

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI**

**AN ASSESSMENT OF BENEFITS MANAGEMENT PRACTICES OF PUBLIC  
PROCUREMENT ENTITIES IN THE PROCUREMENT OF INFRASTRUCTURAL  
PROJECTS IN GHANA: CASE STUDY OF KUMASI METROPOLITAN ASSEMBLY  
(KMA)**

**BY**

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## DEDICATION

I dedicate this work firstly to the Almighty God for the gift of life and how far he has brought me. It's also to my dear husband Kwame, my mum Millicent and my sister Dorcas.

God bless you all.



## ACKNOWLEDGEMENTS

Sometimes our light goes out but is blown into flame by another human being. Each of us owns deepest thanks to those who have rekindled this light. 'Albert Schweitzer'.

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## TABLE OF CONTENTS

	PAGE
DEDICATION	I
ACKNOWLEDGEMENT	II
TABLE OF CONTENT	III
LIST OF TABLES	VIII
LIST OF FIGURES	IX
ABSTRACT	X
<b>CHAPTER ONE: INTRODUCTION</b>	
1.0 Introduction	1
1.1 Background of the study	1
1.2 Problem Statement	3
1.3 Objectives of the Study	4
1.4 Scope of the Study	5
1.5 Justification of the Study	5

1.6 Organization of the Study	6
-------------------------------	---

## CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction	7
2.1 Concept of Public Procurement	7
2.2 Concept of Benefit Realization Management	10
2.3 Classification of Benefits of Project	13
2.3.1 Value types	13
2.3.2 Organisational or Business Impact	14
2.3.3 Unplanned or Emergent Benefits	14
2.3.4 Tangible	14
2.3.5 Efficiency	15
2.3.6 Effectiveness	15
2.4 Benefit Realization Management Approaches	16
2.4.1 Active Benefit Realization (ABR)	16
2.4.2 Office of government Commerce (OGC) Benefit Management approach	18
2.5 Benefit Realization Techniques	22

2.5.1 Benefit Identification	23
2.5.2 Benefit Profile	24
2.5.3 Benefit Realization plan	24
2.5.4 Benefit monitoring, Review and Evaluation	25
2.6 Summary	27
 <b>CHAPTER THREE: METHODOLOGY</b>	
3.1 Research Design	28
3.2 Population of the research	29
3.3 Sample Techniques	29
3.4 Sample size	30
3.5 Data Requirements and Sources	34
3.6 Data Collection and Processing	35
3.6.1 Data Collection Instruments and Method	35
3.6.2 Processing of Data	36
3.7 Data Presentation and Analysis	36
3.7.1 Presentation of Data	36

3.8 Profile of Study Area	36
---------------------------	----

3.8.1 Kumasi Metropolis	36
-------------------------	----

3.8.2 Kumasi Metropolitan Assembly	39
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## CHAPTER FOUR: RESULTS AND DISCUSSION

4.0 Introductions	45
-------------------	----

4.1 Characteristics of Respondents	45
------------------------------------	----

4.1.1 Gender Type and Working Experience	45
--	----

4.1.2 Gender and Facility Type Relationship of Respondents	47
--	----

4.2: Benefit Realization Practices at KMA	50
---	----

4.2.1 Stakeholders in Benefit Realization	50
---	----

4.2.2 Benefit Determination	52
-----------------------------	----

4.3 Challenges Facing KMA in Benefit Realization	59
--	----

4.4 Public Perception on Infrastructural Projects Provided by KMA	61
---	----

4.4.1: KMA and Facility Users Interaction	62
---	----

4.5: Framework for Benefit Realization at KMA	70
---	----

## **CHAPTER FIVE: MAJOR FINDINGS, CONCLUSION AND RECOMMENDATIONS**

5.0 Introduction	73
5.1 Summary of Major Findings	73
5.1.1 Benefit Realization Practices Employed by KMA for Infrastructural Projects	73
5.1.2 Factors that Militates Against the Operation of Effective Benefit Realization by KMA	74
5.1.3 Public Perception of some Infrastructural Projects Provided by KMA	74
5.2 Conclusion	75
5.3 Recommendation	76
<b>REFERENCES</b>	79
<b>APPENDICES</b>	
Appendix 1: Questionnaire for facility users	82
Appendix 2: Interview Guide for KMA	85

## LIST OF TABLES

Table 2.1: Paradigm shift for benefits realisation	12
Table 2.2: Roles of Stakeholders in Projects and Their Responsibilities	17
Table 2.3: Key Stakeholders and their Responsibilities in Project Management	19
Table 3.1: Sample size determination	33
Table 4.1: Characteristic of Facility Users	46
Table 4.2: Gender and Facility Type Relationship of Facility Users	47
Table 4.3: Stakeholder and their Roles in Infrastructural Facility in Kumasi Metropolis	50
Table 4.4: Review and Evaluation of Project to Ensure Benefit Realization	57
Table 4.5: Methods use For Evaluation and Review of Project at Each Phase of project	58
Table 4.6: Challenges KMA faces in Ensuring Benefit Realization	60
Table 4.7: KMA and Facility Users interaction	62
Table 4.8: Users' Perspective of Problems with Facilities	64
Table 4.9: Rating of Problems from Perceptive of Facility Users at Market centers	66
Table 4.10: User's Satisfaction with Facility	67

## LIST OF FIGURES

Figure 2.1 Benefit Management Process by Office of Government Commerce	21
Figure 3.1: Map of Market Centres in Kumasi	38
Figure 4.1: Number of Years Spent at Facility Center	48
Figure 4.2: Gender of Respondents and Facility Type	48
Figure 4.3 Pie Chart Showing Review and Evaluation of Project to Ensure Benefit Realization at Post Construction Stage	57
Figure 4.4: Pie Chart Showing Challenges KMA Faces in Ensuring Benefit Realization	60
Figure 4.5: Users' Perspective of Problems with Facilities	65
Figure 4.6: Pie Chart Showing Rating of Problems from Perceptive of Facility Users at Market centers	66
Figure 4.7: User's Satisfaction with Facility	68
Figure 4.8: Framework for benefit realization	70

## ABSTRACT

It is common knowledge that public procurement entities especially Metropolitan, Municipal and District Assemblies have huge investments in infrastructural projects. However the impact on the quality of lives of people or intended beneficiaries is questionable (Ashurst and Doherty, 2003). This study seeks to research into the Benefit Realization Practices of Public Procurement Entities in the procurement of infrastructural projects in Ghana. The study was conducted in Kumasi Metropolis using KMA as a public procurement entity to assess whether or not market centers and transport terminals provided by KMA meet the needs of the users. In order to get realistic outcome, the study selected market queens and transport union leaders from the market centers and transport terminals respectively. The study realized that KMA has a benefit management practice in place ranging from pre design stage to post construction stage. However, it was realized that KMA does not directly involve the beneficiaries (market queens and transport union leaders) in the projects and does not quantify benefits identified for each projects. This has resulted in problems at the facilities had problems but the problems was less severe in facility where user were more involved in the project and more understood the actual benefit of the project. The study therefore recommended that KMA should create awareness of actual benefit of project before their commencement, assign specific roles to facility users as stakeholder in benefit realization and intensify evaluation before, during and after construction of facility and inclusion of Benefit realization in the Procurement Cycle.

## DECLARATION

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

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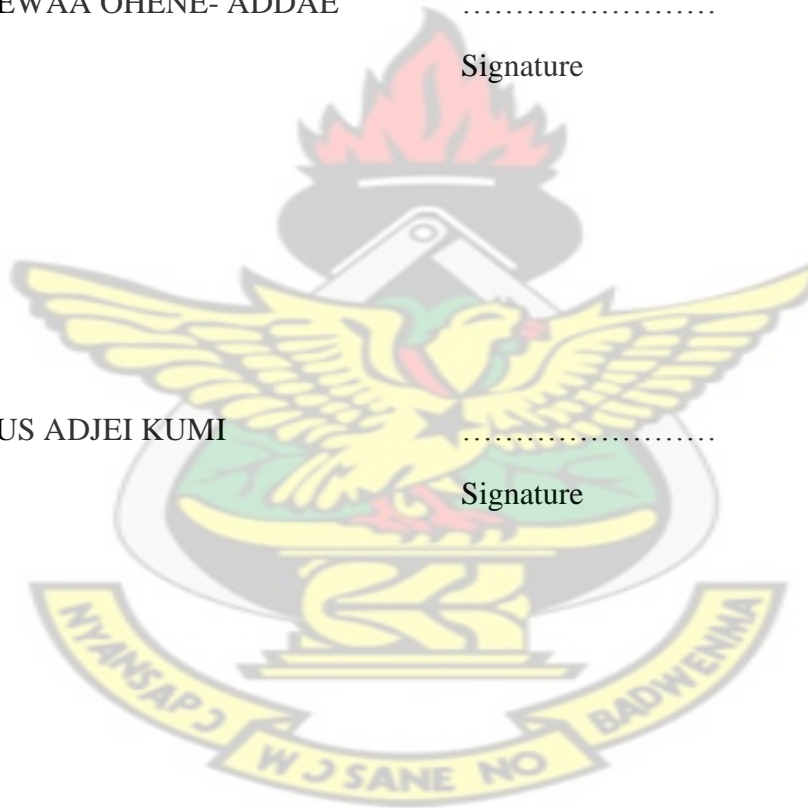
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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

This introductory chapter contains the background to the study, statement of the research problem, objectives of study; research questions, justification, limitations of the study, scope of this research project and organization of the study.

#### **1.1 Background of the study**

All around the world, public infrastructure services needs are fast outpacing the resources for providing them. These socio-economic realities have intensified the search for more innovative means of delivering public services and the need to achieve value for money and this necessitated the need for introduction of Public Procurement. Public Procurement is the process of acquiring goods and/or services at the best possible total cost of ownership, in the right quantity, quality, time and place for use by government and public organizations via contracts (Glavee-Geo, 2008).

Procurement processes and procedures in Ghana have gone through a number of changes, with the main objective of reducing or at best eliminating corruption in Public Procurement, realizing value for money, efficiency in the procurement process among others. A major change was the passing of the Procurement Act, Act 663, in 2003. As much as the usage of Act 663 has

streamlined procurement processes in the country and established a high level of sanity in the procurement environment, the International Trade Centre UNCTAD/WTO (ITC) advises developing and transition countries on the techniques of effective Public Procurement systems while supporting the policy goals established by governments. Its main focus continues to be assistance to less developed countries. Public procurement remains a big part of the economy of developing countries, accounting for an estimated 9-13% of their gross domestic product (WTO, 2001). Nevertheless, it is an area in need of attention since resources are not being properly managed in many countries. Governing administrations in developing countries can reap benefits from improved management of their public procurement systems. With a more focused approach on benefit realization management, greater value can be achieved in national budgets while developing local industry (Wittig, 2010).

The infrastructure procured by public entities such as Kumasi Metropolitan Assembly (KMA) are required to meet specific public needs to promote improvement in quality of lives for general public. A good procurement should therefore have benefits realisation management, so as to achieve the outcome and benefits of a project. According to McCartney (2000), projects and programmes can only be regarded as successful if the intended benefits are realised. What generally drives Projects and programmes is a need to realise specific benefits through structured change. Benefits management and realisation has recently risen as the “new” practice that seeks to move forward from the traditional investment appraisal approach and focus on the active planning of how benefits will be realised and measured (Glynne, 2007).

Lack of benefits realisation management leads to the abandonment of project output. These abandoned projects, cost the nation in terms of money. In Ghana, specifically Kumasi Metropolis, most infrastructural projects by developed by Government are seemingly not optimally utilized. This suggests low or poor benefit realization management for those projects.

Ashurst and Doherty (2003) confirmed that there is little focus on benefits delivery, and very few public procurement entities have a process to realize those benefits but a majority of these entities believe that there can be improvement in this area (Ward et al, 1995: Bennington & Baccarini, 2004). There are apparent challenges in benefits realization in Ghana and Kumasi Metropolis in particular. Considering the paradigm shift onto benefits realization, there is a need for comprehensive study with the intention of applying it to identify solution of the challenges in Kumasi.

## **1.2 Problem Statement**

It is common knowledge that public procurement entities especially Metropolitan, Municipal and District assemblies have huge investments in infrastructural projects. However the impact on the quality of lives of people or intended beneficiaries is questionable (Ashurst and Doherty, 2003). Ashurst and Doherty (2003) found in their study that majority of organizations and projects adopt the traditional measures of project success, namely delivery of quality on time and on budget. But, there was little evidence of any explicit focus on benefits realization.

In Ghana it is realised that though some projects gain 100% completion, their benefits and outcomes are mostly not achieved. The provisions of the Public Procurement Act, (Act 663) do

not extend to benefits realisation and nothing about it is mentioned in the associated regulations, manuals and guidelines. Professionals involved in the design, construction and supervision at best have their interests extending up to the project outcome stage (Architect) with the majority terminating at the output level.

The implication of such problems is the dissatisfaction of beneficiaries and abandonment of the project output. These abandoned projects, cost the country in terms of value and finances: funds used in construction of these projects become waste because they are abandoned. It is in view of these problems that the study seeks to research into the Benefit Realization Practices of Public Procurement Entities in the procurement of infrastructural projects in Ghana, using the Kumasi Metropolitan Assembly (KMA) as case study.

### **1.3 Objectives of the Study**

This study generally seeks to determine and document the processes and procedures used by the Kumasi Metropolitan Assembly (KMA) during procurement of projects to ensure that benefits associated with the procurement of various infrastructural projects are systematically identified, planned, monitored and realized.

Specifically, the objectives of this research are:

1. To identify Benefit Realization practices employed KMA for infrastructural projects.
2. To identify factors that militates against the operation of effective Benefit Realization at KMA.
3. To assess public perception of some infrastructural projects provided by KMA.

4. To propose effective Benefit Realization framework for use by KMA.

#### **1.4 Scope of the Study**

The study was conducted to determine the benefits realization practices of Kumasi Metropolitan Assembly (KMA) in the procurement of infrastructural projects in Kumasi Metropolis. Kumasi Metropolis was selected for the study because it is the second largest city in Ghana and one of the major business centres with relatively high population. KMA therefore has the mandate of providing public infrastructure for the benefit of specific groups and or general residents. The study specifically looked at infrastructure with public commercial interest (markets and transport terminals)

#### **1.5 Justification of the Study**

The purpose of this study could be outlined below:

**Academic purpose:** The output of this study would contribute to knowledge and literature in the subject area under investigation. It would provide the base for further research by students, researchers, consultants and clients who may be interested to conduct similar studies in related fields.

**Management of KMA:** It would also provide a framework for ensuring effective Benefits realization practices and procedures.

**Policy makers:** It is expected that the study would help the government in regulating its activities in the area of benefits realization practices in the procurement process. The study would also inform national and corporate policies which would be of relevance to other public

institutions and would also serve as a guide on what strategies to adopt in efficient benefit management practices.

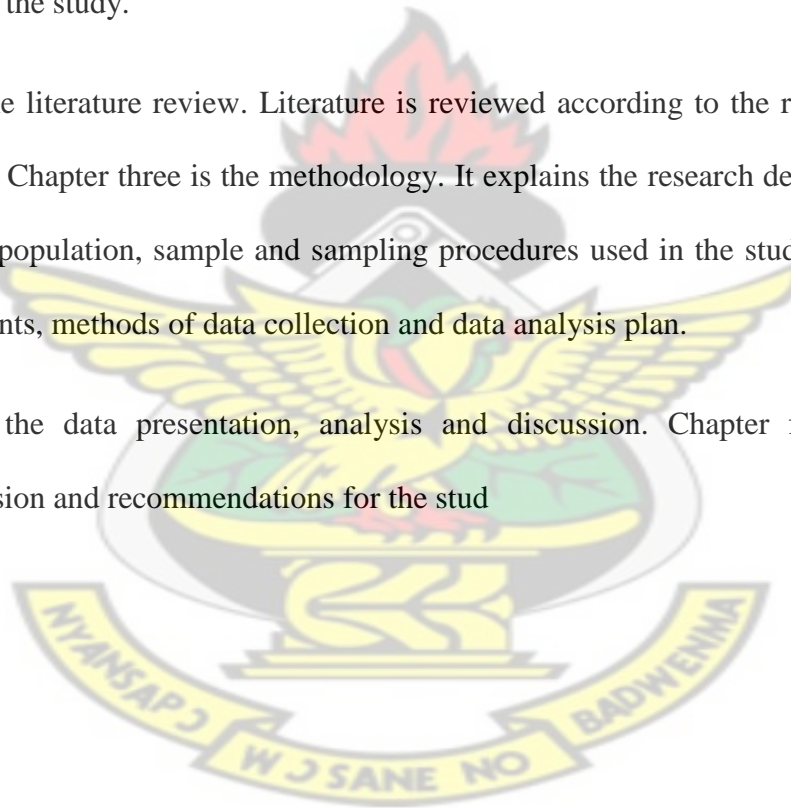
## **1.6 Organization of the Study**

The research work is divided into five (5) chapters;

Chapter one is the general introduction. It looks at the background to the study, the objectives of the study and the statement of the problem. It also briefly looks at the research questions, scope and limitations of the study.

Chapter two is the literature review. Literature is reviewed according to the research questions used in the study. Chapter three is the methodology. It explains the research design. It also gives details about the population, sample and sampling procedures used in the study. It explains the research instruments, methods of data collection and data analysis plan.

Chapter four is the data presentation, analysis and discussion. Chapter five presents the summary, conclusion and recommendations for the study.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

Public procurement goes hand in hand with benefit realization of public projects. Procurement starts the whole process and without which KMA cannot embark on any meaningful projects for the people of the metropolis. Procurement is one of the major requirements for any project to take place in any public agency and part of the whole process of outcome of project. There is therefore the need to review relevant aspects of public procurement and benefit management realization. This chapter is therefore devoted to the literature review on benefits management practices in the public sector and for the purpose of orderly presentation; the study reviewed related literature such as:

1. Concept of procurement
2. Concept of benefit realization management
3. Classification of benefit
4. Benefit realization management approaches
5. Benefit realization techniques

## 2.1 Concept of Public Procurement

According to Ghana Integrity Initiative (2007), Public Procurement is the acquisition of goods and services at the best possible total cost of ownership, in the right quantity and quality, at the right time, in the right place for the direct benefit or use of governments, corporations, or individuals, generally via a contract.

Therefore one of the main objectives of procurement is to provide best service to users at lowest cost and protect the governments cost structure (Barly, 1994). It should be acknowledged that public procurement has both economic and social benefits, but the social benefits of public procurement are primarily seen as indirect positive effects from economic savings and environmental improvements (Wickenberg, 2004). Procurement is a potential instrument of integrating socially and economically sustainable benefits to stimulate employment programmes. Moreover, it has both an important effect on the economy and a direct impact on the daily lives of people as it is a way in which public policies are implemented (Ghana Integrity Initiative, 2007).

For procurement to achieve these goals, it should follow these two principles: Professionalism and Value for Money (Economy). Professionalism is the discipline whereby educated, experienced and responsible procurement officers make informed decisions regarding purchase operations. The role of procurement professionals is critical to Ghana's economic development. It is in the recognition of this fact that the procurement Boards object includes; the professional development, promotion and support for individuals engaged in public procurement and ensure adherence by the trained persons to ethical standard. Value for Money (Economy): this is to

secure a judicious, economic and efficient use of state resources at a reasonable cost. Value for money is not about achieving the lowest initial price: it is defined as the optimum combination of whole life costs and quality.

International experience suggests the following four basic principles upon which procurement system is based (World Bank, 2000): Maximizing economy and efficiency, promoting competition and encouraging maximum participation by suppliers and contractors for the supply of goods, construction or services to be procured, fair and equitable treatment of all suppliers and contractors and transparency in procedures and minimizing opportunities for corruption and collusive activities. According to Sarpong (2007), good procurement should have the following principles;

1. Efficiency and Effectiveness: all procurement functions should aim at achieving the right quantity and quality at the minimum cost.
2. Competitiveness: the procurement process should ensure some competition among the competing parties.
3. Ethical approach: procurement process should avoid all practices that could lead to possible conflict of interest.
4. Fairness: all procurement should aim at achieving fairness and ensuring that all participating bidders are given equal opportunity to bid.
5. Transparency: the procurement process should be open enough to avoid giving competitive bidders advantage over other bidders. These are in line with the World Bank's principles of procurement and it is therefore imperative to see these principles in

all procurement. Any procurement without these principles and objectives should not be considered as a good procurement and it is not in the interest of the nation since all forms of procurements have these principles.

From the above, Public Procurement can be said to be the purchase of goods, services and public works by government and public institutions with the aim of providing specific benefit to specific groups of people or general public as a whole. To enable awarded project to achieve its benefit, the public procurement practitioners should bear in mind the principle of professionalism and value for money.

## **2.2 Concept of Benefit Realization Management**

Projects and programmes are generally driven by a need to realise specific benefits through structured change, however some projects fail to achieve their objectives and this calls for benefit realization management. Though there are many definitions of Benefits realisation management, this study adopted the definition by Ward and Daniel (2006). Ward and Daniel defined Benefits Realization Management as the process of organizing and managing such that potential benefits arising from the use of project are actually realized. From the definition, every project has potential benefit and success of any project measured by the extent to which benefit are realized.

Benefit realization therefore help to get the most from project deliverables and help to maximize the benefits that users obtain from systems/services. Benefit realization management helps to:

1. Define and deliver project aims and expected project benefits
2. Deliver services that users want and will use (user satisfaction)

3. Keep the project team focussed on project aims and benefits
4. Start up a project
5. Plan and prepare for project handover/rollout
6. Plan and gather measures (usually after the project itself has closed)

This involves the identification of project aims and benefits and it is therefore important to involve all relevant project stakeholders in this process to ensure that the views of all interested parties are taken into account. Stakeholder involvement from an early stage will help gain 'buy-in' to the concept of benefit realization management and also give stakeholders a sense of ownership of the process/deliverables. Some stakeholder groups are particularly large and it may be impossible to involve them all in the process - in this case, it is feasible to select a representative sample.

Benefit of a project therefore can be described as an advantage on behalf of a particular stakeholder or group of stakeholders (Ward and Daniel, 2006). Benefits always or mostly don't meet the desired objectives of the project output. These occur when the proper benefits realisation management is not performed.. Studies such (Hochstrasser & Griffiths, 1991 & Clegg et al 1997) have shown that over 70% of business improvement projects fail to deliver their expected benefits and even when they are achieved in part, often they are far from fully realised. Some of the reasons attributed to these failures can be related to;

1. Business cases focused on target savings instead of expressing business benefits in a manner that can be understood and implemented
2. Too much emphasis on deliverables or outcomes which do not deliver specific benefits
3. No mechanisms or structures in place to manage their realisation.

Moreover, Truax (1997) have suggested a number of reasons for organisations not getting the benefits they expected and these are;

1. Immediate results of an investment are rarely the expected benefits
2. Necessary means for benefits realisation are not identified
3. Benefits do not occur where and when they are planned
4. The right benefits are difficult to identify up front
5. Projects are too narrowly defined for effective delivery of benefits
6. Organisations often have a limited ability to manage change.

To optimize realization of benefit, the practice of realization management ought to change from passive benefit realization management to proactive benefit realization management (Truax, 1997). In Table 2.1, Truax compared passive to proactive benefit realization management.

Table 2.1: Paradigm shift for benefits realisation

<b>Passive Benefit Realization Management</b>	<b>Proactive Benefits Realisation Management</b>
Benefits are stable over time	The potential benefits from an investment change over time
The investment determines the nature and scope of benefits	The organisation and its business context determine the benefits
Financial returns represent the most valid justification for an investment	All the outcomes of an investment represent potential sources of value
It is sufficient to manage investment to generate the benefits	The organisation must be proactive in realising benefits

Source: (Truax, 1997)

In many large organisations and complex public interest sector programmes and projects failure to identify and achieve planned benefits through change initiatives appears to be common (Bartlett, 2006). Lack of benefits management is often a root cause of programme failure, but equally damaging is poor benefits management that attempts to manage benefits without recognition of the contributors to success.

## **2.3 Classification of Benefits of Project**

Many authors have classified benefits according to a variety of different criteria such as value type, business impact, unplanned or emergent and actor orientation. Other categories of benefit are tangible and intangible, and another is efficiency and effectiveness (Bennington &Baccarini 2004).

### **2.3.1 Value types**

Under this classification, benefit can be tangible and intangible and hard and soft. According to Nogeste and Walker (2005), tangible benefits as one that has been operationalised and can be measured, monitored and controlled. Intangible benefits on the other hand are described as being operationalised with an agreed measure of success or failure rather than being assumed and undeclared.

Moreover, benefits of a project can also be classified as hard or soft benefits. According to Phillips (2003) hard benefits represents the output, quality, cost and time of work related

processes which are also characterised by being objective and relatively easy to measure. He characterised soft benefits as being subjective and often difficult to measure.

### **2.3.2 Organisational or Business Impact**

This looks at how benefit impacts on the owner; some benefits are critical to benefit owners, while others may not actually benefit owners. According to Bradley (2006), classifying benefits by organisational or business impact is helpful when checking strategy alignment and balance and when comparing the relative significance of benefits. He also explains that benefits in this type of classification should be in accordance with the three main strategic improvement areas of productivity, risk minimisation and growth.

### **2.3.3 Unplanned or Emergent Benefits**

Benefit can be Planned and unplanned. The unplanned benefits may be caused by a change implemented or another benefit gained. Farbey et al (2003) identified that many projects with planned benefits gave rise to unplanned benefits. They found out that unplanned benefits tended to be more intangible than planned benefits. This is due to the fact that planned benefits are given hard financial benefits and they are documented in business cases as a result of change or an investment.

### **2.3.4 Tangible**

Tangible benefits are those that can be measured by an objective, quantitative and often financial measure. Such benefits that are quantitative and financial are often termed 'hard'. Example of such benefit would be the cost savings caused by discounting the licenses to certain software packages. There are also benefits that are easy to measure but hard to directly associate to any financial benefit, for example the number of staff that have been participating in a training course (Ward and Daniel, 2006).

Intangible benefits are those that can only be judged subjectively and tend to employ qualitative measures. These are often called 'soft' benefits and examples of such benefits would be an improved ability to make decisions or improved satisfaction. Some organizations work hard to develop suitable measures and some organizations have realized that they cannot derive financial value from them. Instead, they are recorded in the business case for new investments, where they are viewed as important as more tangible benefits (Ward and Daniel, 2006).

### **2.3.5 Efficiency**

Efficiency benefits are those benefits that seek to reduce costs of performing a particular process. For example this includes saving money by reducing the work force, speeding up transactions or shortening product cycles. These kinds of benefits do not change the nature of the objectives that the process or tasks were devised to fulfill (Bennington and Baccarini, 2004).

### **2.3.6 Effectiveness**

Effectiveness benefits are ways of doing different things that better achieve the required results. For example providing strategic competitive advantage or developing new products or services that are designed to increase profit (Bennington and Baccarini, 2004).

## **2.4 Benefit Realization Management Approaches**

There are many different benefit management approaches. However, study reviews two main approaches: Active Benefit Realization and OGC benefit management approaches.

### **2.4.1 Active Benefit Realization (ABR)**

The Active Benefits Realization approach is based on Remenyi & Sherwood-Smith (1998). The approach rests on the notion that the ABR project management process is based on the principles of continuous participative evaluation of projects. Active Benefit Realization requires continuous focus on benefit realization and it is based on contingency philosophy (this means actual information outcome, development activities, task and continuous participation of principal stakeholders throughout the project) (Sakar & Widestadh, 2005).

Since the ABR process is based on active participation, the roles and responsibilities must be clearly stated. A benefits realization program needs to be participative and for that, the role of participants must be agreed. One of the critical success factors for the ABR process is that all the principal stakeholders must be correctly identified. The selected stakeholders should not only be committed to an environment of learning and understanding but also they have to have time for continuous involvement and participation in the project. The purpose of involving various groups

of stakeholders has several objectives. A better understanding is achieved through the learning process which enhances the competence of the participations. There are three sets of core stakeholders as indicated in Table 2.2 with their responsibilities.

Table 2.2: Roles of Stakeholders in Projects and Their Responsibilities.

Roles	Responsibilities
Line managers and end users	Responsibility for making the system succeed
Accountants and financial officers	Responsible for ensuring the investment of the organizations resources are controlled in terms of corporate policy
Information systems people	Responsible for bringing technical expertise to information systems development and subsequent management

Source: Remenyi and Sherwood-Smith (1998)

ABR is based on idea of continuous evaluation, active participation of the primary stakeholders including line managers and users with direct focus on benefits realization. One of the main purposes with the way of working, regarding stakeholder's involvement is to remove any potential for the stakeholders to be surprised at the end of the project.

The process of ABR consists of seven major activities; initialization of project, production of pictures, agreement to continue, system development, evidence collection, review and learning and development of updated pictures (see Figure 2.1). ABR is a reiterative process based on the evaluation of progress and review to ensure that the development is on course to realize business

benefits. This reiteration continues until the project is concluded. According to Lin & Parvan (2003), ABR process can be divided into three as follows:

1. Setting the course: this is the development of three sets of requirement which are business picture, financial picture and project picture. After this requirement, decision is made whether or not to start the project.
2. Formative evaluation. This is assessment of progress of project. All stakeholders develop their views on the progress of the project and their views are exchanged through discussion session. There are three possible outcome of this stakeholder discussion and these are: update of three initial pictures, project reforms if there is no enough fund, time and skills for the project and project termination if the project has become irrelevant.
3. Moving forward: this provides feedback throughout the entire life of project.

Remenyi and Sherwood-Smith (1998) were of the view that ARB is reiterative process based on continues evaluation and review to ensure that project is course to achieve its intended benefits.

#### **2.4.2 Office of government Commerce (OGC) Benefit Management approach**

The OGC Benefits Realization Management is based on OGC (2008). This approach rests on the notion that Benefits Realization Management aims to make sure that desired policy outcomes have been clearly defined, are measurable, and provide a compelling case for investment – and ultimately to ensure that the change or policy outcomes are actually achieved.

The six key roles and responsibilities are well defined within this approach as indicated in Table 2.3.

Table 2.3: Key Stakeholders and their Responsibilities in Project Management

Roles	Responsibilities
SRO – senior responsible Owner	Owens the Benefits Management Strategy and is responsible for Benefits Realization Plan
Program Manager	Oversees / prepares the Benefits Realization Plan and ensures it is aligned with Program Plan and Business Case
Program Office	Acts as the information hub for tracking and progress-chasing benefits, calling reviews and communicating results
Business Change Manager	Realizing benefits; Agreeing profile, impact analysis, quantifying, risk Assessment
Project Manager	Defining benefits in PID(project initiation document), delivery of enablers to time, quality and costs

Assurance/validation	Usually carried out by third party individuals not directly involved in the Business Change Program
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Source: OGC Benefits Management - Roles and responsibilities (OGC, 2008)

In this approach, benefits realization management starts before a project or program is accepted onto the department or agency's portfolio of change initiatives – only those with properly defined strategic benefits are given approval. The identification, tracking and realization of benefits continues throughout the program and probably continue after it has formally closed, when managers with responsibility for operations or service delivery increasingly take on the task of ensuring that the planned benefits are being monitored and optimized (see Figure 2.2).

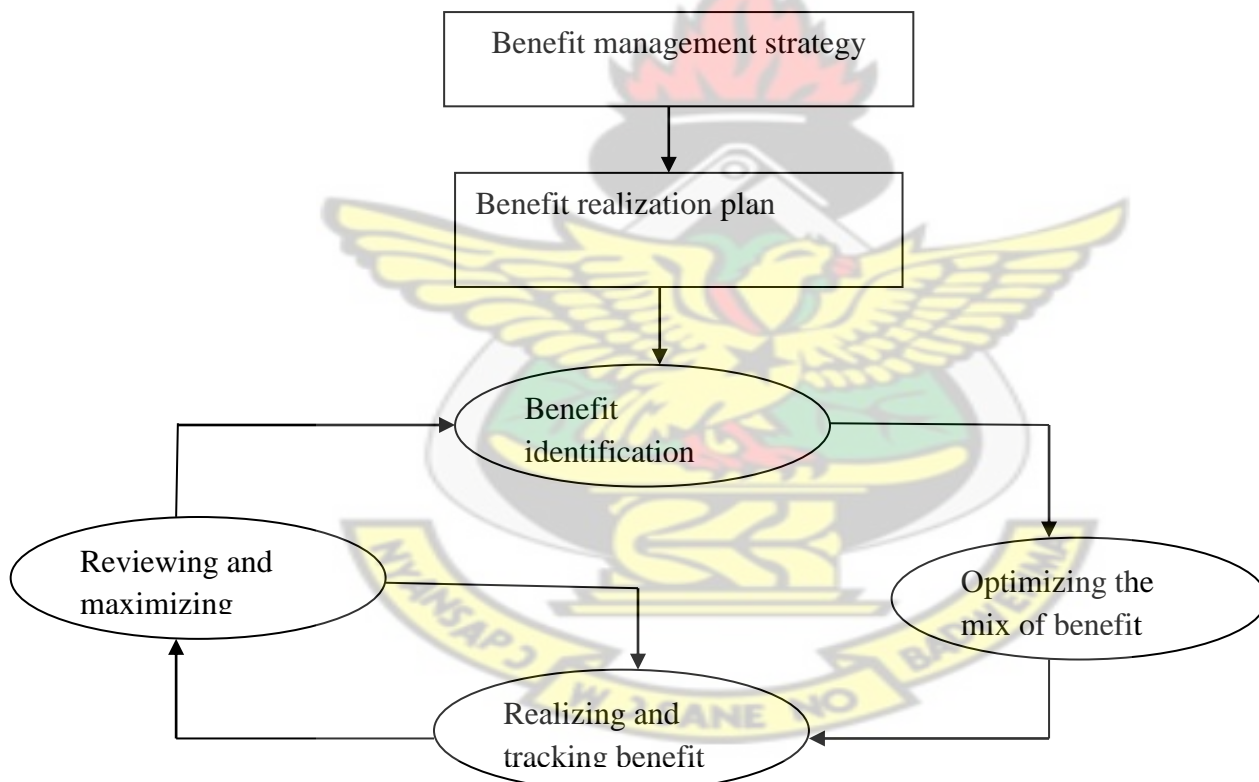
Benefit realization practices starts even when a programme is in the strategy and planning stages (Macfarlane, 2004). According to Macfarlane (2204), benefit-related activities which should take place at an early stage include:

1. Ensuring all stakeholders have realistic expectations of the results of the programme, and have a common understanding at the outset
2. Agreeing which of the benefits will be measured and tracked, and considering whether any data collection can be built into the benefit realization system to assist with any of the required measures, so that this can be planned in good time
3. Compiling a benefits register

4. Determining accountability for: the delivery of each benefit, the measurement of each benefit which is to be tracked and the reallocation of resources or funds which are released from each benefit where possible
5. Identifying benefits which can be measured locally, through workshops or interviews with local teams.

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Figure 2.1 Benefit Management Process by Office of Government Commerce



Source: Benefit Management Process (OGC, 2008)

1. **The benefits management strategy:** This describes a structured continuous process to ensure that benefits are sustained and returns on investments are maximized. A set of

questions need to be answered, for example; what are top-level (strategic) benefits and are there any dis-benefits? What are the main roles and responsibilities? Who else is a stakeholder and therefore need to be involved in agreeing and communicating benefits? What are the sequences and dependencies between benefits? How will all benefits be tracked and measured?

2. **The benefits realization plan:** This is developed as a product in its own right and may be incorporated within each iterated version of the business case. This process involves identifying and prioritizing tangible and intangible benefits, generating ownership of and commitment to the benefits from business stakeholders, developing measures and quantifying benefit opportunities, implementing an on-going benefits tracking and reporting process etc.
3. **Identifying and prioritizing benefits:** This worked through based on a list of benefits opportunities that has been produced in strategy formulation phase. Benefits identification can take several forms, and for each benefit a profile should be built. The purpose with the profile is to describe all aspects of the benefits including ownership and measurement. As with the business case, it is important that the benefits profiles are dynamic and updated.
4. **Optimizing the mix of benefits:** this is a situation where strategies are being put in place to maximize both tangible and intangible benefits of a project.
5. **Realizing and tracking benefits and reviewing:** the emphasis on continuity within the benefits management process almost certainly last beyond the closure of the program. This implies that there will be many people involved in working to increase benefits realization and deal with any dis-benefits issues. This activity must be coordinated with

clear accountability, responsibility and commitment. A benefits management action plan lists the review points, timelines, responsibilities, interdependencies and resources required to achieve benefits in the operational sphere.

## **2.5 Benefit Realization Techniques**

This section reviews the common tools or techniques for benefit realizations in all the models of benefit realization. According to Reiss et al (2006) and Payne (2007), benefit does not just occur as a result of implementation of project but are planned for with techniques for monitoring, reporting and responding to achievement and non achievement of benefit. The techniques for realizing benefit include: benefit identification, benefit profile, benefit realization plan, benefit monitoring and review and benefit evaluation.

### **2.5.1 Benefit Identification**

The first activity in benefit realization is to understand what the possible benefits are and if they are relevant and achievable. The main activities in benefit identification include:

1. Analyze the drivers to determine the investment objectives
2. Identify the benefits that will be measured
3. Establish ownership of the benefits
4. Identify the changes required and stakeholder implications and
5. Produce first-cut business case (Ward and Daniel, 2006).

According to Bennington and Baccarini (2004), benefit identification should take several approach such as interviews and workshops involving all keys stakeholder. In the views of

Sherwood-Smith (1998), the key element of benefit identification process is that key stakeholders learn to understand major requirement of project and whether the said project is affordable and possible.

Therefore the best process of benefit identification is to involve all key stakeholders to identify and agree on the desired benefit of the project.

### **2.5.2 Benefit Profile**

This outlined the detailed benefits and disbenefits of the investment. Writers such as Reiss et al (2006), Bennington and Baccarini (2004) and Ward and Daniel (2004) have suggested drawing up formalized benefit profile of pros and cons in order to manage them effectively. According to Bartlett, 2006), the benefit profile includes the following:

1. A description of each benefit and disbenefit
2. How it will be measured
3. Its financial valuation where possible
4. How it interacts with other benefits
5. The extent to which it depends on the success of other projects within the programme

The benefit profile must be subjected to constant review to reflect current situations (CCTA, 2000).

### **2.5.3 Benefit Realization plan**

The main purposes of this stage are to develop a comprehensive benefit plan and a business

case for the investment. It includes activities, responsibilities, timescales, resources and deliverables, but a very important part is a clear description of the relationships and dependencies that are critical to achieving the investment objectives (Ward and Daniel, 2004). With a plan, it is difficult to predict how an organization might realize business benefit (Ward et al, 1996).

According to Ward and Daniel (2006), in developing benefit realization plan, seven critical questions should be asked and these are outlined as follows:

1. Why do we want improvement?
2. What improvement do we want?
3. What are the benefits?: can they be measured or quantified?
4. Who is responsible for its delivery?
5. What changes are needed?
6. Who will be affected? And
7. How and when can the change be made?.

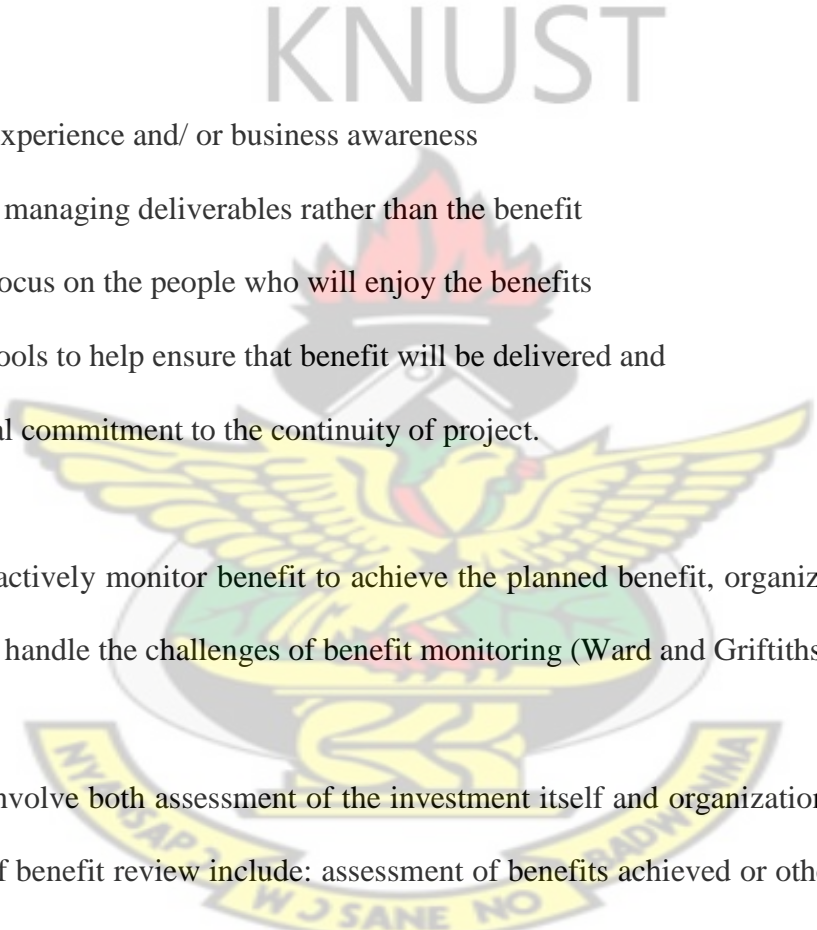
According to Kippenberger (2000), having a specific benefit realization plan helps to effectively achieve specific benefit. This view is also held by Nogeste and Walker (2005)

#### **2.5.4 Benefit monitoring, Review and Evaluation**

Benefit monitoring compares project results with benefit realization plan during the project and assesses if any change (be it internal or external or both) have occurred that would affect the

delivery of planned benefit (Ward et al, 1996). Benefit monitoring is a cycle and according to Bartlett (2007), it starts with benefit planning and ends with benefit realization.

Despite the importance of benefit monitoring, many organization do not monitor benefit of project for many reasons. Some of the reasons, according to Bennington and Baccarini (2004) are given as:

- 
1. Lack of experience and/ or business awareness
  2. Focus on managing deliverables rather than the benefit
  3. Lack of focus on the people who will enjoy the benefits
  4. Lack of tools to help ensure that benefit will be delivered and
  5. Emotional commitment to the continuity of project.

Therefore to be actively monitor benefit to achieve the planned benefit, organization must work to overcome and handle the challenges of benefit monitoring (Ward and Griffiths, 1996).

Benefit review involve both assessment of the investment itself and organizational learning. The main activities of benefit review include: assessment of benefits achieved or otherwise, initiation of action to gain outstanding benefits where feasible and identification of lessons for other projects (Ward and Daniel, 2004). According to Ashurt and Dohesty (2003), benefit review is the process by which the success of the project in terms of benefit delivery is addressed; opportunity for the realization of future benefits are identified and lessons learned and opportunity for change in future projects identified.

The benefit evaluation focuses on what has been achieved, what has not (or not yet) been achieved and why, and identify further action needed to deliver outstanding benefits, if possible (Ward and Daniel, 2004). Another aspect is also identifying any unexpected benefits that have arisen and understand how they came out. The evaluation should involve all key stakeholders and it must be an objective process with future improvements in mind, and not a way of allocating blame for past failures

## **2.6 Summary**

From the above Benefit Realization Management Approaches, it is clear that for benefit of project to be realized, major stakeholders of projects should be identified and given specific roles and actively participated throughout the projects. Moreover, there should be clearly stated processes for benefit realization and the most common processes are identification of benefit, benefit realization plan and monitoring. Under the identification of benefit, all likely benefits (most especially direct and indirect) associated with project should be stated and documented. The benefit realization plan seeks to put in place strategies to ensure the intended benefits of projects are realized. It identifies all the primary stakeholders of the projects and their roles, time frame for expected benefit and financial resources needed for the said projects. Monitoring phase seeks to ensure whether the plan is working effectively or not and starts as soon as the project begin and even continues after the completion of the projects. The monitoring after the completion is equally important since it helps identifies all unplanned benefits associated with the project and any structural changes that might occur to serve as impetus for future planning

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## CHAPTER THREE

### METHODOLOGY

This chapter highlights on the research design and methods employed by examining the techniques and procedures used in carrying out the study. The chapter covers the study design, data collection techniques and methods, sampling methods, study variables and the tools for analysis.

#### 3.1 Research Design

The research design adopted for the study is the case study method which seeks to examine the benefits management practices of public procurement entities in the procurement of infrastructural projects in Ghana, using kumasi metropolitan assembly (KMA) as a case study. The case study method according to Nachmias (1992) involves an observation of a single group which in this case is KMA at a single point in time, usually subsequent to some phenomenon that allegedly produced change, for instance an organization or institution, after major restructuring programme.

The selection of which method to employ is thus dependent upon the nature of the research problem, Morgan and Smircich (1980) argued that the actual suitability of a research method, derives from the nature of the social phenomena to be explored. The research method employed for the study is the case study method. It is in understanding the suitability and the appropriateness of the use of the case study, Yin (1989), suggested that the term refers to an event, an entity, an individual or even a unit of analysis. It is an empirical inquiry that investigates a contemporary phenomenon within its real life context using multiple sources of evidence, which in this case from KMA and general public in Kumasi Metropolis.

### **3.2 Population of the research**

The population of this study is all public procurement entities in Ghana and the beneficiaries of procurement of infrastructure by these entities.

### **3.3 Sample Techniques**

The difficulty of interviewing the whole population due to financial, time and other constraints make sampling inevitable element in research work. According to Agyedu (1999) the process of sampling makes it possible to limit a study to a relatively small portion of the population. A sample is thus a representative selection of a population that is investigated into in acquiring statistical information of the whole.

In this study, convenience and purposive sampling technique were employed in the identification and selection of the public procurement entity and facilities provided. The public procurement entity that was purposively selected was Kumasi Metropolitan Assembly (KMA) and facilities that were purposively and conveniently selected were market centres and bust terminal in the

metropolis. KMA was purposively selected because it is a public entity which is mandated to improve the quality of life of the people in the metropolis through the provision of essential service and creation of an enabling environment to ensure the total and sustainable development of the city. Moreover, the market centres and bus terminals were selected because of their dominance in the facility provided by KMA and also they have well defined target groups.

Purposive and convenience sampling were employed because they are employed in studies such as community, or some other clearly defined and relatively limited group and helps to identify most suitable respondents (Patton, 1990; Kuzel, 1999). Purposive sampling can be applied to research in a number of ways such as, sampling informants with a specific type of knowledge or skill (Li et al. 2006, Prance 2004, Vargas & van Andel).

With regards to sampling of market centres and bus terminals, the study conveniently selected closer market centres and bus terminals for easy access. Moreover, within each selected market centres and bus terminals, the study selected market queens and transport union leaders respectively. Moreover, within KMA, the study purposively selected groups who were directly engaged in provision of facilities in the metropolis and the identified and selected: planning officer, engineer, procurement officer and Coordinating Director

### **3.4 Sample size**

Determination of a sample size in every research is very important. This is based on a number of factors such as the population size, the risk of selecting a “bad “sample and the allowable sample error (Israel, 1992). There are criteria’s to be considered in other to determine a good sampling

method. According to (Israel, 1992), the level of precision which is also termed as the sampling error “is the range in which the true value of the population is estimated to be”. That is the range is normally expressed in percentage points.

For the purpose of this research the level of precision used was 0.05. The confidence level which is also termed as the risk level is based on the idea that when a population is repeatedly sampled, then the average value of the attribute obtained by that sample is equal to the true population value. The normal confidence level used in research is at 95 % [Israel (1992), Kish (1965)]. While the degree of variability means the distribution of attributes in the population.

(Kish, 1965) also set the sample size criteria as the total population, standard error of sampling distribution and the maximum standard deviation of the population elements which is also a confidence level of 95%.

The sample size of the population was determined by adopting the Kish formula (Kish, 1965) which is  $n = n^1 / (1 + n^1/N)$ , where:

$n$  = sample size

$$n^1 = S^2 / V^2$$

$N$  = Total population

$V$  = Standard error of sampling distribution. This is 0.05

S = Maximum Standard deviation of the population elements (Total error = 0.1 at a confidence level of 95%)

$$S^2 = P(1-P)$$

P = the proportion of the population element that belong to the defined class

At 95 % confidence level

$$S^2 = 0.5(1-0.5) = 0.25$$

$$n^1 = 0.25 / 0.05^2 = 100$$

From the Kish formula above, the calculation of the sample size of the two sets of facilities is shown below:

### **Metro Markets**

The population of the markets is 27. Therefore N – 27

$$\begin{aligned} n &= \frac{100}{(1+100/27)} \\ &= \frac{100}{(1+3.7)} \\ &= \frac{100}{4.7} = 21.27 \end{aligned}$$

From the calculation the number of markets to consider as sample size is 22.

### **Intra-city Car Parks**

The overall population of the intra-city car parks is 17. To calculate the sample size,

N = 17, therefore

$$n = \frac{100}{(1+100/17)}$$
$$= \frac{100}{(1+5.88)}$$
$$= 100/6.88 = 14.53$$

The sample size for intra-city car parks is 15.

**Inter- city car parks**

N = 3, therefore

$$n = 100 / [ (1+100/3) ] = 100 / 34.333 = 2.91$$

The sample size for inter- city car parks is 3

**Table 3.1:** Sample size determination

Town	Sample size (calculated)	Allowance (10%)	Sample size used
Market centres	22	2	24
Intra-city car parks	15	2	17
Inter –city car parks	3	-	3

Source: Author's construct

The market centres were central market, Asafo market, Asawase market, New Tafo market, Bantam market, Old Tafo market, Patasi market, Kwasdaso Estate market, Ahensan market, Alhaji moro market, Pankrono market, Sepe- buokrom market, Chirapatre market, Ayeduase market, Oforikrom market, Amakom market, Bohyen market, Santasi market, Anomangye market, Ayigya market, Sofoline market, Kentinkrono market, Suame market and Kwadaso market.

The intra- city bus terminal selected were Kejetia, Prison Adum, Dr. Mensah, Pampaso, Tech Junction, Roman –Hill, Abinkyi, Sofoline, Tafo mile 4, Oforikrom, Airport round about, Atinga, Aiga School Junction, Atonso Agogo station, Aduom, Anloga and Aboabo No. 1.; while the inter-city bus terminal were MMT- Neoplan, Asafo Neoplan and Bantama bus terminal.

Moreover, in each market centre and bus terminal the head of queens and union leader was respectively selected for interview since each market centre and bus terminal had one head of queen and union leader respectively.

### **3.5 Data Requirements and Sources**

The data required for the research included the procurement processes and practices of KMA, obstacles to best procurement practices at KMA, infrastructural facilities such as market centre, transport terminal, refuge dump, toilet facilities, school etc. provided by KMA and public acceptance of these infrastructural facilities. Data on the perception of the residents in the communities were required. In addition, data on infrastructural facilities provided by KMA were verified for which pictures were taken.

The study used both secondary and primary sources of data to gather the data required for the study. The secondary sources included published reports on the subject under investigation.

The primary data was gathered through direct interviews using structured and unstructured questionnaires. Additionally, the researcher's observation skills and experience helped in gathering the required data.

### **3.6 Data Collection and Processing**

This looks at the data collection instrument employed and how the data collected was processed.

#### **3.6.1 Data Collection Instruments and Method**

The selection of data collection tools and methods is very significant in research both scientific and social. This is due to the fact that the choice of an appropriate tool offers adequate flexibility in addressing respondents differently while investigating into the phenomenon under study. The data collection instruments employed for the study were questionnaire and interview. These instruments were used to enhance the data collection process. These tools were used to ensure a complete assessment of benefit realization practices of KMA.

A questionnaire was administered to market queens and transport union leaders. In the questionnaire, a number of close and open ended questions were posed and administered. The facilities users questionnaire administered was divided into two (see appendix 1 for full questionnaire) as follows:

1. Personal data and
2. Benefit realization

Moreover, sampled KMA staffs were interviewed on areas stated below (see appendix 2 for full interview guide):

1. Procurement processes and practices at KMA
2. Benefit management practices of KMA and
3. Challenges facing KMA with respect to ensuring benefit realization

### **3.6.2 Processing of Data**

The data collected was processed using Statistical Package for Social Sciences (SPSS) and Microsoft excel spreadsheet.

### **3.7 Data Presentation and Analysis**

#### **3.7.1 Presentation of Data**

The data were presented in tables and pie charts and bar charts.

The analyses of data were done descriptively using SPSS. Each research question was analyzed and discussed and data on each research question was presented in tabular and chart form.

### **3.8 Profile of Study Area**

#### **3.8.1 Kumasi Metropolis**

Kumasi is located in the transitional forest zone and is about 270km north of the national capital, Accra. It is between latitude 6.35o – 6.40o and longitude 1.30o – 1.35o, an elevation which ranges between 250 – 300 metres above sea level with an area of about 254 square kilometres.

The unique centrality of the city as a traversing point from all parts of the country makes it a

special place for many to migrate to. Figure 3.1 is the administrative map of Ghana showing Kumasi in the Ashanti region.

The Kumasi metropolis is the most populous district in the Ashanti Region. During the 2000 Population Census it recorded a figure of 1,170,270. It has been projected to have a population of 1,625,180 in 2006 based on a growth rate of 5.4% p.a and this accounts for just under a third (32.4%) of the region's population. Kumasi has attracted such a large population partly because it is the regional capital, and also the most commercialised centre in the region. Other reasons include the centrality of Kumasi as a nodal city with major arterial routes linking it to other parts of the country and also the fact that it is an educational centre with two State Universities, a Private University, a Polytechnic, two Teacher Training Colleges, Secondary Schools and a host of Basic Schools.

Ashanti Region is currently the second most urbanised in the country, after Greater Accra (87.7%). The large urban population in the region is mainly due to the fact that the Kumasi metropolis is not only entirely urban but accounts for a third of the region's population. The growth of industries and the large volume of commercial activity in and around Kumasi as well as the high migrant number may account partly for the relatively high urban population. It has been estimated to have a daytime population of about 2 million. The population has grown rapidly over the inter-censal periods from 346,336 in 1970, 487,504 in 1984 to 1,170,270 in 2000. Based on these the census reports the estimated population growth rate as 5.47 per cent.

The city of Kumasi has been planned with about twenty seven (27) markets to serve as trading centres and places of exchange within various communities. Some of these markets have been described as traditional communities markets. The Figure 3.1 below shows market in Kumasi.

Figure 3.1: Map of Market Centres in Kumasi



Source: JAG and FAF,

### **3.8.2 Kumasi Metropolitan Assembly**

The Kumasi Metropolitan Assembly, which is the second largest city in Ghana and the only metropolis in the Ashanti Region, constitutes the highest political authority in the metropolis. It was established by Legislative Instrument 1614 of 1995 under the Local Government Law 1988, PNDC Law 207, which is now replaced by the Local Government Act 462, 1993.

The LI 1604, which was amended as LI 1805, 2005, guides, directs and supervises all other administrative authority in the metropolis. It also divides the Kumasi Metropolitan Assembly into ten sub Metropolitan District Councils namely Asokwa, Subin, Nhyieaso, Bantama, Manhyia, Kwadaso, Oforikrom, Tafo, Suame and Asawase. As part of its sub-structures, the Assembly has 24 Town Councils and 419 Unit Committees. The Kumasi Metropolitan Assembly is made up of 87 members with 60 elected members and 27 members appointed by the government.

#### **VISION**

To develop Kumasi into a safe and vibrant city by improving city management through good

governance, local economic development, tourism promotion, improved sanitation, proper environmental and social services as well as spatial and infrastructural development.

## **MISSION**

The Kumasi Metropolitan Assembly is committed to improving the quality of life of the people in the metropolis through the provision of essential service and creation of an enabling environment to ensure the total and sustainable development of the city by a well motivated staff.

## **FUNCTIONS**

The functions of the Assembly, as given by the Local Government Act 462, 1993, Legislative Instrument 1614 of amended (LI 1805), are as follows:

1. To facilitate the effective and efficient functioning of Local Government administration in the metropolis,
2. To ensure efficiency and effectiveness in the use of resources of the Assembly and decentralized departments,
3. To monitor, co-ordinate and harmonize the implementation of development plans and programmes in the metropolis,
4. To facilitate the provision of basic social services and economic Infrastructure such as schools, markets and health facilities in the metropolis,
5. To facilitate community based and private sector developments,
6. To ensuring existence of peace and tranquility to enable people go about their social and economic activities,

7. To establish, install, build, maintain and control public latrines, lavatories urinal and wash places,
8. To improve environmental and sanitation condition through sound waste management practices,
9. To control haphazard land development and the provision of basic social physical Infrastructure (ie. Educational & health facilities)
10. To enhance the planning, budgeting and project execution role of the Assembly,
11. To ensure efficient service delivery, staff orientation, co-ordination of departmental activities as well as client feedback information on the Assembly's performance,
12. To provide for building lines and the layout of buildings, to prepare and undertake and otherwise control schemes for improved housing layout and settlement,
13. To regulate and control markets including the fixing and collection of stall rates and tolls,
14. To promote civic participation and transparency in local governance and information through the operation of the Sub structures of the Assembly, and
15. To ensure effective and efficient revenue mobilization and management.

**The KMA is responsible for:**

1. The issuance of Building Permit
2. The issuance of birth and death certificates and burial permits
3. The issuance of marriage certificates
4. The approval of Planning Schemes(Layouts)
5. The control of developments - orderly physical development of settlement
6. Waste Management and waste collection.

7. Revenue Mobilization
8. Fixing of Fees and Rates
9. The preparation of development budgets
10. The provision of basic socio-economic infrastructure etc. schools, health centers, markets, lorry parks.
11. The maintenance of peace and security and
12. The development of sports and culture.

The KMA has the following department

1. Works department: The Kumasi Metropolitan Works Department is one of the departments established under Act 462 (first schedule) for the five (5) Metropolitan Assemblies in Ghana. In order to carry out these functions, the Metropolitan Works Department is structured into units namely: Structures, Administration, Maintenance, Electrical, Development Control, Architectural and Surveying, Out Door Advertising, Projects and Research with the Metropolitan Works Engineer as the Head. The Department performs its functions by relating with the Ten (10) Sub-Metropolitan District Councils and other departments under the umbrella of the Kumasi Metropolitan Assembly, especially Waste Management, Roads Department, Town and Country Planning, Education, Finance, Planning and Budget and Legal Departments.

The Department is responsible for the development and maintenance of first cycle schools, markets, sanitary structures, management of the Assembly's lands

properties in collaboration with the Estate and Town and Country Planning Department, design and management of all building and development projects of the Assembly, as well as collaborate with the Department of Urban Roads in the development of road infrastructure and all lorry terminals (lorry parks). The Department also renders services such as building permits, outdoor advertisement permits, certification of true copy of approved building plans and identification and ownership of buildings. The Metropolitan Works Department also demolishes unauthorized developments as well as dangerous and unsightly buildings/structures. The Department has the requisite human resources to deliver all the services listed above.

2. Planning Department: It serves as the secretariat of the Metropolitan Planning and Coordinating Unit (MPCU). The MPCU is the hub for coordinating all programmes, projects and activities of all the departments and units of the Assembly including the Decentralised departments. Minutes of the monthly meetings of the MPCU are prepared by the unit. The unit is responsible for building the data base of the Assembly. This includes the collection of baseline data, the updating of existing data, the analysis and synthesis of data for planning and other decisions. The unit is also responsible for the preparation of Medium Term Development plans like the MTEF strategic plan, 5-year Medium Term Development Plans based on guidelines issued from the NDPC, MLGRDE, annual action plans of the Assembly, investment proposals and annual budget and supplementary estimates of the Assembly including revenue projections. The unit takes the lead in the monitoring and evaluation of development projects of the Assembly including Donor funded programmes and projects. In this regard the unit issues on-the-

spot, monthly, quarterly and annual monitoring/progress monitoring/progress reports on all programmes and projects of the Assembly. Also, the endorsement of payment certificates for work executed is a major responsibility of the unit.

3. Finance Department: The Metro Finance Office of Kumasi Metropolitan Assembly is responsible for the financial and accounting duties of the Kumasi Metropolitan Assembly. It is responsible for the keeping of the Local Accounts as the Assembly and reporting on them periodically (monthly and annually) as well as servicing the decentralized departments of the Kumasi Metropolitan Assembly by paying their quarterly grants (F. E. s ) from the central government to them and reporting on them to the Controller and Accountant General. The finance office is headed by the Metropolitan Finance Officer.
4. The Budget Department: The Budget Unit of Kumasi Metropolitan Assembly is responsible for budgeting and financial management functions to ensure prudent and judicious use of the Assembly's resources.
5. Internal Audit Department: The Internal Audit Unit exist to carry out audits and professional evaluations of the activities of the Kumasi Metropolitan Assembly and to ensure that the system of Internal Controls applicable to financial, programme and project areas provide reasonable assurance to management.
6. Environmental Health Department: The purpose of the Environmental Health Department is to ensure the prevention of any hazard or negative impact the environment may have on man. The department is therefore to assess, correct, control and prevent those factors in the environment which can adversely affect the health of both present and future generations.

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## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.0 Introductions

Data were collected from traders and operators of selected markets and transport terminals in accordance with the methodology presented in Chapter Three. The instrument used was questionnaire. Further information was collected from officials of KMA using interviews. This chapter captures the documentation of responses received and discussion of responses.

In this chapter the results of the study are presented and discussed. The presentation and discussion of data was done in accordance of the arrangement of objects of the study. However, characteristics of the facility users' respondents were first presented and discussed.

#### 4.1 Characteristics of Respondents

#### 4.1.1 Gender Type and Working Experience

The gender and the number of years of working experience of respondents who availed themselves to the data collection exercises are as shown in the Table 4.1.

KNUST

**Table 0.1: Characteristic of Facility Users**

Variables	Frequency	Percentage
<b>GENDER</b>		
Female	19	43.2
Male	25	56.8
Total	<b>44</b>	<b>100.00</b>
<b>WORKING EXPERIENCE (YRS.)</b>		
Below 1	5	11.4
1-3	9	20.5
3-5	3	6.8
5-10	5	11.4
10 and above	22	50.0

Variables	Frequency	Percentage
<b>Total</b>	<b>44</b>	<b>100.00</b>

Source: Field Data, 2013

From Table 4.1, out of the 44 respondents interviewed, 19 representing 43.2% were females. The remaining 25 respondents forming 56.8% were males.

Moreover, with regards to number of years that the facility users have been at the facility and involved in the usage of the facility, 11.4%, 20.5%, 6.8%, 11.4% and 50.0% had been involved in the usage of the facility for less than 1 year, between 31- 3 years, between 3-5 years, between 5-10 years and 10 years and above respectively.

#### **4.1.2 Gender and Facility Type Relationship of Respondents**

To relate the characteristics of facility users to project type (market centers and transport terminals), a cross tabulation was produced as shown in Table 4.2 and Figure 4.1 and 4.2.

**Table 0.2: Characteristics of Facility Users and Facility Type Relationship**

Variables	Project type		Total
	Market centers	Transport terminal	
GENDER			
Female	13 (68.4%)	6 (31.6%)	19 (100.0%)
Male	11 (44.0 %%)	14(56.0%)	25 (100.0%)
Total	24 (54.5%)	20 (45.5%)	44 (100.0%)
NUMBER YEARS SPENT AT FACILITY CENTRE			
Below 1	5 (100.0%)	0 (0.0%)	5 (100.0%)
1-3	5 (55.6%)	4 (44.4%)	9 (100.0%)
3-5	3 (100.0%)	0 (0.0%)	3 (100.0%)

Variables	Project type		Total
	Market centers	Transport terminal	
5-10	3 (60.0%)	2 (40.0%)	5 (100.0%)
10 and above	8 (36.4%)	14(63.6%)	22(100.0%)
<b>Total</b>	<b>24 (54.5%)</b>	<b>20 (45.5%)</b>	<b>44 (100.0%)</b>

Source: Field Data, 2013

Figure 4.1: Years of Experience of Respondents and Facility Type

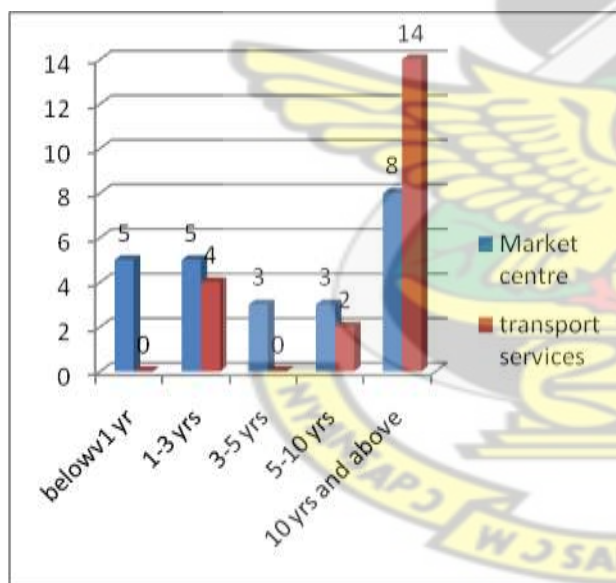
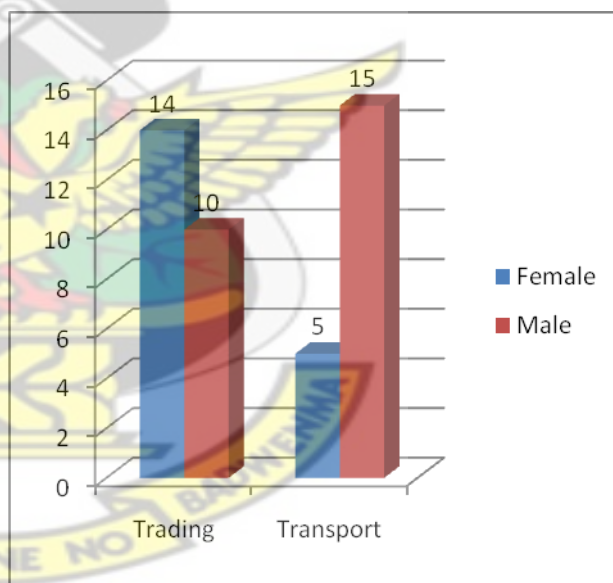


Figure 4.2 Gender of Respondents and Facility Type



Source: Field Data, 2013

From the cross tabulation in Table 4.2 and Figure 4.2, the number of female out number that of males in the market centers whiles males outnumber the females in transport terminals. Females accounted for 68.4% and 31.6% in market centers and transport terminals respectively. Also

males accounted for 44.0% and 56.0% in market centers and transport terminals respectively. This is because, in the market centres, the common economic activity is petty trading (selling of food items) and it is seen that most women are into petty trading in Ghana. Income of women is relatively lower than men and women with little capital can go into petty trading since it requires little capital. Transport service is dominate economic activity at transport terminals and in Ghana, commercial drivers are mostly men. Their work takes them away from home most often any this is perceived to be not good for women who normally preoccupied with household responsibility.

Moreover, from the cross tabulation in Table 4.2 and Figure 4.1, majority of the respondents had spent more than 3 years at the both business centers (market centers and transport terminals) hence they have experienced quite some number of projects initiated and developed by KMA. From Table 4.2, out of the 44 respondents, 30 of them forming 68.2% had spent more than 3 years at both centers. Also, out of the 24 respondents from market centers, 14 of them forming 58.3% had spent more than 3 years and out of 20 respondents from transport terminals, 16 of them forming 80.0% had spent more than 3 years. This suggests that those at transport terminals had spent more time than those at the market centers. This is because, KMA has been relocating some market centers and this has made most of the market women new to their respective market centres relative to transport workers. This relocation of market centres according to KMA was driven by the need to decongest the city.

#### **4.2: Benefit Realization Practices at KMA**

This section considered findings and discussion on benefit realization practices at KMA and was divided into Stakeholders in Benefit Realization, Benefit Determination and Evaluation and Review.

#### 4.2.1 Stakeholders in Benefit Realization

The study sought to find out various stakeholders, their roles and engagement in specific infrastructural projects (Market centers and transport terminal) and the responses are summarized in Table 4.3.

Table 4.3: Stakeholder and their Roles in Infrastructural Projects in Kumasi Metropolis

Stakeholders	Roles	Stages of engagement
Design team (engineers, surveyors, architecture etc) at KMA	<ol style="list-style-type: none"> <li>1. Construction engineers conduct surveys, engage in research, analyze results, plan the construction and oversee to the construction of the project</li> <li>2. Quantity surveyors provide cost advice to KMA throughout all stages of the project.</li> <li>3. Architects create design for projects that KMA wish to undertake</li> </ol>	Pre construction and post construction stages
Planning office, KMA	monitor and evaluate developmental projects of the	All construction stages
Contraction partners	Transform the project design into real project (ie	During construction

	building works)	stage
Beneficiaries (traders' association and transport union)	Use of facility provided	Post construction stage
Finance office, KMA	Source funding and honour payment of contract	All construction stages

Source: Author's Construct, 2013.

From Table 4.3, KMA identifies key stakeholders of specific infrastructural projects and assign each stakeholder specific roles. KMA realizes that beneficiaries (transport union and traders association) have stake to ensure optimum benefit of the projects. However, KMA does not directly involve the beneficiaries in the projects.

The benefit realization approach by KMA with regards to stakeholders' identification is consistent with Benefits Realization approach by Remenyi & Sherwood-Smith (1998). According to Remenyi and Sherwood-Smith (1998) selected stakeholders should continuously involve and participate in the project. The purpose of involving various groups of stakeholders has several objectives. A better understanding is achieved through the learning process which enhances the competence of the participations.

#### 4.2.2 Benefit Determination

This section considers specific benefit determination procedures at KMA used for facilities under consideration. According to KMA officials, the benefit determination processes at KMA start with the need for improvement, benefit identification of projects, people responsible for

implementation of projects, identification of affected persons of project and time for completion of projects.

### **The Need for improvement**

The KMA in consultation with stakeholders identified in Table 4.3 discuss whether or not there is a need for improvement. According the KMA officials, they identify key projects that need improvement and places where the improvements are needed. This is then documented to form the development plan for the Assembly. This is a pre construction stage exercise. However, the facility users had the view that KMA does not actively involve them this process. The users at market centre held this view more than those at transport terminals.

### **Benefits of Improvement identified**

Another phase of benefit determination employed by KMA is identification of benefits of projects identified. According to the KMA officials, the Planning Office is responsible for identifying benefits associated with projects. The planning officers were asked whether they were able to measure or quantify or place financial value of benefits identified for each projects and the response was “No” since according to them not all benefits could be identified. According to the planning officials at KMA, the benefit identification of projects is at pre construction stage. The inability of the planning officials to quantify benefits has the potential of creating problem of assessment of benefit realization at post construction stage. Benefit realization is effectively carried out when benefits are quantified (Daniel and Ward, 2006). The inability of planning officials to quantify benefits may be as a result of lack of experts at the planning office or low involvement of stakeholders in the projects.

## **Responsibility for Implementation of Projects**

This is about who is responsible for implementation of the projects and according to KMA officials, the Engineering Department, Design team and Construction Partners are responsible for implementation throughout the projects (see Table 4.3 for their specific roles). The contractors, according to KMA officials are contracted through procurement processes by KMA.

## **The Affected Persons**

According to the KMA officials, the Assembly through the Planning Department identified affected persons of each project. The affected persons according to planning officials are the beneficiaries of the projects. On whether the affected persons were adequately educated on the effects of the projects on them before commencement, all had the opinion that they were not adequately informed and the projects commenced all of a sudden. This according to the affected persons and confirmed by KMA officials often resulted in attack on contractors and suspension of projects. Moreover, the affected persons had the view that KMA has no efficient mitigation or relocation plan for them. This according to them lead to situation where affected persons who lose their facilities or spaces due to construction or projects do not regain the facility or space after construction.

## **Time for completion of project**

According to KMA officials, each project had time tag for completion but hardly were they completed on time due to suspension of projects as a result of attack on contractors and un planned changes that occurred in the course of construction. According the officials average time delay in projects is estimated to be 6 month to 1 year for market centres and transport terminals.

The officials also added that delay in projects adds more cost and this is estimated to be additional cost of 15% to 20% of project cost. This is clear indications that delay in projects lead to financial loss in the Assembly and the nation as a whole.

#### **4.2.3 Evaluation and Review of Project**

This section sought to find out how KMA undertakes the Evaluation and Review at pre –design (benefit determination), design, construction and post construction stages. From literature one of the key features of a Benefit Realisation Model is the continuity in its evaluation, review, monitoring and control. This feature ensures that the intended Benefits are not lost. The officials at KMA indicated that this feature is experienced at their offices at three (3) stages; Design and Construction and post construction stages.

##### **Pre-design stage**

At the Pre- design stage, benefits of proposed projects or interventions are determined and these established benefits are to be enjoyed merrily by users of the facilities. At the Pre- design stage these benefits may change to a myriad of factors such as availability of funds (budget inadequacy), change in stakeholder requirements, change in legislation etc.

Out of the total number of 10 officials interviewed at KMA, all indicated that no processes or procedures existed for benefit review, monitoring and controlling at the pre- design stage.

According to a total of 44 facility users, all indicated that KMA does not consult them for their requirements which are the basis of Benefits Determination and therefore any possible changes in their requirements before the commencement of designs are not taken into consideration.

On the other hand all the respondents believed that benefits can change over time and hence the need for proper reviews.

Due to the role of the Planning office, the Planning officers are supposed to assume the role of reviewing and monitoring of Benefits at this stage. Currently no one is in charge of that role.

### **Design stage**

Out of 10 officials at KMA interviewed, all agreed that the Engineering department and some cases hired Private Consultants are responsible for the review of Benefits at the design stage. Respondents indicated that the design teams work independently but meet later to consolidate the final design. Respondents at the Engineering Department indicated that designs usually evolve to the extent based on allocated budget and not the Benefits set for the project: meaning designs are invariably not linked to the Benefits and no review takes place at this stage. Benefits set for the project can therefore be lost at this stage.

The Planning office should be primarily responsible for reviewing at this stage as well but that is non- existence.

### **Construction stage**

Responses from officials of KMA indicate that the design team do constantly assess construction work in order to produce desired output. This is not surprising because that is the training of

members of the design team. At this stage as well the Planning Office is expected to provide some leadership in the review and Evaluation of Benefits. At KMA and at this stage, Reviews of Benefits are non- existent, making it highly possible for established Benefits to be lost at stage as well.

### Post construction stage

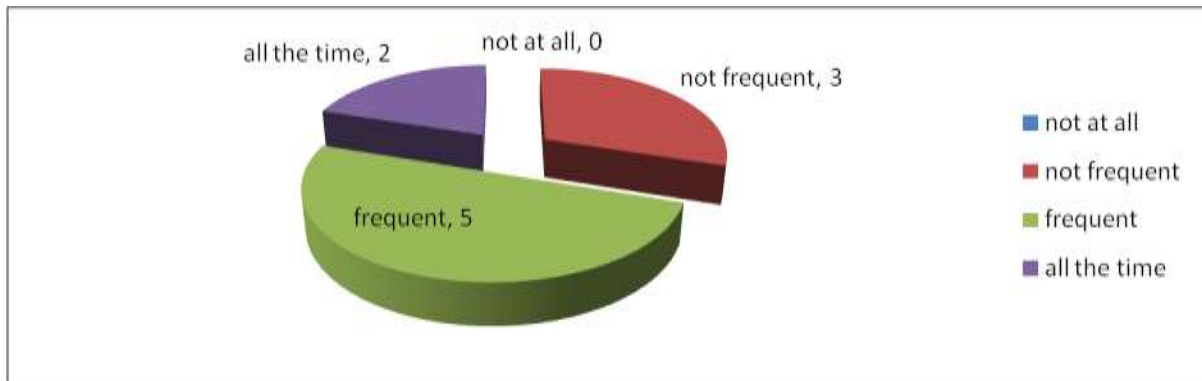
This sought to find out whether KMA evaluate and review projects after construction to know whether intended benefits are met and the responses and the frequency of the review and evaluation are summarized in Table 4.4 and Figure 4.3.

Table 4.4: Review and Evaluation of Project to Ensure Benefit Realization at Post Construction Stage

Variables	F	%
Not at all	0	0.0
Not frequent	3	30.0
Frequent	5	50.0
All the time	2	20.0
Total	10	100.0

Source: Field Data, 2013

Figure: 4.3: Review and Evaluation of Project to Ensure Benefit Realization at Post Construction Stage



Source: Field Data

From Table 4.4 and Figure 4.2 30.0%, 50.0% and 20.0% of officers at KMA had the view that KMA evaluate and review project after construction: ‘not frequently’, ‘frequently’ and ‘at all time’ respectively to ensure benefit realization are met. Also, at post construction, planning office and design team are responsible for evaluation and review of projects. The planning office according to the respondents evaluates and reviews the usage of the facilities to check whether they are consistent with intended benefit identified. Also, the design team especially construction engineers assess the structural strength and capacity in relation to the project design. This accession, though coming from the official of KMA, would be fruitless as the benefits might have been lost along the project cycle and at the post construction stage it will be too late to review with the mind to control the attainment of benefits.

### Methods of evaluation and Review

KMA, according to the officials uses both structural assessment and focus group discussion methods to review and evaluate projects as shown in Table 4.5

Table 4.5: Methods use For Evaluation and Review of Project at Each Phase of project

Variables	Structural assessment	Focus group discussion	Total
Pre-design stage	N/a	N/a	10 (100.0%)
Design stage	3 (30.0%)	7 (70.0%)	10 (100.0%)
construction stage	8 (80.0%)	2 (20.0%)	10 (100.0%)
Post construction stage	6 (60.0%)	4 (40.0%)	10 (100.0%)

Source: Field Data, 2013

From Table 4.5, 30.0% and 70.0% of the KMA officials were of the view that KMA mostly use structural assessment method and focus group discussion method respectively at design stage. The focus group discussion dominate at design stage because according KMA officials, this stage forms the basis of the contract and final output hence the need to seek the views of all stakeholders identified in Table 4.3. The views of the stakeholders shape and determine the project design and desired output of the projects.

Also, 80.0% and 20.0% of the KMA officials were of the view that KMA mostly use structural assessment method and focus group discussion method respectively at construction stage. This clearly suggests that structural assessment method dominates at construction. According to KMA officials, works at construction stage is more technical and requires involvement of technical people (design team) and the views of other stakeholders are limited at this stage.

Finally, 60.0% and 40.0% of the KMA officials were of the view that KMA mostly use structural assessment method and focus group discussion method respectively at post construction stage. This suggests that structural assessment method dominates at post construction stage at the expense of focus group discussion. This clearly shows that views of beneficiaries on the facilities

are limited and KMA does not mostly involve or interact with users of the facilities assess their effects on them.

#### 4.3 Challenges Facing KMA in Benefit Realization

The implementation of any plan usually is met with some challenges. This section therefore presents some of the challenges facing KMA in benefit realization implementation. In order to do this rating system was used as: 1=not a common challenge and 2= common challenge. The responses are presented in the Table 4.6 and Figure 4.4 as challenges facing KMA in ensuring benefit realization of project. From the findings, out of the 10 KMA officials, 60 .0% of them were of the major challenge facing KMA in its benefit realization implementation is low stakeholders participation especially, the facility users. The planning officers stated that the facility users, specifically the market women are most often preoccupied with their trading activities; hence show little or no interest in stakeholder meetings. There are:

1. Low education by KMA. KMA does not adequately education and inform beneficiaries of intended change to come and this creates a barrier to beneficiaries to actively involve and contribute to change.
2. Another possible reason is busy scheduled of beneficiaries. Most of the beneficiaries are economically active and into various businesses and therefore do not have much time participate in forums especially at the pre-design stage (benefit determination stage) which is the starting point of any project. The KMA knowing this problem has reduced their outreach programmes and these have affected community participation adversely.

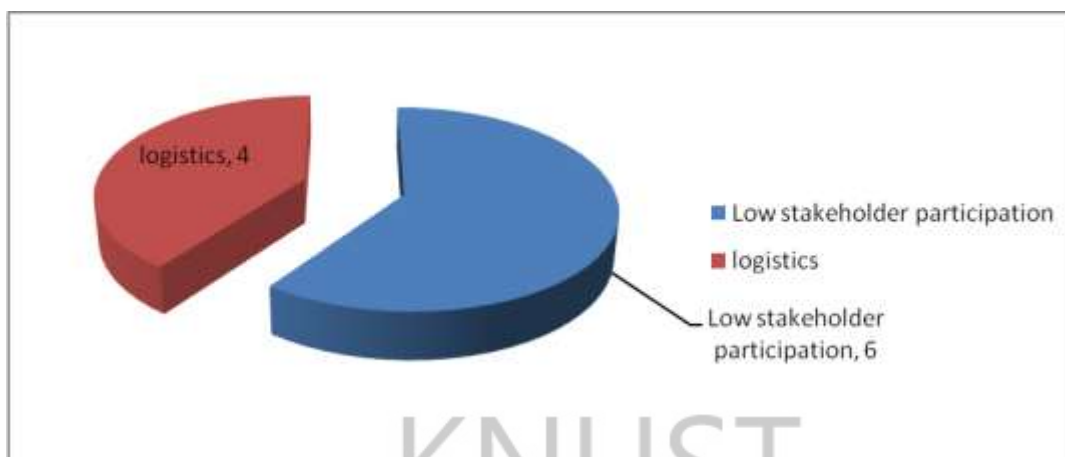
The remaining 40.0% of them were the view logistics is the major challenge facing KMA in its benefit realization implementation. Also, according to the respondents, the logistical problem at the KMA is equipment and means of transport. The inadequate equipment such as computers, printers, fax and telephone and this coupled with inadequate mean of transport makes monitoring team unable to frequently visit all facility centres as scheduled from time to time and educate the users on benefit of specific project. This demonstrates how the KMA officials are handicapped in ensuring benefit realization in the Metropolis.

Table 4.6: Challenges KMA faces in Ensuring Benefit Realization

Challenges	Frequency	Percentage
Low stakeholders participation	6	60.0
Logistics	4	40.0
Total	10	100.0

Source: Field Data, 2013

Figure 4.4: Challenges KMA Faces in Ensuring Benefit Realization



Source: Field Data, 2013

#### 4.4: Public Acceptance of Infrastructural Projects Provided by KMA

This section was devoted to KMA and Stakeholders/ beneficiaries interaction (Table 4.7) and problems with facilities (Table 4.8; Figure 4.5 and Table 4.9; Figure 4.6) and beneficiaries' satisfaction with projects (Table 4.10; Figure 4.7).

##### 4.4.1 KMA and Facility Users Interaction

This subsection considers how KMA and facility users interact at both business centres (market centres and transport terminals). One of the best ways through which KMA can make known the benefit of infrastructural projects to facility users is through direct contact with the facility users. The Table 4.7 summarizes perception of facility users on their awareness of benefits of projects before their commencement.

Table 4.7: KMA and Facility Users interaction

Variables	Project type		Total
	Market centers	Transport terminal	
<b>Beneficiaries aware of project before commencement</b>			
No	16 (69.6%)	7 (30.4%)	23 (100.0%)
Yes	8 (38.1%)	13(61.9%)	21 (100.0%)
Total	<b>24 (54.5%)</b>	<b>20 (45.5%)</b>	<b>44 (100.0%)</b>
<b>Discussion of benefit with beneficiaries (only those engaged)</b>			
No	5(55.5%)	4(44.5%)	9 (100.0%)
Yes	3(25.0%)	9(75.0%)	12 (100.0%)
Total	8(38.1%)	13(61.9%)	21(100.0%)
<b>Meeting with Beneficiaries after completion of projects</b>			
Not at all	13 (72.2%)	5(27.8%)	18(100.0%)
Not often	10 (50.0%)	10 (50.0%)	20 (100.0%)
Often	1 (16.7%)	5 (83.3%)	6 (100.0%)
<b>Total</b>	<b>24 (54.5%)</b>	<b>20 (45.5%)</b>	<b>44 (100.0%)</b>
<b>Partnership with KMA</b>			
No	17 (73.9%)	6 (26.1%)	23 (100.0%)
Yes	7 (33.3%)	14 (66.7%)	21 (100.0%)
<b>Total</b>	<b>24 (54.5%)</b>	<b>20 (45.7%)</b>	<b>44 (100.0%)</b>

Sources: Field Data, 2013

From Table 4.7, out of 44 respondents, 23 forming 52.3% were not consulted and engaged on the projects while the remaining 47.7% were consulted and engaged in the projects. Out of those who were engaged on the projects, 61.9% were users of transport terminals (drivers and transport owner) while the remaining 38.1% were users of market centers (traders). However, out of those who were engaged on the projects (21 users), only 12 of them forming 57.1% had the view that KMA officers discussed with them the actual benefit of the projects while the remaining 42.9% responded otherwise. Moreover, with regards to discussion of actual benefit and project type, majority (75.0%) of transport terminal users had the view that KMA officers discussed with them actual benefit of the construction of terminal while only 25.0% of the market centers users had an understanding of the actual benefit of the construction of market centers. This clearly suggests that KMA's engagement with beneficiaries of projects is low and this may force beneficiaries to rely on other sources such as the media and friends for information on projects by KMA. This has the tendency of obscuring information and impeding the progress of the project as beneficiaries may oppose the said project for lack of understanding of actual benefit to them.

Post assessment of construction of projects is a critical aspect of ensuring benefit realization. However, from Table 4.7, 18 facility user forming 40.9%, 20 facility users forming 45.5% and 6 facility users forming 13.6% had the view that KMA officers 'not at all', 'not often' and 'often' respectively meet them to discuss project outcome. Moreover, KMA officers often meet users of transport terminals more than users of market centers as shown in Table 4.7. This is because, it was observed from the study that users of transport terminals were more enlightened and less busy than users of market centers and therefore have more time for KMA officials and also constantly insist on their right as stakeholders than users of market centers.

#### 4.4.2 Facility Users' Perceptive of Problems with Facilities

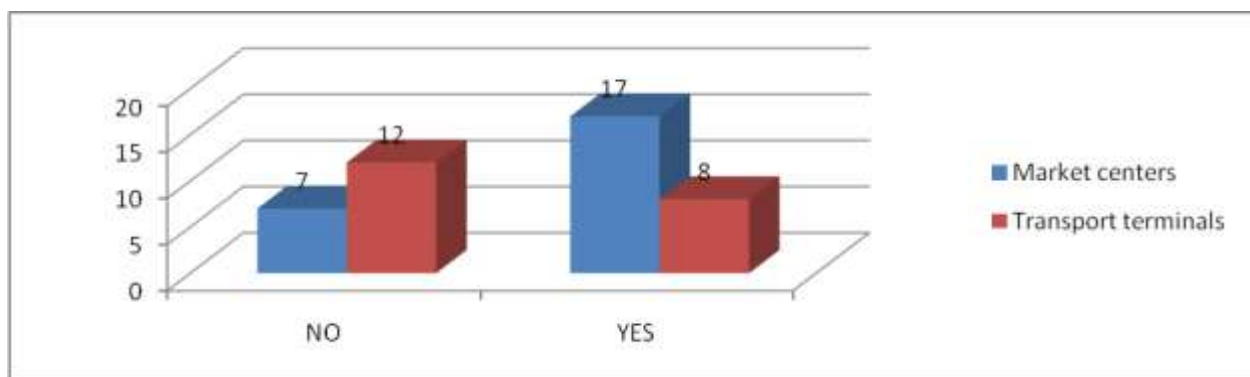
This subsection deals with the facility users' perception of problems with facilities provided by KMA and their responses are summarized in Table 4.8 and Figure 4.5.

Table 4.8: Users' Perspective of Problems with Facilities

Variables	Project type		Total
	Market centers	Transport terminal	
<b>Problems with facility</b>			
No	7 (73.1%)	12 (63.2%)	19 (100.0%)
Yes	17 (68.0%)	8(32.0%)	25 (100.0%)
Total	<b>24 (54.5%)</b>	<b>20 (45.5%)</b>	<b>44 (100.0%)</b>

Sources: Field Data, 2013

Figure 4.5: Users' Perspective of Problems with Facilities



Source: Field Data, 2013

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From Table 4.8 and Figure 4.5, out of 44 respondents, 19 forming 43.2% had the view that facility had no identifiable problem while 25 respondents forming 56.8% were of the view that the facility had problems. Out of the respondents with the view that facility had problems, 68.0% and 32.0% were market centers users and transport terminals users respectively.

The facility users further rated the problems of their respective facility using the rating scale:

1=not at all    2 = not common    3= common    4 = very common    5= most common. The

findings are summarized in Table 4.9 and Figure 4.6. From the Table 4.9 and Figure 4.6, the market women perceived fire outbreak as the most common problem in the market centres and this was followed by human and traffic congestions. Goods destruction due to roof leakages during rainy season had the least rating average.

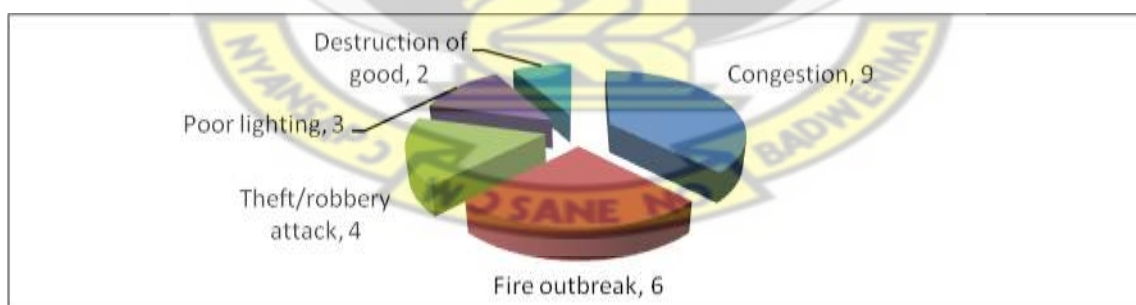
Table 4.9: Rating of Problems from Perceptive of Facility Users at Market centers

Challenges	1	2	3	4	5	Rating average	Response count
Congestion	0	0	6	12	6	4.0	24

Challenges	1	2	3	4	5	Rating average	Response count
	(0.0%)	(0.0%)	(24.0%)	(50.0%)	(24.0%)		
Fire outbreak	0 (0.0%)	0 (0.0%)	0 (0.0%)	6 (24.0%)	18 (75.0%)	4.8	24
Theft and robbery	0 (0.0%)	10 (41.7%)	8 (33.3%)	6 (24.0%)	0 (0.0%)	2.8	24
Poor lighting	10 (41.7%)	4 (16.7%)	10 (41.7%)	0 (0.0%)	0 (0.0%)	2.3	24
Goods destruction	14 (58.3%)	10 (41.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1.4	24

Source: Field Data, 2013

Figure 4.6: Rating of Problems from Perceptive of Facility Users at Market centers



Source: Field Data, 2013

However, at transport terminal, all the respondents had the view that congestion is the major problem confronting them.

#### 4.4.3 Facility Users' Satisfaction with Facilities

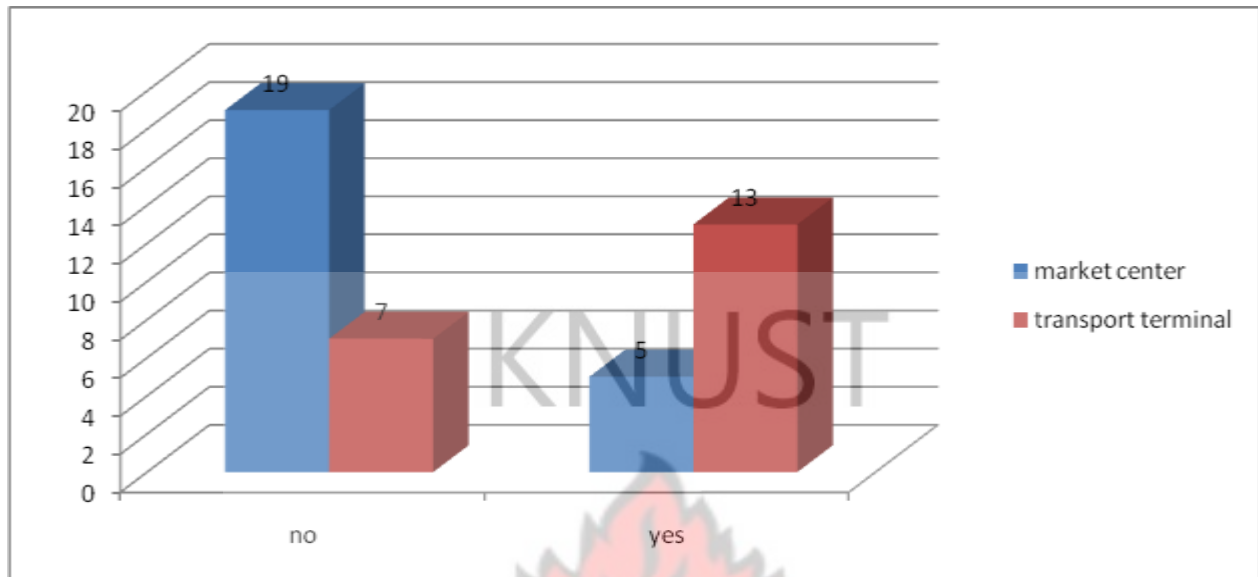
The facility users are satisfied when their expectations are met by the facility provided by KMA and this study sought to find out whether or not they are satisfied with the facility provided by KMA. The study asked the facility users a simple question: are you satisfied with the facility provided by KMA? And the responses are given in Table 4.10 and Figure 4.7.

Table 4.10: User's Satisfaction with Facility

Variables	Project type		Total
	Market centers	Transport terminal	
<b>Happiness with facility</b>			
No	19(73.1%)	7(26.9%)	26 (100.0%)
Yes	5(27.8%)	13(72.2%)	18 (100.0%)
<b>Total</b>	<b>24(54.5%)</b>	<b>20(45.5%)</b>	<b>44(100.0%)</b>

Sources: Field Data, 2013

Figure 4.7: User's Satisfaction with Facility



Source: Field Data, 2013

From Table 4.10 and Figure 4.7, out of 44 respondents, only 18 forming 40.9% were satisfied with the facility while the remaining 59.1% were not satisfied with the facility. Out of those satisfied with the facility, 13 forming 72.2% were at the users of transport terminals and the remaining 27.8% were users of the market centers.

From Table 4.14, users' satisfaction with facility is strongly positively correlated with users' participation in project and users understanding of actual benefit. Moreover, users understanding of actual benefit increases with users' participation in project. The users of transport terminals are more satisfied than users of market centres because the users of transport terminals were more aware of the project and better understood the benefit of the project before their commencement than users of market centre and KMA officials had more. KMA officials had

more discussions and meetings with users of transport terminals before, during and after completion of the project than users of market centers.

This finding is consistent with literature. Beneficiaries' interests can be affected, both positively and negatively, throughout the course of a major infrastructure and construction project (S. Olander, 2008). According to S. Olander (2008), representatives of these interests are referred to as the project stakeholders who can benefit or threaten a project due to their power and intention to influence outcomes in line with their individual concerns and needs. Failing to address and meet the concerns and expectations of project stakeholders has resulted beneficiaries' dissatisfaction and many project failures.

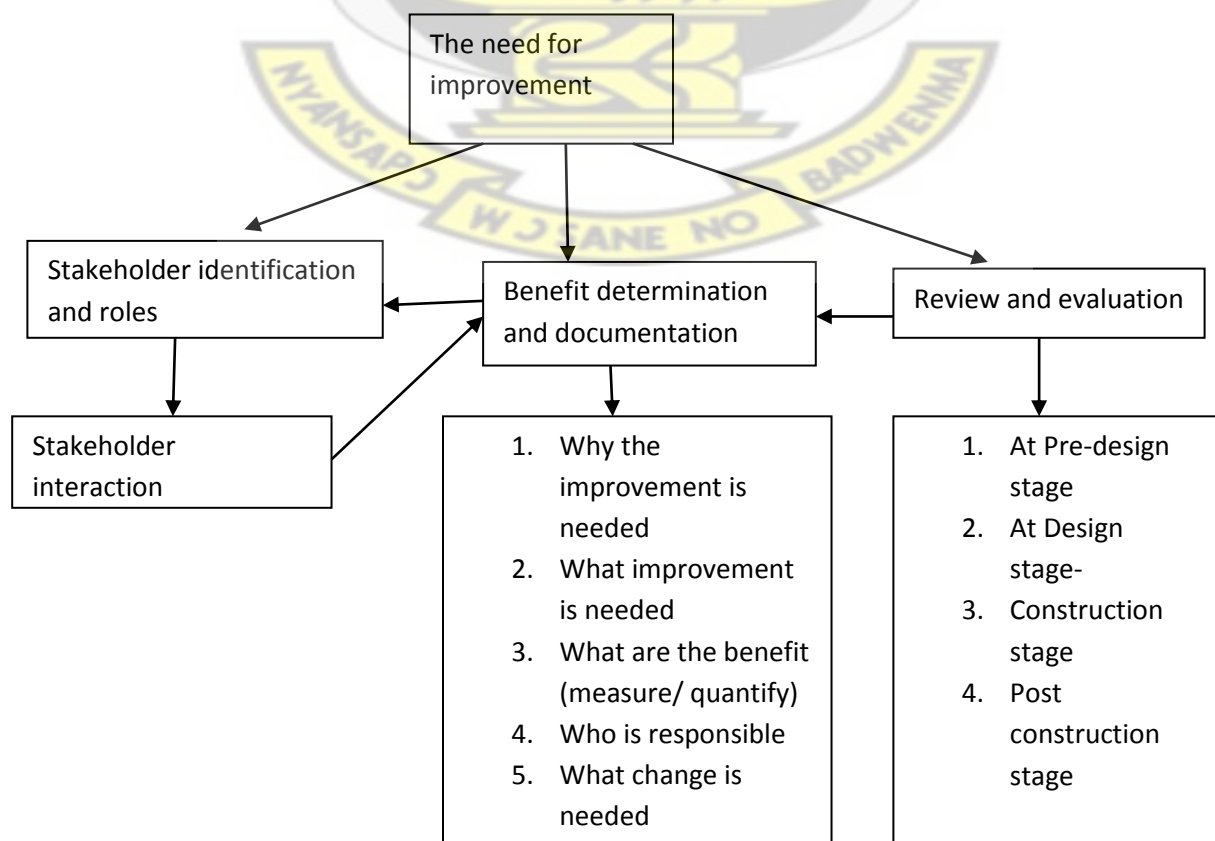
Moreover, beneficiaries' participation in projects help project provider (KMA) to identify what beneficiaries think they want and produce facility which reflects that understanding of the beneficiaries (Scott, 2010). Therefore KMA needs to constantly work with and engage beneficiaries of projects to provide facilities acceptable by them. , get feedback from stakeholders, and then update their solutions to reflect their improved understanding.

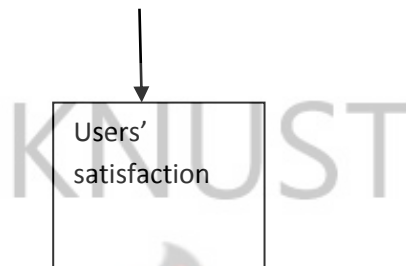
#### **4.5: Framework for Benefit Realization at KMA**

From the findings, framework for successful benefit realization can be developed for KMA as shown in Figure 4.8. The framework was validated by experts at KMA after a validation meeting using focus group approach.

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Figure 4.8: Framework for benefit realization

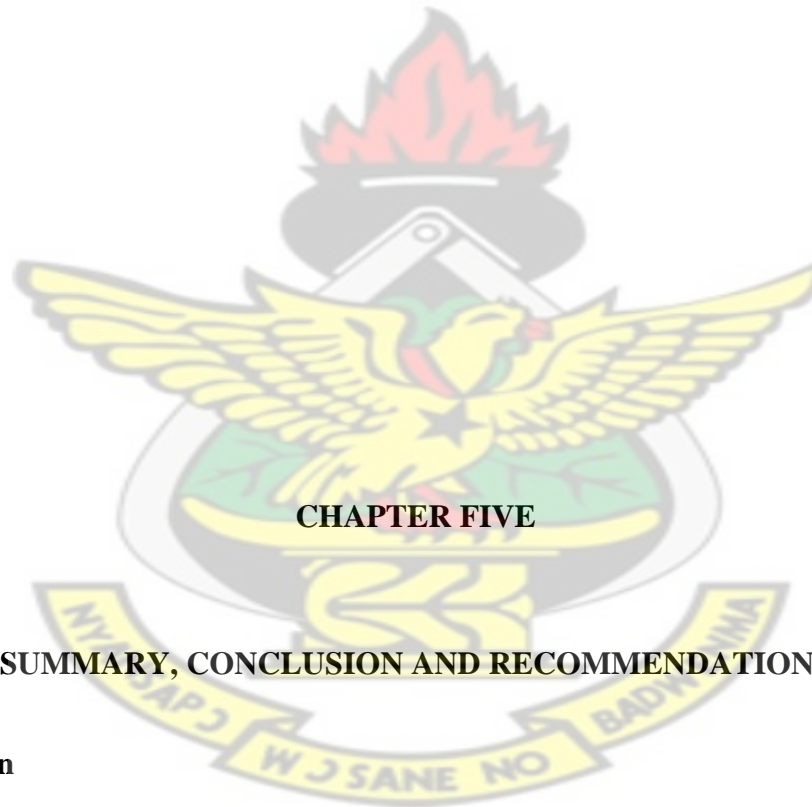




Source: Author's Construct, 2013

From the framework, KMA shall identify a change or facility for construction and clearly identify all the stakeholders of the project such as contractors, design team, beneficiaries with specific roles and constantly communicate to the intended benefit of the project and engage them in provision of the facility. For successful benefit determination, seven approaches shall be used as indicated in the framework. Moreover, KMA through its planning officers and design team shall evaluate, review and monitor project at pre- design stage, design stage, construction stage and post construction stage and communication any change to beneficiaries. The outcome of this process is that intended benefit shall be realized and beneficiaries shall be satisfied with facility.

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## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter summarizes the study's findings and provides evidenced based recommendation for the study. This chapter moreover, provides conclusion for the study.

#### 5.1 Summary of Major Findings

This section provides the summary of findings of this study in line with the objectives of the study outlined in Chapter One.

### **5.1.1 Benefit Realization Practices Employed by KMA for Infrastructural Projects**

From the survey, it was realized that KMA identifies key stakeholders of specific infrastructural projects but does not directly involve the beneficiaries (market queens and transport union leaders) in the projects. The study found out that KMA has benefit determination processes in place but does not quantify benefits identified for each projects and affected persons are adequately educated on the effects of the projects on them before commencement. Moreover, KMA gives time tag for completion of projects but hardly do projects are completed on schedule and add additional cost to actual cost of the project.

Moreover, it was realized that KMA evaluate and review of project at design: mostly through focus group discussion, construction and post construction stages: mostly through structural assessment.

### **5.1.2 Factors that Militates Against the Operation of Effective Benefit Realization at KMA**

It was realized from the study that KMA has several challenges in its benefit realization implementation. From the study, the major challenge facing KMA in benefit realization of projects is low stakeholders participation especially, the facility users. The low facility users' participation according to this study is due to low level of education on projects by KMA and busy schedules of beneficiaries. Moreover, logistical problems ranging from equipment and vehicle are another challenge. This according to the study has adversely affected the ability of the planning officers to frequently visit all facility centres as scheduled.

### **5.1.3 Public Perception of some Infrastructural Projects Provided by KMA**

From the study, it was realized that most of the facility users had the perception that KMA's engagement with beneficiaries of projects is low. However, KMA engaged the users of transport terminals more than the users of market centres. Moreover majority of the facility users had the perception that "not at all" meets with them to discuss project outcome. Moreover, majority of the facility users (56.8%) had the perception that the facility had problems and users of market centres had this perception more than users of transport terminals. The most common problem in the market centres is perceived to fire outbreak whiles goods destruction due to roof leakages during rainy season had the least rating average. The study further realized that more facility users (59.1%) were not satisfied with the facility and the users of market centres were perceived not to be satisfied more than users of transport terminals.

### **5.2 Conclusion**

The infrastructure projects by Kumasi Metropolitan Assembly (KMA) are required to meet facility users needs to promote improvement in quality of lives of the general public. A good procurement should therefore have benefits realisation management, so as to achieve the outcome and benefits of a project. According to McCartney (2000), projects and programmes can only be regarded as successful if the intended benefits are realised. It is in view of this that this study was conducted to ascertain whether or not infrastructural projects such as market centers and transport terminals by KMA meet the needs of facility users.

The study was conducted in Kumasi Metropolis using KMA as a public procurement entity to assess whether or not market centers and transport terminals provided by KMA meet the needs of the users. In order to get realistic outcome, the study selected market queens and transport union leader from the market centers and transport terminals respectively.

From the survey, it was realized that the facility users had spent various time periods at each business centers but majority of the respondents had spent more than 3 years at the both business centers (market centers and transport terminals). This suggests that most of the facility users have experienced quite some number of projects initiated and developed by KMA and can therefore give candid opinion on the activities of KMA with regards to benefit realization of infrastructural facilities. Moreover, from the survey, it was realized that KMA has several benefit determination processes including identification of key stakeholders, review and evaluation projects both at design stage, during construction stage and post construction stage. The KMA faces several challenges in its benefit realization activities and major one of them is lack of public or facility users' participation. The KMA also faces logistical challenges and this coupled with busy economic activities of facility users had resulted in majority of facility users not being made aware of actual benefits of projects before their commencement.

Low community participation and contribution to the projects had resulted in number of problems of the facilities such as congestion and abandonment of projects.

### **5.3 Recommendations**

The recommendation of this study is based on findings of the study and it is aimed at helping KMA to improve upon its benefit realization practices.

### **1. Awareness creation of actual benefit of project before their commencement.**

It was realized from the study that majority of the facility users had spent more than three years at their respective business center but majority were not made aware of the actual benefit of the construction or improvement in the facility. For the KMA to win the support and commitment of facility users for a project, the KMA should make them aware of their intension of improvement in the facility and actual benefit that users would derive from the improvement. The KMA can should organize regular meeting between the entity and the facility users to make them aware of the actual benefit of the projects. The KMA should be prepared to listen to opinion and views of the facility users and factor them into their entire benefit realization processes.

### **2. Assign specific role to facility users as stakeholder in benefit realization.**

From the study, it was realized that KMA identifies various stakeholders of infrastructural projects and assign each to specific role with exception to facility users as stakeholder. The facility users have no specific role to play in the benefit realization process. The KMA should therefore assign facility users to a specific role. The queen mothers at market centers and transport union leaders at transport terminals should be assigned role. KMA should make them solicit the views of their members to KMA and also educate their members on behave of KMA. It is more likely that members would

pay more attention to their leaders and accept the project or improvement that they are part.

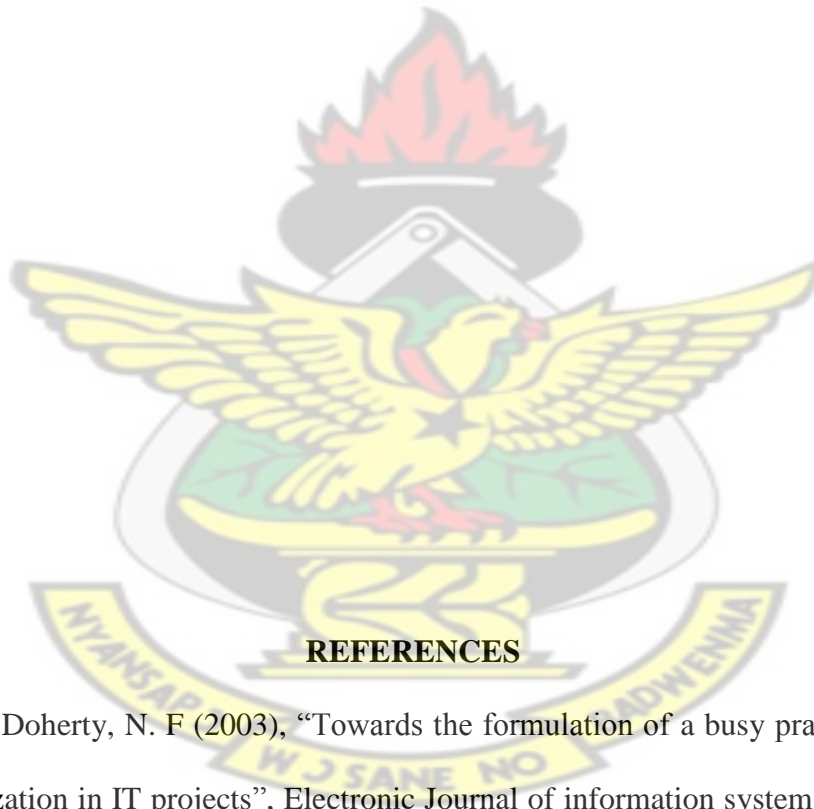
### **3. Measure or quantify identified benefit associated with project.**

From the study KMA identifies benefit associated with project but does not quantify or measure those benefit. For KMA to adequately and effectively evaluate the outcome of the project, KMA should quantify or measure benefit of project. When benefits are quantify, it makes assessment easy and helps determine successfulness of project. KMA can measure benefit by placing financial value on it and it when the financial value of benefit is known compared to cost that KMA can know whether or not a given project worth embarked upon.

### **4. Intensify evaluation before and after construction of facility.**

From the study, the facilities both market centers and transport terminals have many problems. To help address this problem, KMA should intensify evaluation of project before, during and after construction to detect any future problems that may arise. More importantly, KMA should constantly evaluate all inspect all market centers and transport terminal within its powers to ascertain whether those facilities are still consistent with their actual benefit of construction. The outcome of the evaluation or review should be address immediately by all stakeholders.

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## REFERENCES

Ashurst, C. and Doherty, N. F (2003), “Towards the formulation of a busy practice’ framework for benefit realization in IT projects”, *Electronic Journal of information systems evaluation* 6, 1-

10

Baccarini, D. (2004), “Project management in IT project”, *An Australian perspective*, *Project management Journal*.

Bartlett, J. (2006), “Managing programme of business change”, Hampshire, UK

Bennington, P. & Baccarini, D. (2004), “Project benefits management in IT projects” – An Australian perspective. *Project management journal*, June 2004.

Björn Wickenberg (2004), “Translation of Sustainability into Public Procurement Practices in Swedish Municipalities”, Unpublished, MSc Thesis, Lund University.

Central Computer and Telecommunication Agency (CCTA) (2000), “Managing the benefit”, the antidote 27, 28, 29

Bradley, G. (2006), “Benefit Realization management”- A practical guide to achieving benefit through change, Hampshire, UK, Gower.

Farbey. B, Land, F and Targett, D (2003), “The moving staircase- Problem of appraisal and evaluation in a turbulent environment”, *Information Technology and people Journal* 12, 238-252.

Glynne, P. (2007), “Benefit management –changing the focus of delivery”, Association for process management year book 2006/07.

Kippenberger, T. (2000), “Managing the business benefit”, the antidote 5

Lin, C. and Pervan, G. (2003), “The practice of IS/IT benefits management in large Australian organization”, *Information and management journal*, 41, 13-24

McCue, C.P., & Pitzer, J.T. (2000). “Centralized vs Decentralized Purchasing: Current Trends in Government Procurement Practices.” *Journal of Public Budgeting, Accounting & Financial Management*, 12 (3): 400-420.

Nogeste, K and Walker, D.H.T. (2005), “Project outcomes and outputs; making the intangible tangible”, *measuring business excellence*, 9, 55-68

OGC (Office of Government Commerce): “Managing Benefits”: An Overview, Accessible: <http://www.ogc.gov.uk/TheEffectiveMeasurementandManagementofICTCostsandBenefits.uk/documents/ManagingBenefitsV101.pdf>. [2008-02-08].

Payne, M. (2007), “Benefit management- Releasing project value into the business”, Hampshire, UK, project manager

Philips J. J (2003), *Return on investment in training and performance improvement programmes*, Burlington, MA

Public Procurement Act of Ghana, Act 663

Reiss, G., Anthony, M., Chapman, J. Leigh, G., Payne, A. and Payner, P. (2006), Gower handbook of programme management, Gower Publishing

Remenyi, D. & Sherwood-Smith, M. (1998). “Business benefits from information systems through an active benefits realization programme”, *International Journal of Project Management*, vol. 16:2, pp 81-98.

Sakar, P. and Widestadh, C. (2005), “Benefit management, how to realize the benefit of IS/IT investment”, Department of Informatic, Gotborg, University of Goteborg

Thai, K.V. (2001). “Public Procurement Re-Examined.” *Journal of Public Procurement*, 1 (1): 9-50.

Traux, J. (1997), “Investing with benefit in mind”, Curing investment myopia, the DMR white paper.

Waara F. (2007), “Mitigating Contractual Hazards in Public Procurement”, a study of Swedish local authorities. *Journal of Construction Management and Economics*. Vol. 26, no 1-3, Pg 237 145.

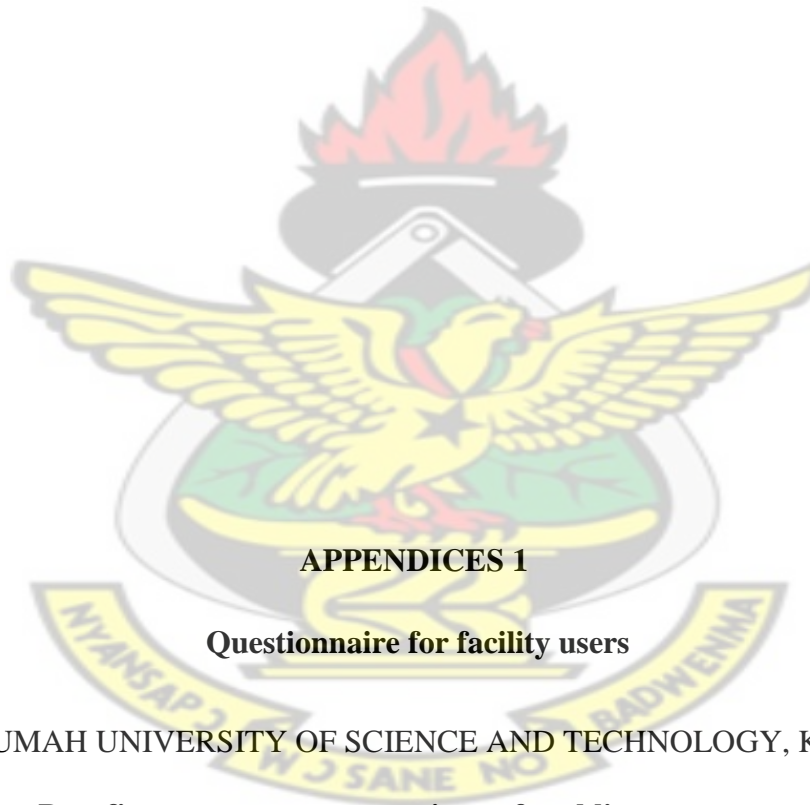
Ward, J. & Daniel, E. (2006), “Benefits Management, Delivering Value from IS and IT Investments”, John Wiley & Sons, Chichester, UK.

Ward, J., Taylor, P. and Bond, P. (1995), “Identification, realization and measurement of IS/IT benefit”, an empirical study of current practice.

World Bank (1996), Ghana 1996 Country Procurement Assessment Report, Washington, D.C.:

The World Bank (2000), Procurement Assessment Report, Washington, DC Ghana Country Department, The World Bank

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## APPENDICES 1

### Questionnaire for facility users

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

**Research Topic:** Benefits management practices of public procurement entities in the procurement of infrastructural projects in Ghana: case study of Kumasi Metropolitan Assembly (KMA). All information provided in this study will be treated as confidential and your anonymity is assured.

Please tick ( ) where applicable

### Personal Data

1. Gender: 1= female [ ] 2= male [ ]

2. Where is your business located?

Market Centre	
Bus terminal –inter city	
Bus terminal – intra city	

3. What type of business are you engaged in?

Trading	
Transport services	

4. For how long have you been in the business centre?

1= below 1 year [ ] 2= 1- 3 years [ ] 3= 3- 5 years [ ] 4= 5- 10 years [ ]

5= 10 years and above [ ]

### Benefit Realization

5. Are you aware that the facility you are using was put up by KMA?

1= No [ ] 2= Yes [ ]

6. Do you think the facility was proposed by your association/ union?

1= No [ ] 2= Yes [ ]

7. Is the association/ union happy with the facility that you are using?

1= No [ ] 2= Yes [ ]

8. Please give reason(s) to answer in question 7 above. ....

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.....

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.....

9. Does the facility you are using give any problem to the members of the association/ union?

1= No [    ]      2= Yes [    ]

10. If question 9 is yes, please give the problems.

Problems	Cause

11. Is the KMA addressing those problems? 1= No [    ]      2= Yes [    ]

12. How often does KMA meet your association/ union to discuss their needs?

1= Not at all [    ]      2= Not often [    ]      3= often [    ]      4= very often [    ]

13. Do you see your association/ union as a partner of KMA for ensuring that facility meets the needs of members?      1= No [    ]      2= Yes [    ]

14. Please give reason (s) to answer chosen in question 12. ....

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15. Did KMA discuss the actual benefit of the facility before they put up the facility?

1= No [    ]      2= Yes [    ]

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### APPENDIX 3

#### Interview Guide for KMA

Question/ Item	Response Recorded
What are the procurement practices at KMA?	
What do you understand by benefits	

What do you understand by benefits Management	
How do you perform Benefits Management	
Do procurement processes include benefit management practices?	
Who are responsible for ensuring that projects meet their intended benefit? (Position and Qualification Requirement)	
At what phase of projects are they engaged and disengaged?	
Please rank from highest the problems you face in your benefit management practice	
How do these challenges affect intended benefits of projects?	
How do you know whether the intended benefits of projects are realized?	
Is KMA satisfied with usage of projects at the metropolis?	
Do you foresee any problem with projects provided by KMA?	
Do you believe that changes in projects requirements/ design can affect the benefits of the project?	
Are the changes in the projects communicated to	

staff?	
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