sector, it is advisable for healthy financial partnerships are formed between the public and private sectors to shift from the existing traditional sources of funds. Other options can include investing available funds in less risky assets which will guarantee a good enough interest and be managed by a private fund manager.

2. **A flexible Employee quota system:**

The sector can consider the solution of Public-Private Partnerships with private Ghanaian Real Estate developers, as mentioned above in section 4.2.8. This option is feasible for the Ghanaian government and urban

roads sector due to the rapid spring up of estates and gated communities in various sections of the country. Thus, having PPPs in the management of the roads would wave off reasonable amounts of cost in remunerations, for which reason the government has placed a quota on public sector employment. Opting for this partnership would be beneficial because, these real estate developers are knowledgeable in property management; and would therefore require a basic transfer of knowledge. Having this partnership is beneficial in every way to both partners; that is, the government reduces cost and gets more work done, while the real estate developers or companies get more exposure and acquaintance with their communities as a marketing tool.

3. **Provision of adequate machinery and equipment:**

The implementation of the first proposed solution on fund generation, would allow the sector to repair all existing machinery and equipment that have still not been attended to by the government. Such machinery and equipment lacking in the AMRD include: unavailability of computers and Information Technology (IT) facilities like the internet, a number of broken down vehicles and machinery for monitoring purposes, poorly furnished office facilities, among others. PPPs that look at the AMRD partnering with some private plant pools can also aid in addressing this challenge.

6.2.2 Recommendations for internal causal factors

Though the external causes of problems to the sector have been addressed, there would be very little or no improvement if the internal structures are not well built to support it. Solving the problems of this sector is not complete with just tackling the external problems faced by the sector, hence the need for equal solutions to be generated for the internal problems also. The following constitute the recommendations on how the sector can address the basic internal challenges that it faces:

1. Introducing a Performance criteria:

Having a performance criterion is one critical requirement of the sector, as it will help in the implementation of its plans and executing its responsibilities. Relevant performance indicators that may be applicable to the sector may include: level of productivity, material quality standards, standard cost levels for each kind of project, employee hours required, etcetera. Having such criteria put in place will eliminate the attitude of procrastinating management activities and ensure that the set engineering and property management standards, as identified, are being met. In addition, this will help the sector monitor its productivity to the economy of Ghana, as well as be a good incentive for the sector to lobby the government in reducing the employee quota for the sector; and also increasing the funds remitted to the sector annually through the country's budget.

2. Increasing Employee motivation:

This sector can be described as a labour intensive sector, due to the numbers of personnel it requires from construction through performing management activities like rehabilitations, maintenance among others. Thus, it cannot afford to have the few available to the sector leaving for other sectors or not working due to the lack of employee incentives. As part of designing and implementing the above performance criteria, the sector could use these criteria in rewarding deserving employees annually as per the standards set out for each year. Having this system in place would become a natural incentive to boost the employees to give back more in their work which would intend improve the sector's efforts in keeping the urban roads in good shape.

However, this incentive system would not be complete without the provision basic facilities for the use of employees. It is understandable that this sector does a lot more paper and pencil drawings etcetera; but perhaps the introduction of computers and other IT facilities, better furniture and more user-friendly decorations in the various offices, would improve employee motivation toward work.

Finally, the sector can adopt a Job Rotation strategy as a way of generating excitement among their employees about the job they are doing. Being an engineering intensive sector, the employees are likely to do repetitive tasks which can get boring. Therefore, should the sector adopt the strategy of moving employees around very similar roles, the possibility of boredom would be reduced and be motivated to perform the exact duties required of them.

6.3 Limitations

This research study was limited by a number of factors, which if not present would have better enhanced the outcomes of this research. First of the limitations was the tedious and extended procedures within the Urban Sector of Ghana, which resulted in extreme time constraints for this research. Given that there were more resources such as flexible procedures in the sector and time, this study would have included more interviews; which would have indicated a better representation of how property management practices are being used in the sector.

Second was the limited access to professionals within the Urban Roads sector. As a result of low staffing in the sector, there are very few engineers performing the respective duties within the sector. Based on this problem, the few professionals available were constrained with time especially, and this made it nearly impossible to reach the engineers within the sector. Given that the sector was better staffed and thus had more professionals available; this research could have been a better informed on how the sector actually operates with regards to property management in Ghana.

The limited access to documents on urban roads, both in the sector and the country, made this research unable to properly evaluate and identify how well property management is forecasted for the sector. As part of the data collection tools for this research study, a document study was to be conducted on existing documents on urban roads to identify the property management practices used currently. In the absence of this resource

however, the study considers just one of such documents and thus, does not entirely give an accurate evaluation of the property management practices employed; in the urban roads sector and the Accra Metropolitan Area.

6.4 Recommendations for further research

The low recognition of the property management sector in Ghana is not beneficial to the economy. This is because, Ghana has been identified the world over as a very fast growing economy and one also with a lot of potential (Pricewaterhouse Coopers Ghana, 2012). The economy will thus soon be developing and constructing a lot of assets and properties to enhance this growth. Without the practice and better use of property management within the country, Ghana's proposed growth can be retarded in various forms.

Specifically in the Ghanaian urban roads sector, the major challenge has been the lack of funds to the sector to aid in performing their required duties. These duties include routine and periodic maintenance, traffic control, user safety awareness, etcetera which are all property management practices when it comes to road management. It is therefore imperative that a solution is found to this so that the nation can benefit from its assets of which road is a major part.

This research further recommends a follow-up research whereby possible mediums of generating funds are investigated and recommended to policy makers for implementation.

BIBLIOGRAPHY

- Abgodjah, O. B. (2010). A CASE FOR MAINTENANCE CULTURE. Community 10, Tema, Ghana - Greater Accra.
- Agyepong, S. A. (2011, November). Property, Asset and Portfolio Management. Berekuso , Eastern Region, Ghana.
- Aidoo, G. A. (2011). Financing Rural and Urban Roads with Road Fund. Accra, Ghana.
- Ampong, K. (2011, November 4). *Growth in Ghana*. Retrieved March 20, 2012, from Broll Ghana: <http://www.brollghana.com/news/growth-in-ghana/8/>
- Angelides, D. C. (1999). PROJECTMANAGEMENT AND GOOD TECHNICAL AND. *JOURNAL OF MANAGEMENT IN ENGINEERING*, 79-80.
- Annexure, E. (2011). *DEFINITION OF ROAD CLASSES*. Retrieved October 21, 2011, from Google Web: www.joburg-archive.co.za/.../SARAnnexureEClassesofRoads.doc
- Arbury, J. (2011). *From Urban Sprawl to Compact City – An analysis of urban growth management in Auckland* . Retrieved December 22, 2011, from jarbury.net portal: <http://portal.jarbury.net/thesis.pdf>
- Bekoe, M. O. (2012, March 21). Assessing Propertey Management practices used in the Ghanaian Urban Roads Sector. (M. A. Owusu-Acheaw, Interviewer)
- Broll Ghana. (2011, November 4). *Growth in Ghana*. Retrieved March 20, 2012, from Broll Ghana: <http://www.brollghana.com/news/growth-in-ghana/8/>
- Bryman, A. (2004). Content analysis. In *Social Research Methods* (p. 181). New York: Oxford University Press.
- Cox, H. (2008, March 12). *The Importance of Property Management*. Retrieved October 18th, 2011, from <http://ezinearticles.com/?The-Importance-of-Property-Management&id=1041836>
- DFID Transport Resource Centre. (2002, August). *Transport's Role in Achieving the Millennium Development Goals*. Retrieved October 18, 2011, from Site Resources: World Bank Website: http://siteresources.worldbank.org/INTWDR2004/Resources/22572_TransportsRole.pdf
- Dua-Agyeman, E. (2006, July). *PERFORMANCE AUDIT REPORT OF THE AUDITOR-GENERAL ON THE FUNDING OF GHANA ROAD FUND*. Retrieved November 17, 2011, from

www.performanceaudit.afrosai-e.org.za: <http://www.performanceaudit.afrosai-e.org.za/sites/performanceaudit.afrosai-e.org.za/files/GHANA%20ROAD%20FUND.pdf>

Duffour, D. K. (2009, November 18). *Budget Statement and Economic Policy of the Government of Ghana fro the 2010 Fiscal Year*. Retrieved December 22, 2011, from Ministry of Finance and Economic Planning: <http://www.ghana.gov.gh/documents/2010budget.pdf>

EHOUMAN, L., TRAORE, B., BILALE, A., JOOTTUN, L., ARON, R., & HEEROO, H. (2009). *PROJECT APPRAISAL REPORT: AWOSHIE-POKUASE ROAD AND COMMUNITY DEVELOPMENT PROJECT, GHANA*. AFRICAN DEVELOPMENT FUND.

Gbadegesin, J. T., & Ojo, O. (2011). An Appraisal of Property Management Practice in Metropolitan Ibadan, Nigeria. *The Built & Human Environment Review, Volume 4, Special Issue 1*, 167 - 181.

Ghana Investment Promotion Council. (2011). *Infrastructure*. Retrieved October 18, 2011, from Ghana Investment Promotion Council Website: <http://www.gipc.org.gh/pages.aspx?id=81>

Ghana News Now.com. (2010, June 17). *Cocoa stranded in Western Region because of bad roads*. Retrieved November 17, 2011, from Ghana News Now.com Website: <http://www.ghananewsnow.com/2010/06/17/cocoa-stranded-in-western-region-because-of-bad-roads/>

Ghana Web. (2004, March 28). *Ghana?s Roads ? Which Way?* Retrieved October 18, 2011, from <http://www.ghanaweb.com/GhanaHomePage/features/artikel.php?ID=54862>

GhanaWeb. (2011, January 14). *Ghana set to become fastest growing economy in 2011 - World Bank*. Retrieved December 6, 2011, from GhanaWeb Website: <http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=201263>

Google Images. (2011). *Urban Roads*. Retrieved October 21, 2011, from Google Images Website: <http://www.google.com.gh/#hl=en&q=urban+road&tbs=dfn:1&tbo=u&sa=X&ei=5w2hTvDmK8bAhAeBzZTvBA&ved=OCBgQkQ4&fp=1&biw=1304&bih=707&bav=cf.osb&cad=b>

Government of Ghana Official Portal. (2011). *Statement By The Hon. Minister For Roads And Highways Of Programmes And Projects Of The Ministry At The Conference Room Of The Ministry Of Information On Tuesday, 9th February, 2010*. Retrieved October 18, 2011, from Government of Ghana Official Portal: http://www.ghana.gov.gh/index.php?option=com_content&view=article&id=1356:press-briefing-on-the-general-overview-of-the-programmes-and-projects-of-the-ministry-of-roads-and-highways&catid=80:meet-the-press&Itemid=227

- Hall, S. (2012). *Are Descriptive & Statistical Analysis the Same?* Retrieved April 12, 2012, from eHow.com: http://www.ehow.com/about_5124141_descriptive-statistical-analysis-same.html
- Heggie, I. G. (2010, January 1). WORLD BANK TECHNICAL PAPER NUMBER 275, AFRICA TECHNICAL SERIES. *Management and Financing of Roads, An Agenda for Reform*, pp. 1 - 4.
- ING Real Estate Investment Management. (2011). *Glossary*. Retrieved October 18th, 2011, from ING Real Estate Investment Management Website: http://www.ingreim.com/reim/about_us/glossary/#P
- International Road Federation. (2011). *Road Safety Publications*. Retrieved December 22, 2011, from International Road Federation Website: <http://www.irfnet.org/files-upload/pdf-files/UNRSC%20Infrastructure%20Document%20lr%20Final.pdf>
- Investopedia Dictionary. (2011). *Real Property*. Retrieved December 21, 2011, from Investopedia Website: <http://www.investopedia.com/terms/r/real-property.asp#axzz1hGUT49e1>
- Kumasi Metropolitan Assembly. (2011). *Urban Roads: Kumasi Metropolitan Assembly*. Retrieved November 17, 2011, from Kumasi Metropolitan Assembly-KMA Website: <http://www.kma.gov.gh/kumasi-metro/page/5110/urban-roads>
- Miles, M. E., Berens, G. L., Eppli, M. J., & Weiss, M. A. (2007). Property, Asset and Portfolio Management. In *Real Estate Development Principles and Process*. Washington, D.C: the Urban Land Institute.
- Ministry of Roads and Highways. (2010). *Welcome to the Ministry of Roads and Highways*. Retrieved October 18, 2011, from <http://www.mrt.gov.gh/index.asp?expandable=100>
- Modern Ghana. (2009, March 25). *Road Accidents in Ghana*. Retrieved October 18, 2011, from Modern Ghana Website: <http://www.modernghana.com/news/208003/1/road-accidents-in-ghana.html>
- MTTU. (2008). *Road Traffic Laws*. Retrieved March 23, 2012, from Ghana Police Service: http://www.ghanapolice.info/mttu/road_traffic_laws.htm
- Nelson, E. (2012, March 21). Assessing Property Management practices used in the Ghanaian Urban Roads Sector. (M. A. Owusu-Acheaw, Interviewer)
- Nyarko, E. (2011, December 8). Property Management in Ghana. (M. A. Owusu-Acheaw, Interviewer)
- Pricewaterhouse Coopers Ghana. (2012). *PwC Ghana: Budget 2012*. Retrieved April 06, 2012, from Pricewaterhouse Coopers Ghana Website: <http://www.pwc.com/gh/en/publications/ghana-budget-highlights-2012.jhtml>

The World Bank. (2011). *Ghana*. Retrieved December 6, 2011, from The World Bank Web site:
[http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/GHANAEXTN/0,,
menuPK:351958~pagePK:141159~piPK:141110~theSitePK:351952,00.html](http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/GHANAEXTN/0,,menuPK:351958~pagePK:141159~piPK:141110~theSitePK:351952,00.html)

Trochim, W. M. (2005). *Research Methods: The concise Knowledge base*. Thomson Corporation .

Wood, C. J. (2011). *ROAD TRAFFIC (AMENDMENT) ACT 2008, ACT 761*. Retrieved March 23,
2012, from Judicial Service of Ghana:
[http://www.judicial.gov.gh/index.php?option=com_content&task=view&id=186&Itemid
=159](http://www.judicial.gov.gh/index.php?option=com_content&task=view&id=186&Itemid=159)

APPENDICES

Appendix 1

Interview Guide (For the Urban Roads professionals)

Name of Interviewee:

Position / Company:

1. What is your general understanding of property management?
2. What is your general understanding of urban roads management?
3. What is the responsibility of the Urban Roads sector under the transportation ministry?
4. What are the practices the sector uses in managing urban roads in Ghana?
 - a. Generally used by the sector
 - b. Within the A.M.A (*possibility of similar answers as before*)
5. What are the challenges the sector faces in managing the urban roads?
 - a. Generally faced by the sector in the country
 - b. Specifically within the A.M.A
6. How in your view can some of the challenges facing the sector be addressed?
 - a. Generally addressed by the sector in the country
 - b. Specifically addressed within the A.M.A
7. Are there any external factors, like government policies, regulations, etc., that affect the sector in performing its role of managing urban roads in the Ghana?
 - a. Generally within the sector
 - b. Specific to the A.M.A
8. Can property management be adopted within the Urban Roads sector of Ghana?
 - a. If yes,

- i. Is property management being properly utilized in sector's activities?
 - ii. How can property management be used to improve the activities of the sector?
 - b. If no, why do you think the practice of property management in the Urban Roads management cannot be adopted by the sector?
9. Can you please recommend another expert(s), who would be able to help with providing information for this study:
 - a. Name:
 - b. E-mail address:
 - c. Telephone Number:
 - d. Place of Work (or Position):

Appendix 2

Guide for Document Study

1. What management practices are being used for the management of this road?
2. Which of the management practices above, fall under the property management practices used within the roads sector?
3. Which property management practices used within the roads sector are lacking from the management practices being used for this road?
4. Are there any management practices of the said road that needs to be changed or improved, based on the concept of property management?

Appendix 3

Experts interviewed for this research

Mr. Eward Nyarko, UT Properties - Accra

Ing. Michael Ofori Bekoe, (*Civil Engineer*) Rom Consult Limited

Mr. Jerome Yamoah Baidoo (Materials Engineer) Rom Consult Limited

Mr. Edem Nelson (Highway Engineer) Rom Consult Limited

Mr. Kofi Nti (Accra-East Area Engineer) Accra Metropolitan Roads Department

Mr. Michael Quaye (Engineer) Accra Metropolitan Roads Department