

**PUBLIC PROCUREMENT PRACTICES AND DEVELOPMENT OF
MSEs IN KENYA: CASE OF ROADS SECTOR**

By

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DECLARATION

This management research project is my original work and has not been submitted to any other university or college for the award of degree or diploma or certificate.

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This research project has been presented for examination with my approval as the University supervisor.

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DEDICATION

With gratitude to God, this project is dedicated to my husband Isaac, my daughters Joy and Lisa and to the loving memory of my mother, Consolata Wanjiru Ngotho.

ABSTRACT

In Kenya, the public sector is the predominant buyer of road construction services and hence its buying behavior affects the road construction industry. Although there are Government policies and programmes in place to promote local contractors, the capacity of the local contracting industry has remained low. The main aim of this study was to determine the impact procurement practices in the road sector in Kenya have on Micro and Small Enterprise (MSEs) contractor development and growth.

The research methodology involved a review of the economic, legal and political environments in which contractors in Kenya operate; conducting in-depth interviews with ten Senior Managers in the three Road Authorities. In addition, questionnaires were distributed to 105 MSEs carrying out maintenance works in the regions sampled in the study, namely Nairobi, Kajiado and Nyeri.

This study reveals that some of the Road Authorities' procurement practices are constraining the growth and development of MSEs. Among the challenges MSEs face is high competition among themselves and from large firms, large contract sizes, unclear contractor registration criteria and inadequate inter-firm cooperation.

This paper recommends that roadworks contracts are packaged into smaller lots to increase the workload available for MSEs, contractor registration is reviewed and inter-firm co-operation is promoted through sub-contracting, joint ventures and formation of a strong MSE contractor association.

Keywords: Public procurement practices, MSE contractors, road construction, road sector.

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ABBREVIATIONS AND ACRONYMS

KeNHA	Kenya National Highways Authority
KeRRA	Kenya Rural Roads Authority
KRB	Kenya Roads Board
KURA	Kenya Urban Roads Authority
MSEs	Micro and Small Enterprises
MoTI	Ministry of Transport and Infrastructure
PPDA	Public Procurement and Disposal Act, 2005
PPOA	Public Procurement Oversight Authority
RAs	Road Authorities
SMEs	Small and Medium Enterprises

CHAPTER ONE: INTRODUCTION

1.1 Background

Public procurement often constitutes the largest domestic market in developing countries and can thus contribute to the economic development of these countries (Wittig, 2002). In Kenya, it is estimated that the government spends approximately 17% of its GDP on public procurement (World Bank, 2010).

Until the mid-20th century, most researchers considered SMEs an impediment to further economic development and SME policies were thus designed in the framework of social policies (Wikipedia, 14th June 2013). Currently, the role of SMEs in economic development is widely acknowledged with SMEs generally seen as labour intensive, capital saving and capable of helping create most of the new jobs needed in the country (Lalkaka, 1997).

The emergence of computer-based technology has decreased the role of economies of scale while increased standards of living and greater consumer individualism has led to fragmented markets and shorter life cycles. In addition, large enterprises have downsized their activities to focus on their core business in order to increase their flexibility and efficiency. These factors have been favourable to SME development (Hart, 1999). According to International Finance Corporation (IFC), there is a positive relationship between a country's overall level of income and the number of SMEs per 1,000 people.

1.1.1 Public Procurement Practices

Public procurement is defined as the government's activities of purchasing goods, works and services, from another party through market mechanisms, which it requires to carry out its functions (Arrowsmith, Treumer, Fejo, & Jiang, 2011).

Procurement practices refer to the processes and methods employed by an organization to undertake its procurement function and are generally based on the principles of value for money, open and fair competition, accountability and due process, fair dealing and non discrimination (Asia-Pacific Economic Cooperation, 1999). Procuring entities need to balance between the bidding administrative costs (to both the procuring agency and bidders) and the nature and cost of the services being procured, while also taking into consideration government policies and the nature of the industry (Office of Fair Trading, 2004).

In Kenya, public procurement is regulated by the Public Procurement and Disposals Act (PPDA) of 2005. The purpose of the PPDA is to establish procedures for procurement and disposal of unserviceable, obsolete or surplus stores and equipment by public entities in order to maximize economy and efficiency, promote competition, promote integrity and fairness, increase transparency and accountability, increase public confidence and to facilitate promotion of local industry and economic development.

All public entities in Kenya are regulated by the PPDA and are required to adopt practices that promote fair competition in all public procurements, discourage the use of fake competition and use methods of aggregation where appropriate in order to take advantages of economies of scale. PPDA covers all procurements of goods, works and

services and prescribes the rules and procedures to be applied for procurements using various procurement methods. Open tender is the preferred tendering method and the PPDA only allows for application of other methods under specific circumstances.

The PPDA and Regulations allows for preferences and reservations to be applied in public procurement and disposal where funding is 100% from the Government of Kenya. Exclusive preference is given to citizens of Kenya upto the sum of fifty million shillings in respect of goods and services and two hundred million shillings in respect of works. In addition, a percentage margin of preference of the evaluated tender price is allowed on a graduated scale depending on percentage shareholding by locals. The Act also allows for preferences and reservations to be applied for candidates such as disadvantaged groups, micro, small and medium enterprises, identified regions and such other categories as may be prescribed. Following a Presidential Directive, the National Treasury through the Kenya Gazette of 18th June 2013 amended the public procurement law requiring that 30% of all public tenders are set aside for youth, women and persons with disabilities.

1.1.2 Micro and Small Enterprises

The term Micro and Small Enterprises (MSEs) covers a wide range of firms from micro-enterprises (usually employing a couple of workers and generating subsistence level revenues) to more formal and fast growing small enterprises varying in terms of employees, turnover and capital investment and sometimes these variables are differentiated by industry (Fjose et al, 2010; Ernst & Young, 2009; Kunhnir, 2010). There is currently no consensus on MSE definition amongst countries and even among researchers.

In Kenya, the Micro and Small Enterprises Act 2012 defines a micro or small enterprise as firm, trade, service, industry or a business activity according to number of employees and the company's annual turnover. For the manufacturing and services and farming sectors, the definition also takes into account the investment in plant and machinery plus registered capital as shown below:

Table 1.1: Definition of MSE, Kenya

Entity	No. of Employees	Annual Turnover limit	Manufacturing: Investment in plant, machinery + registered capital	Services and farming Sector: Equipment investment + registered capital
Micro enterprise	<10	< Kshs 500,000	< Kshs 10million	< Kshs 5million
Small enterprise	More than 10 but less than 50	Between Kshs 500,000 and Kshs 5million	Between Kshs 10million and Kshs 50million	Between Kshs 5million and Kshs 20million

Source: Micro and Small Enterprises Act 2012

MSEs in the road sector in Kenya have been considered within manufacturing sector rather than services sector due to the heavy capital investment requirements in construction equipment. Hence, in this study MSEs are defined as contractors with an annual turnover of not more than Kenya Shillings 50 million per year.

In Kenya, available estimates show that SMEs is a growing and vibrant sector with a lot of untapped potential. The sector employs about 7.5 million Kenyans or 80 per cent of the country's total employment outside small-scale agriculture and contributes 20 per cent to the country's GDP (Wandabusi, 2011). According to the Economic Survey

(2013), the SME sector in Kenya created an additional 591,000 jobs constituting over 90 percent of all jobs created in 2012. The Government operationalized the Micro and Small Enterprises Development Act, 2012 and appointed the Micro And Small Enterprises Authority Board in March 2013 to support MSE development in the country.

1.1.3 Growth of MSEs

In a study by Hanks, Watson, Jansen and Chandler (1993) life-cycle or growth or development stage is defined as ‘a unique configuration of variables related to organization context or structure’. Contextual dimensions considered include enterprise size and age, growth rate, and focal tasks or challenges faced. Structural dimensions include formalisation, centralisation, vertical differentiation, and number of organisational levels.

Various parameters are used to measure firm growth ranging from number of employees, revenues or asset growth. Most researchers studying small firm growth in developing countries rely on employment growth since obtaining reliable financial data is usually difficult (Nichter & Goldmark, 2009). Since all contractors who undertake road construction work with the Ministry of Transport and Infrastructure (MoTI) are formally registered, in this study turnover will be used to measure firm’s growth and development stage.

1.1.4 Roads Sector In Kenya

According to the National Integrated Transport Policy of 2009, road transport is the predominant transport mode carrying over 93% of all freight and passenger traffic in the

country. The Kenya Vision 2030 identifies infrastructure as critical to achieving the economic goals of the country (Ministry of Planning, 2007).

The road sector has undergone significant reforms over the last two decades aimed at improving the management of roads in the country. Currently, the MoTI is responsible for policy formulation and oversight, Kenya Roads Board (KRB) is responsible for the management of the Road Maintenance Levy Fund while four implementing agencies are responsible for management of the various sub networks as shown below:

Table 1.2: Summary of Kenya’s Road Network Distribution

AGENCY	Road sub network	Paved	Unpaved	Total
KeNHA	National Roads	6,783	6,904	13,687
KeRRA	Rural Roads	2,268	127,799	130,067
KURA	Urban Roads	2,140	10,409	12,549
KWS	Roads within National Parks and Game reserves	6	4,577	4,583
Total		11,197	149,689	160,886

Source: Road Inventory and Condition Survey, Ministry of Roads 2009

Funding for the roads sector is primarily from Central Government (Exchequer) and development partners for capital projects while the Road Maintenance Levy fund is applied for road maintenance and recurrent purposes. The annual budget for roads was Kshs 119 billion in Financial Year 2013/14.

Road contractors are registered by the National Construction Authority (NCA). By the end of June 2014, NCA had registered 7,729 roads contractors in 8 classes (NCA 1 to NCA 8) as shown in the table below:

Table 1.3: Registered road contractors by NCA class

NCA CLASS	1	2	3	4	5	6	7	8
NUMBER	140	114	245	906	761	1581	3010	972
MAX. CONTRACT VALUE (KShs mil)	>750	750	500	300	200	100	50	>50

Source: National Construction Authority, June 2014

NCA adopted the evaluation criteria for registering contractors from the Ministry of Roads that was hitherto registering road contractors. The classification criteria adopted evaluated, among other things, the legal status of the firm, nationalities of directors, annual turnover, technical qualifications of personnel, list of road construction equipment and summary of the previous projects undertaken in the last five years (Moramati Foundation, Proinvest, 2011). It was noted that the evaluation criteria does not indicate specific requirements for each class in terms of Annual Turnover, Personnel and Equipment and this affects transparency of the registration process. NCA in consultation with stakeholders is currently reviewing the classification criteria to set appropriate thresholds on the basis of quantity of work.

1.2 Research Problem

There is a growing interest in encouraging private sector involvement in construction and maintenance of public works in developing countries, and a preference to involve micro-enterprises in this work so as to achieve economic benefits and enhance local employment for the poor (Sohail, Miles, & Cotton, 1999). In addition, the government may use its purchasing power to achieve public policy goals such as protecting national

industries against foreign competition, promotion of social equality, and more recently for environment protection and sustainable development (Copenhagen Economics, 2008; Keisler & Buehrig, 2005; McCrudden, 2007).

The Public sector also stands to benefit with the enhanced participation by SMEs in procurements from increased competitiveness, flexibility and innovation (House of Commons All-Party Parliamentary Small Business Group, 2009). However, one of the most significant challenges of SMEs is their inability to access public sector jobs due to negative perceptions towards SMEs (Amyx, 2005; Adelaja, 2003).

In Kenya, roads infrastructure is fully funded and managed by public sector and hence public procurement practices have a large influence in the development of road contractors in the country. There have been numerous programmes in the past designed to promote participation of MSEs in road infrastructure provision such as the Rural Access Roads Programme and the Minor Roads Programme in the 1980s and 1990s and the Roads 2000 strategy, currently being implemented by the MoTI. However, these initiatives have had limited success and MSE participation in roadworks delivery in the country has remained low (Ministry of Roads, 2012).

There are several past studies on barriers facing SME development in Kenya (Olang'o, 2012; Bomen, Morara, & Mureithi, 2009; Kithae, Gakure, & Munyao, 2012). The study by Bomen, Morara and Mureithi (2009) found that SMES face several challenges, among these being high competition among themselves and from large firms, and lack of access to credit. The study by Kithae, Gakure and Munyao (2012) found lack of access to credit, limited technology and conformance to legal requirements as challenges facing MSEs in

Makueni District. Another study by Olang'o (2012) identified several factors which impede SMEs in Bondo District from accessing public contracts among these perceived corruption, unavailability of public contracts, lack of information access, lack of feedback, large lot sizes, lack of capital, lengthy and bureaucratic procurement procedures, stringent selection criteria, inaccurate contract information, cost of tendering, poor business infrastructure, unfavorable taxation regime and pre-qualification. However, most of these studies are not sector specific and covered most sectors such as general trade, manufacturing and agriculture. In addition, most of these studies did not concern themselves with the effects of policies on SME growth.

Recognizing that different sectors have unique characteristics in terms of capital requirements, expertise and technology that influence procurement methods employed and noting the low participation by MSEs in the roads sector, it is felt necessary to carry out a study on MSE development within the roads sector which is a crucial sector to the economy.

This study therefore seeks to understand the opportunities and barriers encountered by MSEs in winning public procurements within the road sector and will attempt to answer the following questions: What procurement practices are applied by Road Agencies in roadworks construction? What is the impact of these public procurement practices on the development of MSEs in the roads sector?

1.3 Research Objectives

The overall objective of this study is to determine the impact procurement practices in the road sector in Kenya have on MSE development. The specific objectives are:

- i. To determine the procurement practices applied by MoTI in procurement of roadworks; and
- ii. To identify the key factors which impact on the development and growth of MSEs in the roads sector.

1.4 Value of the Study

Given the importance of MSEs to the economy, the study findings will assist the Government to formulate appropriate policies to promote MSE participation in the road construction industry.

In addition, the MSEs shall gain knowledge on the systemic barriers they face in procurements of roadworks which can enable them to effectively engage with the Government to remove these barriers.

The findings of the study shall also assist development partners to design more sustainable programmes, particularly those aimed at promoting local contracting capacity such as Roads 2000.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section discusses public procurement practices and their impacts on MSEs development. It also presents the theoretical underpinnings of public procurement and MSE development and proposes a conceptual model.

2.2 Public Procurement Policies, Strategies and Practices

The public procurement system in Kenya has undergone significant development from a crude system with little regulation to an orderly well regulated system. The introduction of the Public Procurement and Disposal Act of 2005 and the Procurement Regulation of 2006 introduced new standards for public procurement in Kenya (Public Procurement Oversight Authority, 2007).

The Public Procurement Oversight Authority (PPOA) procurement manual outlines the procurement cycle encompassing four major stages; (i) procurement planning stage which covers needs identification, preparation of procurement plans, (ii) tendering stage which covers preparation of tender documents, invitation of bidders, evaluation of bids, tender award and contract signature (iii) contract management stage involving contract administration, receipt, inspection and acceptance of goods, works and services procured and; (iv) storage and inventory management.

2.2.1 Public Procurement Policies

Public procurement systems seek to fulfill a number of objectives, among these being economy and efficiency, equity and integrity (Kelman, 1990; Dekel, 2009). This requires that the whole process is well understood by the principle actors (the procuring entities

and the business community/ suppliers) as well as other stakeholders such as policy makers, academia and the general public.



An important mechanism for cost cutting is procurement practices that facilitate competition among vendors so that government agencies can benefit from the efficiencies inherent in private enterprise (Keisler & Buehrigh, 2005). In markets where public buyers constitute a significant player in the market, Government may use its purchasing power to achieve public policy goals such as early protecting national industries against foreign competition, promotion of social equality, and more recently for environment protection and sustainable development (Copenhagen Economics, 2008; Keisler & Buehrigh, 2005; McCrudden, 2007).

2.2.2 Procurement Strategies

There are a number of procurement strategies that can be adopted by a firm aimed at protecting its cost structure and minimizing costs. These may include sourcing, developing and maintaining good relationships with suppliers, developing suppliers, adopting short to medium term contracts to take advantage of competing offers, using standard inputs so that suppliers can be switched easily, centralized procurement to use purchase leverage, negotiation, and supplier segmentation among others (Kiser, 1976).

The Public Procurement and Disposal Manual, 2009, using the Kraljic supplier positioning model, recommends that procuring agencies group their procurements based on difficulty of procurement and relative expenditure as shown below:

Figure 2.1: Supplier Segmentation Model

Difficulty in procurement 	III. Difficult to procure relatively low cost	IV. Difficult to procure Relatively high cost
	I. Easy to procure relatively low cost	II. Easy to procure Relatively high cost
	Relative expenditure 	

Source: PPD Manual, 2009, Page 6-7

PPOA recommends that procurement of items under Group I should focus on efficiency and suitable methods are request for quotations, low value procurement methods and term contracts. For Group II, there are several suppliers and hence have a potential for high profits if the procurement is well managed; the recommended methods are open tendering, restricted tendering and request for proposals. Under Group III, these items are “bottleneck” since they have the potential to stop the job and the recommended methods are open tendering, restricted tendering, direct procurement and request for quotations. Group IV items are critical to the performance of the organization and are the most complex items to procure; the preferred methods are prequalification tender or open tender. Generally, single sourcing is discouraged to avoid collusion and only allowed in exceptional circumstances such as emergency or uniqueness of service or product and require specific clearance from PPOA for items over given thresholds.

2.2.3 Roadwork Interventions

Roadworks are broadly categorized as development (involving rehabilitation/reconstruction, upgrading and construction of new roads) and maintenance (involving routine and periodic maintenance) as described briefly below (Ministry of Roads, 2011):

Routine maintenance involves the regular maintenance activities such as bush clearing, drain cleaning, pothole patching to ensure the road performs as designed; these are usually the simplest works to undertake and are not normally capital intensive.

Periodic maintenance are activities undertaken at periodic intervals (usually every four to six years) to improve the riding quality and pavement strength and include resealing and regravelling. A road which has deteriorated beyond maintainable state requires rehabilitation/ reconstruction to restore the strength of the road pavement. When an existing unpaved road is constructed to paved standard, this is referred to as upgrading and involves activities such as bituminizing or concrete surfacing, improving capacity such as increasing number of lanes, junction improvements etc. Development entails construction of a completely new road. As one moves down the spectrum from periodic maintenance to new development, the construction activities generally increase in technical complexity and require higher capital outlays and heavy construction equipment.

For roadworks, routine maintenance works may generally be considered as Group 1 (Bartezzaghi & Ronchi, 2004), periodic maintenance under Group II, bridgeworks and emergencies under Group III and rehabilitation, upgrading and development works are Group IV.

2.2.4 Procurement Practices

Procurement practices have a large influence on the prosperity or survival of many businesses or industries (Copenhagen Economics, 2008; Office of Fair Trading, 2004). A study by Kenya Anti-Corruption Commission of 2007 revealed that despite the introduction of the procurement regulations, public procurement still faces challenges of

inefficiency and lack of transparency. Some procurement practices which impact negatively on MSE development are discussed below:

Participation restrictions may arise from restricted communication and publication of opportunities, inflated tendering costs, excessive information requirements, overly narrow prequalification criteria placing too much emphasis on past experience or firm size, or inadequate time allowed for bidders to prepare bids (Office of Fair Trading, 2004). Supporters of multiple sourcing base their arguments on the traditional market based exchange (Porter, 1985) and state several advantages such as lower costs through competition, ensuring higher independence from supplier, ensuring supply continuity and wider access to markets and technologies (Trevelen & Sweikhart, 1988; Porter, 1985). On the other hand, opponents of multiple sourcing base their arguments on transaction cost theory and cite disadvantages such as higher administrative and transaction costs and less loyalty of suppliers (Cooke, 1998; Stork, 1999). There is need to ensure the right balance between increased administrative costs of having more bidders and the expected reduction of prices due to increased competition.

Contract aggregation refers to bundling of works within fewer, larger contracts to be tendered less frequently. This is an important decision as it has a large effect on cost components such as purchasing price and operation costs (Linthorst et al, 2008). Benefits of contract aggregation may include lower prices due to economies of scale (Ellram & Billington, 2001), reduction of administrative costs of procurement and procuring entity supervision/ contract management costs (Sheridan, 1998) and increased supplier loyalty (Freeman & Cavinato, 1990; Stork, 1999) and stimulates investment by winning supplier due to increased volume of work (Office of Fair Trading, 2004). On the other hand,

disadvantages of contract aggregation may include reduced competition (Office of Fair Trading, 2004; Porter, 1985; Rubin, 1990), higher dependency on supplier (Trevelen & Sweikhart, 1988) and limited access to alternative markets and technologies (Quayle, 1998). This practice also excludes smaller firms who are unable to meet the larger contract requirements. The appropriate sizing of public tenders should consider external factors that relates to market structure as well as internal factors of abilities and conditions within the procuring entity (Copenhagen Economics, 2008).

Related to contract aggregation is the type of contract models which may be used to delivery infrastructure projects. There are three main types usually applied for road projects: (i) the traditional ad-measure contracts, (ii) performance based contracting (PBC) and (iii) public private partners. Under the ad-measure contracts, the contractor is paid, based on his tendered rates, for works executed done as per the specifications and as jointly measured by the Engineer and the Contractor; this method of payment is based on inputs. For the PBC model, the Contractor is paid for achieving a target service level. For example he is paid on a monthly basis for keeping the road surface pothole free and not for the number of potholes he repaired over the period. PBC are output based and do not quantify the inputs. Public Private Partnerships (PPP) are a long term contract in which a public body works with a private enterprise to design, build, operate, maintain and/ or finance public infrastructure projects. Under PPP contracts, there is also the annuity model where the Consortium (comprising engineering consulting firms, financiers and contractors) will design, finance, build and maintain a public facility over a long term period and the public body pay for these works in equal installments over the term of the contract (Singh & Kalidindi, 2003).

Public sector is generally risk adverse since any failure of procurement jeopardizes the ability to provide services to the public and is highly visible and may have significant detrimental effects. As a result, avoiding failure is a high priority for the public sector and build in the procurements requirements such as high performance bonds, emphasis on past experience and firm's establishment in terms of age, turnover which tend to favour more established firms and incumbents over new entrants (Office of Fair Trading, 2004).

Public sector may opt to meet its requirements through self supply rather than procurement. It provides a credible fallback for public sector when market prices become inflated and also provides a benchmark on assessing if the rates provided by bidders are realistic (Office of Fair Trading, 2004). However, this practice may also limit competition by reducing the market size.

2.3 Firm Development and Growth

There is no comprehensive theory to explain which firms will grow or how they will grow (Garnsey, 1996). Whereas several determinants of firm growth have been suggested, researchers have been unable to gain consensus regarding the factors leading to firm growth (Weinzimmer, 2000).

Nichter and Goldmark (2009) undertook a comprehensive survey on the literature on small growth and provided a synthesis of the factors associated with MSE growth. Factors identified in the study that contributed positively to firm growth in the developing countries were education of the owner, previous work experience of owner, social networks, value chain (strong demand by end market) inter-firm cooperation (vertical linkages such as sub-contracting, horizontal linkages such as Cooperatives, consortia and

supporting structures such as finance, training, legal, tax advice) and a favorable business environment. On the other hand, age of the firm (older), female ownership, firm's legal status (informal) and if firm located in the household were found to contribute negatively to firm growth.

2.4 Accessibility of MSEs To Public Procurement

Evidence supports the contention that access to government work acts to improve SME capabilities, competitiveness and potential to enter other markets, as well as boost the economies of remote communities (Procurement Policy Unit, 2001).

Various studies (DG Enterprise and Industry of the European Commission; The Procurement Research Group, Dublin City University, 2013) have carried out surveys and identified the main barriers hindering access of SMEs from public procurement market includes excessive conditions imposed regarding ability of the firm to execute the contract, lack of financial support in providing bid bond and performance bonds, unclear evaluation rules, rigging, unclear specifications, excessive documentation requirements in preparation of the bid, insufficient time allowed to prepare bid, difficulties in collection of the bid documents, excessive bureaucracy, low level of buyer-supplier interactions and poor feedback.

2.5 Conceptual Framework

Policy towards the MSE sector has evolved since independence. At independence, Government policies on MSE sector was based on the Lewis (1954) dual economy model where the economy was divided into two sectors; subsistence (informal) sector which acts as a reservoir of surplus labor, and the more capital intensive and productive

(formal/ modern) sector. Under this view, the MSE sector was seen as a temporary disequilibrium of the economy which was expected to disappear as the economy modernized (Ronge et al, 2001). Sessional Paper No. 1 of 1986 saw a major policy shift as the government recognized the importance of the SME sector in terms of its potential to bring balanced rural-urban development and create non-farm employment. Sessional Paper No. 2 of 1992 and the enactment of the Micro and Small Enterprises Development Act, 2012 have further strengthened the government's commitment to SME development in Kenya.

One way of organizing studies focused on firm growth is grouping them by the factors explaining growth. Gibb and Davis (1990) listed four main types of approaches (i) personality-dominated approaches, which explore the impact of personality and capability on growth (ii) firm development approaches, which seek to characterize the growth pattern of the firm across stages of development and the influence of factors affecting growth process (iii) business management approaches, which pay attention to formal strategic planning to attain a strategic fit within the market place and (iv) sectoral and broader market-led approaches which focus largely on the identification of growth, constraints and opportunities relating to small firm growth in relation to the sector. In a study carried out by Cambridge Small Business Research Center (1992), the most significant growth barriers were related to factors on the macro level.

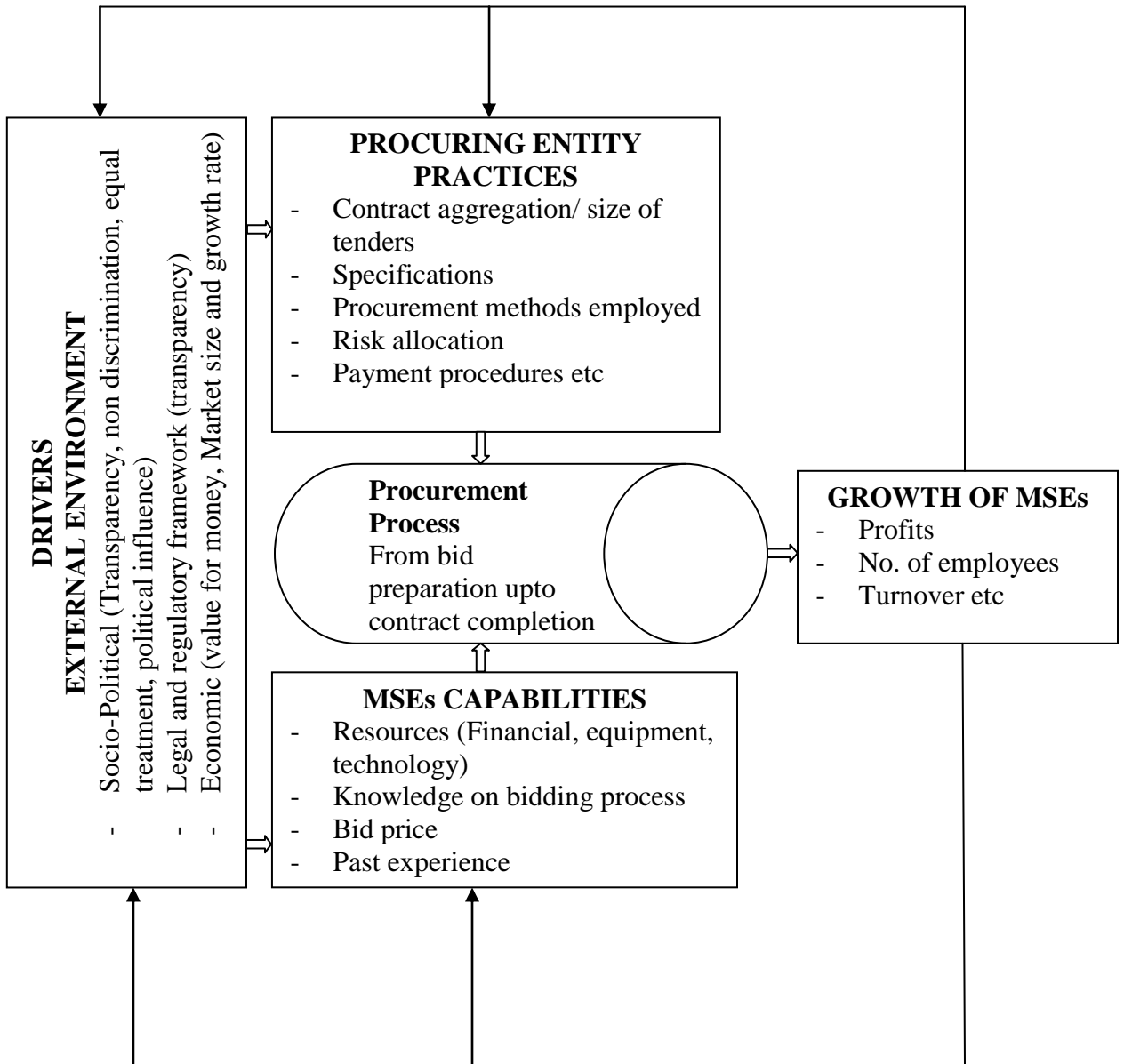
The study is underpinned on the Resource based theory, Stakeholder theory and Agency theory. Under the Resource-Based View (RBV) a firm obtains a competitive advantage primarily in the application of unique, costly to copy resources (Wernerfelt, 1984; Rumelt, 1984) .

In the traditional view of the firm, the firm has a duty to place the needs of its shareholders first. Stakeholder theory argues that while maximizing value for the shareholders, interests of other parties, including government bodies, political groups, trade associations, trade unions, communities, financiers, supplier, employees and customers need to be considered. Sometimes even competitors are counted as stakeholders - their status being derived from their capacity to affect the firm and its other morally legitimate stakeholders (Freeman, 1984).

Under Agency theory, the principal is in a position to induce the agent to perform some tasks in the principal's interest, and not necessarily in the agent's interest. Donahue (1989) explained that procurement managers in the public sector must play the agent role on behalf of elected representatives who act as the principal.

It should be noted, however, that the various approaches are not mutually exclusive. This study will be anchored on the sectoral and broader market-led approaches, resource based view, stakeholder and agency theories and will try to establish the specific opportunities and barriers that MSEs face within road sector procurements.

Figure 2.2 Conceptual Model



Source: Adapted from Obanda (2012)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology that was used to carry out the study while offering justifications for the method adopted. It also outlines the sampling design and data collection. Finally, data analysis as applied is discussed.

3.2 Research Design

The research design adopted was a mixed approach comprising qualitative design and descriptive-crosssection design as follows:

Qualitative research was applied in order to gain a deeper understanding of the procurement practices as currently applied by the Road Authorities, namely KeNHA, KeRRA and KURA and the experiences and attitudes of road practitioners regarding MSE participation. Burns and Grove (2003) describes a qualitative approach as a “systematic subjective approach used to describe life experience and situations to give them meaning” The qualitative method investigates the why and how of decision making, not just what, where, when.

For purposes of identifying the barriers MSEs face in public procurements, a descriptive-crosssection design approach was adopted. A descriptive survey generally explains events as they are, as they were or as they will be (Cohen, 1988).

3.3 Population

For the procuring entities, the population was three Road Authorities involved in road construction and maintenance. Kenya Wildlife Service (KWS) has been excluded since

working in the game reserves is not considered appropriate for MSEs due to security concerns.

Based on the list of prequalified contractors for FY 2013-14 obtained from the three Road Authorities, the population of MSEs was estimated as 1200 registered contractors under category G and H in the Nairobi, Kajiado and Nyeri counties.

3.4 Sample Design

For the Road Authorities, purposive sampling method was applied; one respondent from either Maintenance or Procurement departments of the three Road Authorities who were senior managers, (at either Manager or General Manager level) in the Maintenance or Procurement departments were selected.

For the MSEs, a precision level of 10% was adopted since descriptive statistics will be used and also considering the research constraints of time, personnel and costs. Using published tables, for a precision level of 10%, confidence level of 95% and degree of variability of 50%, the sample size was determined to be 91. In a similar SME study in Uganda (Commonwealth Secretariat, 2010), a sample size of 100 was used. Hence the sample size applied for this study was 100 MSEs.

The MSEs were selected using stratified random sampling. The first stratum was all firms involved in roadworks programmes in Nairobi, Kajiado (due to proximity) and Nyeri (in order to cover one region with development partner support for ongoing R2000 programme). The second stratum was firms working for KeNHA, KeRRA and KURA selected proportionately based on value the Road Authorities workplans of FY 2013/14.

3.5 Data Collection

Both secondary data and primary data were collected in the study in the following two main phases:

The first phase initially involved collecting secondary data through perusal of policy documents, manuals, budgets, procurement records and progress reports from the Road Authorities in order to determine the characteristics of road works procurements in terms of budgets, cost of tender, number of bidders and procurement methods employed.

In addition, semi-structured interviews were conducted by the researcher targeting the Procurement and Maintenance managers in each of the three Road Authorities in order to understand the agencies procurement practices as currently being applied. The interview guide applied to conduct the interviews is attached in the Appendix. It was designed with open ended questions covering the following thematic areas; (i) Current procurement practices in place (ii) specific procurement policies and practices on MSEs promotion (iii) experiences and attitudes of managers towards MSEs (iv) suggested measures to enhance MSEs participation in road construction.

In the second phase, primary data was collected from 100 MSEs using self administered structured questionnaires developed based on similar studies (DG Enterprise and Industry of the European Commission; The Procurement Research Group, Dublin City University, 2013; National Procurement Policy Unit, 2007; Commonwealth Secretariat, 2010) which aimed at understanding the barriers MSEs face in accessing public procurements in the road sector. The questionnaire which is attached in the Appendix was arranged in three key areas (i) demographic information of MSE such as name of firm, age, legal status,

registration class etc (ii) assessment of level of participation by MSE in roadworks (iii) factors which hinder the MSEs during tendering process. The questionnaire gave ratings for the factors on a likert scale from 1 (strongly agree) to 5 (strongly disagree).

3.6 Data Analysis

Under the conceptual model for this study, the main factors which were considered as influencing MSE accessibility to roadwork contracts (which in turn influences the MSEs development) is the interaction between the MSEs capabilities and Road Authorities procurement practices; this relationship is moderated by the prevailing government policies. Hence data collected was analyzed in order to fulfill the two research objectives as follows:

For the first objective, in order to gain a deeper understanding of the procurement practices applied by Road Authorities, content analysis was undertaken for the policy documents and manuals reviewed and for the interviews done for the senior managers from the three Road Authorities. The prevailing government policies related to MSE development were also assessed using content analysis approach.

Under the second objective, the factors influencing MSEs access to road construction work were extracted from the questionnaires completed by the MSEs. The data was analyzed using descriptive statistics and presented in frequency tables using Microsoft Excel.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the key findings from the review of the Road Authorities procurement practices. It also presents the responses by the MSEs on their interaction with the procurement process for roadworks projects. The chapter thereafter discusses the impacts of these procurement practices on the growth and development of MSEs.

A review of the procurement policies and systems in the three Road Authorities was undertaken by perusing various documents including Road Authorities policy documents, procurement manuals and sample bidding documents. In addition, study reports for various capacity support programmes being undertaken to review procurement systems in the Ministry were perused.

In March 2014, the researcher carried out interviews involving Senior Managers in Maintenance and Procurement departments of each of the three Road Authorities and Regional Managers in the seven regions sampled in the study; namely Nairobi, Kajiado and Nyeri.

A total of 105 questionnaires were distributed through the seven Regional Managers offices to the MSEs who were carrying out maintenance works in their regions. 76 forms were returned representing an overall 73% response rate.

The data analysis and results are presented in the sections below.

4.2 Road Authorities Procurement practices

In this section, the research sought to establish the procurement practices being applied to Road Authorities. The parameters considered included the bidding methods applied, bid evaluation criteria, how roadworks are packaged into lots, types of contracting models used and workload distribution amongst different categories of contractors.

4.2.1 Bidding methods applied

On the types of bidding methods used, the Road Managers interviewed reported that the predominant method of procuring roadworks used is open tendering system; other methods of procurement are only used in exceptional circumstances. They reported that the tenders notices were placed in newspapers of wide circulation. A notable restriction was that the tenders were generally restricted to a specific class of contractors depending on the nature of the roadworks (type of roadworks and value of works). Also bidders could only be awarded maximum of 2 bids in order to give equitable chances to all contractors and also not to overstretch their capacity.

The interviewees also reported that the level of competition for small value roadworks tenders (less than Kshs 20million) is very high since in FY2013-14 Road Authorities received an average of 30 bids for low value roadworks tenders (less than Kshs 20million). In addition, the interviews reported that the bidding prices are progressively getting lower than the Road Authorities estimated costs indicating increasing competition.

It is generally accepted that opening bidding method gives a fair chance to all bidders, increases competition and ensures higher independence from supplier and offers wider

access to markets and technologies (Trevelen & Sweikhart, 1988; Porter, 1985) However, this method also has inherent disadvantages such as higher administration costs and lower loyalty of suppliers (Cooke, 1998; Stork, 1999).

Given the current excessive competition for low value roadworks contracts, there is need to consider alternative tendering methods to ensure the right balance is struck between the expected benefits of price reductions from increased competition and disadvantages of increased administrative costs of having many bidders, reduced quality from price undercutting and lower supplier loyalty which may lead to long term negative impacts on MSEs growth and development.

4.2.2 Packaging of roadworks contracts

In terms of packaging the roadworks programmes into separate lots, the Road Managers interviewed reported that the main consideration made was the type of work to be done, road length, contractor's capacity and the Road Authorities' administrative arrangements in terms of region and supervision costs.

It was noted that road programmes were mainly disaggregated into routine maintenance, periodic maintenance, bridgeworks and new construction or improvement works. The road characteristics also influences the contract size; for highways the road project lengths range from 20 – 100 km, rural roads range from 5 – 20 km and urban roads range from 1 – 10 km. Another consideration in packaging the roadworks into lots was contractor's capacity, administrative boundaries and supervision arrangements hence most road projects do not generally exceed 100 km. It was noted that routine maintenance

projects in all the three Road Authorities were generally less than Kshs 20 million while other roadworks types were generally packaged into larger lots over Kshs 20million.

Benefits of contract aggregation include lower prices, reduction of agency administrative costs, increased supplier loyalty and also stimulates investment by winning supplier due to increased volume of work (Ellram & Billington, 2001; Sheridan, 1998; Freeman & Cavinato, 1990; Stork, 1999; Office of Fair Trading, 2004). On the other hand, disadvantages of contract aggregation include reduced competition, higher dependency on supplier and limited access to alternative markets and technologies (Office of Fair Trading, 2004; Porter, 1985; Rubin, 1990; Trevelen & Sweikhart, 1988; Quayle, 1998). The appropriate sizing of public tenders should consider external factors that relates to market structure as well as internal factors of abilities and conditions within the procuring entity (Copenhagen Economics, 2008).

The recently built Makutano ma Mwala to Kithimani road in Machakos County is an illustrative case study of how works packaging influences the type of contractors engaged. The 33 km Road was recently upgraded to bitumen standard within 3 months at a cost of Kshs 650 million. The project road was let out as eleven (11) contracts to medium sized local contractors with each contractor assigned 3 kilometers. Earlier on, the project road had been designed to be built under a single contract for an estimated Kshs 1.6 billion and a project delivery period of 3 years (County Government of Machakos, 2014).

Packaging of tenders into large lots leads to the exclusion of smaller firms who are unable to meet the larger contract requirements. Hence the tendency of Road Authorities

to package all roadworks into large contracts except for routine maintenance works has resulted in the restriction in the participation of MSEs to only routine maintenance contracts.

4.2.3 Bid evaluation criteria

The Road Managers interviewed reported that the bid evaluation criteria is included in the bidding documents and is standardized in each of the three Road Authorities. Evaluation is carried out in three stages (Preliminary responsiveness, Technical and Financial Evaluation)

From the sample bidding documents perused from each of the Road Authorities, it was noted that the key parameters assessed under the preliminary responsiveness stage is company registration status, contractor registration class and tax compliance. It was also noted that for KeRRA, due to its large numbers of contractors (over 4,000), all bidders are also required to be prequalified contractors in order to reduce the administrative work in preliminary responsive stage. Under the technical evaluation stage, the aspects evaluated include firm's past experience, equipment holding, firm's professional and technical personnel, turnover and current workload. The tender is awarded to the responsive and technically qualified bidder with the lowest evaluated bid price. A recent report evaluating the contracting capacity within the Ministry of Transport and Infrastructure found that over 75% of the bids submitted are disqualified at preliminary and technical evaluation stage.

The advantages of cost based method of procurement are that it is objective and fair. Also open bidding leads to the highest competition resulting in lowest bid prices (Heijboer &

Telgen, 2002). However, open bidding also has disadvantages of higher administration costs, poor bid preparation by bidders with increasing competition, risk of price undercutting leading to lower quality. The overemphasis of cost based procurement methods by Road Authorities may eventually compromise quality. This may be overcome by including criteria for past performance.

Another weakness of the evaluation criteria noted was that it does not consider incumbents. As a result, no loyalty of suppliers was being built over the years.

The low pass rate at preliminary and technical stages may be attributed to the Road Authorities applying the evaluation criteria too stringently. There is need to strike a balance between value for money and fairness to ensure that bidders are not disqualified for non-material deviations which do not affect the scope or quality of work or the competitive position of other bidders.

4.2.4 Type of contracting models used

The Road Managers interviewed reported that all roadworks are contracted out to private sector contractors and no works are carried out inhouse by the Road Authorities. They also reported that the predominant contracting model used is the traditional ad-measure contracts where the contractor is paid, based on the unit rates in the bills of quantities, for works executed done as per the specifications and as jointly measured by the Engineer and the Contractor. This method of payment is based on inputs.

The interviewees also reported that Road Authorities had recently introduced Performance Based Contracting where the Contractor is paid for achieving a target service level. In addition, the government had also introduced Public Private Partnerships

(PPPs) in the country. Road Authorities recently advertised for construction of 2,000 km of roads under the annuity model where the consortia (comprising engineering consulting firms, financiers and contractors) will design, finance, build and maintain a road over 8 to 10 year period and the government will pay for the work in equal installments over the term of the contract.

Bidding under Performance Based Contracting or Public Private Partnerships requires higher technical skills compared to traditional ad-measure contracts since the responsibility of designing and supervising the roadworks is transferred to the contractor as he is only paid for completed works. Since MSEs have lower technical capabilities, the introduction of alternative contracting models by Road Authorities will lead to restriction in the participation in roadworks procurements by MSEs.

Public sector may opt to self supply rather than outsource when market prices become inflated and also provide a benchmark on assessing if the rates provided by bidders are realistic (Office of Fair Trading, 2004). However, this practice may also limit competition by reducing the market size. Hence the practice of outsourcing of roadworks construction to the private sector was considered positive to the development of MSEs since it offers higher opportunities to the local construction industry.

It was noted from the Road Authorities procurement records, that all the contractors who were engaged in roadworks below Kshs 20million tendered for the works as single entities. This indicates low levels of horizontal linkages among the MSEs such as bidding as joint ventures or associating with others in order to enhance their capabilities. Also the Road Authorities practice of limiting contractor to a maximum of 2 contracts discourages

horizontal growth. From interviews with the Road Managers, it was also noted that Road Authorities do not incorporate into the bidding documents for large scale contracts a requirement for sub-contracting a portion of the works to local contractors; such a practice would to encourage vertical linkages among contractors.

4.2.5 Workload distribution

The Road Managers interviewed reported that the Road Authorities prepare separate budgets for road maintenance and road development programmes which are funded by the Road Maintenance Levy Fund and the Development Vote respectively. Over the last three years, the roadworks budgets have grown at an average rate of 17% per year and in the total roadworks budget in FY2014-15 was Kshs 135billion.

It was noted that road maintenance works constituted about 20% of the total roads budget in the current FY. It was further noted that the budget allocation for routine maintenance in FY2014-15 was less than 10% of the total roadworks budget. The Road Authorities package periodic maintenance, rehabilitation and upgrading into large contracts usually over Kshs 20million which MSEs do not have the capacity to undertake.

Hence MSEs are restricted to participate only in routine maintenance roadworks tenders which constitute a small percentage of the budget and this practice limits their growth and development opportunities. Further the opportunities for work experience in more complex roadworks for MSEs is limited since the more capital intensive roadworks are packaged into larger contracts.

4.3 MSE experiences with the Road Authorities procurement process

In this section, the research analysed the results of the Contractors responses in order to establish the MSE characteristics, their experiences in the bidding process and trends for MSE growth and development.

4.3.1 MSE characteristics

The MSE characteristics were assessed in terms of the firm's age, number of employees, annual turnover, ownership by disadvantaged groups and contractor registration with NCA. The findings of the survey conducted on the Contractors are summarized below:

Table 4.1 Contractor's Characteristics

Age	> 15 years	10 - 15 year	5 - 10 years	< 5 years	Total	Average	SD
Frequency	5	9	30	32	76	8.1	5.9
%	7%	12%	39%	42%	100%		
Staff Complement	> 50 staff	25 - 50 staff	10 - 25 staff	< 10 staff	Total	Average	
Frequency	6	12	21	37	76	8.6	7.2
%	8%	16%	28%	49%	100%		
Owned by disadvantaged group	women	youth	PWD	N/A	Total		
Frequency	19	18	2	37	76		
%	25%	24%	3%	49%	100%		
Average Turnover in last 3 years	> Ksh51M	Ksh16M- Ksh25M	Ksh16M- Ksh25M	Ksh6M- Ksh15M	< Ksh5M	Total	
Frequency	10	7	11	27	13	68	
%	15%	10%	16%	40%	19%	100%	

Based on the responses received from the Contractors, it was noted that the firms' ages ranged from 1 year to over 30 years with the average being 8 years. For staff complement it was noted that firms had staff complement ranging from 0 – 36 employees with average being 8 employees.

85% of the respondents had annual turnover of less than Kshs 50million in last three years. 51% of the firms which responded were owned by disadvantaged groups and out of these firms, 45% belonged to women, 40% to youth and 5% to persons with disabilities. 92% of the firms indicated that they were registered with NCA ranging from class NCA 1 to NCA 7.

From the above, it is seen that over 80% of the respondents fit into the definition of MSEs since they have less than 50 employees and average annual turnover of less than Kshs 50 million.

From the Contractors responses, it is noted that only 16 No. (21%) of the contractors reported being registered under NCA 7 or below and can thus be considered MSE contractors. This implies that a significant proportion of work which would typically be expected to be undertaken exclusively by MSEs was also being done by medium and large contractors.

4.3.2 MSE knowledge on bidding process

The responses from the Contractors were analysed to assess their knowledge of the bidding process as shown in Table below:

Table 4.2: Contractors' assessment of bidding process

	DESCRIPTION	Average Response ¹	standard deviation
1	Tenderers have access to adequate and timely information on road agencies contract opportunities	1.76	0.92
2	Tender documents are clear, well prepared and easy to understand	1.75	1.07
3	There is sufficient time allowed to prepare and submit tenders	1.96	1.18
4	The person who prepares the the bid documents in my firm is technically qualified	1.63	0.85
5	Qualification criteria in terms of firm's turnover is reasonable	2.16	1.10
6	Contract values of most jobs advertised is too large relative to size of the company	3.63	1.12
7	Qualification Criteria in terms of firms past experience is reasonable i.e years of experience specified are not excessive	1.97	1.05
8	The bid security amounts are reasonable	2.11	1.03
9	Registration as a road contractor with the National Construction Authority (NCA) is easy	2.34	1.04
10	Preparation of tenders and supporting documents is time consuming and difficult to compile	3.53	1.28
11	Pre-tender site visits are regularly organized by procuring entities	1.86	0.84
12	public procuring personnel are available to meet suppliers and offer timely clarifications	2.22	1.18
13	Tender evaluation is conducted in an objective and fair manner	1.95	0.95
14	Procuring entities communicate the award of tender to the successful tenderer in a timely manner	1.86	0.92
15	Procuring entities communicate to unsuccessful tenderers the reasons for rejection	2.64	1.25
16	Payment for works are done timely	2.36	1.23
17	There is adequate site supervision and guidance by Road Agencies	2.07	1.18
18	Access to credit is difficult	2.72	1.16

Response rating: 1=strongly agree; 2=agree; 3=neutral; 4= disagree; 5= strongly disagree

From the responses received, it was noted that Contractors appeared generally knowledgeable of the procurement process and were also generally satisfied that RAs complied with public procurement regulations to make the process fair and transparent.

This may be attributable to the robust procurement regulatory framework in the country since tendering procedures and tender documents have been standardized across the entire public sector and hence bidders who regularly participate in public procurements are familiar with these tendering procedures. Also the practice of Road Authorities holding mandatory site visits during which clarifications on the tender are made positively contributes to enhancing the Contractors knowledge of the tendering process.

4.3.3 MSEs growth prospects

In order to measure the firm's growth, the turnover growth rate over the last three years and ability of contractors to secure work in years 2012 and 2013 was assessed. Contractor's perceptions of future work prospects were also evaluated.

From the contractor's responses, only 34% reported a positive turnover growth rate over the last three years. An analysis of KeRRA progress reports for FY 2012-13 and FY 2013-14 indicated that only 42 (34%) out of the 125 contractors who worked in Nyeri were able to secure work in the two subsequent years.

More than 85% of the contractors reported that they had participated in more than 5 tenders in the last three years. On the other hand, only 15% of the contractors indicated that they had more than 50% success rate in winning tenders.

The Road Managers interviewed indicated that whereas there is a good pool of MSE contractors, the transition rate to grow to large contractors was very low; most MSE contractors remained small or left the industry.

Table 4.3: Contractors’ perception of future work prospects

	DESCRIPTION	Average Response ¹	standard deviation
1	The workload through out the year is adequate.	2.87	1.18
2	Procuring entities offer adequate training and support to small scale contractors	2.71	1.21
3	I expect opportunities for small scale contractors to increase in future	1.76	0.92
4	The Current environment ion the road construction industry is favourable to small scale contractors	2.29	1.14
5	Public sector is an important client to my business	1.66	0.99

Response rating: 1=strongly agree; 2=agree; 3=neutral; 4= disagree; 5= strongly disagree

On the Contractor’s perception of future prospects, over 93% indicated that they expected opportunities for small scale contractors to grow. On whether the current environment in the roads construction industry was favorable to small scale contractors, over 75% of the Contractors responded positively.

It was noted that most of the MSEs experienced negative growth in the last three years while future prospects also appeared low due to the decreasing routine maintenance budgets.

4.4 Discussion

Overall, the study findings reveal that Kenya has a vibrant pool of local MSE contractors actively participating in road construction works. It is also noted that the government

policy promotes the growth of local road contracting industry. In addition, it is noted that all Road Authorities have instituted administrative systems and processes which comply with the public procurement regulations.

Several procurement practices which contribute positively to the development and growth of MSEs were identified. Among these was a open bidding to enhance fair access to procurements by all bidders, fair and transparent bidding procedures being applied in the Road Authorities, mandatory site visits during which clarifications are made, packaging of routine maintenance works into small lots to be carried out by MSEs, application of simple ad-measure contracting models, timely payments and guidance offered by the supervisors during construction.

However, this study also shows that MSE contractors are facing several constraints and as a result some of these firms have experienced negative growth in the recent years while others have been unable to transit and grow to medium and large sized contractors.

This scenario reveals that the policy to promote the MSE development in the country is not adequately integrated in Road Authorities procurement practices and hence has not translated into tangible development of the MSE construction industry. Road Authorities have not been able to achieve an optimal balance between the bidding administrative costs (to both the procuring agency and bidders) and the nature and cost of the services being procured while taking into consideration the need to promote development of MSEs contractors in the Roads Sector. The key weaknesses noted in the Road Authorities' procurement policies and practices and their implications on MSE development are discussed further below:

Under policy considerations, although there is an MSE development strategy and notable MSE capacity building initiatives under R2000 programme in place in the Ministry, in practice the implementation of this strategy is limited to development partner funded R2000 programmes hence covering less than 15% of the total roadworks budget. Further, since the R2000 programme is largely funded by external sources, the development of MSEs may not be sustainable in the long run unless local funds are also applied.

The open tendering methods being used by Road Authorities also have implications on MSE development in the country since the high level of competition is pushing down the bidding prices and this may eventually force many contractors out of business. It is worrying to note that most MSEs had a low success rate of winning public tenders from one year to the next year since these firms require assured and continuous workload to meet their operations and also to grow.

The maintenance funds are inadequate and only cover about 50% of the road network needs (Ministry of Roads, 2011). Unless the budgets for maintenance are increased, the condition of the roads will continue to deteriorate beyond maintenance and will require expensive rehabilitation works to bring them back to maintainable state. This implies that the amount of routine and periodic maintenance works is likely to decrease in the long term and hence the opportunities for MSE contractors who are presently only involved in routine maintenance works will also reduce.

The Road Authorities tendency to package all rehabilitation, construction and upgrading works as larger single projects (>Kshs 50 million) reduces the opportunities available for MSE contractors since they are only able to participate in the low value contracts (routine

maintenance works) which account for less than 10% of the total road budgets. This practice also further marginalizes the MSEs since routine maintenance works are less technically complex and hence these contractors are unlikely to develop technical skills for more complex road operations such as construction of bituminous road pavements.

Most of the MSEs are young firms with low staff complement and low annual turnover. The low technical capacity and weak financial bases makes it difficult for MSEs to effectively participate in the Performance Based Contracting and annuity projects which have been recently introduced by Road Authorities since these projects are more complex and are usually packaged in large lot sizes.

The low level of inter-firm cooperation covering arrangements such as sub-contracting, horizontal linkages such as Cooperatives, consortia and strong contractor association is further constraining the growth and development of MSE contractors since they can only participate in low value contracts.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study investigated the impacts of Road Authorities procurement practices in Kenya which impact on the development of MSE contractors. The study used a mixed design approach using exploratory, inductive qualitative approaches to investigate the why and how of policies and procurement practices and descriptive statistics using frequency tables to determine the characteristics of MSEs and roadworks programmes.

This chapter concludes the study by discussing the key findings and their implications and then gives recommendations. It also discusses the limitation of the study and suggests areas for further research.

5.2 Summary of Key Findings

The Kenya Government recognizes the importance of the MSE sector and has formulated appropriate policies to support development of the sector. Key policies for MSE development include the enactment of the Micro and Small Enterprises Act 2012 and public procurement policy which facilitates promotion of local industry. In the roads sector, the R2000 strategy aims to promote use of local resources for delivery of roadworks.

In the roads sector in Kenya, public sector is the only buyer of road construction services and hence its buying behavior affects competition as well as the development and growth of MSE contractors. This study reveals that despite the favorable policy framework for

MSE development, there are weaknesses in Road Authorities' procurement practices which constrain the growth and development of MSE contractors.

Among the challenges MSE face is high competition among themselves and from large firms, large contract sizes, newly introduced alternative contracting models such as Performance based contracting and annuity, skewed workload distribution favoring large firms, lack of capital and technical skills, stringent selection criteria, lack of transparent contractor registration criteria, inadequate inter-firm cooperation such as sub-contracting, joint ventures and absence of a strong MSE contractor association.

5.3 Limitations of the study

Due to constraints of time and funds, convenience sampling was used to carry out surveys on Contractors engaged in road construction in Kenya.

On literature review, there was low access to detailed procurement records such as tender evaluation reports at the Road Authorities due to the confidential nature of these records and hence sample tender documents and interviews with Road Managers were mainly relied upon.

There was also low response from non-successful bidders.

5.4 Recommendations

Based on the study findings, the following recommendations are proposed to promote MSE contractors in the roads sub-sector:

First, the current practice of packaging of roadworks for rehabilitation, upgrading and new construction projects should be reviewed to repackage these works into smaller

works to enable higher participation of MSE contractors in roadworks tenders. In addition, the workload distribution between MSE and large scale contractors should be reviewed to promote equity.

Second, there is need to review the bid evaluation criteria to balance between value for money and fairness in order to reduce disqualification of bidders for non-material deviations,.

Third, a policy stipulating a minimum threshold of MSE content for annuity programme should be formulated. This may be achieved by contractors being required to sub-contract a certain percentage of work to local MSE contractors particularly during maintenance phase.

Fourth, it is recommended that the current contractor registration criteria is reviewed to give specific requirements for each class in terms of technical qualifications, capital, equipment holding and past work history in order to classify contractors according to their capabilities. This will enable the Road Authorities to target the appropriate classes of contractors for their tenders.

Lastly, inter-firm co-operation should be promoted in order for MSEs to access larger scale contracts. MSEs should be encouraged to bid for works jointly as consortia, joint ventures or sub-contractors. In addition, MSEs should be encouraged to form a strong contractor association to lobby the government for a more favorable business environment.

5.5 Areas for further research

There is need for an investigation of the contractor development in Kenya through a sector-wide longitudinal survey over a long period (10 year) to determine the effectiveness of government programmes in enhancing local contracting capacity.

In addition, a study to assess if the quality of work is influenced by level of competition (number of bidders) should be undertaken. This will investigate the optimal competitive levels to eliminate undercutting of prices by contractors which may lead to poor quality of works.

Another suggested area is the optimal sizing of roadworks projects to promote contractor development while taking into consideration agency costs.

5.6 Conclusion

In Kenya, it is recognized that the development of the MSE sector will contribute towards employment creation, poverty alleviation as well as inclusive development for all citizens and is key to achievement of the country's economic blueprint, the Vision 2030.

However, the benefits of MSEs will only be fully realized once the current constraints facing this industry are alleviated through appropriate procurement policies and practices being adopted by the Road Authorities.

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OTHER DOCUMENTS PERUSED

1. Procurement policy for Kenya Rural Roads Authority
2. NCA List of registered contractors
3. List of prequalified contractors for KeRRA, KURA and KeNHA
4. Annual Progress reports FY 2012-13 and FY 2013-14 for KeRRA, KURA and KeNHA (giving roadworks contracts executed)
5. Sample Tender document

APPENDICES

**PUBLIC PROCUREMENT PRACTICES AND DEVELOPMENT OF MSEs IN KENYA:
CASE OF ROADS SECTOR**

QUESTIONNAIRE TO SMALL SCALE CONTRACTORS

Introduction:

The Researcher, Margaret N. Ogai is a student at the University of Nairobi undertaking a research project towards partial fulfillment of requirements for Master of Business Administration.

The purpose of this questionnaire is to investigate the impacts of procurement practices on development of small scale contractors within the Road Sector.

SECTION A: CONTRACTOR'S PROFILE	
Name of respondent	
Position	
Name of firm	
Age of firm	
No. of permanent employees	
Annual turnover in last 2 years (tick as appropriate)	<input type="checkbox"/> <5mil <input type="checkbox"/> 5 - 15mil <input type="checkbox"/> 15 - 25mil <input type="checkbox"/> >25mil
Is firm registered as road contractor with MoTI?	YES: ___ NO: ___ Registration class: ___

SECTION B: LEVEL OF PARTICIPATION IN ROADWORKS TENDERS				
No. of Tenders Participated In Last Three Years	<input type="checkbox"/> <5	<input type="checkbox"/> 5 - 19	<input type="checkbox"/> 20-49	<input type="checkbox"/> >50
Firm's success rate in winning road construction tenders in the past three years?	<input type="checkbox"/> <5%	<input type="checkbox"/> 5 - 24%	<input type="checkbox"/> 25-49%	<input type="checkbox"/> >50%
Total Value of Roadworks Contracts Awarded In Last Three Years				
2013:Kshs (mil)_____ 2012: Kshs (mil)_____ 2011: Kshs (mil)_____				
Total value of roadworks executed in 2013	<input type="checkbox"/> <5mil	<input type="checkbox"/> 5 - 15mil	<input type="checkbox"/> 15 - 25mil	<input type="checkbox"/> >25mil

SECTION C: EVALUATION OF THE PROCUREMENT PROCESS	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. Pre-tendering stage					
1. Tenderers have access to adequate and timely information on road agencies contract opportunities					
2. Tender documents are clear, well prepared and easy to understand					
3. There is sufficient time allowed to prepare and submit tenders					
4. The cost of buying tender documents is fair					
5. Qualification criteria in terms of firm's turnover is reasonable					
6. Contract value of most jobs advertised is too large relative to size of the company					
7. Qualification criteria in terms of firms past experience is reasonable ie years of experience specified are not excessive					
8. The bid security amounts are reasonable					
9. Registration as a road contractor with the Ministry of Transport & Infrastructure is easy					
10. Preparation of tenders and supporting documents is time consuming and difficult to compile					
11. Pre-tender site visits are regularly organized by procuring entities					
12. Public procuring personnel are available to meet suppliers and offer timely clarifications					
b. Tender evaluation, award and contract execution					
13. Tender evaluation is conducted in an objective and fair manner					
14. Procuring entities communicate the award of tender to the successful tenderer in a timely manner					
15. Procuring entities communicate to unsuccessful tenderers the reasons for rejection					
16. Payments for work done are timely					
17. There is adequate site supervision and guidance by Road Agencies					
18. Access to credit is difficult					
c. Future prospects for small scale contractors in the road sector					
19. The workload throughout the year is adequate					
20. Procuring entities offer adequate training and support to small scale contractors					
21. I expect opportunities for small scale contractors to increase in future					
22. The current environment in the road construction industry is favorable to small scale contractors					
23. Public sector is an important client to my business					

- Thank you for taking time to complete the questionnaire!

PUBLIC PROCUREMENT PRACTICES AND DEVELOPMENT OF MSEs IN KENYA: CASE OF ROADS SECTOR

QUESTIONNAIRE TO MAINTENANCE AND PROCUREMENT MANAGERS

Introduction:

The Researcher, Margaret N. Ogai is a student at the University of Nairobi undertaking a research project towards partial fulfillment of requirements for Master of Business Administration.

The purpose of this questionnaire is to gain understanding of procurement practices within the Road Agency and their impacts on development of small scale contractors.

SECTION A:	
Name of respondent	
Department	
Position	
Name of Agency	

Organization-strategy-culture

2. Briefly describe the procurement function in your organization (organizational setup, degree of centralization of procurement, procurement strategy, key trends in procurement)
3. What are the procurement policies and practices at the Road Authority?
4. What are the key factors considered to package roadworks into contracts? (contract aggregation vs division into lots, impact on MSEs, subcontracting opportunities)

Promoting competition

5. How does the Agency publish opportunities?
6. What are procurement methods predominantly used by the Agency and why?
7. Does Agency maintain list of approved, procedures for , how can companies get onto lists; frequency of renewal etc How are low value procurements handled?

Evaluation of tenders

8. Evaluation criteria and handling of process. How is detailed evaluation criteria determined?
9. What advantages if any do incumbent suppliers enjoy?

Supporting MSEs

10. Are there specific procurement policies and practices to facilitate access of MSEs to roadworks procurements? Does Agency have open days with Contractors? Responsiveness to bidders queries/ organised site visits/ feedback on tenders/ site supervision/ timely payments to contractors
11. Does the Agency monitor the participation by MSEs in roadworks? What volume of work is currently being undertaken by MSE compared to large enterprises? Has the volume of works being undertaken by MSEs increased or decreased over the past five years?

Attitudes towards MSEs in relation to public procurement

12. What are the strengths of MSEs in relation to public procurement? E.g., flexibility, price, local knowledge, closer relationship, supplier diversity etc.
13. What are the weaknesses of MSEs in relation to public procurement? E.g. lack of resources, lack of track records, poor quality, lack of knowledge of tendering process

14. What specific measures can be applied to improve MSE access to construction jobs?

- *Sizing of contracts*; subdivision of contract into smaller lots, grouping of tenders
- *Ensuring access to relevant information*; wide publication of contract notices, enhancing information about rejection of bidders, providing relevant information and help to MSEs on administrative procedures
- *Improving quality and understanding of the information provided*; providing training to public buyers and MSEs
- *Setting proportionate qualification levels and financial requirements*; rules regarding evaluation of groups of tenderers, rules regarding qualification and financial resources of the applicants,
- *Simplifying tendering procedures*; simplification of the rules regarding the submit of tenders, simplification of the applicable legislation
- *Giving sufficient time to draw up tenders*
- *Ensuring payments are made on time.*
- *Setting aside work volume quotas for MSEs*
- *Provide for sub-contracting/ partnership arrangements*
- *Encouraging cooperation among firms to enhance technical and financial criteria*