MAKERERE



FACULTY OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

A comparative study of local and foreign construction firms' participation in donor

funded road construction projects.

a case study of Uganda

BY

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REG.No:2006/HD16/6690U

A dissertation submitted to the school of graduate studies in partial fulfillment of the requirements for the award of a master of science in civil engineering of Makerere University

AUGUST 2009

DECLARATION

I, BALIMWEZO RONALD do declare that this dissertation is original and has not been, to the best of my knowledge published or submitted to any University or college for any other degree award.

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DEDICATION

To my wife Rachael Balimwezo and my daughter Ronnitah-Willing Balimwezo Kirabo.

ACKNOWLEDGEMENT

First to my supervisors: Dr. D. Tindiwensi and Dr. A.G. Kerali, for academic and professional guidance.

Secondly to my classmates for support. I will never forget their encouragement in the trying times during the course of study.

Respondents for accepting to participate in the study and willingly giving information. Special thanks go to the Engineers of UNRA for availing me with valuable information pertaining to this study.

I cannot forget the tireless efforts of my parents for not only giving me moral and parental support but also financial support towards accomplishment of this dissertation.

A million thanks go to my sponsor, Muljibhai Madhavani Foundation for supporting me with tuition for this course.

Lastly, special thanks go to my family for not only enduring the long periods of absence while I was undertaking this course but also for their financial and other forms of support.

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ABBREVIATIONS AND ACRONYMS

ADB	African Development Bank
DANIDA	Danish International Development Agency
DFID	Department for International Development of United Kingdom.
DFPs	Donor Funded Road Construction Projects
ERB	Engineers Registration Board
EU	The European Union
GoU	Government of Uganda
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
IDA	International Development Agency
IFC	International Finance Cooperation
IGG	Inspector General of Government.
IMF	International Monetary Fund
JICA	Japanese International Cooperation Agency
KfW	Kreditan fur Wiederaufbau
LDCs	Least Developed Countries
LIB	Limited International Bidding
MoFPED	Ministry of Finance Planning and Economic Development
MOWT	Ministry of Works and Transport
NDF	Nordic Development Agency
NORAD	Norwegian Agency for Development

- NSDS National Service Delivery Survey
- ODA Official Development Assistance
- OECD Organization for Economic Cooperation and Development
- PPDA Public Procurement and Disposal of Public Assets Authority (PPDA)
- RAFU Road Agency Formation Unit
- RoA Reality of Aid
- RSDP Road Sector Development Plan
- SCB Selective Competitive Bidding
- SPSS Statistical Package for Social Scientists
- UBOS Uganda National Bureau of Statistics
- UGX Uganda Shillings
- UIA Uganda Investment Authority
- UIPE Uganda Institution of Professional Engineers
- UNABCEC Uganda National Association of Building and Civil Engineering

Contractors

- UNRA Uganda National Roads Authority
- USD United States Dollar
- WB The World Bank

GLOSSARY OF TERMS

- *Construction Firm*: A firm involved in road construction activities in Uganda.
- *Local Construction Firm:* According to this study, a local construction firm is a Grade A+ road construction firm as per UNRA and MOWT grading, with 50% or more shares held by Uganda nationals at the time of the study.
- *Foreign Construction Firm*: A Grade A+ road construction firm as per UNRA and MOWT grading, with less than 50% shares held by Uganda nationals at the time of the study.
- Aid:
 Assistance to Uganda in form of grants, loans, technical and any other form of assistance towards road construction either in kind or cash.
- **Participation:** Winning a DFP contract.

ABSTRACT

The study sought to establish the reasons behind the low participation rates of local road construction firms in donor funded road construction projects (DFPs) in Uganda for a ten year period, beginning 1998. The objectives are to: identify all local and foreign construction firms which participate in DFPs, to examine factors such as technical and financial capacity which influence award of contracts to the firm, to assess the compliance with procurement guidelines in the selection and award of tender and to solicit key recommendations to be used to inform the study.

The study adopted a cross sectional, causal- comparative and explanatory research design with a combination of qualitative and quantitative methods. A total of 80 respondents were interviewed from grade A+ road construction firms (40 local and 40 foreign). They were chosen using proportionate simple random sampling. Another 10 key informants were chosen from UNRA and donor community using non-probability sampling methods (purposive sampling). Primary data as well as secondary data were collected for purposes of triangulation of results. The findings of the study revealed that while there were instances of corruption by better placed firms, this was just a factor among the many other factors that reduced the chances of local construction firms from winning many contracts under the donor funded road construction projects in Uganda. Other factors highlighted were: capacity gaps, numerous procedures and other characteristics of DFPs. The study recommends that if the level of participation of local construction firms in DFPs is to be increased, the following should be done; creation of professional development schemes, formation of joint ventures by local construction firms, accessing cheap and long term financing, breaking down contracts into small lots, mandating foreign construction firms to sub contract local construction firms, using post qualification in tendering ,adopting punitive measures for corrupt firms and quickly putting in place a local construction industry development policy.

CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

Roads play a fundamental role in national development. This is because, they enable movement of goods and services from one area to another; linking both production and consumer chains. They, therefore, quicken the process of national integration and economic growth and development as well. That is why roads are a top priority for national governments, donors and other development partners. However, much as roads are important for national development, road construction projects use a lot of petroleum based products such as fuel, lubricants and bitumen as well as other materials such as cement and steel. These inputs form a significant part of road construction works. This expensive undertaking is once again emphasized by the fact that the generalized cost increase of recent road construction works in Africa varies from 67% to 124% for time lapses of 2 to 4 years (RAFU 2008).

Relatedly, Bellingham (2006) acknowledged that road construction materials costs are high for national budgets of Least Developed Countries (LDCs). This means that road construction in LDCs is heavily dependent on donor financing. In Kenya for instance, the unit rate per kilometer of tarmac ranges from US\$570,000 to US\$627,000. In Tanzania, it is US\$ 750,000 and in Uganda, it ranges from US\$ 618,000 to US\$ 708,000 (RAFU 2007). It is against this background of being expensive that road construction projects are mainly funded by donors (Monitor Publications Ltd 2007).

According to Road Agency Formation Unit (RAFU), road development projects in Uganda are mainly funded by development partners especially: the World Bank, European Union and the African Development Bank. These institutions actively monitor and participate in the procurement process of road consultants, contractors and other service providers. Their involvement is as a result of low self-sustaining capacity of Least Developed Countries and Uganda in particular as emphasized by Goonerate and Mbiliny (1992) that; 'The economic difficulties affecting many countries of Sub-Saharan African have reached crisis proportions.'

Limited "local self-reliance" has led to increased donor aid. Aid plays a pivotal role in the socio-economic development of countries the world over. This is because it increases the abilities of a country to spend on public and private sectors that directly stimulate development both social and economic for the benefit of nationals and global citizens (The World Bank, 2002).

In line with the above observation, massive aid inflows have been critical in making Uganda register a remarkable turn around in recovering from political and economic turmoil of 1970s and 1980s with sustained high economic growth rates of 6.9% p.a. in 1990-1999 and, 5.4% p.a. in 2000 – 2006 (The World Bank 2006). In fact research recently carried out by Leggett (2001 cited in APR Panel of Eminent Persons 2008, p.84)

found that in 1986, the year the current Government came to power, Official Development Assistance (ODA) amounted to approximately USD200 million . By 1997, aid from the IMF, World Bank and donor governments had increased to nearly USD850million although recently there has been a great decline in aid dependence due to increased domestic tax base.

The high aid inflows are manifested in the fact that before the Gleneagles G-8 Summit in Scotland, United Kingdom; in 2005, Uganda's total foreign debt both bilateral and multilateral stood at US\$ 4.9b. Some of this money was allocated to the road sector, where 75% is donor-financed, particularly in the underlying programmes: Phase one, two and three of Road Sector Development Program (RSDP) whose objectives pertain to the following:

- To improve access to rural and economically productive areas by removing major constraints to the transport services.
- To strengthen the road sector management.

Phase 1 which was completed in June 2006 included; upgrades to paved standards, Busunju-Kiboga-Hoima road (143km), and further upgrades of national roads to paved (bitumen) standards as well as civil works to improve accident "black spots".

Phase II: Upgrading of main roads to paved standard: Kampala-Gayaza-Bugema-Zirobwe-Wobulenzi (70 km), Karuma-Pakwach-Nebbi-Arua (Section Karuma to Pakwach, 110 km), and the Kapchorwa-Suam (85 km) which was found technically feasible and economically viable; as well as preparation of a Transport Master Plan (June 2000 - June 2005).

In phase III which is to be competed in 2010, the following were the works that were considered: rehabilitation of Busega-Mityana road (57km), upgrades from gravel to paved bitumen standard; Soroti-Lira road (125km), Atiak-Moyo road (91km), Jinja-Bugiri(73km), Dokolo-Lira(60.4km), Kabale-Kisoro(55km), Soroti-Dokolo(62.6km), Kafu-Masindi(99km) and Fort Portal-Budibugyo (59km) roads, and lastly the Northern By-pass (21km) in addition to feasibility studies for upgrading a further 600kms of priority national roads(RAFU2007).

Among other donors that have financed road construction projects in Uganda in line with Road Sector Development Programme (RSDP1, II and III) in conjunction with the World Bank and European Union as well as African Development Bank include: Japan (US\$69.75m) and China (US\$ 69.7m).The World Bank has been active in Uganda since 1961 starting with a loan for electric power development. As of April, 2007, the total loan portfolio disbursed to Uganda comprised of 17 active operations with commitments of US\$1.013bn in all major road sectors (www.worldbank.org.ug) accessed on June 9, 2008 at 5.30 pm.

To sum the above, by November 2006, most of the procurements Road Agency Formation Unit (RAFU) engaged in, 90% were donor funded and the donor guidelines were significantly abided with but taking recognition of the procurement structures enshrined in the Public Procurement and Disposal of Public Assets Authority (PPDA) Act.

However, according to the Ssepuya (2008) and Uganda National Association of Building and Civil Engineering Contractors (UNABCEC)(2008) reports, foreign consultants and contractors dominate donor funded road construction projects in terms of participation.

1.1 Statement of the Research Problem

Extent of involvement of local road construction firms in donor-financed road projects is negligible. According to the UNRA (2008) and UNABCEC (2008), the rate of participation of local construction firms is only 4%. Conversely, the rate of participation of foreign road construction firms is 96% on Donor Funded Road Construction Projects in DFPs. This is inspite of an elaborate and robust procurement regime that ensures open eligibility and participation. The comparative local and foreign construction firm participation gap constituted the study's problem.

1.2 Objectives of the Study

This study was guided by the following general and specific objectives.

1.2.1 General Objective

The general objective of this study was to ascertain variables influencing the differences in levels of participation between local and foreign construction firms in the execution of donor financed road construction projects in Uganda.

1.2.2 Specific Objectives

- i. To identify all the local and foreign construction firms which do participate in donor funded road construction projects in Uganda.
- ii. To examine the key factors which influence the selection and award of DFPs contracts in Uganda.
- iii. To assess the compliance with key procurement guidelines in the selection and award of DFPs contracts in Uganda.
- iv. To solicit key recommendations to be used to inform the study.

1.3 Research Questions

In order to achieve the above objectives, the researcher adopted and utilized the following research questions to investigate the cause and effects of the participation gap.

- i. Which are the local and foreign construction firms that participate in donor funded road construction projects in Uganda since 1998 to 2008?
- ii. Are the compliance issues in the procurement guidelines (selection and award criteria for DFPs) adhered to in Uganda?
- iii. What are the compliance issues in the procurement guideline (selection and award criteria.) in DFPs in Uganda?
- iv. What should be done to improve the participation of the least participating firms in DFPs in Uganda?

1.4 Significance of the Study

The significance of study findings are at international, national, institutional, community, and individual levels. The results of this study will help the donors to improve on the donor funding and implement the Accra Agenda of action (2008) of relaxing restrictions that prevent LDCs from buying the goods and services they need from whosoever they can get best quality at lowest price. The results high light loopholes among local construction firms and give ways in which to improve their capacity to enable them compete in a more globalised context. It will also help in policy reforms, boosting the country's infrastructure and curbing down financial leakages.

Another significant aspect is the core function of research that would pertain to data development. The findings will increase the scope and stock of literature for future researchers and scholars. Policy practitioners and decision makers especially those involved in the national procurement processes are expected to benefit from the results of the study.

The study should in future, be useful to the Ministry of Works and Transport (MoWT) to work out a policy for mainstreaming the local construction industry in donor financed road construction projects. This study's conclusions and recommendations will help in generating options to infuse in the general policy framework of socio-economic development of Uganda.

1.5 Scope of the Study

In terms of geographical scope, this study limited itself to the road construction firms executing work on donor financed road construction projects within Uganda. The study used a mix of the recommended and approved national and international procurement guidelines as the selection and award criteria tools to analyze, factors such as technical and financial capacities of firms which participate in donor funded road construction projects ,issues of due diligence in the procurement process and government policy. It suggested recommendations on how to improve participation of the least participating firms in DFPs. This study addressed itself to donor financed road construction projects, because, donors contribute a vast financial sum equivalent to 90% of all disbursed money towards national road construction in Uganda (PPDA, 2006).

1.6 Conceptual Framework

A conceptual framework is a graphical diagram illustrating an assumptive interrelationship of the study's variables (Amin 2005).

This conceptual model categorizes three sets of variables (Figure 1.1). These are: the independent variables, moderating/intervening variables and the dependent variables. In this diagrammatic representation the independent variable is the cause, while the dependent variable is the effect.

The independent variable is the requirement by the procuring entity of the firms participating in the donor funded road construction projects. Essentially this is enshrined in the selection and award criteria used.

The intervening variable is: the credit/aid/grant model of the donors that may be "tied" or "untied," the national cultural context of the aid-giving country and corruption tendencies in the procurement process. The assumptive interrelationship in this conceptual framework is that, although the given selection and award criteria in the bidding methodology may have a set of procedural standard, it may be affected by a given aid/grant model that is "tied", in a sense that, a giving country may at the same time want to create jobs and financial opportunities for their national firms and as such foreign construction firms end up taking these contracts.

It is probable that, the foreign construction firms have various advantages over local construction firms in the perspective of competency and capacity, which end up favoring them in getting these donor financed road projects creating a difference in participation between local and foreign construction firms as the definitive outcome/dependent variable.

Thus the dependent variable is the local or foreign construction firm wining the donor funded road construction project contracts.

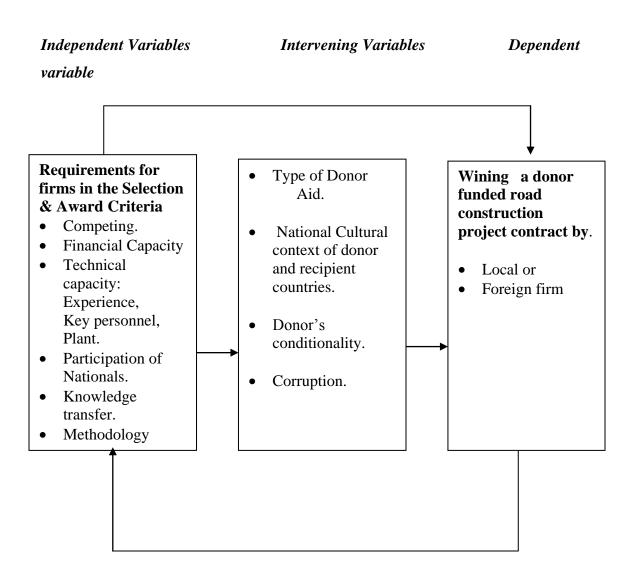


Figure 1.1: Concept of participation of firms in DFPs in Uganda.

1.7 Theoretical Framework

A theoretical framework is a review of the general theory along which the study is developed. In this case, the researcher considered the underlying theories as base principles that attempt to explain, understand or even predict this interrelationship between the study variables (Amin 2005). These theories were adopted and utilized to provide a framework by serving as a point of departure for the pursuit of the research problem (ibid). This set of theories provides a guide for systematizing and relating various aspects of this research. This theoretical framework therefore guides discovery (Amin 2005). The theory helped the researcher in identifying the assumptive and theories that underpin the study (Amin 2005).

In this study, the researcher used various theories of outsourcing or offshore sourcing particularly; Jarvenpaa and Ji-Ye Mao's (2008) **theory of outsourcing**; Qu and Brocklehurst (2003) **theory of comparative analysis**; Dutta and Roy (2005) **theory of system perspective.**

Lastly, Wu (2005) resource-based theory and Ra Kumar and Mani's (2001) mediated business model and J. Wilson's theory of corruption (1977) are used.

1.7.1 Offshore sourcing Theory

In this theory, offshore sourcing or off shoring involves crossing national boundaries to purchase goods and services. This decision is based fundamentally on supply of providers that have operational capabilities, comparative cost advantage, and satisfactory quality culture and acumen in delivery. It can be seen that these may constitute a firm's advantage over another one. This theory is relevant to this study to the extent of its ability to logically bring out these predisposing factors. However, the theory is broad and developed generically and cross-cutting sectors. It does not explain the dynamics of donor financed road construction sector in Uganda. This constitutes a fundamental gap, because, Uganda's policy frame work and graphical set up is unique and different from other countries.

1.7.2 Theory of Comparative Analysis

Qu and Brocklehurst's (2003) theory of comparative analysis argues that transaction cost economics has been the dominant theoretical model in off shoring. Although this seems logical, it may not be comprehensive enough for; it seemingly treats the entire off shoring decision to this single parameter as such as this creates a gap. This was designed to conduct a comparative analysis of the local and foreign construction firms' participation in DFPs in Uganda.

1.7.3 Theory of System Dynamics

In their theory of systems dynamics, Dutta and Roy (2005) suggest that off-shoring is based on various reasons called "systems" and processes called "dynamics". It also suggests that capacity, competence, resource differentials constitute systems and dynamics that may rationally guide the off shoring decision. This theoretical thrust is reechoed by Garud and Kumaras Wany (2005). To a certain extent, it is emphasized by Wu (2006) in his resource-based view of the firm theory which argues that a decision to offshore the sourcing may be hinged on who is deemed to have a resource advantage over the other. Thus the firm that is viewed as more resourceful by the procuring entity wins the contract. This theory is relevant to this because it predicts the actual scenarios and dynamics. However, it is much more generalized in scope. It does not analyze the scenarios and dynamics in the specific Uganda's context and more so to the procurement of road construction service providers. This in essence constitutes a gap which this study was intended to fill.

1.7.4 Mediated Business Model

Rajkuman and Mani (2001) in their mediated business model postulates that a critical comparison in decision-making should be based on the country's low labour costs, skills, competencies and capabilities advantage. It takes into consideration client specific capabilities such as the client profile, processes and human resources or manpower. This theory is relevant for it points out capacity-competence gaps as guides to decision making on who gets what. Its limitation nevertheless remains the context. It's broad, without particularization to Uganda' road construction procurement processes. This equally creates a gap which this study should fill.

1.7.5 Theory of Corruption.

This theory was put forward by Wilson (1977). The theory is "three-tiered". He argues that; little attachment to quality output and efficiency coupled with relatively high attachment to favours, personal loyalty and private gain will lead to corruption. The core message of this theory is that, values that produce irresistible demands for favouritism breed corruption.

Corruption may also result from the process of ordinary people facing extra-ordinary temptations. Thus, corruption is not a result of defects in character or cultural values, but as a consequence of a social system which rewards people with power, wealth and fame only if they are daring enough to seize them. Many Governments are so constituted that their work cannot be carried out without corruption. That is, they are constituted in such a way that all departments and units must be put together formally and constitutionally.

This theory could help to explain the participation levels between local and foreign construction firms in donor financed road projects. Since there is a possibility that foreign construction firms may be more financially resourced than local ones, technocrats may be tempted to yield in to favours at the expense of the local construction firms. The theory is therefore, relevant to this study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review of the literature relevant to the study. The literature review flows around issues categorized in Figure1.1: the concept of participation of firms in DFPs in Uganda, study objectives and research questions. On the whole, this is based on the fact that there is ample due diligence and procedural compliance in selection and award. The second major set of variables around which this literature is arranged is; the credit model which is either "tied" or "untied". The national cultural context of the giving country is also discussed. The third aspect of this review is highlighting the technical and financial capacity of the firms as well as other factors that may influence one grade of firms from winning donor funded road construction project contracts. At the end of this review, scope, content, methodological and data gaps are highlighted and this study is given further justification.

2.1 The Competition of Firms in DFPs.

Firms compete through a formal bidding process. Bidding is an essential purchasing organizational structure which involves listing all potential suppliers of goods, works and services; then, scrutinizing them on the basis of their perceived strengths and weaknesses and, finally deciding on who to award the tender (Benton, 2007). Bidding helps companies or procuring entities to get the kind and quality of information as well as

interact with potential suppliers who are part and parcel of key constituents of the procuring entities.

Bidding is essentially a competitive activity. Benton (2007) argues that a firm can compete in two broad alternative ways; it can seek advantage on the cost or choose to differentiate itself from the competitive advantage on the cost. Alternatively, it can choose to differentiate itself from the competitors on some attributes of the project in the way it markets its products.

A competitive bidding process increases better products, faster delivery and, decreased costs. As firms become more competitive, a rippling effect is created and experienced by the suppliers. A competitive bidding strategy involves opening up to all potential suppliers.

In Uganda, as per the PPDA Act of 2003, all procuring and disposing entities are expected to use open domestic bidding method (ODB). Open Domestic Bidding is a procurement or disposal method that is open to participation on equal terms by all providers through advertisement of the procurement or disposal opportunity. This form of bidding is critical for achievement of competition and value for money. However, international firms and suppliers are not prevented from participating in the bidding process under this method. Therefore, this opens the flood gates of competition that may put the local construction firms into a tight corner and thus they lose out on contracts.

This, however, presupposes information equality on the market such that the stakeholders have the right information regarding the available business opportunities (PPDA 2003).

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Benton's (2007) views resonate well with the recent Accra Agenda of Action (2008) on aid effectiveness that called for transparency, equality and fair competition in procurement of goods and services using aid money.

Another open method of procurement is Open International Bidding (OIB) which is open to competition on equal terms by all providers through advertisement of the procurement or disposal opportunity and which specifically seeks to attract foreign providers. The method comes in handy to obtain maximum value for money and competition where national providers may not necessarily make it achievable.

On the other hand, bidding may be selective and restricted, in that, particular previous suppliers already pre-qualified or preferred especially in the sense of limited time required, within which to deliver goods and services. In this case, a long protracted open bidding may cause delay and operational difficulties (Bowersox 2007). It is probable that in such crash projects in Uganda, local construction firms are worst hit.

There are two methods under restricted bidding; restricted domestic bidding (RDB) and restricted international bidding (RIB). Under the former method, bids are obtained through direct invitation without open advertisement. Value for money and competition is obtained to the extent possible where circumstances do not justify or permit open bidding procedure. The latter is a procurement method where bids are obtained by direct invitation without open advertisement and the invited bidders include foreign providers. However, restricted bidding is prone to abuse and many scholars indicate that value for money and competition advantages are lost (Bowersox 2007).

The other fundamental component is the cost option (Bowersox 2007). Quality and least cost-based selection (QLCBS) entails an examination in comparative terms on quality specifications, cost specification differences along which the procuring entity may base its decision. Bowersox (2007) further argues that this method is efficient in cost-sharing and registering low unit cost and hence, improved efficiency .The national and international bidding systems widens the sourcing catchment areas and therefore, opportunities for reduced cost and greater efficiency from suppliers.

Bidding helps industrial, institutional and intermediate buyers in procuring quality, efficient, and effective deliverables (Lyssons1996; Attila 2004; Benton 2007).To maximize procurement benefits, however, it is essential that the procurement regime is free of biased selectivity and preconceived ideas about suppliers. It must be both nationally and internationally done so that ideas of suppliers of varied levels are scrutinized at the same benchmark ().

Procurement whether national and international must incorporate the notion of transferability of good practices. However, going beyond that, there are critics who would argue that, attempts to effect western "best practices" for government contracting entrenches an oppressive plan to reinforce the control of the US and other advanced

capitalist economies (Schwartz 2003). If this practice is established in Uganda, it is likely to be unfavourable to the local construction firms.

At the end of it all, is an increasing observation that the transformation of global procurement or national procurement regimes is inseparable from broader global trends (ibid). Schwartz (2003) borrows from Stiglitz (2003) in his book: "Globalization and its Discontents" to argue that global economic integration has subordinated other important values to unrestrained free market capitalism. Similarly, he infers that an unregulated global competition for capital investment is increasingly undermining national political economy. This regime is likely to lock out the local construction firms from participating in the projects.

On the other hand, Hunja (2003) notes that in many developing countries, public procurement was not previously viewed as having a strategic impact on management of public resources. It was viewed as a process-oriented, "back-office" support function, often implemented by non professional people. He however, notes that, reforming procurement systems has quite proved to be quite difficult. He further points out:

"A strong and well-functioning procurement system is one that is governed by a clear legal framework, establishing the rules of transparency, efficiency and mechanisms of enforcement, coupled with an institutional arrangement that ensures overall constituency in policy formulation and implementation."

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He further observes that: "Studies and assessments of procurement systems in developing countries have consistently indicated weaknesses in most, if not all these areas."

Public procurement is a process by which vast sums of money are expended and utilized by public entities to procure goods and services from the private sector. A procurement system that has loose or opaque rules that are poorly enforced provides opportunities for abuse of the contract award through corruption (Hunja 2003).

Vested interests in such systems can also manifest through business cartels which may have an interest in maintaining a legal framework that prohibits competition from foreign suppliers and vice versa. In many developing countries like Uganda, access to public contracts also serves as a means to reward political supporters and finance political parties.

Hunja (2003) asserts that: "Political leaders often lack the will to expend the political capital necessary to overcome the resistance of powerful economic interests often present".

Dorbeck (1985) explains that autonomy of an institution protects it from outside pressures and manipulations. It also serves to achieve efficient and effective operations. Autonomy is affirmed by the doctrine of separation of powers.

2.2 Key Factors which Influence the Award of Contracts in DFPs

The key Factors considered in awarding tender/contracts to firms include: financial and technical capacity of the firm, participation of nationals, knowledge transfer and methodology. The procurement entities must ensure that the firms that are awarded contracts have the necessary manpower and financial resources to deliver the anticipated quality outputs (Benton 2007, Bowersox 2007 and Lyssons 1996). The widespread underdevelopment and massive poverty in Africa has however meant ineffective, inefficient institutions structure and systems tasked with roles performance (Smith 2005). He observes that extreme poverty is a deprivation of capabilities. This means that the local construction firms often find it difficult to meet the requirements for the award of contracts.

Competition policies can best be enhanced if parties are competing on the basis of equality or near equality. Where there are material differences on vast scales, allotment become heavily skewed (World Bank 2002).

Adebayo (1988) sums it up all, when he argues that the human condition-the social fabric of peoples' lives, is the ultimate test of development. It is also among the vital means of achieving it.

According to the Uganda Public Procurement and Disposal of Public Assets Act 2003, the following criteria are used to evaluate the bids submitted by prospective road contractors in Uganda.

Item	Criteria	Range of Points
a)	Specific Experience	5 to 10 points
b)	Methodology Proposed	20 to 50 points
c)	Key Personnel	30 to 60 points
d)	Transfer of Knowledge	0 to 10 points
e)	Participation by Nationals	0 to 10 points
	Total	100 points

 Table 2.1: Main Criteria and Maximum Number of Points for Procurement of

 Service Providers.

Source: Uganda PPDA Act No. 1 of 2003 and PPDA Regulations No. 70 of 2003

From the table above, it is clear that differentials in participation of firms (local or foreign) are highly determined by the set evaluation criteria by the procuring entity.

A firm's ability to present the right personnel is likely to gain a minimum award of 30 points and a maximum of 60 points out of 100 available points. Some studies have shown that most firms in the developing world are unable to attract and retain high quality technical staff which may put them in a very weak bargaining position for road construction contracts.

Mubiru (2001) established that only 24 % of contractors in Uganda are able to employ more than 100 full time staff. However, his study fell short of indicating the categories of staff as per their expertise. Another study by the Uganda National Council for Higher Education indicated that as at 2005, there were only 120 registered architects, 280 engineers and 78 surveyors in Uganda (UNCHE 2004). This indicates a very small pool from which local construction firms can pick competent professionals to boost their profiles and earn them more points in the bidding process.

The situation is further complicated by the inability of local construction firms to hire expatriate staff because they are very expensive (Mubiru 2001). If hired, expatriate staff would increase the company overheads and subsequently the bid prices thus making the firms' bid big and unattractive to the procuring entity. Hence loose out on these big DFPs.

Another key criterion that carries a lot points is the firm's proposed methodology for the job at hand which carries between 20 to 50 points. To fulfill this requirement satisfactorily the firm needs to have adequate experienced manpower, plant and timeframe. The other requirement that closely relates to the above criterion is the firm's specific experience which carries 5 to 10 points. Available studies indicate that firms in developing countries especially in Uganda have limited work experience, poor equipment and weak financial standing and this is due to: lack of cheap credit, reluctance of banks to offer non collateral credits and commercial banks' reluctance to fund construction projects. Thus local contractors are usually unable to meet eligibility criteria for the relatively complex development projects like the donor funded ones (APR Panel of Eminent Persons 2008).

The Sloan Management Review Journal (2003) indicates that companies that are innovative and continually seeking better and cheaper ways of doing work have been found to be successful in increasing their bottom-line. Innovation and creativity is often a result of training and exposure. However, local construction firms in the developing countries are not likely to have many opportunities for training and exposure in comparison to their foreign counterparts. Thus, there are likely to be wide methodological differences in bid proposals. This explains the difference in participation between local and foreign construction firms in donor road construction projects.

Local construction firms face challenges of meeting some of the key criteria during the tendering process of these big projects like the DFPs.For example, local banks shun guaranteeing these big jobs because of limited involvement and poor resources of local construction firms. On the other hand, international firms often require long mobilization periods to move the equipment into the country leading to high costs for implementation of projects. These challenges affect all the stakeholders in the project implementation. The Ministry of Works and Transport (MOWT) is working to address some of the shortcomings of local contractors. (Monitor publications 2007).

2.3 Compliance Issues in Project Awards.

The intervening variables that influence the award of contracts in Uganda include: the type of donor aid, donor conditionalities, the national cultural context of both the donor and recipient countries plus the impact of corruption in the procurement process. The

intervening or moderating variable is a set of factors that affect the relationship between dependent and independent variables.

Broadly mentioning, aid can be categorized into two major dimensions. These are "tied" and "untied". Tied aid is non-discretional and must be used on the will and volition of the giver. On the other hand, untied or free aid either in terms of grant concessions, loans and competitive credit facilities can be used on the basis of the loanees or grantees' freedom and development priorities. Shantayaman *et al* (2001) argues that since 1980 virtually every African country has received large amounts of aid. They reveal however, that the results have varied enormously in providing public services that are essential for economic growth and development. They observe that the biggest setback to aid in Africa is that it has largely been a foreign policy tool rather than a tool of economic development.

According to Shantayaman *et al* (2001), this has led to a high degree of gaps in bilateral aid flows over the years and performance gaps of this aid in itself. Alesina and Dollar (2004) illustrates that this aid allocation by multi-lateral and bilateral donors has been driven by strategic variables such as colonial relationships, voting patterns at the United Nations and the desire to stimulate business opportunities for firms in the aid giving countries.

Indeed most private contractors and consultants from donor countries are long time partners of their governments in implementing different projects worldwide. Reality of Aid (RoA) (2004) cites the Louis Berger Group which managed the construction of the US military base in Thailand, one of the largest in South East Asia. The same group also planned, designed and managed construction of over 100, 000 miles of highway, 2000 miles of railroad and bridges, 100 airfields, sea ports, dams, water supply systems, numerous environmental mitigation projects and diverse cultural preservation projects throughout the USA and in 140 other countries. This is what the study attempts to establish in Uganda.

The group could have been able to gain unfair advantage over other corporations in winning all these contracts because it originates from the donor country. Japan is one of the countries that roots for her companies to carry out infrastructure development like the construction of roads, bridges and dams in countries it commits assistance. This is because Japan's industrial structure has a very high rate of civil engineering and construction works (RoA, 2004). USA and Japan are some of Uganda's major donors.

In a nutshell, (RoA, 2004) estimates that in the case of grant aid, almost 50% of it flows back to its source country. In effect foreign donors are simply giving their own corporations/firms projects to profit from. Worse still, most foreign aid monies are loans, so the recipient country shoulders all the costs while the donors' own contractors earn immensely. Given the above scenario, local construction firms become marginalized in winning contracts in donor funded projects. This further limits their opportunities to acquire experience and knowledge of modern construction technologies on top of expanding their financial capacity.

Western donors and the donor coordinating groups attach foreign aid to policy reforms, in practice however; there has been a tendency by the donors to use aid as leverage. The lack of influence by external institutions in the past, in the face of unraveling agreements has compelled donors to take a more retrospective look. Aid has therefore been a uniform tool of powerful interests and not necessary reform per se (Alesina & Dollar 2004). They similarly analyze that in both Ghana and Uganda, donors have continued to use conditionality well after the end of the rapid reform period. They observed that, in Ghana, conditionality became more stringent over time as overall quality of policies improved. For instance, they stated that International Monetary Fund's conditionalities rose from 20 in 1983 to 40-50 between 1988-1989.

Shantayaman *et al* (2001), explain that the share of policy-based loans rose sharply in Ghana's overall loans from the World Bank. Accordingly, conditionalities became tighter, deeper and increasingly specific. The principle problem of conditionality is its tendency to limit participation in decision-making. However, tied aid contravenes the Accra Agenda of Action (2008). The agenda notes that donors agreed to relax restrictions that prevent developing countries from buying the goods and services they need from whosoever and wherever they can get the best quality at the lowest price.

Untying aid is a major theme of the ongoing debate about the coherence and effectiveness of the aid giving and the credibility of the donors. The EU commission approach is based on the approach that untying aid is a way of increasing transparency and responsibility in the management and provision of aid. Moreover, tying aid has been found to increase the cost by 15 % to 30 % (Fredrick 2005).

Sogge (2002) equally notes that each aid-giving nation displays its own mix of ideology, purpose and image. He points out that official aid giving countries ultimately project it as just another instrument to project power beyond national borders, a total of foreign policy. Sogge (2002) argues that: "Foreign aid had traditionally been the domain of policy elites and certain outwardly-oriented business groups".

He similarly shares the view that giving has been the conventional norm of modern aid system, born midway through the twentieth century. It is tied with geopolitics, trade and banking and foreign aid can't be classified purely as "gift-giving". He denotes it as highminded goodwill. The bigger the stakes, the bigger and greasier the finger prints of commerce, geo-politics and ideological crusading.

Sogge (2002) mentions that, aid had deep and intertwined roots in the history of "western" expansion. Trade and investment, he observes have gone on, in the name of a super project of social engineering called "development". He further amplifies the argument by revealing:

"Aid is an ambiguous two-faced thing. There is commonly a lot less to it than meets the eye under its many paddled layer, the business of giving camouflages its much larger and inseparable twin, taking." Much of these loans have been tied to the national cultural contexts of the aid-giving countries and goes hand in hand with their power agendas. In his explanation, he observes that the aid regime is equal to power agendas. This is the essence of the conceptual framework presented in this study.

At the same time, the conceptual framework states clearly from the work of Byres (1972, p 43) that there is unmistakably impression about foreign aid and the crucial and material part it has played in development. He argues however, that this contribution of foreign aid is more cautious in some parts. He notes that the correlation between the amounts of aid received by individual countries in the past and growth performance is very weak.

The central theme assumes axiomatically that aid promotes development, and is, indeed needed and crucial for a reasonable rate of material progress. He however, argues that the "simplest answer" as to why rich countries assist the poor countries is because of a "moral reason or argument". There is however, no correlation between foreign aid and the moral duty of individuals to behave charitably towards the less fortunate or weaker. Foreign aid generally favours primarily better off individuals in the recipient countries". There is also presumably the appeal of enlightened and constructive self-interest which is a respectable and valid interest for international action and policy. Besides, and is said to benefit donor countries partly through direct benefits from the bilateral aid relationship (Byres 1969, p 57).

Aid is therefore, in the long run, transformed into an asset of neocolonialism and real politics. Foreign aid and the international trade network are the economic mechanisms of neocolonialism. In retrospect, Byres (1969, p 105) asserts:

"The role of foreign aid has not been merely to supplement domestic resources. Aid has to a large extent been a catalyst. It's been of first importance in the psychology of development. A cushion of foreign resources makes it possible to pursue bolder policies and take steps to accelerate development. However, at the forefront of the aid regime is the vested interest of the donor"

He again argues that although it is widely believed that the purpose of foreign aid is to reduce world poverty, it is only partly true. The major purpose of aid is to further economic and political interests of the aid-giving nations. There is little altruism in aid programs. The foreign aid program of 1960s as it was in the 1940s and 1950s is planned and administered to serve the vital interests of the United States. It is a prime instrument of US foreign policy and our security would be in great jeopardy without aid program. US assistance fits into a carefully planned pattern based on a study of each country and an analysis of US interest (Byres 1969, p 119).

Corruption is one of the main intervening variables which influence the award of contracts in Uganda. One of the common ways of influencing tender award is through political pressure and interference in the bidding processes. Corruption poses a serious development challenge. In political realm, it seriously undermines democracy and good governance. It undermines fair play, justice and equal opportunities, equity and non discrimination which are the underlying principles of democracy. In the economic realm, corruption generates economic distortion in the public sector by pulling public investment away from priority sectors into projects where bribes and kickbacks are more flourishing. Corruption lowers compliance with construction or other regulations; reduces the quality of public services (APR Panel of Eminent Persons 2008).

Tina Soreide (2006) in her paper titled: "Tender Manipulation: Large Firms and Infrastructural contrasts" notes that large infrastructural projects appear particularly prone to political interventions, addressing for instance regional or redistributive considerations, unemployment and protection of the domestic or international industry. She found out that 70% of the would be contractors reported that "unethical business practices by competitors had cost them important contracts. Marketing strategies verge on corruption when representatives of customers are offered significant "benefits" of significant personal value".

She puts it hereunder:

"The outcome of tender on big contracts is affected from above by diplomatic pressure to the benefit of one particular firm, especially when the client is of a foreign government. The pressure may deal with helping the buyer linked formally or informally to the purchase, commercial pricing issues and removal of impediments to trade". The kind of pressure may reduce the prospect of ending up with the most beneficial outcome of the host country's citizens. The link to corruption becomes clear when the selected firm has paid its own government to put pressure on the client (Soreide 2006).

Soreide (2006) further expounds: "Successful diplomatic and political pressure will cause a deviation from the ultimate goal of competitive bidding which is the best price and quality solution in the given project. Diplomatic pressure and politics are thus called misprocurement since the results often are inferior solutions in terms of best value for money". In the long run the Local firms are engulfed in a spiral of poverty just like their national governments which forces them to close business.

Uganda's PPDA estimates that over UGX330billion (USD184million) is lost every year to corruption in procurements. This is more than what the country receives in aid every year (APR Panel of Eminent Persons 2008).

Negotiation skills or influence are also key factors that affect the award of contract. Saleemi (1997) argues that human behaviour plays a decisive role in negotiation. The buyers' behaviour is always aimed at taking the best bargain in which his organization stands to benefit. Hence forth, the "strategy" and "tactics" used in most cases have got an opportunistic and corruptive implication, although they are both accepted as an integral part of the negotiation process. Jossep *et al* (2005) observed that: interference from "above", currency differences, language differences and legal regime differences, constitute some of the key constraints as related to external sourcing particularly, to the European Union and the United States of America.

As Lyssons and Farrington (2006) put it, political power peddling may undermine choice rationality, product quality by duly interfering with the purchase chain in the stages such as: receiving requisitions, solicitation of quotations and negotiating with suppliers.

Favouritism and Lack of Transparency are also common factors that greatly affect the procurement process. IGG(2003) refers to favouritism as obtaining benefits through exploiting personal relations between those with power and those seeking favour e.g. jobs, land or other benefits. Lack of transparency involves all actions of those in power that deny other people competitive advantage especially withholding vital information and changing rules and procedures without adequate consultations. For example, European Union suspended funding for two road projects it is involved in implementing together with the Government of Uganda in Masaka District. This was as a result of irregularities in the tendering process.

The EU called for investigations into the process of tendering and award of the contracts with a view of eventually re-tendering the contracts. The roads in question are Masaka-Kyotera and Nyendo-Villa Maria roads. The initial investigations into the irregularities indicated that the company (M/S Dott Services) that was awarded the contract on the basis of having presented the lowest bid of UGX 6.7 bn, had initially submitted two financial offers; both reflecting different figures for the same project. According to the Uganda Public Procurement and Disposal of Public Assets (PPDA) Act and Regulations 2003, this action contravenes principles of equal treatment, fairness and transparency in procurement operation for public works. However, it may not be easy to fight these tendencies of corruption and irregularities in the procuring process if there no amendments made in the PPDA Act of 2003.For instance reporting misprocurements made by firms and the procuring entity should be done at no cost and should addressed to PPDA other than UNRA which may have a hand.

Indeed, the above scenario is better illustrated by one World Bank consultant who observed that Uganda is in short of better modern roads because of high corruption tendencies among government officials who are bribed and counter bribed to award tenders to particular companies (Auma 2008). This led to the same firms continually wining contracts year in year out since they amass a lot of resources from these contracts thus becoming financial giants. In fact this high level of corruption in tender awards has more often than not been blamed for escalation of road construction unit costs in Uganda (APR Panel of Eminent Persons 2008).

2.4 Summary of Literature

The study found some areas of emerging gaps which helped to address its (study) objectives. The literature dimensions as delineated both in theoretical and conceptual reviews explain essential observations which are captured in the study objectives, conceptual framework and research questions.

The theories reviewed include; Jarvenpaa and Ji-Ye Mao's (2008) theory of offshore sourcing, theory of comparative analysis by Qu and Brocklehurst (2003) and the theory of system perspective by Dutta and Roy (2005). Others are Wu (2005) resource-based theory and Ra Kumar and Mani's (2001) mediated business model and J. Wilson's theory of corruption (1977)

They point out capacity and competence gaps as guides to decision making in who gets what, the need to have countries, firms specializing at what they can do best, process of utilization of offshore resources for local benefit, and role corruption can play in influencing in diminishing quality of outputs at the expense of favours in projects.

However, the theories are broad and they are developed generically across a range of sectors. They do not explain the dynamics of donor financed road construction sector in Uganda. This constitutes a fundamental gap in literature, because, Uganda's policy frame work and geographical set up is unique and different from other countries. Besides a theory like comparative advantage disregards the advances in technology that can lead to a particular firm or country developing capabilities to deliver a service more competitively. Thus this constituted one of the gaps that this study set out to establish.

The literature as well reviewed the process of competing for projects through the formal process. The Uganda national procurement guidelines (PPDA, 2003) were reviewed as well as many other scholarly articles (Buijenen 1976, Lyssons 1996, Attila 2004, Benton, 2007 and Bowersox 2007) on the subject. Whereas the PPDA clearly elaborates the procedures for procurement of services, it does not give any in-depth information on experiences of handling DFPs in Uganda. Reports of RAFU and UNRA also do not paint a clear picture of the factors behind the low participation levels of local firms apart from highlighting capacity gaps. Other scholarly articles reviewed, were not particularized to Uganda despite enabling the researcher to gain a glimpse into the likely scenarios and issues that could explain the factors influencing award of tenders to different firms. Thus the need to a detailed comparative analysis of local firms and foreign firms in DFPs to weigh the strength of the likely factors in influencing the low trend of participation in DFPs by local firms.

The evaluation study of The World Bank (IBRD, 2002) again only concentrated on analyzing and comparing trends of procurement between countries in sub Saharan Africa on issues like escalating unit prices for road construction and the general process of managing road construction contracts. They only faintly mention that dominance of foreign firms in managing road construction projects in Africa without explaining the factors responsible for this trend.

Therefore the study sought to address the following questions in order to bridge the observed gaps in the literature.

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- Which are the local and foreign construction firms that participate in donor funded road construction projects in Uganda since 1998 to 2008?
- What are the factors that affect the participation of local and foreign road construction firms in DFPs in Uganda?
- Are the compliance issues in the procurement guidelines (selection and award criteria for DFPs) adhered to in Uganda?
- What should be done to improve the participation of the least participating firms in DFPs in Uganda?

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents a brief description of the major methodological aspects within which this study was conceived and executed. These are: study design, study area, sampling scheme, sample size, data collection, data processing, data analysis and data presentation as well as ethical considerations.

3.1 Study Design

This study utilized a cross sectional causal-comparative and explanatory research design. Amin (2005) defines this design as a systematic inquiry tool that studies and analyses two variables at once, establishing the causality of variance in performances for purpose of data analysis. In this case, the "causal" aspects were the variables influencing the "depth of participation levels" between local and foreign construction firms on donor financed road construction projects in Uganda. The "comparative" aspect was the participation of local and foreign construction firms. The "explanatory" mode in the design attempted to analyze the factors which affect the levels of foreign and local construction firms' participation.

This study used a causal-comparative explanatory design because it had two study sample components, that is, the local and foreign road construction firms, and sought to measure

and analyze participation levels in comparison on top of explaining variables influencing the participation patterns. This study also employed a cross-sectional approach to study the scenario at that particular moment because it would have been very expensive and time consuming to adopt a longitudinal study design.

3.2 Study Area

This study was limited to donor-financed road construction projects in Uganda. According to the PPDA (2006) and RAFU (2007), donors finance 90% of Uganda's road construction projects. These road projects are dispersed in all the regions of Uganda. The final list of firms that participated in this study was accessed from MoWT and UNRA in January 2009. This was a cross-sectional study of local and foreign construction firms' participating in donor financed road projects.

3.3 Sampling Methodology

This study used a triangulated approach that combined both quantitative and qualitative approaches. The quantitative method was used to select respondents in the selected road construction firms, while the qualitative method was used to select key informants from the donor community and UNRA. In the selection of respondents from these road construction firms, the researcher used stratified random sampling with a probable proportionate sample criterion. This technique is whereby, a uniform, stratified, differentiated sample is chosen from various sub-samples and then aggregated into a composite, single sample (Amin 2005, Moser & Kalton 2000, Sarantakos 1998). This

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method was used because of the multiplicity and categorization of road construction firms in Uganda.

In terms of selecting key informants from the donor community and UNRA, purposive sampling was used. This is whereby a given study element is selected basing on its perceived knowledge regarding a study subject at hand (Moser & Kalton 2000; Amin 2005; Sarantakos 1998). This was because of their perceived vital knowledge and specialized information regarding the study subject at hand. The donors finance road constructions and they represent the interests of their national governments, UNRA officials are responsible for managing the procurement and road construction management in Uganda.

In selection of road construction firms, the researcher used simple random sampling with a lottery method to select four foreign construction firms in *grade* A^+ and four local construction firms in *grade* A^+ . According to UNRA (2008), selection of *grade* A^+ is necessitated by the fact that it is the only pre-qualified level by UNRA that is tasked to carry out construction in works of bitumenized road in Uganda.

Lottery method is whereby all the elements in a sample frame are written on a piece of paper, cut into pieces of paper bearing each name; then folded and; the researcher selects one at a time without replacement (Amin 2005). This method was been used because of the multiplicity of local and foreign construction firms in the sphere of roads in Uganda.

According to the UNRA lists of prequalified firms, there were twelve (12) foreign road construction firms in grade A^+ , while there were only four (4) local construction firms in grade A^+ (UNRA 2008).

Selection of four (4) grade A_+ foreign construction firms and (4) grade A^+ local construction firms was necessitated by time and financial limitations on part of the researcher and also to have an equal proportion because there only 4 local construction firms that qualify to compete. A total of eight (8) firms were finally selected for participation in the study.

3.4 Sample Size Estimation and Sample Design

The researcher used the following statistical formula (Z-procedure) to generate the sample size of respondents from both the local and foreign road construction firms in *grade* A^+ (Sarantakos1998)

Sample size, $(n) = \frac{pqZ^2}{E^2}$

Where; \mathbf{Z} is the normalized random variable at a specified level of confidence, \mathbf{p} is the proportion of the variable of interest based on previous experiences ,that is, reported proportionalities of participation by local and foreign construction firms in donor-financed road projects. In the same equation, \mathbf{q} is a variable derived as (100-p). Then, \mathbf{E} is the margin of error between the sample mean and the population mean and in this case it is 5.

According to UNRA (2008), the proportion of participation of local construction firms is

estimated to be 4% while foreign construction firms is 96% on donor financed road projects. Therefore, the value of \mathbf{p} for local construction firms is 4 and for foreign construction firms is 96. In this case the value of \mathbf{Z} is 1.96 at a level of confidence of 95%. The researcher then substituted the above values in the formula to generate the sample size of respondents in both local and foreign construction firms.

Proportion of Sample size for foreign road construction firms (ni)

Sample size,
$$(ni) = \frac{pqZ^2}{E^2}$$

Where, p = 96 q = (100 - p) = 100 - 96 = 4 Z = 1.96E = 5

Therefore, generating the sample of respondents from foreign construction firms in grade A^+ statistically entailed:

$$(ni) = \frac{1.96^2 \times 96 \times 4}{5^2} = 59$$

Proportion of Sample size for local road construction firms (ni)

For local construction firms in Grade A^+ , using the same sample size estimation parameter below:

Sample size, (nii) =
$$\frac{pqZ^2}{E^2}$$

Where, p = 4

$$q = (100 - p) = 100 - 4 = 96$$

$$Z = 1.96$$

E = 5

Therefore, generating the sample size of respondents from local construction firms in grade A^+ statistically entailed:

$$(nii) = \frac{1.96^{2} \times 4 \times 96}{5^{2}} = 59$$

The study thus established the required number (118) of respondents from both the local and foreign construction firms in grade A^+ to participate in the study. After establishing the sample from the two categories of firms, the researcher embarked on selecting a probable, proportionate, uniform sample across from the two firm categories. The following formula was used as extracted from stratified random sampling theory.

$$S = \frac{Ni \times n}{N}$$
,

Source (Sarantakos 1998 and Amin 2005)

Where

Ni: is the total number of study elements from each foreign or local construction firm.

n: is the requisite sample size from four foreign or local road firms *in grade* A^+ , which was 59

N: is the summation of all study elements in all the four foreign or local construction firms in *grade* A^+ .

S: is the desired sample size from each local or foreign construction firm in *grade* A^+ . This formula was utilized for two reasons: principally, to generate a proportionate, probable sample from different firms that have different numbers of study elements. Secondly, to generate a uniform and representative sample across the firms. The same methodology was applied at the local construction firms' level to generate a stratified random sample. Therefore, after generating and estimating total samples as indicated above, stratified random samples were derived as indicated above.

3.5 Selection of Firms

After estimating the sample size from local and foreign construction firms, the researcher embarked on selection of firms. The researcher obtained lists of both local and foreign construction firms that are eligible for participating in *grade* A^+ from the MoWT and UNRA from which the sampling frame was drawn (*see appendix II*).

3.5.1 Local construction firms

The sampling frame of grade A^+ local road construction firms was constructed from lists obtained from MoWT and UNRA. Since there were only four (4) local construction firms in grade A^+ eligible to compete, they were all considered. Local construction firms were coded as: E, F, G and H for purposes of confidentiality. *(see appendix II)*

3.5.2 Foreign construction firms

Similarly, a sampling frame containing all the twelve grade A^+ foreign road construction firms that were eligible to compete in the DFPs was constructed from the lists obtained from MoWT and UNRA. Using simple random sampling with a lottery technique, without replacement, the researcher selected four foreign construction firms which for similar reason were coded as: A, B, C and D (*see appendix II*). Simple random sampling was used in order to give each firm an equal chance of being selected.

3.5.3 Selection of Respondents

After estimating the samples and selecting local and foreign construction firms, the researcher embarked on selection of proportionate, probable stratified samples from these firms. This was done through use of stratified random sampling with probable, proportionate sample criteria. This is whereby sub-samples are first derived from sample strata, and then added up into one composite sample for the entire strata (Berg 2004, Amin 2005, Sarantakos 1998). The underlying formula was used to select at two levels; local and foreign construction firms.

This formula is adopted from (Amin (2005) and Sarantakos, (1998).

$$S = \frac{Ni \times n}{N}$$
 (Sarantakos 1998 and Amin 2005)

Where

Ni: is the total number of study elements from one foreign or local construction firm.

n: is the requisite sample size from four foreign or local road construction A^+ firms, that is 59

N: is the summation of all study elements in all the four foreign or local construction firms.

S: is the desired sample size from a particular firm in the study.

Local Firm	No. of Sample Elements(Employees)
Е	54
F	103
G	87
Н	46
TOTAL	290
Foreign Firms	No. of Sample Elements (Employees)
А	163
В	69
С	45
D	65
TOTAL	342

Table 3.1 Showing the Sample Elements from representative Firms under study

Stratified random sampling was used in order to generate a proportionate, yet representative sample from sample elements in Table 3.1. All in all, while the study targeted to use a total of 118 respondents from both local and foreign construction firms, only 80 primary respondents (40 from local construction firms and 40 from foreign construction firms) were interviewed.

3.5.4 Selection Key Informants

After selecting primary respondents from firms, the researcher decided to purposively select 15 key informants: 10 from the donor community that are involved in financing road construction projects in Uganda and five key personnel (engineers and administrators) from UNRA that are involved in the procurement process.

Finally, the total sample size targeted for the study was 118 respondents and 15 key informants. All in all, 133 participants were targeted as shown in the Table3.2. However, the total interviewed were 90 respondents (80 respondents from firms and 10 key informants from UNRA and donor community). Overall response rate for this study was 67%.

Item	Delineation	Grade	Total	Total
			targeted	Interviewed
	Road Construction Firms			
1	Foreign Construction Firms in	ni	59	40
	grade A ⁺			
2	Local Construction Firms in grade	nii	59	40
	A^+			
	\sum of primary respondents from	ni +nii	118	80
	firms			
	Key informants			
3	UNRA	xi	5	5
4	Donors	xii	10	5
	\sum of Key informants from UNRA	xi+xii	15	10
	& Donors			
	Total of Participants	ni+nii+xi+xii	133	90

 Table 3.2 Showing the Total Sample Size

3.6 Data Collection

A semi structured questionnaire was used to obtain data from the survey respondents. This enabled the researcher to administer very many questionnaires quickly and since they were pre-coded, processing of information was easy. On the other hand, a questionnaire with open ended questions was administered to the key informants. This tool enabled the researcher to do probes and gain deeper insight into issues of interest to the study that were raised by the key informants in a relaxed manner. The questions were simple, clear, and reasonably brief to address the study objectives. The questionnaires were pilot tested and there were minor errors which were corrected. The corrected version was used to reviews the main questionnaire which turned out to be successful.

3.7 Data Processing

All the quantitative data sets were cleaned, coded and then entered into the Statistical Package for Social Scientists (SPSS). Computer data processing was used because of the bulk quantitative data set that required a lot time to process manually and SPSS is equally good at tabulation. (Berg, 2004). All the quantitative data from the key informants was edited, summarized and analyzed thematically.

3.8 Data Analysis and Presentation

Quantitative data was analyzed and presented using descriptive statistics like simple frequencies and presented in tables and figures. Qualitative data was thematically presented using methods like direct verbatim quoting.

3.9 Ethical Issues and Considerations

The following were done before formal execution of this study to ensure conformity with the standard research ethical issues and considerations.

- Grade A+ Local and foreign construction firms were approached for formal permission to involve them in the research.
- A Research Assistant was recruited, oriented and trained.
- Copyright procedures were observed through acknowledgement of all secondary sources of information.
- Privacy of firms and individuals was preserved through keeping their identities confidential through use of pseudo names.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Introduction

The following chapter presents and discusses the findings of the study. The study's main aim was to establish the factors that influence the participation levels of foreign and local construction firms in donor funded road construction projects in Uganda. The chapter is arranged in five sub- sections: the background characteristics of respondents that participated in the study, the comparative technical and financial capacities of the firms, issues of due diligence in the procurement process, recommendations and discussions. The findings are presented and discussed according to the objectives of the study.

4.1 Background Characteristics of the Respondents

Respondents were asked their positions in the firms and the duration they had worked for in the firms. These characteristics were deemed important for this study because they were a proxy of the level of responsibility of individual staff and the experience they had in implementing projects for the selected firms. Hence they would provide the required information about the aspects of interest to the study namely the firm's participation in the DFPs and the factors responsible for participation levels. The results are presented in Table 4.1.

Grade	Local		Foreign		Total		
	freq	%age	freq	%age	freq	%age	
Position							
Managing Director	3	8	1	3	4	5	
Other Director	4	10	2	5	6	8	
Project Manager	9	23	6	15	15	19	
Engineer	14	35	16	40	30	38	
Procurement Officer	3	8	6	15	9	11	
Administrator	4	10	4	10	8	10	
Other Staff	3	8	5	13	8	10	
Sub Total	40	100	40	100	80	100	
Duration of employee in the firm							
Less than 1year	4	10	7	18	11	14	
1-3 years	13	33	8	20	21	26	
4-6 years	10	25	9	23	19	24	
7-9 years	6	15	11	28	17	21	
10 and above	7	18	5	13	12	15	
Sub Total	40	100	40	100	80	100	

Table 4.1 Respondents' Employment Status Characteristics

In table 4.1, under engineer, the following professionals were considered: materials engineers, civil engineers, structural engineers, traffic engineers and highway engineers. Majority of the respondents were engineers (38%) followed by project managers (19%), company directors including the managing director were 13%. Other respondents were procurement officers (11%), administrative staff (10%) and other categories of staff (10%).

About the duration of the respondents in the firms selected for the study, majority (60%) had spent over 4 years with the firms. Only 14% had spent one year or less with the firm they were working for. Therefore if duration at the firm is used as a proxy measure of experience, most of the respondents interviewed had worked for their respective firms long enough to be able to respond to the study questions.

4.2 Firms' Participation in DFPs in Uganda

Respondents were asked to qualify the preliminary findings from secondary literature for this study about participation of firms in the DFPs. They were asked as to whether foreign construction firms participated more than local construction firms in DFPs. The findings on the participation of firms in the DFPs are shown in Table 4.2.

The findings indicated that majority of the respondents (93 %) agreed that foreign construction firms participated more in DFPs than their local counterparts. An equal percentage of all the respondents (4%) either disagreed with the statement or could not confirm it. However, more foreign construction firms were in agreement (95%) with the statement than their local counterparts (90%).

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	L	Local		reign	Total	
Item	freq	%age	freq	%age	freq	%age
Yes	36	90.0	38	95.0	74	93
No	1	2.5	2	5.0	3	4
Don't Know	3	7.5	0	0.0	3	4
Total	40	100	40	100	80	100

Table 4.2Participation of Firms in DFPs in Uganda

The above findings are consistent with the relevant literature cited in the study. For example, the World Bank (2006) had noted that: 'governments in a growing number of developing countries including those in sub-Saharan Africa are keen to promote the emergence of domestic construction firms willing and able to pursue contracting and consulting works in competition with international firms. Most of the local construction firms in these countries are, however, small and relatively inexperienced, so that they do not have the managerial and technical capability to handle the construction projects their respective national governments wish to see introduced. This capability gap has left the domestic market door open for international construction firms. The above findings are also backed by Ssepuya (2008) who found out that foreign construction firms participated more than their local counterparts in the execution of DFPs.

4.3 Firms' Technical and Financial Capacity

The firm's technical and financial capacity was key criteria for the awards of the DFPs in Uganda. The findings are shown in Table 4.3. Technical capacity was conceived as the firm's capacity in relation to plant and equipment size, manpower and experience. On the other hand, financial capacity was taken to mean the number, size and value of projects executed by the firm, turnover, and amount of credit a firm had ever secured from financial institutions.

Table	Table 4.3Firms' Projects Implemented and Contract Values (1998-2008)								
		No of	Value of Pr Years on Market in				-	Max. Credit ever secured in US \$	Turn- over in (2008) US \$
Firm	Status	DFPs	Uganda	Total	Max.	Min.	Ave.	million	million
Α	Foreign	13	15	123.25	22.55	2.09	9.48	60	120.00
В	Foreign	8	8	385.55	70.45	23.91	48.19	100	500.00
С	Foreign	0	10	N/A	N/A	N/A	N/A	4	20.45
									>100
D	Foreign	1	5	54.55	54.55	54.55	54.55	80	(est.)
Е	Local	2	10	4.64	3.25	1.39	2.32	1.5	8.82
F	Local	0	6	N/A	N/A	N/A	N/A	5	65
G	Local	2	3	8.761	4.920	3.841	4.380	3	10.20
Н	Local	1	2	2.068	2.068	2.068	2.068	2	7.27

Note: Data for this Table was compiled from information generated from firm reports, interviews with key
firm personnel (Managing Directors and other Directors), RAFU & UNRA, MOWT reports and interviews
with selected key personnel.

The findings revealed that a total of 27 projects were implemented by the firms between 1998 and 2008. Only 18.5% (5 projects) were implemented by local construction firms and the majority 81.5% (22 projects) were implemented by foreign construction firms. The total value of projects implemented by local construction firms was a mere US\$ 15.289 millions and that of their foreign counterparts was US \$ 563.35 millions. This means that local construction firms were only able to implement close to three percent (2.8%) of the total value of projects implemented by the foreign construction firms.

On average, the size of the projects handled by foreign and local construction firms were US \$ 28.1 and US \$ 2.2 millions respectively. One local (firm F) and one foreign (firm C) which were eligible to compete were unable to implement any DFP because they did not win any award.

The number of years spent by a firm on the market (in grade A^+) was one of the criteria used to determine its experience. However, this was qualified more by the number of projects done by the firm. The results show that foreign construction firms had spent more years in grade A_+ . The firm with the highest number of years in Grade A_+ is a foreign (firm A) and the one with least number of years was a local construction firm (Firm H). The average number of years spent by a foreign construction firm in grade A_+ was 9.5years and that of their local counterparts were 5 years. If the firms that did not implement any project (firm C & F) during the period under consideration were left out, there was no major difference between the number of projects implemented by either foreign or local construction firms. On average each firm (foreign or local) had implemented one project every year except for firms D & E that implemented one project every five years. However, when the value of the projects implemented was considered, foreign construction firms remained supreme.

Findings also indicated that foreign construction firms had more annual turnover. Only one foreign construction firm had an annual turnover of less than US\$ 100 millions (firm C with US\$ 20.45 million) and the highest (firm B) had an annual turnover of US\$ 500 millions. There was only one local construction firm with an annual turnover of more than US\$ 50 million (firm F with US\$ 65 million). All the other local construction firms had annual turnover below US\$ 12 million, with the lowest being US\$ 7.27 million.

According to the procurement guidelines of UNRA, for a company to qualify for major DFPs, it should have had a turnover of more than US\$ 100 million for the last 5 years. Making a projection backwards for the last five years only, one local construction firm (firm F) was capable of bidding for the big projects. In fact a managing director of a local construction firm clearly pointed out that this requirement was a hindrance to local construction firms as follows:

"...the most hindering condition is that of US\$ 100 million turnover for the last 5 years. It is a technical knockout for the local construction firms in eligible to compete in the DFPs".

UNRA's policy was that the above requirement is meant to ensure that only the firms with the requisite capacity qualify and thus quality of the work is not compromised. But they were of a considered view that firms with lower capacity but within grade A+ can qualify for smaller projects that fall within their capacity limits. However, many donor funded projects implemented over the period under study were found to be big (on average US\$ 21.4 millions). Also when respondents were asked about the characteristics of DFPs, the majority (92%) concurred that DFPs were normally big. This is likely to keep local construction firms on the periphery of participation in DFPs which will perpetuate their low experience and financial capacity one of the strong criteria as per the PPDA Act and Regulations, 2003 to win points for award of tenders.

Another proxy measure of a firm's financial capacity is the amount of credit that can be secured from the financial institutions. The firms were asked about the maximum amount of credit they had ever obtained from the financial institutions. Results again showed that foreign construction firms still lead the local construction firms if absolute credit amounts are considered. While the highest maximum amount of credit ever obtained by a foreign construction firm was US\$ 100 million, the local construction firm with the highest credit amount ever obtained was US\$ 5 million. All the other foreign construction firms had obtained credit above 50 million except firm C with US\$ 4 million. If credit ever obtained by local construction firms is expressed in terms of the total amount of all credit obtained by all firms it was a mere 4.5%. Reasons raised for this scenario rotate around the unavailability of cheap credit to local construction firms and lack of adequate collateral and other guarantors.

The study findings correlate with other studies in the sub Saharan region. For instance Wells (1986), established that infrastructure development generally correlates with the development of engineering capability. Shortfalls in engineering capability not only constitute a major feature of the construction industry in sub-Saharan Africa, but also pose a critical constraint on project design, project development and project implementation. In many of the sub-Saharan countries, the inability of the construction and building industry to gear itself to the level of construction activity required for the implementation of development plans is considered to be one of the major causes of the failure of planning (ibid). Inadequate construction capacity gives rise to constraints on the supply side of the industry, which in turn affects the level of construction activity. Supply constraints often manifest themselves in failure to implement projects in time or at all. In many developing countries, project implementation failures could be accounted for by the inability of clients to engage contractors or designers willing and capable to do the work; or where designs were completed and contractors engaged, by subsequent delays in the execution of the work arising from failure on the part of contractors to obtain vital inputs of materials, manpower and machines.

The major problems singled out to be the cause of inadequate construction capacity include; the low levels of training in the construction industry, poor organization of the construction industry with a large number of very small and inefficient firms, lack of planning at all levels of the construction process, inadequate capacity and inefficiency in the building materials industries and lack of national construction firms offering bids for civil engineering projects.

4.3.1 Firms' Comparative Manpower Capacity to Participate in DFPs

Firms' manpower differences were identified as yet another indicator of their technical expertise.

Findings presented in Table 4.4 showed that there were wide differences between local and foreign construction firms' manpower capabilities. In total, the foreign construction firms that were sampled had 103 full time key personnel and their local counterparts had only 58. This was almost half of what the foreign construction firms had.

Results again showed that local construction firms had no grade of manpower in which they outnumbered foreign construction firms. This indicated that they were at a disadvantage when it came to bidding for works as the PPDA Act 2003 contract award criteria puts firm's key personnel at 30 to 60 points out of the 100 points to be awarded.

Table 4.3.1 Average Local and Foreign Firms' Manpower Capacity to Participate inDFPs

Manpower Category	Foreign Firms	Local Firms
Civil Engineers	12	10
Structural Engineers	4	3
Materials Engineers	2	1
Highways Engineers	3	2
Traffic Engineers	2	0
Land Surveyors	11	8
Quantity Surveyors	6	3
Technicians	44	20
Others		
Project Managers	5	3
Support Staff	14	8
Total	103	58

Table 4.3.2 Firms' Plant Size to Participate in DFPs in Uganda

The results are shown in Table 4.5. Firms' plant capacity differences were again another indicator of their technical ability to execute works in DFPs.

Table 4.5: Average Plant and Equipments Size of Firms

Plant & Equipment Grade	Foreign Firms	Local Firms
Excavator	15	7
Bull Dozers	17	6
Wheel/Chain Loaders	23	8
Low/Bed/Trailer Loaders/Monsters	18	8
Rollers(Vibrating, drum & Pneumatic)	33	13
Cranes	7	2
Chipping Spreaders	4	3
Bitumen Sprayer	5	3
Bitumen Distributors	3	2
Bitumen Boiler	2	2
Trucks	54	40
Graders	15	9
Asphalt Mixing Plant	2	1
Asphalt Paver Finisher	2	2
Water Bowzer	12	8
Murram Stabilizer	4	1
Stone Quarry	2	1
Generator	24	5
Fuel Tank	8	3
Others (Mechanical Brooms)	3	3
TOTAL	250	124

Results of the study revealed that there are differences between local and foreign construction firms' relative plant sizes. Plant size should be noted that was another criterion for award of contracts to bidders in DFPs. Results indicated that in total, foreign construction firms sampled had 250 units of plant size and their local counterparts had 124 units which was a very big difference. PPDA (2006) gives between 20-50 points for methodology in the selection and award criteria and this is were plant plays a big role. When the respondents were further asked to take everything into consideration and comment as to whether the local construction firms' capacity pitied against them participating in DFPs. Figure 4.1 showed that: majority (69%) indicated that it was true and 23% noted otherwise while 8% were undecided. Therefore one can conclude that technical and financial capacity differentials are a factor to reckon with in determining participation levels of firms in the Donor Funded Projects.

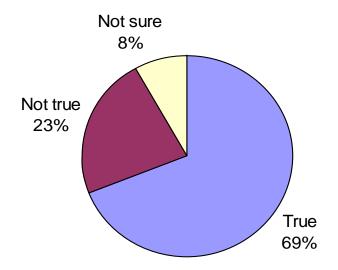


Figure 4.1: Do Local Firms' Capacity disfavour them in the Participation of DFPs

4.4 The influence of Corruption in the DFPs tendering process

This study sought to determine the role of corruption in denying local construction firms the opportunity to win contracts for DFPs during the tendering process. The findings are indicated in Figure 4.2. This study conceived corruption to mean all actions by the power holders that deny others competitive advantage. They include: bribery, favouritism and yielding to undue influence among others. They were summarized and measured using three items on the Likert scale; kickbacks, collusion and political influence.

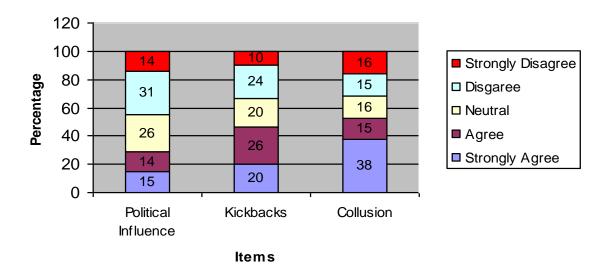


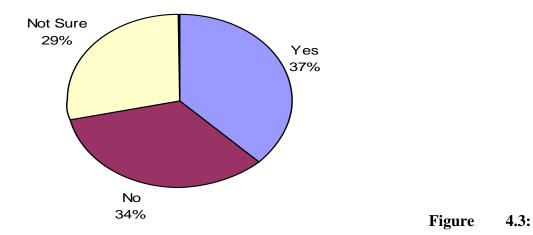
Figure 4.2: Influence of Corruption in Acquisition of Contracts by Firms

The results of the study illustrated in Figure 4.2 indicated that 29% (15% strongly agreed and 14% agreed) of the respondents accepted that political influence exited in award of tenders, 46% (20% strongly agreed and 26% agreed) accepted that kickbacks were offered by some firms to win tenders. The results also indicated that 26%, 20% and 16% of the respondents preferred to remain neutral on the issues of political influence, kickbacks and collusion respectively. Lastly 45% (31% disagreed & 14 % strongly

disagreed) objected to the existence of political influence in contract awards, 34% (24% disagreed & 10% strongly disagreed) denied that some firms offered kickbacks.

Many respondents 53% (38% strongly agreed and 15% agreed) reported that collusion by some pre-qualified firms who participated in tendering processes were common and it influences the outcomes of the processes. Only 31% (15% disagreed & 16% strongly disagreed) objected that collusion was exercised by some pre-qualified firms who participated in tendering.

A combination of all items under corruption (political influence, kickbacks and collusion) in this study reveals that 42% of the respondents believed that corruption influenced award of tenders to more influential firms thus denying some firms opportunity to participate. An almost equal proportion of respondents (37%) did not believe that corruption influenced award of tenders in DFPs. Surprisingly a significant percentage of respondents (21%) were undecided (neutral).



Respondents' Attitudes towards Firms Influence in Determining Tendering Outcomes

Results presented in Figure 4.3 indicated that foreign construction firms were better placed to influence the results of the tendering process. 37% of the respondents concurred with the statement, 34% did not concur with the statement and 29% were undecided (neutral).

4.5 Other Factors influencing Participation of Firms in DFPs in Uganda

The study also weighed other factors that could influence the participation levels of local construction firms in the tendering process for DFPs. They included: irregularities in tendering process, lack of preferential treatment to local construction firms, lack of joint ventures and partnerships between local and foreign construction firms and submission of unrealistic bids (too low or too high) by local construction firms. The findings are shown in Figure 4 below.

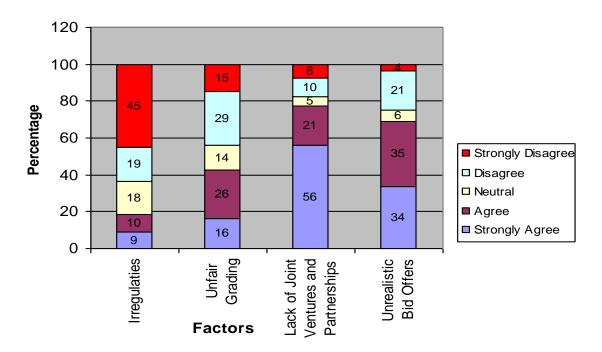


Figure 4.4: Other Factors Influencing Firms Participation Levels in DFPs in Uganda

4.5.1.0 Joint Ventures and partnerships

The results revealed that a significant percentage (77%) of respondents accepted that lack of joint ventures and partnerships between local and foreign construction firms reduced local construction firms' chances of winning DFP contracts. Joint Ventures and partnerships would help the local construction firms to build up their capacity.

4.5.1.1 Submission of Unrealistic Bids by Local Construction Firms

The results revealed that a significant percentage (69%) of respondents accepted that submission of unrealistic bids by local construction firms respectively reduced local construction firms' chances of winning DFP contracts. The bids were too low or too high

hence uncompetitive; the local construction firms eventually won a handful of the DFPs.This was because local firms lacked enough human resource that could produce completive bids. Table 4.4 revealed that in total, all the local firms had 3 Quantity Surveyors (QS) compared to their foreign counterparts with 6 Quantity Surveyors. Figure 6 also shows 53% of the respondents accepted that firms are given short time span for bid submission this meant that a firm must had enough human resource to produce a competitive bid within that short time.

4.5.1.2 Irregularities in Tendering Process

On the other hand, a significant percentage of respondents 45% strongly disagreed that irregularities in the tendering process reduced chances of local construction firms winning contracts. Only 9% strongly agreed that irregularities were a factor to reckon with. Taking into consideration the fraction of respondents (64%) who merely disagreed with the statement, that

is, (19 disagreed and 45 strongly disagreed), it is safer to conclude that irregularities in the tendering process are not a significant factor in explaining low participation levels of local construction firms in donor funded road construction projects. However, literature cited cases for instance the Masaka-Kyotera and Villa-Maria roads where a foreign construction firm that was awarded the contracts on the basis of having presented the lowest bid price of UGX 6.7 billion had initially submitted two financial offers; both reflecting different figures for the project. This may be taken to be irregularities in the tendering process.

4.5.1.3 Lack of Preferential Treatment to Local Construction Firms/Unfair Grading of Firms

An almost equal number of respondents (42%) concurred and (44%) did not concur that lack of preferential treatment to local construction firms reduces the chances of the local construction firms from participating in donor funded road construction projects. Only 14% of the respondents were non committal on this statement. It is probable that local construction firms concurred with the statement and foreign construction firms did not concur with the statement. However, results from other sources like key informant interviews and literature available indicate that for young and low capacity local construction firms its important for national governments to support them through schemes like affirmative action policies if they are to develop a vibrant reservoir of competent and robust firms in the construction industry. According to APR Panel of Eminent Persons (2008), Ugandan economy is driven to a large extent by private sector micro, small and medium sized enterprises where most of the local construction firms fall. The government needs to promote domestic investments and provide for adequate incentives to keep them in business.

There was no other better expression of the above than the following verbatim quote from a project manager of a donor organization:

"...if Uganda is to develop her construction industry, then local construction firms need to be supported in a special way with several incentives not as mere profit seeking companies but active partners in development of the nation. This means that many firms will be able to build strong human resource structures and machinery to accomplish big construction works that are apparently being managed by the few available foreign companies"

4.5.2 Characteristics of Donor Funded Projects

The findings shown in Figure 4.5 illustrate the Characteristics of Donor Funded Projects (DFPs) in Uganda which presents incentives or disincentives for local construction firms to participate fully in their implementation. These characteristics include: size of the projects, conditions attached, time spans and lags between several project stages, information about the projects and bid security required.

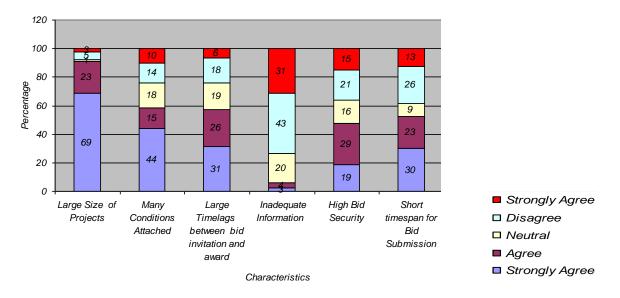


Figure 4.5: Characteristics of Donor Funded Projects (DFPs)

The results for this part of section are illustrated and discussed in the proceeding sub sections.

4.5.2.1 Size of the Projects.

Local construction firms showed much preference for low value civil engineering projects than foreign construction firms because they feared acute competition with the later since the donor funded road construction projects were few and big. Donor funded roads projects required heavy plant, specialized human resource skills and technologies which called for commitment of a lot of capital (money) for successful execution of works. A significant proportion 92% (69% strongly agree and 23% agreed) accepted that donor funded projects were big and required a lot of capital commitment (see figure 5 above). Only 7% (5% disagreed and 2% strongly disagreed) did not accept that DFPs were big in size and required a lot of capital. This left a mere 1% of the respondents were undecided on this statement. Hence, it was likely that some local construction firms owing to their capacity constraints had tended to shun participation in these big projects. Possibly the following verbatim quotation from a UNRA official summarizes the above analysis:

"...local construction firms find it hard to commit the little resources they have in participating in donor funded projects because they are normally very big which may tilt their cash flow streams unfavourably and thus denying them opportunity to do other available construction works".

The reactive approach that is compounded by the local contractors' conservative nature in taking exceptional risks, compared to there foreign counterparts who consider high risk ventures and risk taking in general as normal business failed them to grow and survive in business.

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Generally foreign construction firms indicated that their main purpose of venturing into the developing countries' markets was to undertake big projects which more often than not were funded by donors. Hence the foreign construction firms were better prepared and ready for their mission in developing countries like Uganda. They thus concentrated adequate resources and energies to present attractive bids to local procurement entities such as UNRA. Table 4.3 revealed that the average size of projects implemented by firms in the last ten years indicated that foreign construction firms implemented bigger projects as compared to local counterparts.

4.5.2.2 Tied Aid (Donor Conditionalities)

Donors exercised a lot of control on the aid they extended to recipient countries like Uganda. Effective control of aid by donors is precipitated by the need to further their own agendas. This is done through donors' application of their own procurement rules and regulations to projects they fund in recipient countries. The findings in Figure 6 above show that 59% of the respondents accepted that DFPs have many conditions attached to them while as 24% of the respondents were no in agreement. This study established that although most donors jointly apply their procurement rules and regulations along side those of the recipient country in procuring contractors for road projects, where their motives are not met, their rules and regulations become supreme. This can possible be better adduced from the following communication by a manager of a foreign construction firms with

experience and technical expertise wins contracts where donors have interest, the procurement entity has to seek for the required no objection from the donor."

Studies in other countries did not differ greatly from the above findings. Foreign aid was normally used to create a favourable environment for the donor's own corporations or firms. RoA (2004) noted that most private contractors and consultants from donor countries were long time partners of their governments in implementing different projects worldwide. RoA (2004) cites the Louis Berger Group which managed the construction of the US military base in Thailand, one of the largest in South East Asia. The same group also planned, designed and managed construction of over 100, 000 miles of highway; 2000 miles of railroad; bridges; 100 airfields, sea ports, dams, water supply systems, numerous environmental mitigation projects; and diverse cultural preservation projects throughout the USA and in 140 countries.

The group could have been able to gain unfair advantage over other corporations in winning all these contracts because it originates from the donor country. RoA (2004) further points out Japan as one country that roots for her companies to carry out infrastructure development like the construction of roads, bridges and dams in countries it commits this assistance. This is because Japan's industrial structure has a very high rate of civil engineering and construction works.

In a nutshell, RoA (2004) estimated that in the case of grant aid, almost 50% of it flows back to its source country. In effect foreign donors are simply giving their own corporations/firms projects to profit from. Worse still most foreign aid are loans, the recipient country shoulders all the costs while the donors own contractors earn immensely. Given the above scenario, local construction firms become marginalized in winning contracts in donor funded projects. This further limits their opportunities to acquire experience and knowledge of modern construction technologies on top of expanding their financial capacity. In the long run they are engulfed in a spiral of poverty just like their national governments. This forces them to close business.

4.5.2.3 Time frame

The findings revealed that DFPs take longer periods between bid opening and contract signing. The Table 4.6 explains the results in Figure 5.

Duration	Frequency	%age
0-60 days	9	10
61-120 days	46	51
121-180 days	14	16
181 days and above	21	23
Total	90	100

 Table 4.6
 Time between bid opening and contract signing

The average timeframe between bid opening and contract signing was found to be 120 days. The earliest time a contract could be signed was found to be 60 days and the longest timeframe was reported to be 210 days. The study results thus indicated that majority of the projects tend to take longer (more than 6 months). On the contrary government funded projects tended to take relatively shorter procurement periods. This made them more attractive to local construction firms.

Longer time frames between bid opening and contract signing were not attractive to most local construction firms. Many firms (57%) interviewed indicated that longer period did not make economic sense for their firms since they affected their cash flows. Firms needed to commit financial, human resources and time to a project from the time of prequalification, bid preparation evaluation, negotiation until contract signing including, seeking the required no objection from the donor. In some cases this may mean that the firm will participate in the re-tendering process of the contract if the donor rejects the initial selection results.

Aware that local construction firms had limited sources of finances, which were often very costly as earlier alluded to in this study; they tended to pull out from competing in such projects that take long. This left only a few or no local construction firms competing in the donor funded projects; as a result foreign construction firms dominated the whole process and ended up winning these big DFPs. Available literature cited agrees with this finding. For instance, the Uganda Road Agency Formation Unit (RAFU) reported that the tendering process of some roads like the Soroti-Dokolo took too long thereby limiting the necessary competition (Monitor 2007). Thus, time was a contributing factor to reducing the participation of local construction firms in donor funded road construction projects.

4.6 Proposed Recommendations from Respondents.

The study sought to find out the possible recommendations for increasing participation of local construction firms in donor funded road construction projects. Figure 4.6 summarises the findings from the exercise as perceived by the respondents used in the study.

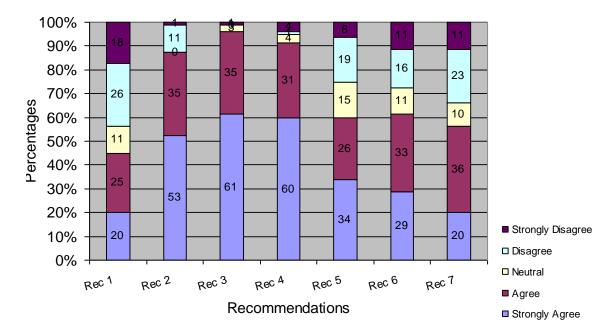


Figure 4.6: Recommendations for Enhancing Participation of Local Construction Firms in DFPs

Rec. 3- Promotion of Professional Development Schemes

Results presented in Figure 6 above revealed that promotion of professional development schemes for local construction firms was highly recommended by respondents as the most viable options for enhancing participation of local construction firms. Sixty one (61%) of the respondents strongly agreed with the recommendation, 35% agreed with the statement and only 3% remained neutral and only 1% strongly disagreed.

Rec. 4- Formation of Joint Ventures and Partnerships

Another recommendation that respondents put emphasis on was the formation of joint ventures and partnerships with experienced and financially stable construction firms in the industry. Only 5 % (1% disagreed and 4% strongly disagreed) did not concur with the recommendation. Given that only 4% remained undecided, it left 91% (60% strongly agreed and 31% agreed) concurring with the recommendation.

Rec. 2- Access to Cheap and Long Term Finance

Access to cheap and long term finance was also identified by respondents as a key recommendation in enhancing local construction firms participation levels in the DFPs. Up to 88% (53% strongly agreed and 35% agreed) identified with the recommendation and 12% (11% disagreed and 1% strongly disagreed) did not identify with it.

According to APR Panel of Eminent Persons (2008), a private sector-led economic growth strategy is always constrained by limited and unaffordable credit.

Rec. 5- Breaking down Contract into Small Lots

Breaking down contract into small lots was recommended by respondents. They felt that owing to the low capacity of the local construction firms, they would enhance their experience and financial capacity if they were given opportunity to implement big contracts that were broken down in small lots. Only 25% (19% disagreed and 6% strongly disagreed) did not identify with the recommendation and 15% remained neutral leaving the majority 60% (34% strongly agreed and 26% agreed) accepting the recommendation.

Rec. 6-Foreign Construction Firms that Win Contracts to Sub Contract Local Construction Firms

The other recommendation respondents identified was instituting a mandatory requirement for foreign construction firms that win contracts to sub contract local construction firms. Over 62% (29% strongly agreed and 33% agreed) accepted the recommendation, 27% (16% disagreed and 11% strongly disagreed) did not accept the recommendation and 11% preferred to remain neutral.

4.7 Discussion of Findings

The discussion of the results was made according to the objectives of the study and the research questions in light of the literature gathered about the subject.

4.7.1 Research Question One: What are the patterns of firms' (local and foreign) participation in DFPs in Uganda between 1998 and 2008?

The research question was derived from objective number one of the study. The study results indicate that foreign firms have participated more than local firms in DFPs. Over ninety percent (93%) of all the respondents' agreed that foreign firms participate more in DFPs than their local counterparts. Out of a total of 16 firms in grade A+, four firms are local and the rest (12) are foreign indicating a ratio of 1:3. Also out of the 27 DFPs implemented by these firms in the study between 1998 and 2008, only 19% (5 projects) and 81% (22 projects) were done by local and foreign firms respectively.

The above findings are consistent with the report of the World Bank (2006) that notes that despite many developing countries' efforts to promote the emergence of domestic construction firms so that they pursue construction and consulting works in competition with international firms, local firms' participation in projects has dismally remained low.

On average local construction firms in these countries are small and relatively inexperienced, so that they do not have the managerial and technical capability to handle the construction projects their respective national governments wish to see introduced. This capability gap has left the domestic market door open for international construction firms. Ssepuya (2008) and UNABCEC (2008) also agree with the finding that foreign construction firms participate more than their local counterparts in the execution of DFPs.

4.7.2 Research Question Two: What are the factors that influence the participation levels of local and foreign road construction firms in DFPs in Uganda? Research question two was derived from objective two. Questions were asked in respect to comparative technical and financial capacities of local and foreign firms, issues of corruption and due diligence. Results indicate that foreign firms are more superior in almost all aspects of capacity than their local counterparts. Plant size, manpower, number and value of projects executed and annual turnover were all considered.

The study established a number of factors that combine to explain the dismal participation levels of local firms in donor funded road construction projects. While corruption was found not to be the major factor responsible for this trend, it still was believed by a significant proportion of respondents to influence tender awards in DFPs. In fact 42 % of all respondents felt that taking all factors into consideration corruption determines outcome of DFPs tender awarding processes. This finding is in agreement with (Soreide 2006, Uganda APRM Panel, 2008, theory of corruption that in form of political pressure and interference in the bidding processes is rife and has costed contracting companies many lucrative contracts. They argue that corruption is even clearer when the selected firm has paid its own government to put pressure on the client (Soreide 2006). The study established that issues like kickbacks to officers in the procurement entities make them very prone especially when representatives of customers are offered significant "benefits" of significant personal value" by the prospective contracting firms representatives.

Sogge (2002), Shantayaman *et al* (2001) arguments on hidden costs of aid and conditionalities attached to it also point to the effect of undue influence on the process of awarding DFP tenders.

It also established that local firms have low comparative technical and financial capacities in respect to foreign firms. For instance in terms of plant, for every one unit of plant owned by a local firm, a foreign firm has two units, and in terms of manpower for every one permanent staff member of a local firm, a foreign firm has two.

In fact Wells (1986), PPDA (2003), Mubiru (2001) all argue that local firms' capacity to prepare wining bids is low. This has been accentuated by inability to hire on a permanent basis professionals like engineers and procurement experts.

The theory of systems dynamics as espoused by Dutta and Roy (2005) supports the finding above where it suggests that capacity, competence; resource differentials constitute systems and dynamics that may rationally guide the off shoring decision. This assertion is re-echoed by Garud and Kumaras Wany (2005) and partially by Wu (2006) in his resource-based view of the firm theory which argues that a decision to offshore the sourcing may be hinged on who is deemed to have a resource advantage over the other.

All the firms had studied the market and established that their road sector had very few players in Grade A+. The firms also established that the skills and equipment and machinery used in road sectors were not readily available in the local market. Based on their comparatively easy access to the latest technology, appropriate equipment and

machinery and skilled personnel in the road sector, these foreign firms end up winning these bid contracts. The possession of current technologies and resources have enabled foreign to carry out activities better than their competitors the local counterparts and have secured them competitive advantages.

Due to their superior technical and financial capacities, foreign firms are viewed as more resourceful by the procuring entity thus they end up winning the contract for DFPs.

Research Question Three: Are the compliance issues in the procurement guidelines (selection and award criteria) adhered to in award of DFPs contracts in Uganda?

The study also sought to find out whether the procurement process of DFPs complies with the laid down procurement guidelines. The findings indicated that there were cases of corruption in the procurement process. The procurement entity (UNRA) to a large extent followed the laid down procedural requirements in procurement of firms for DFPs save for a few lapses where some pre-qualified firms colluded and gave kickbacks .It was also found out that at times the PPDA guidelines are side stepped and the procurement guidelines of the donor country are applied. At times these guidelines are too bureaucratic and due to this local firms find the DFPs unattractive when they consider the opportunity costs in terms of time and resources to commit to this process.

Collusion of firms was greatly aided by the fact that the number of firms in grade A+ is small. There are only 6.7% (11 firms) pre-qualified firms by Ministry of Works, Transport and Communications which makes it easier for the most influential firms to

form cartels and knock out the small ones especially the local construction firms. The above finding can be confirmed as a worm's-eye views of corruption in aid by one Ugandan Member of Parliament and former senior civil servant said recently that in his experience, loan-funded aid projects breed corruption. According to the Public Accounts Committee report for 1997-98:

"The project funds had been targets for embezzlement and the Committee came to the conclusion that the local culprits handling such projects are aided or abetted by officials of foreign/international Governments/Institutions which fund such projects. Accounting officers must take keen interest in the running of projects" Government of Uganda (2000).

The following statement by a UNRA Official also qualifies this finding:

"There are very many instances abound where foreign construction firms acting on the already available prequalification lists buy out the local construction firms and they decline submitting bids".

Collusion had also been perpetuated by the long period taken to grade firms. New firms that had gained capacity and fulfill other requirements to move from one grade to another in order to be pre-qualified for participation in the tendering process for grade A+ road works had to wait for a minimum of three years (MOWT 2008).

These findings confirm what earlier studies had established. A recent World Bank Evaluation study of procurement operations in Sub-Saharan Africa, established that while many local construction firms were pre-qualified for works, a few participated in the tendering process.(IBRD 2008).The study cites reasons like cartel formation and collusion among firms. The report also notes instances where local pre-qualified firms receive kickbacks from foreign construction firms to chicken out of the project procurement process. Hence, the share of local construction firms amid such tendencies in the procurement process for donor funded road projects is likely to remain low.

Corruption was believed to have influenced award of tenders to more influential firms thus denying some firms opportunity to participate although some respondents did not believe that corruption influenced award of tenders in DFPs. Surprisingly a significant percentage of respondents (21%) were undecided (neutral). These findings are consistent with other studies on the subject. For example, the IGG Integrity Reports (2003 & 2008) and NSDS(2004) revealed that many respondents in individual interviews preferred not to disclose corrupt practices within their institutions, rather than put themselves in vulnerable positions by identifying cases. Possibly many respondents would have revealed more about the subject of corruption had they been afforded the opportunity within focus group discussions. This was not possible simply because of the limited time. Results from the general comments about corruption from key informants and other respondents confirmed the existence of the practice. A few of these comments are highlighted below:

A Managing Director of a local construction firm said:

"...corruption is very rampant in the procurement process, at times we are asked to give 30% of the contract value before even the work begins. At the end of the day, we are tempted to do shoddy work or even abandon the project....."

Corruption lowers compliance with construction or other regulations; reduces the quality of public service and increases budgetary pressure on government. Documentary evidence which indicated that corruption is highest in procurement. For example, the PPDA estimates that over UGX 330Bn is lost every year to corruption in procurement. (APR Panel of Eminent Persons 2008)

Another respondent (UNRA official) revealed that:

"...we may not rule out instances of pre-qualified firms forming cartels but this does not mean that if a firm does not have capacity like most local construction firms do, will seriously reduce their chances to win contracts."

Another interesting comment by a Director of a foreign construction firm:

"...big firms collude to win contracts which puts small firms especially the local ones in grade A+ in a vulnerable position."

Recent developments in the fight against corruption in the road construction sector also confirm the results. For instance, European Union recently suspended funding for two road projects in Masaka district over inconsistencies and lack of transparence in the tendering processes. The EU called for investigations into the process of tendering and award of the contracts with a view to eventually re-tendering the contracts. The roads in question were Masaka-Kyotera and Nyendo-Villa Maria roads. The initial investigations into the inconsistencies indicated that the company (a foreign construction firm) that was awarded the contract on the basis of having presented the lowest priced bid of UGX. 6.7 billion, had initially submitted two financial offers; both reflecting different figures for the project. According to the Uganda Public Procurement and Disposal of Public Assets (PPDA) Act and Regulations 2003, this action contravenes principles of equal treatment, fairness and transparency in procurement operation for public works.

World Bank studies concluded time and again that many donors are part of the corruption; it is embedded in their projects especially where a lot of financial resources were committed to projects. Since road construction projects are large in nature, they tend to be prone to corruption (Erixon 2005). Erixon (2005) was in agreement with the Public Accounts Committee report for 1997-98 which found out that the local culprits of corruption handling DFPs were aided or abetted by officials of foreign/international Governments/Institutions which funded these projects.

Research Question Four: What should be done to improve the participation of the least participating firms in DFPs in Uganda?

The last question of study was establishing ways in which local firms' participation in DFPs can be enhanced. It was established that majority of the respondents (96%)

recommended promotion of professional development schemes for local construction firms as a key measure for mooting participation of local firms in DFPs. Almost an equal in measure (91%) recommended that local firms should form joint ventures and partnerships with experienced and financially stable construction firms so that they improve their technical expertise and financial capacity. Other suggested measures included; access to cheap and long term finance and breaking down big contracts into small lots. If implemented these measures would go a long way in enhancing the firms' experience and financial capacity which are key factors in the selection and award criteria under the Uganda national PPDA.

The findings on capacity of local firms relate with Ngowi, A.B. (1997) arguments that local contractors use a reactive approach to issues in contracting for projects as opposed to strategic positioning. He further contends that local firms' reactive approach is compounded by their conservative nature in taking exceptional risks, compared to their foreign counterparts who consider high risk ventures and risk taking in general as normal business failed them in DFPs. Local contractors see national boundaries as the limits of their geographical spread, regardless of the fact that their services might be valuable beyond these borders. McGonagle J.J.& Vella, C.M. (1990) and Mubiru (2001) also contend that firms need to consciously assemble and strategically position teams to outsmart competitors. They further argue that in the unfolding global scenario construction firms need to take a more proactive business approach in order to survive and grow. Activities should take place in the global context, rather than within national boundaries. However, to be able to operate successfully in the global context,

construction firms need to create strategic positions and develop focused differentiation from their rivals.

Indeed the current proposed 2007 Uganda Local Contractors Policy before cabinet underscores these issues in its preamble.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The chapter presents the study's summary, major conclusions and recommendations from the findings of the study based on the objectives that were set out.

5.1 Summary of Findings

A comparative analysis of the participation levels of firms (local and foreign) in DFPs including the reasons explaining the established participation levels were done. In summary the study findings include:

• On participation levels of local and foreign firms in DFPs, it was established that foreign firms participate more in DFPs than their local counterpart firms. For instance ninety three percent (93%) of all respondents agreed that foreign firms dominate DFPs. In terms of absolute numbers, 80% (12 firms) of all the firms in grade A+ were foreign and out of 27 projects (DFPs) implemented between 1998 and 2008 by the firm selected for the study, while 22 projects (80%) had been implemented by foreign firms.

On the reasons that explain the participation levels between local and foreign firms in DFPs, it was found out that technical and financial capacity differences between foreign firms, donor aid bureaucratic procedures, corruption and inherent organizational challenges among local firms collude to explain low participation levels of local firms in DFPs. The results show that foreign firms technical capacities in terms of firm plant, equipment, manpower and experience out competed local firms. The ratio of local to

foreign firms' plant and equipment size is 1:2. This means that for every one unit of plant and equipment held by local firms, foreign firms possess two units. Still in terms of manpower, the ratio of permanent skilled manpower in local firms to foreign firms was 4:7 indicating that for every one staff member in local firms was matched by two staff members in foreign firms. As per the PPDA regulations, plant and equipment size under the PPDA earns the firm between 20 to 50 points and manpower 30 and 60 points.

Financial capacity was conceived in terms of value of projects implemented, turnover and amount of credit ever secured by the firm. The results indicated that foreign firms had high financial capacity. For instance local firms were only able to implement close to three percent (2.8%) of the total value of DFPs implemented by foreign firms between 1998 and 2008. Whereas seventy five percent (75%) of foreign firms had annual turnover in excess of US \$100 million, most local firms (75%) had annual turnover below US \$ 50 million. However, a firm needs to have had an annual turnover of not less than US \$ 100 million in the last five years to qualify for award of a project. Lastly, average credit ever obtained by firms expressed as a ratio of local to foreign firms is 1:21. Local firms reported issues like high interest rates, lack of collateral and guarantees, and short loan repayment periods as major stumbling blocks in securing credit from financial institutions.

Duration spent by a firm in grade A+ gives the firm more opportunities to bid for DFPs and thus likelihood to participate therein. Results show that local firms had on average spent five (5) years in grade A+ while foreign firms had spent nine (9) years. A significant proportion of respondents (69%) noted that low technical and financial capacities of local firms were responsible for denying them opportunities to participate in DFPs.

Corruption was conceived by this study to mean; political influence, kickbacks and collusion of firms. Respondents for the study agreed that these factors influence DFPs tender award in varying proportions especially collusion and kickbacks. Whereas 53% of the respondents agreed collusion influences tender award in DFPs, 46% noted that kickbacks did influence tender award and only 29% found that political influence is responsible. Overall, 42% of all the respondents noted that corruption influences award of DFPs tenders. An almost equal number of respondents (37%) didn't concur that corruption influence tender award. A high proportion (21%) were undecided on whether corruption influences the process of tender award or not.

Other factors that this study established could explain the low levels of participation of local firms in DFPs included; large nature size of DFPs which normally require huge capital outlays, bureaucratic procedures in the process of procurement of DFPs delay the process of tender award, submission of unrealistic bids (to low or too high) by local firms on account of lack of specialized staff in bid preparation.

5.2 Conclusions

The study on the basis of the findings presented earlier resulted in the following conclusions:-

• Foreign firms on account of having the highest representation among grade A+ firms (12 out of 16 firms) and having executed 22 out of 27 DFPs between 1998 and 2008; dominate execution of DFPs more than their local counterparts in Uganda.

• Foreign firms dominate in the DFPs more than their local counterparts because of the following reasons among others: nature of DFPs, corruption through offering kickbacks, formation of cartels and political interference plus inherent weaknesses of the local firms.

• Foreign firms possess superior technical and financial capacities than local firms. For instance for every one plant and equipment size held by a local firm, a foreign firm owns two units. Also in terms of manpower, the ratio of manpower at local firms to foreign firms is one to two (1:2). Besides the average time spent by foreign firms in grade A+ is greater than that of local firms i.e. 9 years for the former and 5 years for the latter.

• Foreign firms have stronger financial power than local firms. This is demonstrated by the high value of projects (US\$ 563 Million) they have implemented compared to

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local firms (US\$ 15 Million). Turnover and credit accessed by foreign firms is still higher than for local firms.

• A significant proportion of respondents (60%) reported that the type of donor aid, donor conditionalities, national cultural context of the donor country and corruption influence the selection and award in DFPs in Uganda.

• Over half of respondents (64%) noted that participation of both the local and foreign construction firms in DFPs in Uganda: is further explained by lack of preferential treatment to local construction firms, lack of joint ventures and partnerships between local and foreign construction firms and submission of unrealistic bids by local construction firms in Uganda.

5.3 Recommendations

The followings are the key recommendations of the study.

- Promotion of professional development schemes for local contracting firms.
- Formation of joint ventures and partnerships by local construction firms with experienced and financially stable construction firms in the industry.
- Government and financial institutions like banks should work out ways to provide cheap and long term finance to the local construction firms.

- The procuring entity should break down big contracts into small lots manageable by the local construction firms. Owing to the low capacity of the local construction firms, they would enhance their experience and financial capacity if they were given opportunity to implement big contracts that were broken down in small lots.
- Government should make it a mandatory requirement for foreign construction firms that win contracts to sub contract local construction firms. This would help the local construction firms to gain experience and increase their financial capacity which are key factors in the selection and award criteria. On the other hand, it would earn foreign construction firms points in the selection and award criteria because they would have transferred knowledge.
- The study recommends that corruption should be combated through strengthening the existing legal and institutional frame works.
- The study recommends that the process of coming up with a policy and regulations of the local construction industry should be quickened. This will ensure that local construction firms speak as one voice and standards are enforced on top of accessing resources to develop their capacity.
- The study recommends that donors should change the understanding of aid monitoring and effectiveness and also launch a research with recipient countries like Uganda to improve impact measurement tools.(implementation of the Accra agenda action point allowing aid recipient like Uganda to have leeway in using

aid to procure goods and services from suppliers they feel would give value for money)

 The PPDA Act of 2003 should be amended as a matter of urgency. Open Domestic Bidding should be left to local construction firms and also reporting misprocurements should be done at no cost and addressed to PPDA other than UNRA.

5.3 Areas of Further Research:

The following section underscores the grey areas available for further research on the basis of the study findings;

First, establish the effectiveness of donor aid in the road construction industry in Uganda. Such a study would shade more light on the trickle down effect of donor aid in the country which the current study was unable to do.

Second, it is imperative to conduct an evaluation study on the performance of UNRA in execution of donor funded road projects in Uganda so as to establish the challenges and successes thereby improving the parameters of managing future projects.

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APPENDICES

Appendix I: Research Tools

Tool I: Self-Administered Questionnaire for Road Construction Firms

I am Balimwezo Ronald; a Master of Science Student at the department of Civil Engineering, Faculty of Technology, Makerere University. I am conducting a study on Local-Foreign construction firms' Participation in donor funded road construction projects in Uganda as part of the requirements to complete my study course. The opinions you express and the information you provide for this study will be kept confidential and only used solely for academic purposes.

SECTION A: Firm Background Details

- c) In this research a firm with 50% shares held by citizens is a local construction firm. Is

your firm	Local?
Yes	

No

d) In the table below, mention the road works you have executed from 1998-2008. Give contract sums and funding agency.

Item	Name of project	Contract sum	Funder	Nationalit	Paved	Length of
				y of		road(Km)
				funder		
1						
2						

3			
4			
5			
6			

2. Selection Criteria

a) Which of these award selection criteria have your firm participated in? Tick whichever is applicable.

ICB	
ISB	
NCB	

Others specify

3. Comparative Technical-Capacity Gaps.

a) On these projects listed in 1(d., what is your source of finance)

Bank loans	
Own capital	
Share holding	
Hire purchase schemes	
Others (specify)	

b) What is the maximum amount of credit ever obtained in US \$? Tick whichever is applicable.

Over 40m	
Between 20-40m	
Between 10-20m	
Between 5-10m	
Between 1-4m	
Below 1m	

c) What is your annual turn over in US million \$?

d) Which of the personnel in the table below do you have in full employment? Add other categories of personnel if not listed.

Item	Qualification	No of personnel
1	Materials Engineers	
2	Civil Engineer	
3	Surveyors	
4	Highways Engineers	
5	Traffic Engineers	
6	Technicians	
7	Environment Specialists	
8	Structural engineers	
9	Quantity surveyors	
10	Others (specify below)	

e) Which of the plants in the table below do you own? Add other types of plant if not listed in the table.

Item	Type of plant	No of plants
1	Excavators	
2	Bulldozers	
3	Wheel loader/Chain loader	
4	Low/bed/trailer loader/monster	
5	Rollers(vibrating, drum and pneumatic)	
6	Cranes	
7	Chipping spreader	
8	Bitumen Sprayer	
9	Bitumen Distributors	
10	Trucks	
11	Graders	
12	Asphalt mixing plant	
13	Asphalt paver finisher	
	Others (specify)	
14	Water bowzers	
15	Murram stabilizer	
16	Stone quarry	
17	Fuel tank	
18	Mechanical broom	

4. Procurement Regimes

a) Which of these procurement guidelines have you used before in bidding? Tick whichever is applicable.

World Bank/IDA	
ADB	
JICA	
DANIDA	
PPDA	
EU	
ACP OTHERS Specify	

5 Participation levels

a) In your view, what grade of the construction firms participate more on donor funded road construction projects?(Tick whichever is applicable)

Local construction firms

Foreign construction firms

b) The following questions intend to solicit your opinion on the factors that influence the level of participation of firms in implementation of donor funded road construction projects and recommendations. Please tick the box that closely represents your opinion.

No	Item	Strongly	Agree	Agree	Neutral	Disagree	Strongly	Disagree
	Capacity of Firms							
1	There are varying degrees of technical capacities							
	between local and foreign contracting firms							
2	Foreign construction firms possess superior technical							
	capacities than local construction firms							
3	There is inadequate experience and expertise among							
	local construction firms as compared to foreign							
	construction firms to manage big road construction							
	projects							
4	There is lack of adequate trained personnel among							
	local construction firms to implement big road							
	construction projects							
5	Local construction firms have a weak financial							
	martial to manage projects							
6	Local construction firms have limited access to							
	financial resources to finance projects							
7	Financial resources available to local construction							
	firms in Uganda are expensive							
8	Generally local construction firms have inadequate							
	capacity to implement big road construction projects							
9	The capacity gaps of local construction firms prevent							

	them from winning bids for road construction projects		
	Other factors		
10	There is undue political influence in award of tenders		
11	Some firms offer kickbacks to be awarded contracts		
12	Foreign construction firms are better placed to		
	influence to outcome of the tendering process in their		
	favour.		
13	Some pre-qualified firms collude to influence tender		
	award to one of them thus denying others competitive		
	advantage.		
14	Irregularities in the tendering process heavily deny		
	local construction firms to win contracts as opposed		
	to foreign construction firms		
15	Grading local construction firms on the same scale		
	with foreign construction firms limits their		
	competitiveness.		
16	Joint ventures between local and foreign construction		
	firms are uncommon		
17	Submission of unrealistic bid offers (too high or too		
	low) by local construction firms is common		
	Characteristics of Donor Funded Road Projects		
18	Most donor funded road projects are big (require a		
	lot of commitment in terms of plant, staff and money)		
19	Most donor funded road construction projects have		
	many conditions that favour foreign construction		
	firms		
20	There is normally a very big lag between call for bids		

	and final award of the bid and contracting in donor			
	funded projects			
21				
21	There isn't adequate information about DFPs			
	available to local construction firms			
22	DFPs require high bid security amounts to be			
	deposited			
23	Local construction firms don't perceive a lot of value			
	to their firms from DFPs given the above conditions.			
24	Time between call for bids and deadline for			
	submission of bids is very short			
	Recommendations			
25	Government policy should be tipped to be more			
	favourable to local construction firms - affirmative			
	action			
26	Cheap and long term access to capital for local			
	construction firms			
27	Professional development schemes for local			
	contracting firms			
28	Formation of joint ventures, partnerships with			
	experienced and financially stable firms in the			
	industry			
29	Breaking down contracts into small lots			
30	Mandatory requirements for foreign construction			
	firms to subcontract local construction firms if they			
	win big contracts			
31	Use more innovation methods that are competitive e.g			
	post qualification rather than pre qualification.			
L	1	L		L]

6. Any other comment in relation to the topic under investigation

Thank you for your cooperation

Tool II: Questionnaire for Donors

I am Balimwezo Ronald; a Master of Science Student at the department of Civil Engineering, Faculty of Technology, Makerere University. I am conducting a study on Local-Foreign construction firms' Participation in donor funded road construction projects in Uganda as part of the requirements to complete my study course. The opinions you express and the information you provide for this study will be kept confidential and only used solely for academic purposes.

- 1. Names of Donor Agency.....
- 2. Nationality of Donor Agency.....
- 3. Which road construction projects have you funded in Uganda since 1998? Please fill in the table below.

No	Name of Project	Contract	Contractor	Nationality	Procurement	Loan
		sum		of	method	or
				Contractor		Grant
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

4. Do you have procurement guidelines for your funded projects? Tick whichever is applicable

- Yes
- No
- 5. Do you accept the government of Uganda to use other procurement guidelines other than your own on road projects you are funding?
 - Yes
 No

If Yes, which one? Tick whichever is appropriate

a)	ADB	
b)	WORLD BANK/IDA	
c)	JICA	
d)	PPDA	
e)	Others (Specify)	

6. Do the procurement guidelines favour firms from certain countries over the others? Tick whichever is applicable.

• Yes	
• No	
Why?	

.....

How do you ensure the above happens?

.....

7 a) In your view, what grade of the construction firms participate more on your funded road construction projects.

- Local construction firms
- Foreign construction firms

b) What are the factors influencing the participation of the grade in 7 a) above? Tick and rank as appropriate.

• Lack of technical capacity	1 2 3 4 5 6 7 8
• Lack of financial capacity	1 2 3 4 5 6 7 8
• Lack of trained personnel	1 2 3 4 5 6 7 8
Conditions from donor	1 2 3 4 5 6 7 8
• Ownership of plant	1 2 3 4 5 6 7 8
Political influence	1 2 3 4 5 6 7 8
• Others	
	1 2 3 4 5 6 7 8
	1 2 3 4 5 6 7 8
	1 2 3 4 5 6 7 8
	1 2 3 4 5 6 7 8
	1 2 3 4 5 6 7 8
	1 2 3 4 5 6 7 8

c) What do you think are the requisite recommendations to balance local –foreign road construction firms' participation on donor financed road projects?

	1 2 3 4 5	6 7 8
		6 7 8
		6 7 8
	1 2 3 4 5	6 7 8
8. Any	ny other comment?	
•••••		

Thank you

Questionnaire for UNRA Officials

I am Balimwezo Ronald; a Master of Science Student at the department of Civil Engineering, Faculty of Technology, Makerere University. I am conducting a study on Local-Foreign construction firms' Participation in donor funded road construction projects in Uganda as part of the requirements to complete my study course. The opinions you express and the information you provide for this study will be kept confidential and only used solely for academic purposes.

- 1. Name (optional)
- 2. Designation
- 3. Number of years you have worked in Ministry of Works.....

4. Does the procurement method depend on the donor /funder? Tick whatever is applicable

- Yes
- No
- 4. What are the preferred procurement methods used in donor funded road construction projects in Uganda?
- 5. What percentage of grade A⁺ road construction bids are won by local bidders as per the cost below. Write in the boxes as appropriate.
 - Over USD 40m
 - Between USD 20-40m
 - Between USD 10-20m
 - Between USD 5-10m
 - Between USD 1-4m
 - Below USD 1m
- 6. Please give your views on the firms participation in the bidding process as provided for in the following questions
- a) On average, comment on the participation of firms in the tendering process
- i. Percentage of firms applying for prequalification (local% foreign%)
- ii. Percentage of firms applying for prequalification that qualify (local% foreign%)

- iii. Percentage of firms that buy bidding documents (local% foreign%)
- iv. Percentage of firms that buy bidding documents and turn them in (local% foreign%)
- v. Percentage of firms whose bids are accepted for detailed examination (local ...% foreign%)
- vi. Percentage of firms winning the contracts (local% foreign%)
- b) On average, what is the period between bid opening and signing of contract with the successful bidder?
- c) For the responses in 6 a vi) please give reasons (probe for technical, financial, personnel gaps, donor conditions, political influence, plant ownership among others)

.....

d) For the reasons given in 6 c), rank them in order of significance in explaining the problem.

7a) Is UNRA's decision making subject to any approval by a higher authority? Yes....No....

b) If yes does this have and effect on the award of contracts to bidders?c) Give reasons

8. a) Are there any other factors that influence level of participation of firms in donor funded road construction projects in Uganda? Yes No

b) If yes please mention them below (probe for Government policy to develop local construction firms, interest in low cost jobs, Political instability Economic instability)

9. How can the participation of local construction firms be improved? Tick what is appropriate and rank.

•	Breaking down big contracts into small lots	1 2 3 4 5 6 7
•	Strict application of domestic preference scheme	1 2 3 4 5 6 7
•	Use post qualification instead of prequalification	1 2 3 4 5 6 7
•	Tighter deadline for contract signing.	1 2 3 4 5 6 7
•	Strengthening Monitoring of procurement & Implementation process to reduce corruption	1 2 3 4 5 6 7
•	Others (specify)	. 1 2 3 4 5 6 7
		. 1 2 3 4 5 6 7

9)Which donor funded road Construction projects has the Ministry handled since 1998

NO	Name of project	Contractor	Contract sum	Funder	Procurement method	Nationality Of contractor	Length of road in KM

9) Any other comments on the topic?

.....

Thank you

Appendix II: List of Firms (Sampling Frame)

A. Local Road Construction Firms

- 1. Omega Construction Limited
- 2. Zimwe Enterprises Hardware and Construction Limited,
- 3. Mugoya Construction and Engineering Limited,
- 4. Multiplex Limited

B. Foreign Road Construction Firms

1. The Arab Contractors

2. SBI International Holding N.V.

- 3. China Chongqing International Construction Corporation (CICO)
- 4. Sterling Civil Engineering Limited
- 5. H. Young and Co. East Africa Limited

6. Spencon Services Limited

- 7. Energo Projekt (U) Limited
- 8. Cementers Limited

9. Sobertra (U) Limited.

- 10. Dott Services Limited
- 11. China Roads and Bridges Corporation (CRBC)

12. Salini Construction Company

Source: UNRA Records 2008