LOCAL CONTENT STRATEGIES AND PROCUREMENT PARTICIPATION BY LOCAL FIRMS IN THE OIL AND GAS INDUSTRY OF UGANDA

\mathbf{BY}

NAGUDI REGINA

REG NO. 16/U/13564/GMSC/PE

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DECLARATION

Declaration by candidate:

16/U/13564/GMSC/PE

APPROVAL BY SUPERVISOR

I hereby consent that this dissertation "Local content strategies and procurement participation by local firms in the oil and gas industry of Uganda" by **NAGUDI REGINA** registration number **16/U/13564/GMSC/PE** was done under my supervision and is now ready for submission to the graduate school in partial fulfilment for the award of a Master's degree of Science in supply chain management of Kyambogo university.

Date
Signature
Dr. Charles Ndandiko
Principal Supervisor
For and on behalf of Kyambogo University
Date
Signature
Dr. Francis Ssennoga
Second Supervisor

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LIST OF ACRONYMS

CNOOC	China National Offshore Oil Corporation.
EPC	Engineering Procurement Construction
FEED	Front End Engineering Design
MEMD	Ministry of Energy and Mineral Resources
O&G	Oil and Gas
SMEs	Small to Medium Enterprises
TEP	Tucson Electric Power
UN	. United Nations
UNOC	Uganda National Oil Company Limited

ABSTRACT

The study set out to establish the effect of the local content strategies of promotion of business competitiveness, use of locally produced goods/services, technology transfer and local firm's participation in the oil and gas sector procurements in Uganda. The study used a cross-sectional survey design using a quantitative approach. A total 1,271 SMEs were targeted from which a sample of 304 respondents were selected. The study found promotion of business competitiveness strategy has the strongest effect on local firms' procurement participation. Use of local goods and services has the second strongest effect on procurement participation, technology transfer has he least effect on procurement participation in the O&G sector of Uganda. It was concluded that technology transfer significantly affects procurement participation on the O&G sector of Uganda especially through participation in skills development program, R&D and allocation of resources to It was also concluded that use of local supplies significantly affects that effect. procurement participation in the O&G sector of Uganda especially with issuance of procurement guidelines and their simplification and standards certification to promote quality and exclusive local tendering. It was inferred that promotion of business competitiveness affects procurement participation in the O&G sector through business registration, Licensing, Compliance, Business Development, and facilitation of Financial access. To enhance procurement participation, the study recommended that the Petroleum Authority of Uganda in pursuit of its mandate of developing R&D in the sector, should undertake to identity R&D areas and develop R&D sponsorship proposals and market them with Foreign Oil companies for R&D in partnerships with local SMEs. the Petroleum authority in pursuit of its mandate on monitoring should regularly monitor the O&G suppliers and enforce the requirement that locally registered SMEs are given first priority for locally available supplies and services. Monetary penalization of IOC who do not use prequalified list of locally registered suppliers could be sought. It is recommended that IOC should rotate their framework contracts by considering the prequalified list of local suppliers to promote competitiveness of local SMEs in the O&G sector.

CHAPTER ONE: INTRODUCTION

This chapter contains the background of the study, statement of the problem, objectives of the study, research hypothesis, scope of the study and significance of the study.

1.1. Background to the Study

1.1.1. Historical background

Oil and Gas (O&G) procurement are heavy capital investments that most oil producing countries cannot independently invest in under their public procurement investment framework (UN Economic Commission for Africa, 2016; Asiago, 2017). The practice is to rely on total outsourcing or contracting of private firms to do own procurements and production with government entering a production and gain sharing agreement.

To this effect, in least developed economies of Latin America, Asia and Africa, multinational corporations dominated the Fabrication, Engineering Procurement Construction (EPC), Front End Engineering Design (FEED), conceptual designs and seismic studies procurements in the O&G sector (UN Economic Commission for Africa, 2016; Wells & Hawkins, 2015).

In West Africa for example, it is estimated that about \$15 billion is spent annually on servicing operations within the O&G industry of Nigeria while Ghana \$27 million is spent annually on servicing operations within the O&G industry of Ghana. However, over 95% is paid to foreign firms for services Fabrication, EPC, FEED, and conceptual designs (UN Economic Commission for Africa, 2016; Ezeani & Nwuke, 2017).

In Uganda, since the initiation of oil exploration activities in 2008 and the current level of development of the O&G sector, the key players are; China National Offshore Oil Corporation (CNOOC), Ningbo Tuopu Group Co Ltd and Tucson Electric Power (TEP) who are multination companies. The multinational companies in O&G exploration have

taken a lion share of 70%, 73% and 74%, respectively in procurements related to Fabrication, EPC, FEED, conceptual designs and seismic studies Ministry of Energy and Mineral Resources- MEMD (2011).

Suffice to note is that the revenues to oil exploration companies is subject to capital flight as the profits from the contracts are repatriated abroad, where most of the equipment are manufactured thus providing employment opportunities for citizens of other countries, which are already developed economies (Wells & Hawkins, 2015 Ezeani & Nwuke, 2017). Local content strategies have widely been sought as panacea to the low level of participation of local firms in the O&G sector.

To this effect, many oil and gas producing countries in Africa, have sought to rely on local content strategies in form of policies that encourage affirmative action and its monitoring to foster backward integration through local input development, information exchange, technical upgrading and capacity building training support (Adedeji et al, 2018; Asiago, 2016; Kazzazi, & Nouri, 2012; Acheampong, et al., 2016). In so doing the primary strategy of local content policies and the secondary variable of backward integration enable entrancement of local firm participation O&G sector procurement envisaging direct value adding benefits to the oil producing country through exploitation of business opportunities (Kazzazi, & Nouri, 2012; Adedeji et al, 2018).

1.1.2. Theoretical background

Local content policies and associated strategies for local firm participation in the procurement process for Oil and Gas sector are rooted in the Bossuyt (2002) affirmative action theory which asserts that to gain effective quality, there is need for a coherent packet of measures of a temporary character aimed specifically at correcting the position of

members of a target group with a special treatment.

An affirmative action measures that want to achieve substantive equality are measures of affirmative preference. These measures give preference to the person coming from a designated group when two people, who are equally qualified, apply for a job or promotion (Bossuyt, 2002). A more radical measure can be the prohibition for people coming from non-designated groups to apply for certain opportunities or applying lower standards to them. There is a lot of resistance against these kinds of measures because the entitlement of benefits is purely based on group membership (Bossuyt, 2002).

In local business development, affirmative action policies consider mainly the factor of national origin to make sure that underrepresented business groups will benefit in areas such as education, business or employment and technology transfer to add value in national development (Kazzazi, & Nouri, 2012; Wells & Hawkins, 2015; Asiago, 2017). There are countries that use other terms for these policies that may be related to employment equity, positive action, preferential policies or reservations but they all fall within the scope of affirmative action (Wells & Hawkins, 2015).

The affirmative action theory guided this study as it suggests the need for positive discriminatory local content strategies in developing local firms' opportunities for participation in O&G sector procurement process.

1.1.3. Conceptual background

Local Content and Local content strategies

Local content carries an expansive meaning, but within the oil and gas industry it is generally recognized as an intervention by a national Government aimed at ensuring that the majority of the goods and services required at each stage of the oil and gas value chain are locally supplied (Kazzazi & Nouri, 2012; Brand, 2017).

The Ugandan Regulation, 2016 defines local content as the level of use of Ugandan local expertise, goods and services, Ugandan companies, Ugandan citizens, registered entities, businesses and financing in petroleum activities; and the substantial combined value added or created in the Ugandan economy through the utilization of Ugandan human and material resources for the provision of goods and services to the petroleum industry in Uganda.

The object of local content policies is to compel International Oil companies (IOCs) to actively engage the local workforce as part of their conduct of petroleum operations, thereby facilitating the transfer of valuable skills and knowledge to the benefit of the indigenous communities as a whole (Asiago, 2017). Commonly identified local content strategies include regulatory efforts, local employment, promotion of business competitiveness, local sourcing of and goods and services, capacity building and technology transfer O & G sector (Wells & Hawkins, 2015; Asiago, 2017; Brand, 2017). On the basis of the above definition, this study focused on three local content strategies of include; promotion of business competitiveness, use of locally produced goods/ services and technology transfer.

Procurement participation

According to Odiambo and Kamau (2003) public procurement is the purchase of commodities and contracting of construction works and services if such acquisitions are affected with resource from state budgets, local authority budgets, state foundations fund, domestic loans or foreign loans guaranteed by the state, foreign aid as well as revenue from the economic activity of the state. From the definition it is evident that public procurement

is concerned with acquisition of public goods, works and services. Participation in procurement of oil and gas therefore related to the extent to which local firms take a portion of goods, works and services procured in the oil and gas sector in terms of real contracts and contract values retained by the local firms.

Procurement participation in the Oil and Gas sector is difficult concept to define. However, Adewuyi and Oyejide (2012) contends indigenous oil firms' participation is measured by five indicators to include business opportunities, environment conduciveness, technical skill, financial funds accessibility and non-financial incentives. The factors are seen as drivers of entrepreneurship influencing business formation and participation (Ihuaetal., 2011, Gnyawaliand Fogel, 1994).

This study equally conceptualizes procurement participation to include the five indicators of accessibility to business opportunities, environment conduciveness, financial incentives; environment conduciveness; market power; contract and bidding process.

1.1.4. Contextual background

In Uganda, the efforts to develop local content in the O&G sector was initiated in a 2011 study into national content in the oil gas sector to establish how Uganda may benefit from the participation of Ugandans and Ugandan firms in the petroleum activities. The study made key observations to include regulations, capacity building, and employment of Ugandans, use of locally produced goods and services, knowledge and technology transfer as being critical for the achievement of the national content ambitions in the petroleum industry (MEMD, 2011).

To this effect a national Content Policy was formulated to enhance the opportunities, address challenges and constraints, describe the necessary institutional framework to coordinate the development, implementation and monitoring of National Content, and provide the necessary monitoring and evaluation framework (National Local Content policy for the petroleum subsector in Uganda 2017).

Objective three of the local content policy focuses on developing the competitiveness of Ugandan enterprises as suppliers and joint venture partners. The objective is to be achieved through encouraging businesses to formalization, compliance with their statutory obligations; facilitating business development programmes, establishment of joint industry collaboration forums, improved SMEs financial access; and facilitating clustering of petroleum related companies in order to enhance technology transfer and research & development. (National Local Content policy for the petroleum subsector in Uganda 2017).

Objective four of the national local content policy envisages increasing the use of locally produced or available goods and services by the oil and gas industry. Actions to necessary to realize this objective include; - procurement and contracting procedures and practices to benefit Ugandan enterprises; establishing operational bases in Uganda; development and adoption of standards and quality assurance systems for locally available/produced suppliers; and exclusively tender locally available goods and services (National Local Content policy for the petroleum subsector in Uganda 2017).

Objective five of the local content policy of Uganda envisages promotion of Research & Development and Technology Transfer. This will be achieved through preparation and implementation of plans for the transfer of technology and knowhow to Ugandan institutions; enhance capacity of existing institutions in the country to carry out research

and development; encourage cooperation and collaboration. Identifying and prioritizing areas for R&D and technology transfer (National Local Content policy for the petroleum subsector in Uganda 2017).

However, the effectiveness on the local content strategies in promoting local firm participation in O&G sector procurement in Uganda is questionable given the low level of local firm's participation in the O&G sector.

1.2. Statement of the Problem

The importance and benefits local content development are globally recognized as a means of increasing citizens and local firms participation in the procurement of goods and services in the oil and gas sector for increased employment opportunities, local private sector development technology transfer and local capacity development (UN Economic Commission for Africa, 2016; Asiago, 2017; Adedeji et al, 2018).

Despite the promotion of technology transfers, business competitive promotion and promotion of use of local goods and services strategies expressed in Uganda's local content policy, the participation of indigenous firms in the procurement of good and services in the oil and gas sector in Uganda has remained low amidst the growing value of supplies. The value of supplies in the oil and gas sector by Ugandan suppliers from 2010-2013 amounted to USD 329.9 million representing 28% of the total spent for all the oil companies though Ugandan companies comprised about 73% of pre-qualified suppliers. Similarly, middle and top management positions are majorly occupied by foreign nationals a practice that has compromised knowledge transfer for local human capital development in the sector Limited technology transfer (Auditor general, 2015). If the low participation of local firms in the O&G sector procurement continues unabated, the direct value adding benefits of the

sector to the economy will remain a wish against high revenue repatriation by the international oil companies. Moreover, Studies on local content strategies and participation of local firms in the O&G sector in sub Saharan Africa are still scanty (Wells & Hawkins, 2015; Asiago, 2016; Acheampong, et al., 2016; Ezeani & Nwuke, 2017). This has created knowledge and practice gap that needs to be filled to provide strategic and managerial interventions to strengthen local content policy and enhanced value addition in the O&G sector. Therefore, this study established the relationship between local content strategies of business competitiveness, use of locally produced goods/services and technology transfer on local firms' participations in the procurements of Uganda's oil and gas sector.

1.3 General objective of the study

To assess the effect of local content strategies on local firms' participation in procurement processes in the O&G sector of Uganda.

1.4. Specific objectives of the study

- To assess the relationship between technology transfer on local firms' participation in procurement process in the O&G sector of Uganda.
- 2. To assess the relationship between the use of locally produced goods on the local firm's participation in procurement process in the O&G sector of Uganda;
- 3. To assess the relationship between promotion of business competitiveness on the local firm's participation in procurement process in the O&G sector of Uganda.

1.5. Research Hypotheses

1. There is no significant relationship between technology transfer and local firms' participation in procurement process in the O&G sector of Uganda.

- There is no significant relationship between the use of locally produced goods and services and local firms' participation in procurement process in the O&G sector of Uganda.
- 3. There is no significant relationship between the promotion of business competitiveness does not significantly affect the local firms' participation in procurement process in the O&G sector of Uganda.

1.6. Scope of the study

1.6.1. Content scope

Conceptually, the study focused on the local content strategies in the O&G sector as the independent variable under the dimensions of technology transfer, use of locally produced goods and promotion of business competitiveness. The study also focused on procurement participation as the dependent variable.

1.6.2. Geographical scope

The study was conducted in Kampala, Wakiso, Hoima and Masindi districts targeting the listed firms in the oil and gas sector of Uganda.

1.6.3. Time scope

The study covered the period 2015 to 2018 which is the period government of Uganda was harmonizing the O&G procurement modalities including the local content policy but was still faced with low participation of indigenous firms in the sector.

1.7. Significance of the Study

The study will be useful in the following ways:

 To the government of Uganda and MEMD specifically, the study helps evaluate the local content strategies and develop recommendations for strengthening the local

- content policy for enhanced participation of indigenous firms in the O&G sector. Enhanced participation of local firms offers direct value addition to the economy.
- To the Uganda National Oil Company Limited (UNOC), the study helps provide managerial recommendations for strengthening the local firm participation in the O&G sector of Uganda that enhances achievement of its mandate.
- To the local firms, the study offers an opportunity for them to express their policy
 and backward linkage concerns that the government of Uganda needs to address for
 enhance procurement participation in the O&G sector.
- To the academia, the study helps narrow the literature gaps in the effect of local content strategies on procurement participation by local firms in the O&G sector of a developing country at the initial stages of oil exploration and production.

1.8. Justification of the Study

With local firms benefiting a paltry 28% of the O&G sector procurement expenditure, the effectiveness of the local content strategies in promoting local firm participation in O&G sector procurement process lies in balance. Similarly, there is a significant knowledge gap with anecdotal reports attributing to the insignificant contribution of the developments in the O&G sector to the socio-economic wellbeing of Uganda to low procurement participation of local firms in O&G sector of Uganda (National Local Content policy for the petroleum subsector in Uganda 2017). There is need for empirical information for policy and managerial interventions to strengthen local firm participation in the O&G sector of Uganda to foster direct value benefits to the economy by the sector. A study of this nature therefore addressed the knowledge and practice gaps to alleviate the challenges of low local procurement participation in O&G sector of Uganda.

1.9. Conceptual framework

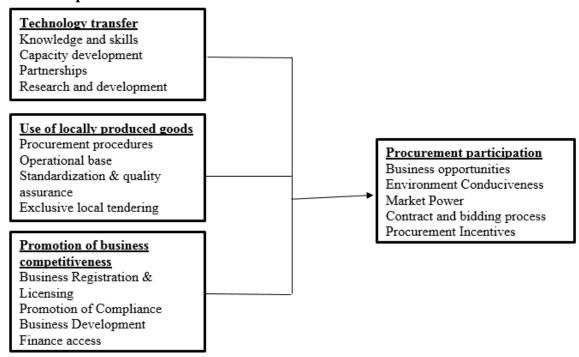


Figure 1: Local content strategies

Source: Adapted with modifications from Adedeji, Sidique, Abd Rahman, & Law (2018) The model shows that technology transfer, promotion of business competitiveness and use of locally produced goods and services have a direct effect on local firms' participation in the procurement process in the O & G sector.

CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

In this chapter, the researcher reviewed relevant literature relating to the oil and gas value chains in general but specifically focused on the procurement aspects of local content and the preparedness of local firms to harness the opportunities available. The literature from previous studies and authorities pertinent local content strategies for local firm procurement participation for comparative analysis, conclusions and recommendations. In this regard, the researcher reviewed literature from contexts that are similar to that of Uganda, economically, socially and politically.

2.2. Technology transfer and local firms participation in the procurement process for oil and gas sector

Objective five of the local content policy of Uganda envisages promotion of Research & Development and Technology Transfer. This will be achieved through preparation and implementation of plans for the transfer of technology and knowhow to Ugandan institutions; enhance capacity of existing institutions in the country to carry out research and development; encourage cooperation and collaboration. Identifying and prioritizing areas for R&D and technology transfer (National Local Content policy for the petroleum subsector in Uganda 2017).

2.1.1. Capacity development

The role of capacity building in promoting procurement participation by local firms has received little empirical studies. The few studies accessed in this study such as Cosbey (2015) report that in South Africa and Malaysia where a skills development funds where established for extractive industries have an obligation to contribute thee has been

significant progress in promoting local capacity to participate in the extractive sectors of those countries. Arthur and Emmanuel Arthur (2014) recommend that enhance participation of local firms in O&G sector of Ghana will be enhanced through effective implementation local content policy on capacity building.

A related study by Unam, Agorzie, Asaolu (2015) in Nigeria report that Local Content Policy has made significant contributions to technological capacity building of oilservicing SMEs as all of the firms were involved in some form of linkages which have strengthened their absorptive capacity to internalize the technological and management skills that flow to them and boosted their ability in winning projects, bids and contracts. The linkage arrangements have also enhanced their capacity to easily meet industry (ISO) standards and quality.

Similarly, Brand (2017) examines a number of local content policies on capacity building and noted that in both developed and developing economies where training schemes were conducted, the results have been positive in developing local knowledge and exercise necessary for participation in the O&G sector. This role of capacity building in boasting local capacity to participate in O&G procurement is evident in Angola where capacity building plan and budget is a prerequisite, Kazakhstan where monetary obligations for capacity building is emphasized. However, in countries like Indonesia, Trinidad and Tobago where capacity building prerequisites are not emphasized, the results on building local capacity have been slow though positive (Brand, 2017). Similarly, Brand (2017) notes that in Nigeria and Kazakhstan, for instance, where initiatives had positive effects, they were not able to significantly reduce the skill gap caused by foreign employment quotas.

However, Teka (2012) longitudinal study in Angola revealed that between 1990 and 2003 only 1,581 high-skilled professionals and 1,111 medium-skilled professionals through its programs and by 2008 the number of high-skilled graduates reached only to 1,790.

Although the above literature attests of a relationship between capacity building and procurement participation, their generalization in the Ugandan context was limited. It was necessary that a study is undertaken to examine the influence of capacity building on procurement participation by local firms in Uganda's O&G sector which is still nascent.

2.1.2. Partnerships

A review of extant literature on partnerships and procurement participation in the O&G sector reveals a significant relationship between the two variables. Partnerships arise due to the nature of high budgets and high risks in the O&G sector (Ihua, 2010; Giroud et.al. 2012). To this effect, Oyewole (2015) attributes increased local SME participation to partnering, alliancing and joint ventures in the O&G sector although creating trust, unclear roles and responsibilities and alignment to common goals were significant problems faced in O&G partnerships.

Poor definition during conceptual stage of the project between parties and whether the share of the rewards will commensurate to the risk they are taking can also lead to volatility in the execution and outcomes (Leahy, 2012). Oyewole (2015) observes that short and long-term relationships within partnering arrangements have to be dealt with accordingly to avoid pitfalls and any untoward relationship that could be costly. In the same line, Changarawe (2014), reports that lack of business partnerships was the key limiting factor for local firms to supply goods and services in the oil and gas sector in Tanzania.

Although the above literature is informative on the relationship and challenges in partnership/alliances attribute on technology transfer, their generalization in the Ugandan context was limited. It was necessary that a study is undertaken to examine the influence of partnerships/alliance on procurement participation by local firms in Uganda's O&G sector which is still nascent.

2.1.3. Research and Development-R&D

Technology transfer requires specified technologies to be transferred on non-commercial terms and/or specific levels and types of research and development (R&D) to be conducted locally, specifically in includes key considerations related to capacity development, development of partnerships, research and development which according to Adedije et al, (2014) have been found to influence procurement participation in the Oil and Gas sector.

However, Unam, et al (2015) study found that the few oil servicing firms that engage in R&D activities do not have separate R&D departments. Besides, thin industrial base, underdeveloped capital markets and inadequate power supply still remain major constraints to enhancing technological capacity building of SMEs in the petroleum industry. The study recommends partnership with foreign firms, provision of cost-friendly loans, and deregulation of the power sector.

Although the above literature insightful on the relationship and challenges of R&D attribute on technology transfer, their generalization in the Ugandan context was limited. It was necessary that a study is undertaken to examine the influence of R&D on procurement participation by local firms in Uganda's O&G sector which is still nascent.

2.3 Use of locally produced goods and local firms' participation in the procurement process for oil and gas sector

Use of locally produced goods and services refers to procurement and utilization of locally produced input materials, development of these materials, often recognized as an important linkage which reduces the capital cost that may have been incurred by the former and over-extension of the firm and tends to include affirmative action on simplification of procurement procedures, emphasis on local operational base, standardization of local products through quality assurance and exclusive local tendering (Tordo et al., 2013; Teka, 2012).

Objective four of the national local content policy of Uganda envisages increased use of locally produced or available goods and services by the oil and gas industry. Strategies necessary to achieve the objective include; -Licensed oil companies, their contractors and subcontractors will put in place procurement and contracting procedures and practices to benefit Ugandan enterprises. Secondly licensed oil companies, their contractors and subcontractors will establish operational bases in Uganda. Thirdly, there is need to develop and adopt standards and quality assurance systems for locally available/produced goods and services. Lastly, licensed oil companies, their contractors and subcontractors will exclusively tender locally available goods and services to Ugandan enterprises (National Local Content policy for the petroleum subsector in Uganda 2017).

2.3.1. Procurement procedures

A review of existing body of literature lends support for the role of affirmative action on procurement procedures in promoting local firm's procurement participation in the O&G sector. Mushemeza, Okiira, Morales & Herrera (2017) contend that countries with specific

local content frameworks that prioritized affirmative action on procurement procedures are more likely to achieve positive outcomes in terms of employment creation, skills development and the participation of their national industry along the oil and gas value chain. Their findings are collaborated with country specific case study such as Sigam and Garcia (2012) Brazil study which reported that localization of procurement regulations and their implementation under the Petrobras, commitments resulted into improvement of local firms' participation from 25% to 80%

Similarly, Nigerian study by Oyewole (2015) reveals that effective design, implementation and monitoring of procurement procedures resulted into increased value added, enhanced entrepreneurial development, improvements in local investment in the sector and overall participation of local SMEs in the O&G sector. Adedeji et al. (2016) also affirms that affirmative action on procurement procedures resulted in significant local SMEs participation in procurement for works, services and supplies leading to significant local value added.

A related study by Venezual by Giroud et al (2012) equally revealed that the streamlining of procurement procedures resulted into significant improvement in local firm's participation O&G sector and overall contribution to GDP.

However, some studies find a low predictive effect of streamlining of procurement procedure on procurement participation. A Nigerian study by Ihua (2010) concluded that the legislating local content especially through procurement procedures has had very little positive implication in enhancing SMEs participation in the industry. Giroud et al (2012) calls for more effective supervision and monitoring of the policy guidelines by regulatory authorities; lessening the pre-qualification requirements and the conditions for tenders and

bids; the need to invest massively in the educational system to promote local firm's procurement participation in O&G sector.

The literature points to a significant relationship between affirmative action on procurement procedures and procumbent participation. However, their generalization in the Ugandan context was limited. It was necessary that a study is undertaken to examine the influence of affirmative action on procurement participation by local firms in Uganda's O&G sector which is still embryonic.

2.3.2. Operational base

A key emphasis of the local content policy is the need to for Licensed NOC, their contractors and subcontractors will establish operational bases in the explorations country and studies report of mixed findings on its effect on procurement participation. In their study Adedeji et al (2014) conceptualized backward integration to include the level of cooperation between local oil service firms and their local affiliate suppliers through local input development, information exchange, technical upgrading, negotiation of payment and delivery, and labor training.

A Ghana study by Ablo (2016) reports that in terms of goods and services provision, the policy mandates that all operators in the oil and gas industry shall as far as practicable have a local base and use goods/services produced by or provided in Ghana for their operations. It was the hope of the government that after the commencement of operations, the participation of Ghanaians in value-added would be at least 10% initially, with a 10% increase annually in the provision of goods and services with the policy of having a local base in Ghana.

However, Boyefio and Ochai (2014), the Ghanaian oil industry was dominated by foreign manufacturers or suppliers of goods and services that could ordinarily be made or supplied by local SMEs or firms. They noted that, although most international oil companies profess support for local content, the reality is that they prefer to deal with their global suppliers for a number of reasons and are reluctant to break such supplier relationships.

A Venezuela by Giroud et al (2012) equally revealed that promotion of local goods and services by establishing a local base in the local content policy resulted into significant improvement in local firm's participation O&G sector and overall contribution to GDP. However, a Nigerian study by Ihua (2010) concluded that the legislations on local supplies has had very little positive implication in enhancing SMEs participation in the industry.

The literature on promotion of firm localization in the O&G sector as highlighted above could not be generalized in the Ugandan context given its unique local content policy and the nascent nature of the O&G sector. This study strives to provide empirical evidence on local base strategy and its contribution to SME participation in the O&G sector of Uganda.

2.3.3. Standardization

To deliver cost savings on projects, operators across the oil and gas industry are looking at standardization as a way of simplifying the processes from design and construction through to installation and start-up, in order to create safer, more predictable and reliable facilities that start-up on time and stay up (Mohammad & Price, 2013). To this effect, one of the strategies in to increase the use of locally produced or available goods and services by the oil and gas industry in Uganda is to develop and adopt standards and quality assurance systems for locally available/produced goods and services (National Local Content Policy, 2017).

On the influence of standardization on procurement participation, Mohammad and Price (2013) note that since procurement process in the oil and gas industry is a capital-intensive industry and about 90-95% of project costs are paid to contractors and suppliers, to ensure project success, it is critical that procurement strategies should incorporate and integrate with the standardization in local supplies. Some form of standardization programme and specification reviews must also be included. Mohammad and Price (2013) further notes that a strategic outsourcing, such as in supply chain management, must be in place. Finally, a management and incentive programme for all key contractors and suppliers must exist in order to secure the commitment of contractors and suppliers to the overall success of the project by supplying standardized goods and services.

The literature on promotion of standardization in the O&G sector as highlighted above could not be generalized in the Ugandan context given its unique local content policy and the nascent nature of the O&G sector. This study strives to provide empirical evidence on standardization strategy and its contribution to SME participation in the O&G sector of Uganda.

2.3.4. Exclusive local tendering

The role of exclusive or preferential local tendering in promoting local firm participation in the extractive sector has been emphasized in most local content policies. To begin with (Ihua, 2010) views local content from an angle of 'community content'; stating that 'Ultimately, community content is about realizing a competitive advantage for an oil and gas development company in the eyes of both the local population and the country's guardians of economic policy. He observed two distinct policy strategies for achieving higher local content vis-à-vis: firstly, where the state requires oil companies to give greater

preference to those nationals and national suppliers who can compete internationally on cost, quality and timeliness notably what can be termed local content participation. For instance, the Trinidad and Tobago case, where oil production operators shall give preference to national subcontractors where such are competitive with foreign bidders in skills, availability and price and meet technical and financial requirements; and the case in Nigeria where the proposed LC bill requires about 95 percent managerial and supervisory positions, 100 percent risk insurance and legal services to be handled by indigenous professionals (Ihua, 2010).

In Latin America, Tordo et al (2013) reports that virtually all of the surveyed regimes mandate preference for local goods, services, consumables, works or enterprises. In all of the jurisdictions examined, the IOC has an obligation to give due and proper consideration to preferring locally sourced services and goods when their price, quality, time of delivery and other terms are comparable to internationally available ones.

A related study by Leahy (2012) revealed that on overall, reveal that reactive exclusive tendering policy as opposed to proactive ones are believed to hinder Petrobras from achieving its production and financial targets. Ablo (2016) equally noted that through extensive fieldwork conducted in Ghana's oil industry over a period of three years, the study concludes that Ghana's local content law on exclusive local tendering is largely beneficial to local elites and does not stimulate broad-based social and economic benefits. The case studies of Ghana entrepreneurial activities show how embedded resources and practices of actors shape local SMEs participation in the oil and gas industry.

The literature on promotion of excusive tendering as highlighted above could not be generalized in the Ugandan context given its unique local content policy and the nascent nature of the O&G sector. This study strives to provide empirical evidence on exclusive tendering strategy and its contribution to SME participation in the O&G sector of Uganda.

2.4. Promotion of business competitiveness and local firms' participation in the procurement process for oil and gas sector

Objective three of the national local content policy envisages development the competitiveness of Ugandan enterprises as suppliers and joint venture partners. Key actions to this effect include promotion of business registration & licensing, promotion of Compliance, Business Development and promotion of financial access (National Local Content policy for the petroleum subsector in Uganda 2017).

2.4.1. Promotion of Registration and Licensing

One of the actions in the national local content policy of Uganda is to encourage Uganda businesses to formalize through registration and licensing of enterprises (National Local Content policy for the petroleum subsector in Uganda 2017). A number of studies on this action for promotion of business competitiveness reveals mixed experiences. A Nigerian study by Ihua (2010) found that SMEs which strived to comply with the national laws and tax regime and specifically procurement guidelines and manufacturing standard reported growth in business deals in the O&G sector. Giroud et al (2012) contends that effective procurement participation by local SMEs the O&G sector can only be requires not only promotion of business registration but also supervision and monitoring by the national authority charged with promotion of local content.

According to Byaruhanga and Mwakali (2011), the informal nature of local firm's initiatives affects the governance of firms. Their findings further revealed that a big number

of the firms in Uganda (85%) had no accounts with formal auditing company's s due to poor records management and limited willingness to reveal economic results. This limits compliance to the requirements to supply of good and services for oil and gas sector.

Formal requirements are often strict when working with the oil and gas sector implying that staff competence be documented. Byaruhanga and Mwakali (2011) found out that two of three firms they surveyed did not have one full time employee with formal training in health, security and environment. Three of four did not have any professional engineers in their staff, and only a few had some certification of their business of relevance for the oil and gas sector.

Although the literature was insightful on the affirmative action on promotion of business registration and licensing and procurement participation, its generalization in the Ugandan context was limited. This study strives to provide empirical evidence on if efforts to register and license SMEs has resulted into significant procurement participation in the embryonic O& G sector of Uganda.

2.4.2. Promotion of Compliance

A related action in the national local content policy of Uganda is to encourage Ugandan enterprises to comply with their statutory obligations (National Local Content policy for the petroleum subsector in Uganda 2017). A number of studies on this action for promotion of business competitiveness reveals mixed experiences. A Nigerian study by Ihua (2010) found that SMEs which strived to comply with the national laws and tax regime and specifically procurement guidelines and manufacturing standard reported growth in business deals in the O&G sector.

Ejiro (2017) for example found that a few interrelated segments of the oil and gas value chain stimulates goods and services for local SMEs than the general contractors. His findings further reveal that local SMEs can compete favorably in the oil and gas sector procurement process if only comply in national laws and business best practices.

Giroud et al (2012) contends that effective procurement participation by local SMEs the O&G sector is enhanced through effective monitoring of compliance by the concerned government agencies in Venezuela. Adedeji et al. (2016) also affirms that affirmative action on promote compliance of SMEs to national laws resulted in significant local SMEs participation in procurement and significant local value added.

Although the literature was insightful on the affirmative action on promotion of compliance among SMEs and procurement participation, its generalization in the Ugandan context was limited. This study strives to provide empirical evidence on if the efforts to promote compliance of SMEs has resulted into significant procurement participation in the embryonic O & G sector of Uganda.

2.4.3. Business Development

Business development according to the Uganda local tent policy aims at facilitating business development programs for Ugandan enterprises in the oil and gas industry. This will be achieved through development of business development programs in procurement, business counseling, management and technical assistance to build the capacities of Ugandan enterprises in the oil and gas (National Local Content policy for the petroleum subsector in Uganda 2017).

Am empirical case study by Asiago (2017) reports that affirmative action by Petroleum Development Oman's focusing on Local Community Contractors program aimed to share the benefits of its operations with the local community by engaging the community contractors through contract work foster SME competitiveness and participation in the O&G sector. This was achieved through appointing a business consultant to guide them in developing their business plans and management systems that meet industry standards; sending experienced staff members to each of the companies to help them better understand oil and gas operations; allocating industrial plots and workshops; and purchasing all the necessary equipment to execute the assigned work.

Ejiro (2017) equally reports thay efforts to promote business development through joint ventures and supplier development efforts were in in position to win a good deal of procurement tenders in the O & G sector. A Ghana study by Ablo (2016) reports that the policy to promote business development in Ghana resulted into a10% local SMEs participation in the O & G sector.

The literature findings on promotion SMEs business development and procurement participation could not be generalized in the Ugandan context. This study strives to provide empirical evidence on if the business development effort has resulted into significant procurement participation in the embryonic O & G sector of Uganda.

2.4.4. Finance access

The national local content policy of Uganda targets improved access to financing by Ugandan enterprises to supply goods and services to the oil and gas industry (National Local Content policy for the petroleum subsector in Uganda 2017). It has always been urged that access to financial services in a key success factor in promoting local SMEs

competitiveness in the O&G sector a SMEs were less likely to access financial credit compared in IOC. The financial challenges is also exhibited in restricted access to finance by local SMEs due to lack of significant collateral requirements, and lack the knowledge and skills to prepare attractive business plans for loan proposals (Akpanika, 2012; Cerbusca, 2015).

It has also been noted that financial access is a key factor on entrepreneurship or business formation and business growth through participation in business opportunities in the O&G sector (Adewuyi and Oyejide, 2012). Ablo (2016) equally noted that the case studies of Ghana entrepreneurial activities show how embedded resources and practices of actors shape local SMEs participation in the oil and gas industry. Sigam and Garcia (2012) Brazil study reports that one of the barriers to the expansion of production capacity of the domestic industry in Brazil, as well as to new investments in research and development, is the difficulty, especially for SMEs, in obtaining finance due to the high cost of capital from the private banking sector. In order to facilitate credit for domestic suppliers, the Program for the Mobilization of the National Industry of Oil and Natural Gas supported the structuring of new financing mechanisms and capitalization of the production chain through collaboration with public and private banks.

To this effect a Program in conjunction with Petrobras and the 11 large banks in Brazil, this program aims to make available credit—with competitive conditions—to the Petrobras supply chain (contractors and subcontractors). It also aims to improve liquidity and financial requirements and more than 40 cross-industry enabling initiatives across six dimensions of human resources, technology and innovation, business development, capital and finance, contracting and tendering, legislation and process improvement which stimulated procurement participation and SME competitiveness (Sigam & Garcia, 2012).

Although the literature was informative on the affirmative action on prometon of financial access among SMEs and procurement participation, its generalization in the Ugandan context was limited given the unique Ugandan financial services sector policies. This study strives to provide empirical evidence on if the efforts to promote financial access among SMEs has resulted into significant procurement participation in the embryonic O & G sector of Uganda.

2.5. Challenges in implementing local content strategy

A number of challenges are identified in the literature on local content but Cerbusca, (2015) and Akpanika (2012) have classified the challenges into capacity gaps, corruption, inefficiencies risks, policy implementation and monitoring.

Capacity gaps arise on the basis that local entities are not able to provide the required inputs in most low developed economies (Kazzazi, & Nouri, 2012; Cerbusca, 2015). The argument is that it is quite difficult for LCDs to quickly supply specialized goods and services to the oil industry for lack of because of the technical complexity of producing them, the specific skills required and the large size of the contracts, among others problems (Akpanika, 2012; Kazzazi, & Nouri, 2012; Cerbusca, 2015). The capacity challenges are also exhibited in restricted access to finance by local SMEs due to lack of significant collateral requirements, and lack the knowledge and skills to prepare attractive business plans for loan proposals (Akpanika, 2012; Cerbusca, 2015).

Corruption has been cited a one of the major challenges in exploring the opportunities offered by the local content policies as those with managerial information may not transparently sharing it's with the local stakeholders to encourage their participation (Akpanika, 2012). Corruption has resulted into opportunities for local participation being

denied and explored by the economic elites which leads to less efficient than a perfectly competitive environment, thus giving rise to welfare losses. Cases of fictitious companies could equally lead to flawed a procurement process on the basis of local content policy (Akpanika, 2012; Cerbusca, 2015).

Inefficiencies risks are widely cited a significant threat in local content policy and arises from the position that the local content policies that grant by law a portion of the contracts to local suppliers give rise to a decrease in their incentives to invest in R&D and innovation, as the jobs are assured to them, without facing foreign competition (Akpanika, 2012; Ihua, 2010).

Policy implementation and monitoring challenges, arises from the fact that although policies have been meticulously analyzed and ensure a priori national welfare developments in the long run, it will be hard for any outcome to materialize if the policies are not adequately implemented and monitored (Kazzazi & Nouri, 2012; Cerbusca, 2015. It has also been argued that the actual implementation process, if done correctly, can be more challenging (Akpanika, 2012; Kazzazi & Nouri, 2012; Cerbusca, 2015). If no formal information flow mechanism is implemented, local businesses and individuals will not be aware of the opportunities in place, and if the rules are not clear a number of legal, coordination and financing problems can arise. On the other hand, a lax monitoring process can lead to operators hiding, withholding, or strictly not complying with the legal requirements intentionally (Akpanika, 2012; Kazzazi, & Nouri, 2012; Cerbusca, 2015).

2.6. Summary of Literature Review

The review of existing body of research reveals an inconclusive position on the influence of local content policies on procurement participation by local firms in O&G sector of developing countries. Like any other developing country, provocations in Uganda's local content development have focused on whether there is sufficient technological local capacity to deal with the employment, goods and service needs for the oil and gas industry. On the other hand, standards of locally produced goods and services to meet the requirements of the Oil and gas sector remains questionable (ACODE, 2014).

To fill the knowledge void, this study will examine the effect of local content policies specifically; business competitiveness, promotion of locally produced goods/services and technology transfer on local firm's participation in procurement of goods and services in the O&G sector of Uganda.

CHAPTER THREE: METHODOLOGY

3.1. Introduction

This chapter presents the research methodology of the study. It describes and justifies the methods and processes that were used in order to collect data that was used in answering the research questions of local content strategies and procurement participation by local firms in O&G sector. The chapter features the research design, population of study, sample size and selection, data collection methods, data collection instruments, validity and reliability, data collection procedures, data analysis and measurement of variables.

3.2. Research Design

This study used a cross-sectional survey design using a quantitative approach. As supported by Creswell (2015) a cross-sectional survey design was used since the local content strategies and procurement participation by local firms in O&G sector was examined at that point in time. The quantitative approach was adopted to help provide data needed to meet required objectives and to test the relationship and study hypotheses (Cresswell & Plano-Clark, 2011) related to local content strategies and procurement participation by local firms in O&G sector.

3.3. Study Population

The study population refers to compilation of subjects or individuals who are subject to the research. The study was carried out on an accessible target population of 1,271 SMEs managers engaged in works, goods and services procurement listed affirmative action of local content to promote their participation in O&G sector of Uganda (The National Suppliers' Database for the Oil and Gas sector, 2019). The SME manager were considered since the SMEs employ an average of 10 staff headed by a manager who was deemed to

possess adequate knowledge on the local content policies and procurement participation by virtue of their managerial position.

3.4 Sample size and procedure

Sampling according to Amin (2005) is the process of selecting a sufficient number of elements from the population so that a study of the sample and an understanding of its characteristics would make it possible to generalize such characteristics to the population elements. Sample size therefore is the total number of elements selected to represent the population of study. The researcher adopted the Yamane formula for sample size calculation to determine the sample size in the study as illustrated below.

$$n = \frac{N}{1 + N(0.05)^2}$$

Where;

n = sample size,

N = population size

e = error term (0.05)

Given that the target population = 1271 SMEs and e = 0.05 considering the 95% level of confidence, sample size is,

$$n = \frac{1271}{1 + 1271(0.05)^2}$$

n = 304 respondents

Therefore, the sample size was 304 respondents from 304 SMEs.

3.5. Sampling Techniques and Procedures

3.5.1. Simple Random Sampling

The study used simple random sampling in which the sample size was obtained from the population in such a way that samples of the same size have equal chances of being selected (Cresswell & Plano-Clark, 2011). The sampling list was generated of all SMEs in the Oil

and Gas sector to form a sampling framework and random numbers were generated in excel to randomly select the SMEs for the study.

3.6 Data Collection Method

The study used a questionnaire with a set of standardized questions on local content policies, backward integration and procurement participation by local firms in O&G sector. The information on the questionnaire was uploaded on kobo toolbox in order to collect the data using mobile phones which was less expensive for data collection (Sekaran & Bougie, 2010), environmentally friendly and collects large amounts of data in short time. The questionnaire was used on all the 304 selected SMEs.

During the study, the researcher sent out emails containing the link to the kobo toolbox server to 304 SMEs managers that could not be easily physically accessed.

3.7. Data Collection Instrument

A standard Questionnaire sought respondents' perceptions on three local content strategies of technological development, competitiveness and use of local supplies based on the National local content policy document. The items were measured using a 5-point Likert scale ranging from 5= strongly agree to 1 = agree. The questionnaire also focused on Procurement participation items developed by Adedeji et al (2018) focusing on access to business opportunities, environment conduciveness, market power, contract and bidding process and procurement Incentives.

3.8. Validity and Reliability of the Instruments

Validity refers to the extent to which research results can be accurately interpreted and generated. Reliability is the measure of the degree to which a research instrument yields

consistent results after repeat. Cronbach's Alpha coefficient was used to measure the reliability of the instrument of which it was found that technology transfer yielded an alpha value of 0.766, promotion of competitiveness yielded alphas value of 0.811, use of local supplies yielded alpha value of 0.792 while procurement participation yielded alpha value of 0,751. The Cronbach's alpha greater or equal to 0.7 is enough to show reliability (Nunnally & Bernstein, 1994).

3.9 Data Analysis

Data was collected by the researcher who was highly experienced with data collection using mobile phones. The collected data was downloaded from kobo collect to excel from where it was cleaned and coded. The data cleaning involved checking for accuracy and completeness to establish whether all questions in the questionnaire were answered. The cleaned data was then exported to SPSS version 22 (Statistical Packages for Social Sciences) where the data was analyzed. The researcher employed both descriptive and inference statistics for the sample to truly represent the population under study. The researcher generated frequency tables, percentages and charts for categorical variables such gender, highest level of education attained, position of the respondent in the company etc. For ordinal variables such as attitude questions, the researcher also generated frequency tables. Both tables and charts were interpreted for easy understanding.

The relationship between variables in the study were measured using bivariate analysis (Chi-square test, Analysis of Variance (ANOVA) and t-tests) which provided the significance levels for statistical conclusions. The researcher also employed a multiple linear regression model in the form below;

$$Y = i + Xb + e$$

Where;

Y = a vector containing observed scores on procurement participation.

i = a vector of 1's representing the y-intercept.

X =the regression coefficient.

b = the independent or predictor variables accounting for technology transfer, promotion of business competitiveness and use of local goods and services

e = vector of residual or error or leftover scoring unexplained by the model.

3.11. Ethical Considerations

A number of ethical considerations were undertaken beginning with ensuring that all cited works are referenced. At data collection, the respondents were told that participation was voluntary, and their confidentiality was guaranteed by not writing their names on the questionnaire. To enhance objectivity, the questionnaire was designed based on local content strategies and procurement participation by local firms in O&G sector best practices. At data administration, all the collected data was stored in a safe computer and was only accessed by the researcher and an experienced data analyst who handle data analysis.

CHAPTER FOUR: DATA PRESENTATION AND DISCUSSION OF RESEARCH

FINDINGS

4.1 Introduction

In this chapter, the researcher reports the findings and discussion of the study based on the collected data through questionnaire survey. The presentation of the report is based on the objectives and major study themes or research questions laid out in the report namely:

- 1. To assess the relationship between technology transfer and local firms' participation in procurement process in the O&G sector of Uganda.
- 2. To assess the relationship between the use of locally produced goods and local firm's participation in procurement process in the O&G sector of Uganda.
- 3. To assess the relationship between promotion of business competitiveness and local firm's participation in procurement process in the O&G sector of Uganda.

The first section presents the response rate. This is then followed by a presentation of background information about the respondents and the major findings and discussion based on the study objectives.

4.2 Response Rate

Three hundred and four (304) respondents were selected to participate in the study and were issued with questionnaires. Out of 304 questionnaires that were administered to respondents, 302 were completed and submitted to the kobo toolbox server. The overall response rate was 302 out of 304 which was equivalent to about 99.3%. According to Mugenda (2008), a response rate of 70% and above is acceptable as representative of the sampled population. In this regard, a response rate of 99.3% was adequate and excellent for the study results to be valid.

4.3 Background Information

This section consists of information that describes basic characteristics such as gender of the respondents, position in the company, highest level of education attained and nature of enterprise.

Gender of the respondent

In this study, a sample size of 303 respondents were accessed. From table 1 below, it was revealed that the majority of the respondents 88.1% (n=267) were males and 11.9% (n=36) of the respondents were females.

Table 1 showing respondents' gender

Gender	Frequency	Percent
Female	35	11.9
Male	267	88.1
Total	302	100.0

Source: Primary data

Highest level of education attained

The sample of this study was also characterized by 94.7% (n=286) of the respondents who reported that they had attained a bachelor's degree. This was followed by those who had attained diploma as reported by 3.6% (n=11). It was also revealed that 1.0% (n=3) of the respondents reported that they had attained a certificate and only 0.7% (n=2) of the respondents reported that they had attained a post graduate diploma education as their highest level of education as shown in table 2 below.

Table 2 showing respondent's highest level of education attained

Highest level of education attained	Frequency	Percent
Certificate	3	1.0
Degree	286	94.7
Diploma	11	3.6
Post-graduate	2	0.7
Total	302	100.0

Nationality of the owner(s) of the SMEs

Table 3 below illustrates that majority of the small-to-medium enterprise in the Oil and Gas sector in Uganda are owned by nationals only as reported by 68.9% (n=208) of the respondents. About 30.8% (n=93) of the sampled SMEs were owned by multi-national owners and only one SME (NARO) was reported to be owned by the government.

Table 3 showing nationality of the owner(s) of the SMEs

Nationality of the owner(s) of the companies	Frequency	Percent
Multi-National company	93	30.8
Nationals only	208	68.9
State owned enterprises	1	.3
Total	302	100.0

Source: Primary data

Is the company/enterprise listed?

During the study, the researcher wanted to know whether the sampled SMEs were listed. From table 4 below, it was revealed that majority 98.3% (n=297) of the small-to-medium enterprise in the Oil and Gas sector in Uganda are listed and of these majority were listed less than 5 years ago. Only 1.7% (n=5) of the sampled SMEs reported that they were not listed.

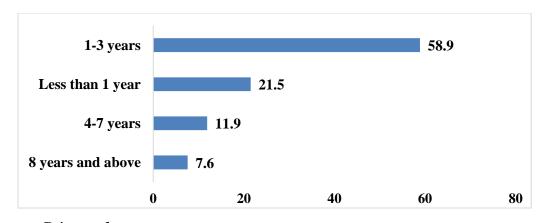
Table 4 showing whether the sampled SMEs are listed.

Is the company/enterprise listed?	Frequency	Percent	
No	5	1.7	
Yes	297	98.3	
Total	302	100	

Duration which the enterprise has supplied the Oil and Gas Sector.

The sample of this study was also characterized by 58.9% (n=178) of the small-to-medium enterprise reported to have supplied the Oil and Gas Sector in Uganda for 1-3 years. This was followed by those who reported that they had supplied the Oil and Gas Sector in Uganda for less than one year as reported by 21.5% (n=65). About 11.9% (n=36) reported that they had supplied the Oil and Gas Sector in Uganda for 4-7 years and only 7.6% of the respondents reported that they had supplied the Oil and Gas Sector in Uganda for more than 8 years as shown in figure 2 below.

Figure 2 showing duration which the enterprise has supplied the Oil and Gas Sector



Source: Primary data

Nature of Oil and Gas procurement

During this study, the researcher was interested in knowing nature of the SMEs in the Oil and Gas sector in Uganda. From figure 3, it was illustrated that majority 94% (n=284) of the SMEs are in service provision. This was followed by 4.6% (n=14) of the SMEs who

are providing goods and only 1.3% (n=4) of the SMEs in the Oil and Gas sector in Uganda are in works.

100 94

80
60
40
20
1.3
Works Goods Services

Figure 3 showing the nature of Oil and Gas procurement in Uganda

Source: Primary data

4.4. Procurement participation

Procurement participation was the dependent variable of the study and the researcher wanted the respondents to indicate the extent to which they agreed with the following observation on procurement participation by their local firm in the Oil and Gas sector in Uganda using a scale of 5= strongly agree, 4= agree, 3= Not sure, 2= disagree, 1= strongly disagree as shown in table 5 below. The percentage for agree is added to strongly agree to denote agreement with that particular item implying high participation while the percentage of disagree is added to strongly disagree to denote disagree or low participation.

 $Table\ 5\ showing\ results\ of\ observed\ score\ items\ on\ Procurement\ participation.$

Procurement participation		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
Our company frequently accesses information on	Freq.	23	274	2	3	0
Business Opportunities in the Oil & Gas sector in Uganda	Percent	7.6	90.7	0.7	1.0	0
Our company is aware of the global nature of Oil & Gas sector	Freq.	28	269	3	2	0
business	Percent	9.3	89.1	1.0	0.7	0
Our company is aware of the powerful suppliers of goods and	Freq.	15	281	1	4	1
services in the Oil and gas sector in Uganda	Percent	5.0	93.0	0.3	1.3	0.3
Our company formed partnerships with other SMEs with large Ugandan companies	Freq.	8	284	3	6	1
and or international companies to tap into the Oil and Gas sector business opportunities	Percent	2.6	94.0	1.0	2.0	0.3
The Oil & Gas Supplies business environment in Uganda is	Freq.	11	266	20	5	0
conducive for local SMEs to operate in the Oil and Gas sector	Percent	3.6	88.1	6.6	1.7	0
The Oil and Gas legal framework is conducive for SME to participate in the Oil and	Freq.	11	260	26	5	0
Gas sector procurement process	Percent	3.6	86.1	8.6	1.7	0
The involvement of the NGOs in the Oil and Gas sector development processes in	Freq.	7	258	34	3	0
Uganda has been influential in shaping the operating environment for SMEs participation in the sector	Percent	2.3	85.4	11.3	1.0	0
The financial services environment is conducive for the SMEs to access credit for	Freq.	23	259	12	8	0
investment in the Oil and gas sector	Percent	7.6	85.8	4.0	2.6	0
Our firm has capacity to influence the price at which it sells its product in the oil and gas sector	Freq.	28	270	1	1	0
	Percent	9.3	89.4	1.0	0.3	0
Our company has a well skilled	Freq.	23	278	0	1	0
and equipped marketing department	Percent	7.6	92.1	0	0.3	0

Our company regularly accesses procurement incentives support to participate in the Oil and gas	Freq.	20	270	1	11	0
sector procurement process	Percent	6.6	89.4	0.3	3.6	0
Procurement incentives is a way to strengthen local procurement	Freq.	26	271	4	0	1
participation	Percent	8.6	89.7	1.3	0	.3

Table 5 above shows that generally, only 1% of the SMEs disagreed with participation indicators with majority of 99% agreeing with O&G access to business information, awareness of powerfully suppliers, and engagement in partnerships. These findings suggest high procurement participation in the O&G sector procurement through access to business information, awareness of powerfully suppliers, and engagement in partnerships.

About 98% were satisfied with the Oil & Gas Supplies business environment in Uganda being conducive with necessary legal framework in place, involvement of NGOs, financial services as development partners indicative of high participation. A total of 99% felt that their companies had capacity to influence the price at which it sells its product, had a well skilled and equipped marketing department, and regularly accessed procurement incentives prerequisite for procurement participation.

These finding suggest access funds from NGOs, financial services as development partners, had capacity to influence the price at which it sells its product, had a well skilled and equipped marketing department, and regularly accessed procurement incentives.

4.5. Technology transfer and local firms' participation in procurement process in the O&G sector of Uganda

The first objective of the study was to establish the effect of technology transfer on local firms' participation in procurement process in the O&G sector of Uganda. This section of

the study sought to establish whether technology transfer in the Oil and Gas of Uganda contributed to procurement performance in the oil and gas sector in Uganda. To understand technology transfer, the researcher had several question items that were administered to the respondents. The question items were scaled using the five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Not sure, 4 = Agree and 5 = Strongly Agree. The results obtained on the question items are as given in table below. The percentage for agree is added to strongly agree to denote agreement with that particular item implying high technology transfer while the percentage of disagree is added to strongly disagree to denote disagree or low technology transfer.

Table 6 showing results of observed score items on technology transfer local content strategy in the Oil and Gas

Technology Transfer		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
Our company participates in O&G stakeholders forum for	Freq	11	273	1	16	1
information sharing on skills requirements and standards in the oil and gas	Percent	3.6	90.4	0.3	5.3	0.3
Our company has Developed Procurement Skills	Freq	11	279	4	8	0
Development Strategy and Plan for suppliers in the oil and gas in Uganda	Percent	3.6	92.4	1.3	2.6	0
Our company has generally gained reasonable knowledge	Freq	29	263	1	7	2
and skills necessary to supply in the oil and gas sector	Percent	9.6	87.1	0.3	2.3	0.7
Government Oil & Gas Agencies have been compelled	Freq	13	242	35	12	0
to put aside funds for training to develop local human capital Our company has a partnership with Foreign Oil companies to conduct Research and development in the oil sector	Percent	4.3	80.1	11.6	4.0	0
	Freq	6	156	7	128	5
	Percent	2.0	51.7	2.3	42.4	1.7
	Freq	11	172	5	110	4

Our firm has a partnership with Uganda government petroleum agencies to conduct Research and development in the oil sector	Percent	3.6	57.0	1.7	36.4	1.3
Our company has an annual training program budget to	Freq	12	259	3	27	1
develop local human capital in the O & G sector of Uganda	Percent	4.0	85.8	1.0	8.9	0.3
The Government of Uganda has put in place training	Freq	10	280	9	3	0
institutions to develop human capital in the Oil & Gas sector	Percent	3.3	92.7	3.0	1.0	0
Our Company participated in the formation of a forum for collaborations between	Freq	12	268	7	14	1
Ugandan institutions and international oil companies to enable joint learning and enhancement of R&D capabilities.	Percent	4.0	88.7	2.3	4.6	0.3
Our company has partnerships	Freq	6	228	12	56	0
with international agencies for technological development	Percent	2.0	75.5	4.0	18.5	0
Our company has partnered with reputable local firms for	Freq	6	122	18	146	10
technological capacity enhancement for local supplies	Percent	2.0	40.4	6.0	48.3	3.3
Our company partnered with academic institutions in Uganda to enhance local	Freq	4	129	14	150	5
capacity to operate the latest technological equipment and systems in the Oil and gas sector	Percent	1.3	42.7	4.6	49.7	1.7
Our company has a Research	Freq	17	271	4	10	0
and Development fund in Oil and Gas	Percent	5.6	89.7	1.3	3.3	0
Our company has been aided with modern production technologies to better our production capabilities to meet	Freq	9	221	7	65	0
requirement in Oil and Gas sector	Percent	3.0	73.2	2.3	21.5	0

Our company has annual scholarships for Ugandan citizens to study within Uganda and aboard to enhance local capacity to meet requirements	Freq	2	125	3	118	54
for skills to operate the latest technology in Oil and Gas sector		0.7	41.4	1.0	39.1	17.9

The findings in table 6 shows that 94% of companies agreed that they participated in O&G stakeholders forum for information sharing on skills requirements and standards in the oil and gas, and to this effect 94% agreed that their companies has Developed Procurement Skills Development Strategy and Plan for suppliers in the oil and gas in Uganda. Moreso, a total of 96.7% agreed that they had generally gained reasonable knowledge and skills necessary to supply in the oil and gas sector. Generally, the findings in table 6 above reveal that, about 9 in=every 10 respondents agreed with their companies having a training budget, were aware on government O&G sector training institutions. These findings suggest tremendous effort directed to skills transfer component of technology transfer to local SMEs using eh affirmative action.

However, it is suffice to note that there were still significant technology transfer gaps as a about 40% respondents disagreed with engagement in partnership with Foreign Oil companies, government and universities to conduct Research and technology development indicative of low technology transfer among SMEs in the O&G sector.

These findings suggest that about half of the local SMEs had no R&D partnerships IOC and Petroleum Authority of Uganda while about half of local SMEs were constrained to engaged in partnerships with reputable local firms and academic institutions in Uganda for technological capacity enhancement for local supplies. About half to the SMEs did not access O & G scholarships to study within Uganda and aboard.

Relationship between technology transfer and local firm's procurement participation.

To investigate whether there is any relationship between promotion of business competitiveness strategy and local firm's procurement participation, there researcher performed a Pearson product-moment r correlation and the findings are tabulated below.

Table 7 showing relationship between technology transfer and local firm's procurement participation.

		Procurement	Technology			
		participation	Transfer			
Procurement participation	Pearson Correlation	1	.305**			
	Sig. (2-tailed)		.000			
	N	303	303			
Technology Transfer	Pearson Correlation	.305**	1			
	Sig. (2-tailed)	.000				
	N	303	303			
**. Correlation is significant at the 0.01 level (2-tailed).						

Source: Primary data

From table 7 above, it was revealed that there is a weak but positive relationship between technology transfer and local firm's procurement participation. The results further revealed that this relationship was statistically significant at 0.01 level of significance since the p-value (0.000) < 0.01. Thus, technology transfer significantly affects procurement participation on the O&G sector of Uganda especially through participation in skills development program, R&D and allocation of resources to that effect.

4.6. Use of locally produced goods and the local firm's participation in procurement process in the O&G sector of Uganda

The second objective of the study was to assess the effect of the use of locally produced goods on the local firm's participation in procurement process in the O&G sector of Uganda. This section of the study sought to establish whether promotion of use of locally produced goods strategy contributed to procurement performance in the oil and gas sector in Uganda. Several question items that were administered to the respondents. The question items were scaled using the five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Not sure, 4 = Agree and 5 = Strongly Agree. The results obtained on the question items are as given in Table below. The percentage for agree is added to strongly agree to denote agreement with that particular item implying high use of local supplies while the percentage of disagree is added to strongly disagree to denote disagree or low use of local supplies.

Table 8 showing results of observed score items on use of local goods and services in the Oil and Gas

Use of local supplies		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
Issuing of procurement guidelines by Licensed oil	Freq	0	270	14	4	15
companies has promoted local firms' participation in oil and gas sector procurement process	Percent	0	89.1	4.6	1.3	5.0
Our company capacity to meet procurement guidelines issued	Freq	13	280	4	6	0
by licensed oil companies has promoted our participation in the Oil and gas sector procurement process	Percent	4.3	92.4	1.3	2.0	0

Simplifying procurement procedures for local firms by	Freq	10	253	33	7	0
Government of Uganda promoted our company participation in Oil and Gas procurement process	Percent	3.3	83.5	10.9	2.3	0
Easy access to procurement	Freq	13	242	35	12	0
procedures for local firms promoted our participation in Oil and Gas industry	Percent	4.3	80.1	11.6	4.0	0
The demand for licensed Oil	Freq	6	156	7	128	5
companies and their contractors to establish operational base in Uganda has promoted our company's participation in O&G procurement process	Percent	2.0	51.7	2.3	42.4	1.7
Access to operational	Freq	11	172	5	110	4
procedures from licensed oil and gas companies has promoted our company's participation in the Oil and Gas procurement process	Percent	3.6	57.0	1.7	36.4	1.3
Conducive operational base for	Freq	12	259	3	27	2
local firms promoted our company participation in the Oil and Gas procurement process	Percent	4.0	85.8	1.0	8.9	0.4
The physical presence of our	Freq	10	280	9	3	0
company in Uganda promoted our participation in the Oil and	Percent	3.3	92.7	3.0	1.0	0

Gas sector procurement						
process						
Our company's ability to meet the standards of goods and	Freq	12	268	7	14	1
services in O&G sector has promoted our participation in the Oil and Gas sector procurement process	Percent	4.0	88.7	2.3	4.6	0.3
The induction by the standard body (ISO or UNBS) on the	Freq	6	228	12	56	0
standards for goods and services in Oil and gas has encouraged our company participation in oil and gas sector procurement process	Percent	2.0	75.5	4.0	18.5	0
Simplifying the UNBS	Freq	6	122	18	146	10
certification procedure promoted our participation in the Oil and gas procurement process	Percent	2.0	40.4	6.0	48.3	3.3
Possession of the UNBS certification standards	Freq	4	129	14	150	5
certificate encouraged our participation in the Oil and Gas Procurement process	Percent	1.3	42.7	4.6	49.7	1.7
Our company's adoption of a	Freq	17	271	4	10	0
quality assurance system to meet the demands of the Oil and Gas sector supplies promoted our participation in the sector's procurement process	Percent	5.6	89.7	1.3	3.3	0

Certification of our supplies by bureau of standards promoted	Freq	9	221	7	65	0
our company's participation in the Oil and Gas sector procurement process	Percent	3.0	73.2	2.3	21.5	0
Adherence to quality standards set by oil companies for local	Freq	2	125	3	118	54
supplies promoted our participation in the Oil and Gas sector procurement	Percent	0.7	41.4	1.0	39.1	17.9
Possession of a recognized quality management certification promoted our	Freq	10	235	52	6	0
certification promoted our participation in the Oil and Gas sector procurement	Percent	3.3	77.6	17.2	2.0	0
All locally available goods are exclusively provided by Ugandan enterprises in O&G	Freq	4	73	42	168	16
Sector to promote local firm's procurement participation	Percent	1.3	24.1	13.9	55.4	5.3
All locally available services are exclusively provided by	Freq	5	77	34	171	16
Ugandan enterprises in O&G Sector to promote local firm's procurement participation	Percent	1.7	25.4	11.2	56.4	5.3

Table 8 reveals that issuing of procurement guidelines by Licensed oil companies has promoted local firms' participation in oil and gas sector procurement process as reported by majority of the respondents 89.1% (n=270). Only 5.3% (n=19) of the respondents disagreed that issuing of procurement guidelines by Licensed oil companies has promoted local firms' participation in oil and gas sector procurement process.

It was also revealed that the company's capacity to meet procurement guidelines issued by licensed oil companies promoted the respondent's company participation in the Oil and gas sector procurement process as reported by 96.7% (n=293) and only 2.0% (n=6) disagreed that their company's capacity to meet procurement guidelines issued by licensed oil companies promoted the company's participation in the Oil and gas sector procurement process.

Further analysis revealed that majority 60.8% (n=184) of the respondents disagreed that all locally available goods are not exclusively provided by Ugandan enterprises in O&G Sector to promote local firm's procurement participation, about 13.9% (n=42) of the respondents reported that they were not sure whether all locally available goods are not exclusively provided by Ugandan enterprises in O&G Sector and only 25.4% (n=77) of the respondents agreed that all locally available goods are exclusively provided by Ugandan enterprises in O&G Sector to promote local firm's procurement participation.

Similarly, 61.7% (n=186) of the respondents disagreed that all locally available services are exclusively provided by Ugandan enterprises in O&G Sector to promote local firm's procurement participation, 11.2% of the respondents reported that they were not sure and 27.1% (n=82) of the respondents agreed that all locally available services are exclusively provided by Ugandan enterprises in O&G Sector to promote local firm's procurement participation.

These findings suggest that about half of the SMEs did not benefit from the condition demanding for licensed Oil companies and their contractors to establish operational base in Uganda. SMEs were constrained to access to operational procedures from licensed oil and gas companies factor which constrained participation in the Oil and Gas procurement

process by local SMEs. About half of the SMEs were constrained to access UNBS certification standards certificate suffocating their participation in O&G Procurement process. About half of the SMEs did not enjoy the exclusive tendering for Ugandan enterprises provision in the national local content policy.

Relationship between use of local goods and services and local firm's procurement participation.

For the researcher to investigate whether there is any relationship between use of local goods and services and local firm's procurement participation, a Pearson product-moment r correlation was be conducted and the findings are presented below.

Table 9 showing relationship between use of local goods and services and local firm's procurement participation.

		Procurement	Use of local goods			
		participation	and services			
Procurement	Pearson Correlation	1	.495**			
participation	Sig. (2-tailed)		.000			
	N	303	303			
Use of local goods and	Pearson Correlation	.495**	1			
services	Sig. (2-tailed)	.000				
	N	303	303			
**. Correlation is significant at the 0.01 level (2-tailed).						

Source: Primary data

Table 9 above reveals that there is a moderately strong positive (0.495) relationship between use of local goods and services and local firm's procurement participation. Table 9 further revealed that this relationship was statistically significant at 0.01 level of significance since the p-value (0.000) < 0.01. Thus, use of local supplies promotes procurement participation in the O&G sector of Uganda especially with issuance of

procurement guidelines and their simplification and standards certification to promote quality and exclusive local tendering.

4.7. Promotion of business competitiveness and the local firm's participation in procurement process in the O&G sector of Uganda

The third objective of the study was to assess the effect of promotion of business competitiveness on the local firm's participation in procurement process in the O&G sector of Uganda. This section of the study sought to establish whether promotion of business competitiveness strategy contributed to procurement performance in the oil and gas sector in Uganda. Several question items that were administered to the respondents. The question items were scaled using the five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Not sure, 4 = Agree and 5 = Strongly Agree. The results obtained on the question items are as given in Table below. The percentage for agree is added to strongly agree to denote agreement with that particular item implying high promotion of competitiveness of local firms while the percentage of disagree is added to strongly disagree to denote disagree or low promotion of business competitiveness.

Table 10 showing results of observed score items on promotion of business competitiveness strategy

Promotion of business competitiveness strategy		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
Government of Uganda has simplified procedures for registering local firms to promote their participation in the	Freq	13	245	37	6	1
Oil and Gas sector procurement process	Percent	4.3	80.9	12.2	2.0	0.3
Access to simplified procedures for registering local firms in the Oil and Gas sector fostered your	Freq	9	244	34	14	1
company participation in the Oil and Gas procurement process	Percent	3.0	80.8	11.3	4.6	0.3
Possession of an authentic and valid Certificate of	Freq	13	281	6	2	0

Incorporation and/or registration promoted our company participation in the oil and gas sector procurement process	Percent	4.3	93.0	2.0	0.7	0
Government of Uganda has simplified procedures for	Freq	14	233	42	13	0
Licensing local firms to stimulate their participation in the Oil and Gas sector procurement process	Percent	4.6	77.2	13.9	4.3	0
Simplified Procedures for Licensing local firms in the Oil	Freq	15	231	41	15	0
and Gas sector have promoted your procurement participation	Percent	5.0	76.5	13.6	5.0	0
Access to simplified licensing	Freq	10	238	41	13	0
procedures for local firms promoted our company participation in the Oil and Gas sector procurement process	Percent	3.3	78.8	13.6	4.3	0
Open bidding as a prerequisite for licensing oil companies	Freq	69	231	0	2	0
promoted your company participation in Oil and Gas Sector procurement process	Percent	22.8	76.5	0	0.7	0
Compliance with tax requirements promoted your	Freq	20	277	3	2	0
company participation in the oil and gas sector procurement process	Percent	6.6	91.7	1.0	0.7	0
Compliance with social security obligations has promoted your	Freq	33	265	2	2	0
company participation in the oil and gas sector procurement process	Percent	10.9	87.7	0.7	0.7	0
Compliance to the bidding guidelines published by Oil companies promoted your	Freq	12	279	8	3	0
company participation in the oil and Gas sector procurement process	Percent	4.0	92.4	2.6	1.0	0
Our company's prequalification as supplier in the oil and gas	Freq	14	183	6	89	10
sector supplier's database has promoted our company procurement participation	Percent	4.6	60.6	2.0	29.5	3.3
The support received from the oil and gas sector supplier development fund promoted our	Freq	16	255	21	10	0
	Percent	5.3	84.4	7.0	3.3	0

company participation in the oil and oil and Gas sector procurement process						
Access to funds from the Oil and gas Development fund promoted	Freq	10	271	11	10	0
our company's participation in the oil and gas sector procurement process	Percent	3.3	89.7	3.6	3.3	0
Access to credit from banks and other financial institutions	Freq	7	177	5	104	9
promoted our company's participation in the oil and gas sector procurement process.	Percent	2.3	58.6	1.7	34.4	3.0
Access to 30% advance from Oil	Freq	2	41	1	203	55
and Gas companies promoted our participation in the Oil and Gas sector procurement process	Percent	0.7	13.6	0.3	67.2	18.2

Concerning Government of Uganda simplifying the procedures for registering local firms to promote their participation in the Oil and Gas sector procurement process, this study revealed that majority 85.2% of the respondents agreed to the statement, 12.2% were not sure and only 2.3% of the respondents disagreed to the statement. This implies that the government of Uganda is doing all that is possible to simplify the procedures for registering local firms. A case in point is that in 2019, the government of Uganda through the Petroleum Authority introduced an online system for firms seeking to be added to the National Supplier Database to attest that their registration documents are authentic. This was aimed at fast tracking the process of registration and cutting costs involved.

During this study, the researcher was interested in knowing whether access to simplified procedures for registering local firms in the Oil and Gas sector fostered the company's participation in the Oil and Gas procurement process and majority 83.8% of the respondents reported that their participation in the procurement process of the oil and gas

sector in Uganda was fostered by access to simplified procedures for registering local firms in the Oil and Gas sector and only 4.9% of the respondents disagreed.

During this study, it was majority of the respondents also revealed that possession of an authentic and valid Certificate of Incorporation and/or registration promoted their company's participation in the oil and gas sector procurement process as reported by 97.3% (n=294), about 2.0% of the respondents reported that they were not sure whether possession of an authentic and valid Certificate of Incorporation and/or registration promoted their company's participation in the oil and gas sector procurement process and only 0.7% of the respondents reported that possession of an authentic and valid Certificate of Incorporation and/or registration did not promote their company's participation in the oil and gas sector procurement process.

This study findings imply that a reasonable number of SMES though prequalified as supplier in the oil and gas sector supplier's database were still constrained to participate in the O&G sector procurement. The findings also reveal that SMES were constrained to access to credit from banks and other financial institutions while most SMEs did not enjoy a 30% procurement advance from IOC as provided for in the national local content policy to reduce on financial constraints experience by local SMEs.

Correlation results between promotion of business competitiveness strategy and procurement participation.

In order to investigate whether there is any relationship between promotion of business competitiveness strategy and local firm's procurement participation, a Pearson product-moment r correlation was be conducted.

Table 11 showing the relationship between promotion of business competitiveness strategy and local firm's procurement participation

		Promotion of business competitiveness strategy		
Promotion of business	Pearson Correlation	1	.527**	
competitiveness strategy	Sig. (2-tailed)		.000	
strategy	N	303	303	
Procurement participation	Pearson Correlation	.527**	1	
	Sig. (2-tailed)	.000		
	N	303	303	
**. Correlation is signif	icant at the 0.01 level (2	2-tailed).		

Table 11 above, revealed a correlation coefficient of 0.527 which implies that there is a moderately strong positive relationship between promotion of business competitiveness strategy and local firm's procurement participation. The correlation is significant at 0.01 level of significance since the p-value 0.000 is less than 0.01 (p<0.01). This implies that promotion of business competitiveness contributed to procurement participation through business registration, Licensing, Compliance, Business Development, and facilitation of financial access.

4.8 Multiple Regression Model

A multiple regression was performed, and the results below were obtained. The multiple regression was also used to form an opinion on the study hypotheses that avers that:

- There is no significant relationship between technology transfer and local firms' participation in procurement process in the O&G sector of Uganda.
- There is no significant relationship between the use of locally produced goods and services and local firms' participation in procurement process in the O&G sector of Uganda.

3. There is no significant relationship between the promotion of business competitiveness does not significantly affect the local firms' participation in procurement process in the O&G sector of Uganda.

For the researcher to assess the impact of technology transfer, use of locally produced goods and promotion of competitiveness on local firms' procurement participation in the O&G sector of Uganda.

Tables 12: Model summary

Model S	Model Summary							
			Adjusted R	Std. Error of the				
Model	R	R Square	Square	Estimate				
1	.581ª	.338	.331	2.7050				

a. Predictors: (Constant), Technology Transfer, Promotion of business competitiveness strategy, Use of local goods and services

Source: Primary data

Table 12 above illustrates that the adjusted R^2 of the model is .331 and the R^2 = .338. This implies that 33.8% of the variations in procurement participation can be explained by technology transfer, promotion of business competitiveness strategy and use of local goods and services.

The results in table 13 below illustrate the F-statistics of the model. It was observed that the F-statistic of the model was statistically significant at 0.05 level of significance since the p-value (0.000) < 0.05 thus we can assume that the model explains a statistically significant amount of the variance in procurement participation of local firms in the Oil and Gas sector in Uganda.

Table 13 showing the F-statistic of the model.

			ANOVA ^a			
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1116.698	3	372.233	50.874	.000 ^b
	Residual	2187.718	299	7.317		
	Total	3304.416	302			

a. Dependent Variable: Procurement participation

b. Predictors: (Constant), Technology Transfer, Promotion of business competitiveness strategy, Use of local goods and services

Chistana	lardized	Standardized			95.0%	Confidence
Coeffici	ents	Coefficients			Interval f	for B
	Std.				Lower	Upper
В	Error	Beta	t	Sig.	Bound	Bound
37.798	3.260		11.595	.000	31.383	44.214
.226	.040	.338	5.611	.000	.147	.306
.193	.047	.249	4.120	.000	.101	.285
.078	.033	.119	2.373	.018	.013	.143
	B 37.798 ss .226 ad .193 .078	B Error 37.798 3.260 ss .226 .040 ad .193 .047 .078 .033	Std. B Error Beta 37.798 3.260 ss .226 .040 .338 dd .193 .047 .249	Std. B Error Beta t 37.798 3.260 11.595 ss .226 .040 .338 5.611 dd .193 .047 .249 4.120 .078 .033 .119 2.373	Std. B Error Beta t Sig. 37.798 3.260 11.595 .000 ss .226 .040 .338 5.611 .000 nd .193 .047 .249 4.120 .000 .078 .033 .119 2.373 .018	Std. Lower B Error Beta t Sig. Bound 37.798 3.260 11.595 .000 31.383 ss .226 .040 .338 5.611 .000 .147 ad .193 .047 .249 4.120 .000 .101 .078 .033 .119 2.373 .018 .013

$$Y = 37.798 + 0.338X_1 + 0.249X_2 + 0.119X_3$$

Where;

Y= Local firms' procurement participation

 X_1 = Promotion of business competitiveness strategy

X₂= Use of local goods and services

X₃=Technology Transfer

From table 13 above, it was revealed that when promotion of business competitiveness strategy, use of local goods and services and technology transfer is zero, local firms' procurement participation in the Oil and Gas sector of Uganda is 37.788.

The standardized coefficient results show that promotion of business competitiveness strategy has the strongest effect on local firms' procurement participation (β = 0.338) implying that a unit increase on promotion of business competitiveness would result into 0.338 unit increases on procurement participation which is significant at 5% level of significance since the p-value 0.000 <0.05. The study therefore did not accept the Null Hypothesis Promotion of business competitiveness does not significantly affect the local firms' participation in procurement process in the O&G sector of Uganda in favor of the directional hypothesis that Promotion of business competitiveness positively affect the local firms' participation in procurement process in the O&G sector of Uganda.

The study further revealed that a unit increase in use of local goods and services would on average lead to 0.249 ($\beta = 0.249$) increases in procurement participation in the Oil and Gas sector of Uganda keeping other factors constant. This is statistically significant at 5% level of significance since the p-value (0.000) <0.05 thus it can be concluded that local firms' procurement participation in the Oil and Gas sector of Uganda depends on use of local goods and services. The study therefore dropped the Null Hypothesis that use of locally produced goods and services does not significantly affect the local firms' participation in procurement process in the O&G sector of Uganda in favor of the directional hypothesis that use of locally produced goods and services positively affect the local firms' participation in procurement process in the O&G sector of Uganda.

The analysis also revealed that a unit increase in technology transfer would on average lead to 0.119 increases in procurement participation in the Oil and Gas sector of Uganda keeping other factors constant (β = 0.119). This is statistically significant at 5% level of significance since the p-value (0.018) <0.05 thus it can be concluded that local firms' procurement participation in the Oil and Gas sector of Uganda depends technology transfer. The study therefore dropped the Null Hypothesis that Technology transfer does not significantly affect the local firms' participation in procurement process in the O&G sector of Uganda in favor of the directional hypothesis that Technology transfer positively affect the local firms' participation in procurement process in the O&G sector of Uganda.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

The general objective of the study was to assess the effect of local content strategies on local firms' participation in procurement process in the O&G sector of Uganda. Specifically, the study assessed the effect of technology transfer on local firms' participation in procurement process in the O&G sector of Uganda. This chapter presents the study findings summary, discussion, conclusions, recommendations, limitations, contribution and areas for further study.

5.2. Summary of the findings

5.2.1. Technology transfer and local firms' participation in procurement process in the O&G sector of Uganda

The study found tremendous effort directed to skills transfer component of technology transfer to local SMEs using eh affirmative action. However, it is sufficed to note that there were still significant technology transfer gaps as a about half of the SMEs where not in partnership with Foreign Oil companies, government and universities to conduct Research and technology development.

There is a weak positive relationship between technology transfer and local firm's procurement participation. The multiple regression shows that a unit increase in technology transfer would on average lead to 0.119 increases in procurement participation in the Oil and Gas sector of Uganda keeping other factors constant (β = 0.119). The study therefore dropped the Null Hypothesis that Technology transfer does not significantly affect the local firms' participation in procurement process in the O&G sector of Uganda in favor of the directional hypothesis that Technology transfer positively affect the local firms' participation in procurement process in the O&G sector of Uganda.

5.2.2. Use of locally produced goods and the local firm's participation in procurement process in the O&G sector of Uganda

The study found positive progress in promotions of use of locally produced goods by was of issuing and specifying of procurement guidelines by IOC, creating of conducive operational environment, physical presence of our company in Uganda, induction and certification by the standard body, however, there were still significant gaps as about half of the SMEs did not benefit from the condition demanding for licensed Oil companies and their contractors to establish operational base in Uganda while about 4 in every 10 SMEs were constrained to access to operational procedures from licensed oil and gas companies factor which constrained participation in the Oil and Gas procurement process by local SMEs. About half of the SMEs were constrained to access UNBS certification standards certificate suffocating their participation in O&G Procurement process. The study also finds that about half of the SMEs did not enjoy the exclusive tendering for Ugandan enterprises provision in the national local content policy.

There was a moderately strong positive relationship between use of local goods and services and local firm's procurement participation. a unit increase in use of local goods and services would on average lead to 0.249 ($\beta = 0.249$) increases in procurement participation in the Oil and Gas sector of Uganda keeping other factors constant. The study therefore dropped the Null Hypothesis that use of locally produced goods and services does not significantly affect the local firms' participation in procurement process in the O&G sector of Uganda in favor of the directional hypothesis that use of locally produced goods and services positively affect the local firms' participation in procurement process in the O&G sector of Uganda.

5.2.3. Promotion of business competitiveness and the local firm's participation in procurement process in the O&G sector of Uganda

The study found out that most SMEs expresses satisfaction with has simplifications of procedures for registering local firms, encouragement of possession of an authentic and valid Certificate of Incorporation and/or registration promoted company participation, use of open competitive bidding, tax regime, access to funds from the Oil and gas Development fund. However, about 4 in every 10 SMES though prequalified as supplier in the oil and gas sector supplier's database were still constrained to participate in the O&G sector procurement. Similarly, the study found that about 4 in every 10 SMES were constrained to access to credit from banks and other financial institutions. It was also found that about 80% of the SMEs did not enjoy a 30% procurement advance from IOC.

There was a moderately strong positive relationship between use of promotion of business competitiveness and local firm's procurement participation. The standardized coefficient results show that promotion of business competitiveness strategy has the strongest effect on local firms' procurement participation ($\beta = 0.338$) implying that a unit increase on promotion of business completeness would result into 0.338 unit increase on procurement participation which is significant (p-value 0.000 <0.05). The study therefore did not accept the Null Hypothesis Promotion of business competitiveness does not significantly affect the local firms' participation in procurement process in the O&G sector of Uganda in favor of the directional hypothesis that Promotion of business competitiveness positively affect the local firms' participation in procurement process in the O&G sector of Uganda.

5.3. Discussion of the study findings

5.3.1. Technology transfer and local firms' participation in procurement process in the O&G sector of Uganda

The study found a positive relationship between technology transfer and local firm's procurement participation implying that Technology transfer positively affect the local firms' participation in procurement process in the O&G sector of Uganda. The finding of a significant relationship between technology transfer and procurement participation in the O&G sector of Uganda is not unique to it as previous studies such as Mohamad, Sapuan, (2012) Libyan study which found out that technology learning capability factor significantly contributed to participation of local firms in the O&G sector of Libya. In the same line Esteves and Barclay (2011) reported that backward technological linkages stimulate procurement of locally produced input materials for further production. Brand (2017) commends the role of technology transfer strategies in the local content policy for supporting the knowledge transfer necessary for participation by local SMEs in the extractive sector.

5.3.2. Use of locally produced goods and the local firm's participation in procurement process in the O&G sector of Uganda

There was a moderately strong positive relationship between use of local goods and services and local firm's procurement participation implying that use of locally produced goods and services positively affect the local firms' participation in procurement process in the O&G sector of Uganda. This study findings are in line with the observation that Procurement of goods and services from Ugandan suppliers by oil and gas companies is enshrined in Uganda's petroleum policies and laws (ACODE, 2014) requiring Ugandan subcontractors being given preference. However, the value of supplies in the oil and gas

sector by Ugandan suppliers from 2010-2013 amounted to USD 329.9 million representing 28% of the total spent for all the oil companies though Ugandan companies comprised about 73% of pre-qualified suppliers (Auditor general, 2015).

5.3.3. Promotion of business competitiveness and the local firm's participation in procurement process in the O&G sector of Uganda

The study found out positive relationship between use of promotion of business competitiveness and local firm's procurement participation. Thus, promotion of business competitiveness contributed to procurement participation through business registration, Licensing, Compliance, Business Development, and facilitation of Financial access. This study findings are supported by Ejiro (2017) who noted that local SMEs can compete favorably in the oil and gas sector procurement process if only they adopt 5 strategy approach; business environment awareness, low cost strategy, joint partnerships, competent personnel, integrity and sound financial management. According to Byaruhanga and Mwakali (2011), the informal nature of local firms initiatives affects the governance of firms. This limits compliance to the requirements to supply of good and services for oil and gas sector. Byaruhanga and Mwakali (2011) further notes that formal requirements are often strict when working with the oil and gas sector implying that staff competence be documented.

5.4. Conclusions of the study

5.4.1. Technology transfer and local firms' participation in procurement process in the O&G sector of Uganda

It was concluded that technology transfer significantly affects procurement participation on the O&G sector of Uganda especially through participation in skills development program, R&D and allocation of resources to that effect.

5.4.2. Use of locally produced goods and the local firm's participation in procurement process in the O&G sector of Uganda

It was concluded that use of local supplies significantly affects procurement participation in the O&G sector of Uganda especially with issuance of procurement guidelines and their simplification and standards certification to promote quality and exclusive local tendering.

5.4.3. Promotion of business competitiveness and the local firm's participation in procurement process in the O&G sector of Uganda

It was inferred that promotion of business competitiveness affects procurement participation in the O&G sector through business registration, Licensing, Compliance, Business Development, and facilitation of Financial access.

5.5. Recommendations of the study

The study found that although local Uganda SMEs to great actively participated in the O&G sector, there were still significant challenges that constrained procurement participation by local SMEs. This major section presents, the action points that the primary stakeholders in the sector need to undertake and how best they could be implemented to enhance procurement participation.

5.5.1. Technology transfer and local firms' participation in procurement process in the O&G sector of Uganda.

- 1. It was found that about half of the local SMEs had no R&D partnerships IOC and Petroleum Authority of Uganda. To enhance procurement participation, the study recommended that the Petroleum Authority of Uganda in pursuit of its mandate of developing R&D in the sector, should undertake to identity R&D areas and develop R&D sponsorship proposals and market them with Foreign Oil companies for R&D in partnerships with local SMEs.
- 2. The study finding point to about half of local SMEs being constrained to engaged in partnerships with reputable local firms and academic institutions in Uganda for technological capacity enhancement for local supplies. Arising from the above raised challenge, this study recommends that the Petroleum Authority of Uganda in pursuit of its mandate of technological capacity enhancement in the sector should identify technological capacity training needs in liaison with educational institutions to develop technological capacity for local O&G supplies to enhance procurement participation in the O&G sector.
- 3. About half to the SMEs did not access O & G scholarships to study within Uganda and aboard. To enhance procurement participation, it is recommended that the Petroleum Authority should solicit for local and international scholarships to build O &G sector local capacity. Use of government sponsored loan schemes in the sector could be sought.

5.5.2. Use of locally produced goods and the local firm's participation in procurement process in the O&G sector of Uganda

- 1. This study observes that about half of the SMEs did not benefit from the condition demanding for licensed Oil companies and their contractors to establish operational base in Uganda. It is therefore recommended that the petroleum authority in pursuit of its mandate on monitoring should regularly monitor the O&G suppliers and enforce the requirement that locally registered SMEs are given first priority for locally available supplies and services. Monetary penalization of IOC who do not use prequalified list of locally registered suppliers could be sought.
- 2. It was also found that about 4 in every 10 SMEs were constrained to access to operational procedures from licensed oil and gas companies factor which constrained participation in the Oil and Gas procurement process by local SMEs. It is therefore recommended that to enhance procurement participation, IOC should organize regular local supplier procurement symposiums workshops to share procurement procedures, policies and certifications requirements oil companies to enable SMEs understand their contract needs/requirements. Use of e-procurement portals, social media and sending of emails procurement guidelines to local suppliers should be encouraged.
- 3. The study found that about half of the SMEs were constrained to access UNBS certification standards certificate suffocating their participation in O&G Procurement process. It is therefore recommended that the National Petroleum Authority in liaison with Uganda National Bureau of Standards should organize standardization workshops for O&G SMEs to enable them implement total quality management to satisfy the O&G sector standards for supplies and services. This will go a long way o enhance adherence to quality standards set by oil companies.

4. The study also finds that about half of the SMEs did not enjoy the exclusive tendering for Ugandan enterprises provision in the national local content policy. To enhance procurement participation, the study recommends that the National Petroleum Authority should regularly monitor the observance of the exclusive tendering policy and enforce suctions on IOC discriminating against local SMEs who are deemed to qualify for procurement in the O&G sector. Enforcement of procurement administrative reviews could be exploited.

5.5.3. Promotion of business competitiveness and the local firm's participation in procurement process in the O&G sector of Uganda

- 1. The study found that about 4 in every 10 SMES though prequalified as supplier in the oil and gas sector supplier's database were still constrained to participate in the O&G sector procurement. It is therefore recommended that IOC should rotate their framework contracts by considering the prequalified list of local suppliers to promote competitiveness of local SMEs in the O&G sector.
- 2. Similarly, the study found that about 4 in every 10 SMES were constrained to access to credit from banks and other financial institutions. It is recommended that the National petroleum Authority in liaison with development partners and Commercial banks should establish an O&G sector SME credit facility to provide short- and long-term credit facilities. Use of bid bond facilities and loan products for SMEs in the O&G sector should be exploited by commercial banks.
- 3. It was also found that about 80% of the SMEs did not enjoy a 30% procurement advance from IOC as provided for in the national local content policy to reduce on financial constraints experience by local SMEs. To enhance local SMEs procurement participation in the O & G sector, the study recommends that the National Petroleum Authority should monitor and enforce this requirement with penalties to offending IOCs.

5.6. Contributions of the study

The study has helped evaluate the level of implementation of the national local content strategy and its effect in on local SME participation in the O&G Sector. This has been the first study of this nature to provide such empirical evidence. The study has also helped to fill knowledge and literature gaps on the effect of local content strategy on procurement participation in the O&G sector.

5.7. Limitations of the Study

A key limitation of the study was its content scope where it only focused on quantitative primary data. The study did not also use expert views would have enhanced the comprehensiveness of the primary information drawn from the study.

5.8. Areas for further research

The study found that 33.8% of the variations in procurement participation can be explained by technology transfer, promotion of business competitiveness strategy and use of local goods and services. Other studies need to examine the effect of capacity building, and promotion of employment strategies as enshrined in the national local content policy on procurement participation.

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APPENDICES

Appendix I: Study Questionnaire

Dear respondent,

I am a student at Kyambogo University pursuing a Master's degree in Procurement and Supply Chain Management. I am carrying out a study on local content strategies and procurement participation by Local SMEs in the Oil and Gas Sector of Uganda. You have been selected to participate in this study by furnishing us with your experiences. Feel free and answer diligently as your responses will be used purely for academic purposes and your responses shall be anonymous.

SECTION A: BACKGROUND INFORMATION (Tick as appropriate)

S/n	Question	Response	Answer
			codes
01	Name of Enterprise		
02	Gender of the respondent	Male	1
		Female	2
03	Position in the company	Owner	1
		Manager	2
		Employee	3
04	Highest level of education	No education	1
	attained:	Primary	2
		Secondary	3
		Certificate	4
		Diploma	5
		Bachelor's Degree	6
		Postgraduate	7
05	What is the nationality of the	Nationals only	1
	owner(s) of the company?	Multinational Company	2
		State owned Enterprises	3
		Joint ventures by nationals and	4
		foreigners	5
		State proportion of foreign ownership	

06	Nature of Enterprise	Sole proprietorship	1
		Partnership	2
		Limited Company	3
		Limited Liability Company (Plc)	4
		Government company/Corporation	5
07	Is the company listed?	Yes	1
		No	2
7b	If Yes, when was the enterprise		
	listed?		
08	For how long has this enterprise	Less than 1 year	1
	supplied the Oil and Gas Sector.	1-3 years	2
		4-7 years	3
		8 years and above	4
09	Nature of Oil and Gas	Goods	1
	procurement	Works	2
		Services	3

Section B: Promotion on business competitiveness strategy

Indicate the extent to which you agree with the following observations on promotion of business competitiveness strategy considerations the Oil and Gas of Uganda. Use a scale of 5= strongly agree, 4= agree, 3= Not sure, 2= disagree, 1= strongly disagree

Code	Question	5	4	3	2	1
P01	Government of Uganda has simplified procedures for registering local firms to promote their participation in the Oil and Gas sector procurement process					
P01	2. Access to simplified procedures for registering local firms in the Oil and Gas sector fostered your company participation in the Oil and Gas procurement process					
P01	3. The Uganda legal framework that promotes local firms' participation in Oil Gas sector					

participation in the oil and Gas sector P01		procurement encouraged your company's		
of Incorporation and/or registration promoted our company participation in the oil and gas sector procurement process P02 5. Government of Uganda has simplified procedures for Licensing local firms to stimulate their participation in the Oil and Gas sector procurement process P02 6. Simplified Procedures for Licensing local firms in the Oil and Gas sector have promoted your procurement participation P03 7. Access to simplified licensing procedures for local firms promoted our company participation in the Oil and Gas sector procurement process P04 8. Open bidding as a prerequisite for licensing oil companies promoted your company participation in Oil and Gas Sector procurement process P05 9. Compliance with tax requirements promoted your company participation in the oil and gas sector procurement process P06 10. Compliance with social security obligations has promoted your company participation in the oil and gas sector procurement process P07 10. Compliance with social security obligations has promoted your company participation in the oil and gas sector procurement process. P08 11. Compliance to the bidding guidelines published by Oil companies promoted your		participation in the oil and Gas sector		
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company participation in the oil and Gas sector		published by Oil companies promoted your		
		company participation in the oil and Gas sector		
procurement process		procurement process		

P03	12. Compliance to contractual obligations			
	stipulated by oil companies encouraged your			
	company participation in oil and gas			
P04	13. Our company's prequalification as supplier in			
	the oil and gas sector supplier's database has			
	promoted our company procurement			
	participation			
P04	14. The support received from the oil and gas sector			
	supplier development fund promoted our			
	company participation in the oil and oil and Gas			
	sector procurement process			
P04	15. Our company past business experience in			
	similar goods and services encouraged our			
	participation in the oil and Gas sector			
	procurement process			
P04	16. Business partnership promoted our company			
	participation in oil and gas sector procurement			
	process			
P05	17. Access to funds from the Oil and gas			
	Development fund promoted our company's			
	participation in the oil and gas sector			
	procurement process			
P05	18. Access to credit from banks and other financial			
	institutions promoted our company's			
	participation in the oil and gas sector			
D0.	procurement process.			
P05	19. Past audit for 3 years promoted our company			
	participation in Oil and Gas sector procurement			
D0.5	process			
P05	20. Access to 30% advance from Oil and Gas			
	companies promoted our participation in the Oil			
	and Gas sector procurement process			

Section C: use of local goods and services

Indicate the extent to which you agree with the following observation on the use of local goods and services in the Oil and Gas sector of Uganda using a scale of 5= strongly agree, 4= agree, 3= Not sure, 2= disagree, 1= strongly disagree

U01 1. Issuing of procurement guidelines by Licensed oil companies has promoted local firms participation in oil and gas sector procurement process U01 2. Our company capacity to meet procurement guidelines issued by licensed oil companies has promoted our participation in the Oil and gas sector procurement process U01 3. Simplifying procurement procedures for local firms by Government of Uganda promoted our company participation in Oil and Gas procurement process U01 4. Easy access to procurement procedures for local firms promoted our participation in Oil and Gas industry U02 5. The demand for licensed Oil companies and	1
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U01 4. Easy access to procurement procedures for local firms promoted our participation in Oil and Gas industry	
firms promoted our participation in Oil and Gas industry	
industry	
U02 5. The demand for licensed Oil companies and	
their contractors to establish operational base in	
Uganda has promoted our company's	
participation in O&G procurement process	
U02 6. Access to operational procedures from licensed	
oil and gas companies has promoted our	
company's participation in the Oil and Gas	
procurement process	
U02 7. Conducive operational base for local firms	
promoted our company participation in the Oil	
and Gas procurement process	

U02	8. The physical presence of our company in		
	Uganda promoted our participation in the Oil		
	and Gas sector procurement process		
U03	9. Our company's ability to meet the standards of		
	goods and services in O&G sector has promoted		
	our participation in the Oil and Gas sector		
	procurement process		
P03	10. The induction by the standard body (ISO or		
	UNBS) on the standards for goods and services		
	in Oil and gas has encouraged our company		
	participation in oil and gas sector procurement		
	process		
P03	11. Simplifying the UNBS certification procedure		
	promoted our participation in the Oil and gas		
	procurement process		
P03	12. Possession of the UNBS certification standards		
	certificate encouraged our participation in the		
	Oil and Gas Procurement process		
U04	13. Our company's adoption of a quality assurance		
	system to meet the demands of the Oil and Gas		
	sector supplies promoted our participation in		
	the sector's procurement process		
U04	14. Certification of our supplies by bureau of		
	standards promoted our company's		
	participation in the Oil and Gas sector		
	procurement process		
U04	15. Adherence to quality standards set by oil		
	companies for local supplies promoted our		
	participation in the Oil and Gas sector		
	procurement		

U04	16. Possession of a recognized quality management			
	certification promoted our participation in the			
	Oil and Gas sector procurement			
U05	17. The demand for licensed Oil companies and			
	their contractors to procure locally available			
	goods and services from Ugandan			
	companies/SMEs promoted our company			
	participation in the Oil and Gas sector			
	procurement process.			
U05	18. The development of local content legal			
	framework encouraged local firms participation			
	in the Oil and Gas sector procurement process			
U05	19. All locally available goods are exclusively			
	provided by Ugandan enterprises in O&G			
	Sector to promote local firm's procurement			
	participation			
U05	20. All locally available services are exclusively			
	provided by Ugandan enterprises in O&G			
	Sector to promote local firm's procurement			
	participation			

Section D: Technology Transfer

Indicate the extent to which you agree with the following observation on Technology Transfer local content strategy in the Oil and Gas of Uganda: Simply tick as appropriate by indicating 5 if you strongly agree, 4 if you agree, 3 if you are not sure, 2 if you disagree, and 1 if you strongly disagree.

CODE		5	4	3	2	1
T01	Our company participates in O&G stakeholders forum for information sharing on skills requirements and standards in the oil and gas					
T01	2. Our company has Developed Procurement Skills Development Strategy and Plan for suppliers in					

	4 1 1 1 1 1	I		
	the oil and gas in Uganda			
TO1	3. Our company has generally gained reasonable			
	knowledge and skills necessary to supply in the			
	oil and gas sector			
TO1	4. Government Oil & Gas Agencies have been			
	compelled to put aside funds for training to			
	develop local human capital			
T02	5. Our company has a partnership with Foreign Oil			
	companies to conduct Research and development			
	in the oil sector			
T02	6. Our firm has a partnership with Uganda			
	government petroleum agencies to conduct			
	Research and development in the oil sector			
T02	7. Our company has an annual training program			
	budget to develop local human capital in the O &			
	G sector of Uganda			
T02	8. The Government of Uganda has put in place			
	training institutions to develop human capital in			
	the Oil & Gas sector			
T03	9. Our Company participated in the formation of a			
	forum for collaborations between Ugandan			
	institutions and international oil companies to			
	enable joint learning and enhancement of R&D			
	capabilities.			
T03	10. Our company has benefited from the joint			
	learning's and enhancement of R&D between			
	Uganda and international institutions			
TO3	11. Our company has partnerships with international			
	agencies for technological development			
TO3	12. Our company has partnered with reputable local			
	firms for technological capacity enhancement for			
	local supplies			

T03	13. Our company partnered with academic			
	institutions in Uganda to enhance local capacity			
	to operate the latest technological equipment and			
	systems in the Oil and gas sector			
TO4	14. Our company has a partnership with Foreign Oil			
	companies to conduct Research and development			
	in the oil sector			
TO4	15. Our firm has a partnership with Uganda			
	government petroleum agencies to conduct			
	Research and development in the oil sector			
TO4	16. Our company has partnership with Ugandan			
	universities to foster Research and Development			
	in Oil and Gas sector			
TO4	17. Our company has a Research and Development			
	fund in Oil and Gas			
T05	18. Our company has been aided with modern			
	production technologies to better our production			
	capabilities to meet requirement in Oil and Gas			
	sector			
T05	19. Our company has procured modern production			
	technologies to better our production capabilities			
	to meet requirements in Oil and Gas sector			
T05	20. Our company has partnered with Uganda			
	universities and other academic to promote			
	Technology development in Oil and Gas			
T05	21. Our company has annual scholarships for			
	Ugandan citizens to study within Uganda and			
	aboard to enhance local capacity to meet			
	requirements for skills to operate the latest			
	technology in Oil and Gas sector			

Section D: Procurement participation

Indicate the extent to which you agree with the following observation on procurement participation by your local firm in the Oil and Gas of Uganda using scale of 5= strongly agree, 4= agree, 3= Not sure, 2= disagree, 1= strongly disagree

CODE			5	4	3	2	1
P01	1.	Our company frequently accesses information on					
		Business Opportunities in the Oil & Gas sector in					
		Uganda					
P01	2.	Our company is aware of the global nature of Oil					
		& Gas sector business					
P01	3.	Our company is aware of the powerful suppliers					
		of goods and services in the Oil and gas sector in					
		Uganda					
P01	4.	Our company formed partnerships with other					
		SMEs with large Ugandan companies and or					
		international companies to tap into the Oil and					
		Gas sector business opportunities					
P02	5.	The Oil & Gas Supplies business environment in					
		Uganda is conducive for local SMEs to operate					
		in the Oil and Gas sector					
P02	6.	The Oil and Gas legal framework is conducive					
		for SME to participate in the Oil and Gas sector					
		procurement process					
P02	7.	The involvement of the NGOs in the Oil and Gas					
		sector development processes in Uganda has					
		been influential in shaping the operating					
		environment for SMEs participation in the sector					
P02	8.	The financial services environment is conducive					
		for the SMEs to access credit for investment in					
		the Oil and gas sector					
P03	9.	Our firm has capacity to influence the price at					
		which it sells its product in the oil and gas sector					

marketing department P03	P03	10. Our company has a well skilled and equipped			
market intelligence fosters our participation in the oil and gas sector procurement process P03		marketing department			
the oil and gas sector procurement process 12. Our firm responds differently to changes in consumers' price sensitivity P04 13. There is a procurement process manual for goods, services and work P04 14. There is proper management of the procurement contracts and an evaluation system is in place for measuring satisfaction levels with our supplies from our contractors P04 15. The staff involved with the procurement have skills sufficient to undertake local content P05 16. Mandating a percentage of procurement spending that local firms should aspire to – and creating incentives (rewards and penalties) for compliance will increase local procurement participation P05 17. Setting a target level of procurement spending that should go to businesses owned by locals including via standard clauses in requests for information/requests for proposals) will increase local procurement participation P05 18. Our company regularly accesses procurement incentives support to participate in the Oil and gas sector procurement process P05 19. Procurement incentives is a way to strengthen	P03	11. Our company marketing department capacity in			
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