Kenya Extractive Industries Development Programme

EXTRACTIVES INDUSTRY LOCAL CONTENT EARLY GAP ANALYSIS

SUMMARY REPORT

SEPTEMBER 2015

UKaid
from the British people

Oil & Energy Services Ltd

Adam Smith International

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. Key Report Findings

The research and analysis described below indicates that it is feasible to maximise the potential for local economic development in the extractives industries in Kenya. The prospects and outcomes of targeted development are discussed throughout the report, with clear recommendations on a supplier development programme, as outlined in the final section. The key findings of the study are summarised below.

A. **The Extractives Sector could have a positive and inclusive economic benefit on the Kenyan economy through local supplier development —** In addition to increasing the taxes and royalties paid out to the government, developing the supply of quality, relevant skills among the labour force, and matching these with the demand for specific goods and services along the supply chain, can significantly harness extractives-driven private sector development domestically. For example, every single job created directly in the extractive industry has the potential to induce six jobs in indirect sectors around the industry, resulting in a wider spread of the economic benefits generated.

B. **Indirect and Direct Services have the most appeal for local supplier development —** The oil and gas, and mining, sectors represent an opportunity for local suppliers to develop and expand products and services. Small and medium enterprises (SMEs), lead contractors and extractives sector companies perceive that indirect services and certain select direct services required by the industry are most suited for local supplier integration. Examples of indirect and direct services such as site logistics support, health support, catering and accommodation, environmental services, and general supplies among others, have high potential for local supplier development and integration into the extractive industry value chain.

C. **Core Technical Services represent a greater challenge for local supplier integration —** Buyers in the extractives sector are more reluctant to integrate local suppliers for this category of goods and services because of the highly technical nature of core technical goods and services, and high project risks associated with their procurement. Examples of these core technical services are well intervention services, reservoir management, casing running, well logging, seismic services and mud logging among others. Suppliers also perceive this category to have the least potential for development as they are unaware of the technical requirements, and to a certain extent, recognise that these services are outside of their realm of expertise. Over time, there are some services which could be introduced in the local market through interventions such as alliances/partnerships, preferred supplier agreements, and subcontracting.

D. **Supply Chain constraints will limit the potential for spreading economic benefits from expanded activity —** Participants from both demand and supply sides (extractives companies and local private sector) recognise the constraints that could limit the prospects of growth and development of services to the extractive industry. Among these are: limited industry experience on the part of local suppliers; limited understanding of international standards for industry participation; lack of specific information on the sectors; needs in terms of goods and services and when they are required; limited access to finance for expansion but also the need to take on additional contracts at the same time; challenges accessing and paying for qualified and technically astute staff to work on these projects.

E. **Skills and Workforce development should remain strongly linked to supplier development —** The development of skills and workforce for local suppliers should be strongly linked to any interventions that seek to ease challenges faced in local supplier integration. Local suppliers have to access qualified and certified staff in order to win contracts and tenders. Identified as a significant challenge by buyers, suppliers should also be able to develop staff to the required levels. The targets for initiatives to support education and training should be linked to local suppliers as they will be the higher generators of employment as extractives sector projects progress. There is an especial need to focus these interventions on semi-skilled professionals and those specialising in vocational trades.

F. **A number of Indirect Sectors would be well-suited for detailed supplier development interventions —** Indirect services provide an immediate area of expansion and optimisation for local supplier development. Specifically those sectors with high feasibility of integration from the demand side and highly suitable for

immediate local enterprise investment present a “low-hanging fruit” opportunity. Examples of these goods and services include energy, construction services, supply chain services, vehicle fleet management, security services, food supplies, general and site support services amongst others. These goods and services are consumed by nearly all economic sectors and are readily available as well as well developed in country.

G. **An Enterprise Development Programme is recommended as being best for the extractives sector —** Strengthening the suppliers’ network, improving technology transfer, and ultimately enhancing the competitiveness of local suppliers to take up business opportunities along the value chain. The enterprise development programme should provide support for local suppliers through the provision of services such as creation and maintenance of a searchable online supplier database, provide information to local suppliers on procurement opportunities, and build required capacity for the local suppliers amongst a host of other enterprise support initiatives. In Mozambique, the SME Empowerment Linkages Programmes (SMEELP) and enterprise development programme has had significant success. Through the programme over 140 SME managers were trained in management and technical best practices and an average of 34% growth in annual sales was achieved by participating SMEs.

2. Introduction

Kenya has an abundance of largely untapped natural resource wealth which, to date, has attracted considerable investor attention. Recent oil discoveries announced by Tullow Oil and Africa Oil signal the strong potential for sector growth in a previously unremarkable upstream oil and gas sector, as well as a robust mining sector, following additional discoveries of rare earth deposits, coal, and other mineral deposits. These developments are projected to grow the economy significantly through direct exploitation of minerals and mineral resources and there are related opportunities that could be leveraged further for the benefit of Kenya’s economic growth and development.

Local content, broadly defined as “all resources, human and not, that can be employed or sourced in the country w[h]ere the business activities take place,” represents one such opportunity. Local content primarily concerns itself with the development of skills (workforce) and competitive provision of goods and services (supplier development) to generate additional value from sector activity, which benefits broader areas of the economy. Through targeted interventions, local content development can be utilised to generate wealth and increased incomes for the broader population, an outcome critical for developing countries.

3. Assignment Overview

In light of the opportunity to utilise local content development as a method for improving livelihoods, DFID commissioned a study that would outline more clearly the opportunities and challenges of development of the local supply chains for the extractives sector in Kenya. The study aimed at ascertaining the demand from extractive industry companies for goods, services and labour, the potential for supply from the Kenyan private sector and labour market, and the gaps that need to be addressed in order to optimise the broader impact of the extractive industries on Kenya’s economy. Further aspects of the study are described below.

4. Methodology and Approach

The report is based on a value chain analysis, which explores the structures, systems and relationships that define activities and affect behaviour in the extractives sectors. Its aims are to identify specific constraints that can be addressed through local content policies and strategies. Specifically, the report examines local private sector players and the factors affecting their ability to provide goods and services to the extractives sector.

The study was undertaken after wide consultation across industry and the local private sector, industry experts, business chambers and associations, in a variety of interactions that included phone calls, email correspondence, interviews, follow-up meetings, and requests for information. Specific data collection focused on interviews, consultative meetings and survey questionnaires sent to nearly 100 companies/SMEs active in Kenya, and follow-up

data requests and analysis were undertaken to uncover the real potential for local supplier integration in the extractives industry value chain.

Utilising data from interviews and a local content survey, a supply chain development model was then generated highlighting selected sectors to be prioritised for local supplier development. The model also projected requirements for the workforce under different investment scenarios and provided insight on related workforce needs for local suppliers. With insights from industry participants on constraints, challenges, and opportunities, model prioritisation and scenario projections, a set of recommendations were developed, focused on a combined supplier development programme.

5. Limitations

Several impediments were encountered during the study that had a direct impact on the study and its findings. The current level of operations in the country is not without great significance: In Kenya, oil and gas operations are at a very early stage of development, with most players still undertaking data acquisition activities. Indeed, while respondents were happy to share qualitative information regarding local content challenges and opportunities, many found it uniformly hard or impossible to share quantitative specifics (monetary values, current contract numbers/amounts, forward purchase plans, etc.). In addition, as there is no legal requirement for local content reporting obligations in Kenya, companies do not have harmonised procurement reporting, hence making it difficult to obtain homogeneous data. This meant that the study had to rely on projection and scenario data to harmonise content and estimate the expected level of activity in the sectors.

Challenges with data collection for this sector were also impacted by the downturn in oil prices during the course of the study. This led to International Oil Companies adopting new strategies related to their exploration activities. Most of them reduced budgets drastically and restructured, or put their activities on hold. This created an extra level of uncertainty as to the reliability of industry-level projections. The reform in petroleum regulations also introduced some uncertainty within the environment of the study and played a role in limited responses during data collection. The mining sector also faced similar challenges with mining law and regulations under review in Parliament. The state of licensure was quite uncertain for certain players, thereby leading to low responsiveness to data collection, as well as a slowdown in project undertakings.

6. Country Context

6.1 Kenya's Mining Industry

Kenya's mining industry is dominated by the production of non-metallic minerals, including industrial minerals such as soda ash, fluorspar, kaolin and some gemstones. Mining and quarrying currently contributes 0.8% of the GDP and around 3% of export revenues. Most of the activity in Kenya comprises of relatively small operations with world class developments in early stages of exploration. Among minerals being commercially mined are:

Mineral	Companies	Notes
Soda Ash	Tata Chemicals Magadi	- TCM is Africa's largest soda ash manufacturer and one of Kenya's leading exporters
Fluorspar	Kenya Fluorspar Company Ltd	- Fluorspar is the second largest income earner - About 360,000 tons of ore mined annually for export - Locations in Kerio Valley, east of the town of Eldoret
Diatomite	African Diatomite Industries Limited	- Has access to viable quality diatomite deposits of over 6M tons in Gilgil region - Mainly mined for export - ADIL is currently modernising its plant to enhance production capacity
Limestone and Lime Products	National Cement Company Bamburi Cement Athi River Mining East Africa Portland Cement	- Produced for manufacture of cement and other industrial products - Cement and construction industry take bulk of limestone mined and quarried

Mineral	Companies	Notes

	Savannah Cement	- Estimated annual capacity for cement production:
		  - Bamburi Cement: 2.3M tons
		  - East Africa Portland Cement Company (EAPCC): 1.4M tons
		  - Athi River Mining: ~1M tons
		  - Mombasa Cement: ~ 1.6M tons
		  - Savannah Cement: 1.5M tons

Iron Ore	Skylight Limited Wanjala Mining Company Ltd/ R.K. Sanghani	- Mainly for use in domestic manufacture of cement - New steel plants project sourcing about 40% of required iron ore from domestic producers
Gold	Artisanal Miners Karebe Gold Mining Ltd	- Several small greenstone belts and operations in West and Southern parts of Kenya

Titanium and Mineral Sands	Base Titanium	- One of Kenya's world class advanced development project
		- Constitutes about 2/3 of mineral sector in Kenya with:
		  - Titanium: 140M tons
		  - Rutile: 80K tons annually
		  - Zirconthe: 40K tons annually
		  - Ilmenite: 330K tons annually
		- Estimated project capital cost of USD 300M
		- Estimated USD 100M to be designated as direct spend in Kenya (contractors, machinery and equipment, goods and services and employment during construction)
		- Estimated USD 260M – 300M tax revenue through mine life
		- Estimated contribution of 1% to GDP
		- Other project prospects in Mambrui, Kilifi, and Vipingo

Base Metal Prospecting	Acacia Mining	- Project constitutes about 2,800km^2 of Ndori Greenstone Belt as well as Lake Zone gold camp - Potential for gold, copper, lead and zinc - Project constitutes advanced knowledge of belt geology and structure - Will also include drill testing of up to 50,000 meters of air core, reverse circulation and diamond drill core, and to collect more than 15,000 auger and soil samples throughout the properties
Carbon Dioxide	Carbacid Co_2 Ltd. BOC Kenya Limited	- About 16,000 metric tons produced annually though Carbacid has capacity to produce 35,000 MT annually
Gypsum	Yamata Gypsum Limited Athi Stores Ltd	- Primarily used in production of cement with about 7,000 MT produced annually
Gemstones	Kutima Investment Limited Bridges Exploration Ltd First Green Garnet (Co) Kenya Ltd Kilimapesa Gold Pty Limited	- Various precious and semi-precious stones - Cumulative production annually of about 17,550 kilograms
Magnesite	Mineral Mining (1965) Corporation Ltd	-
Silica Sand	Eastern Chemical Industries Limited	-
Coal	Fenxi Mining and Great Lakes Corporation	- Estimated 400M tons of coal - Estimate value of USD 40B - Investment required of close to USD 500M in exploration and production

Table 1: Summary of Mining Sector Activity in Kenya
Source: Interview and Research Data

Currently in Kenya, operations are at different stages for different players. Some are in early exploration, while others are in production. Depending on the mineral being exploited, operations could have started as recently as 2014, or as early as the 1940s. The sector is thus characterised by an extensive range of activity across time and at different scales of operation – many of which are relatively small in size.

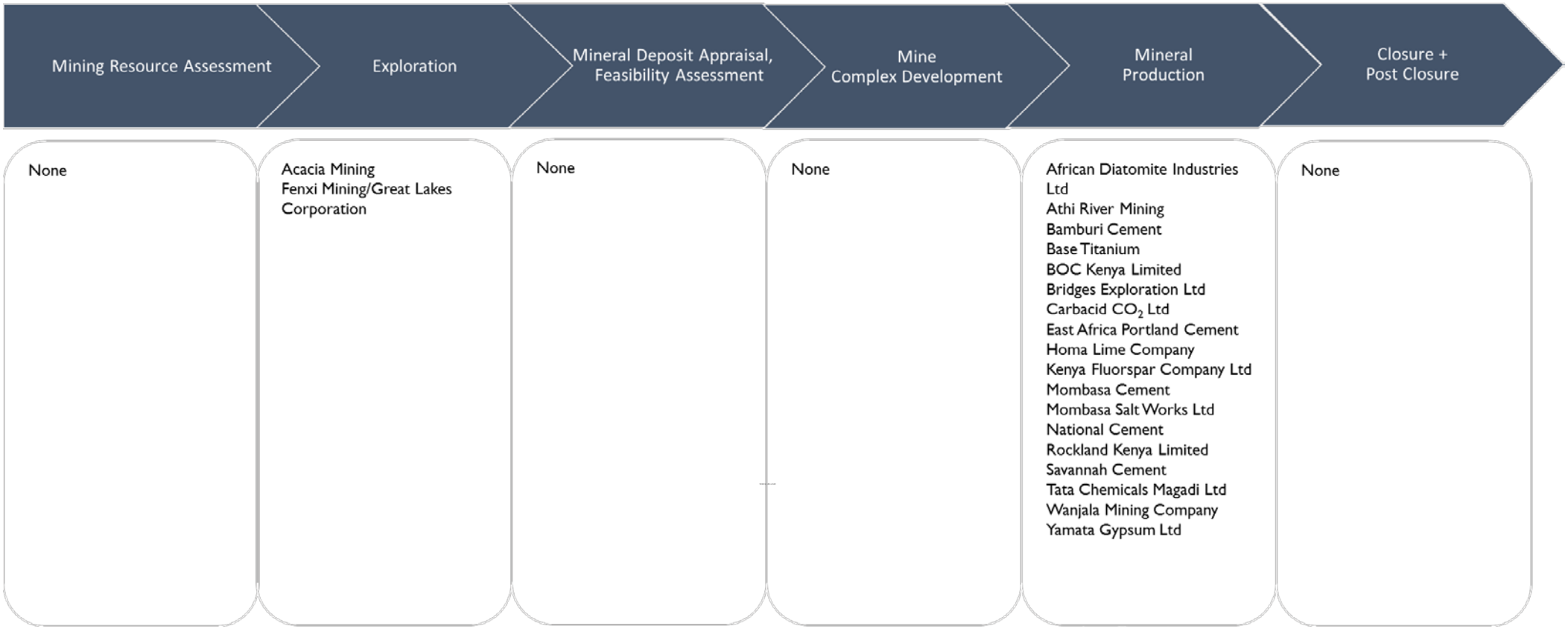

Figure 1: List of Mining Companies and Phase of Operations
Source: Interview and Research Data

Mining companies operate with the assistance of service providers who offer their services, whether tangible or intangible, for the sole benefit of the mining company's activities. These types of companies are also categorised according to the type of service(s) they provide, which can be at a specialist or direct capacity in relation to the mining company's scope of work. In Kenya, service companies are to be found in various sectors of the economy. Examples of services provided include drilling and blasting, transportation and logistics, equipment hire, security, catering and accommodation, and environmental consulting services.

6.2 Kenya's Upstream Oil and Gas Sector

In the last decade, the Eastern Africa region has emerged as a major destination for oil and gas exploration. The discovery of oil in Uganda in 2006 opened the way for East Africa's success in hydrocarbons. In the time period 2010 to 2013, more hydrocarbons were found in the Eastern Africa region than anywhere else in the world.

Uganda, having already gone through the appraisal stage, is set to begin production of oil as early as 2017, if its ambitious plans can be achieved. Onshore oil discoveries have now been made in Kenya where increased exploration activities have seen a number of international oil companies taking part in prospecting in the country's 46 exploration blocks.

Out of 46 blocks, 39 are licensed to 22 operators, including one block for the National Oil Company of Kenya (NOCK). Plans are under way to license open and relinquished blocks available in the near future. Currently in Kenya most operators are in the early stage of operations, with most undertaking exploration activity. As noted in the industry overview, only one operator, Tullow Oil, along with its partner Africa Oil, has made significant progress into the appraisal stage. However, their activities are yet to produce any scoping or feasibility studies; this means that project plans are not yet developed and the scope of operations is not very well defined.

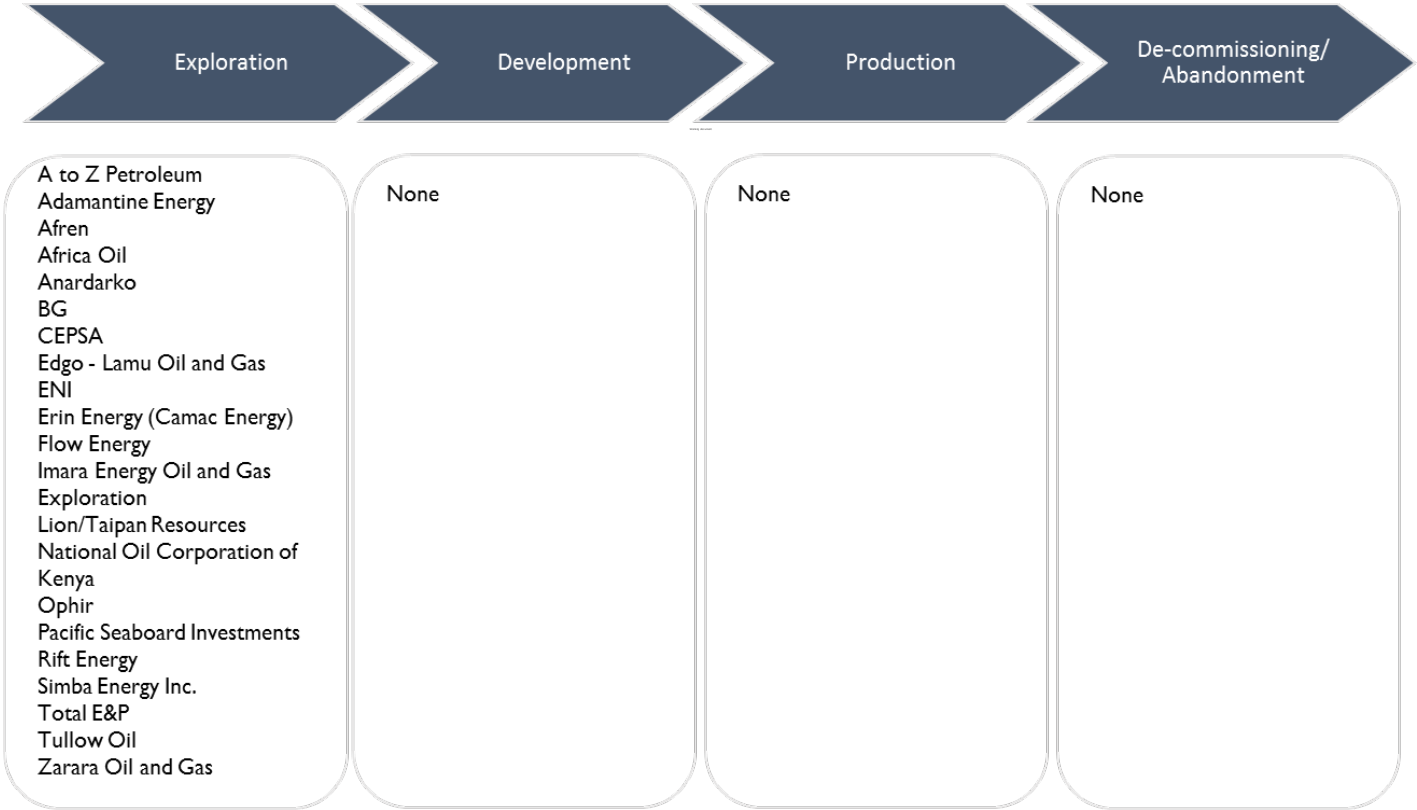

Figure 2: List of Oil and Gas Operators and Phase of Operations
Source: Interview and Research Data

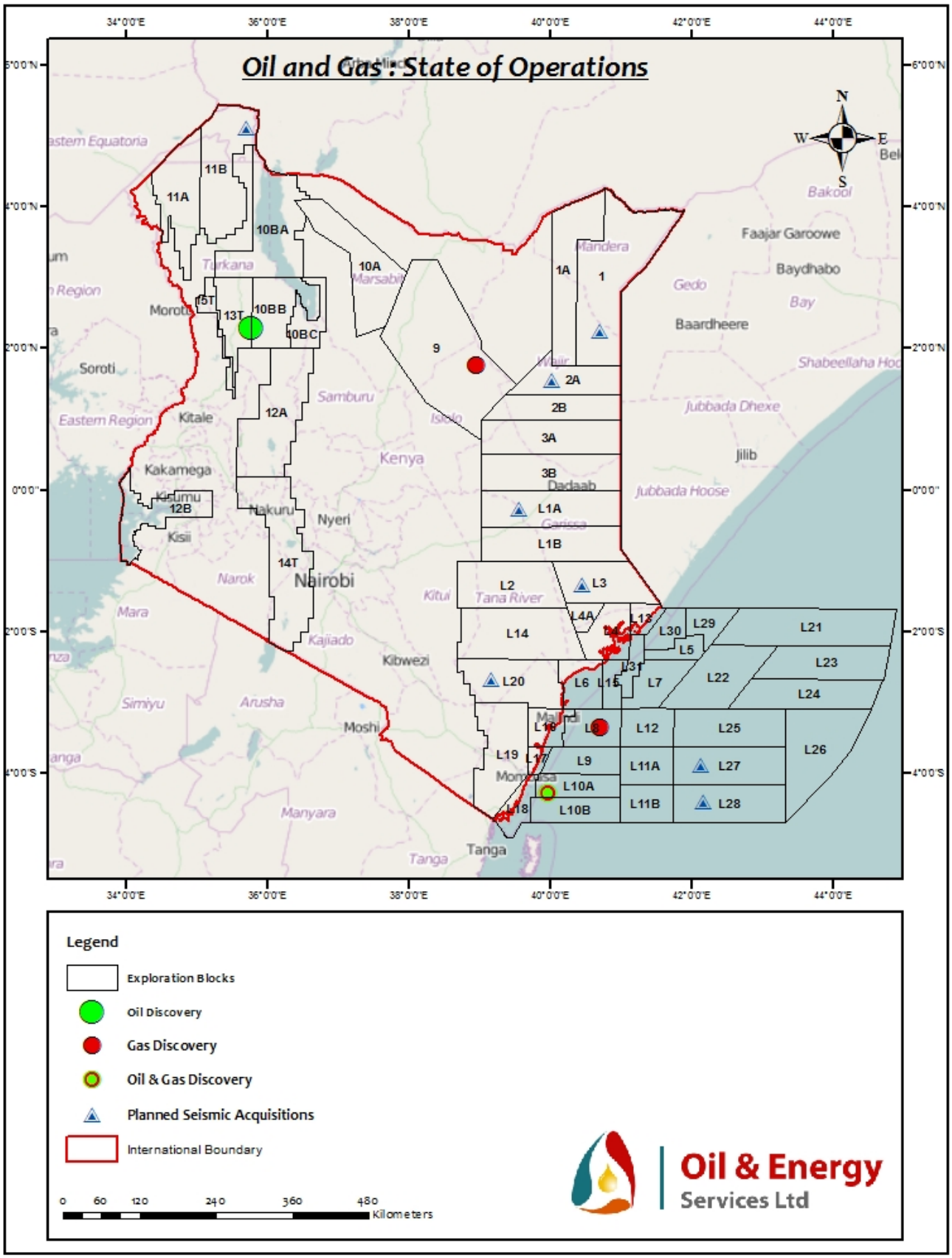

Figure 3: Map of Oil & Gas Exploration Activities in Kenya

More recently, the oil and gas sector has experienced some challenges due to the decrease in the price per barrel of oil. In June 2014, the average price of Brent crude was USD 110 per barrel. However, following increased supply for

the United States and the shale oil boom, prices had dropped as low as USD 40 per barrel by January 2015. This drop in prices has led to a softening in the market and contributed to reduced exploration activity as fundraising for higher risk activity such as exploration drilling has slowed. Even so, Kenya remains a destination for activity due to the relatively lower cost of exploration. Thus some activity will be registered, even as participants await a rebound in prices.

In total, there are 33 international oil and gas companies operating at various levels of the upstream sector in Kenya. Twenty-one (21) of the companies have operation rights to the licenses under the existing Production Sharing Contracts (PSC), while the rest are their Joint Venture (JV) Partners. Among the exploration companies, Tullow Oil and its partner Africa Oil have made and declared discoveries with commercial viability mainly in Blocks 10BB and 13T in the Lokichar Basin.

There are companies that offer support to the international oil and gas exploration companies by provision of goods and services both at an in-field or off-field category (within and without). In Kenya, international companies provide the bulk of the services required, leaving the local and regional companies in direct and indirect services, which require less specialised expertise compared to the bulk of services provided by international companies; and the level of investment required is lower.

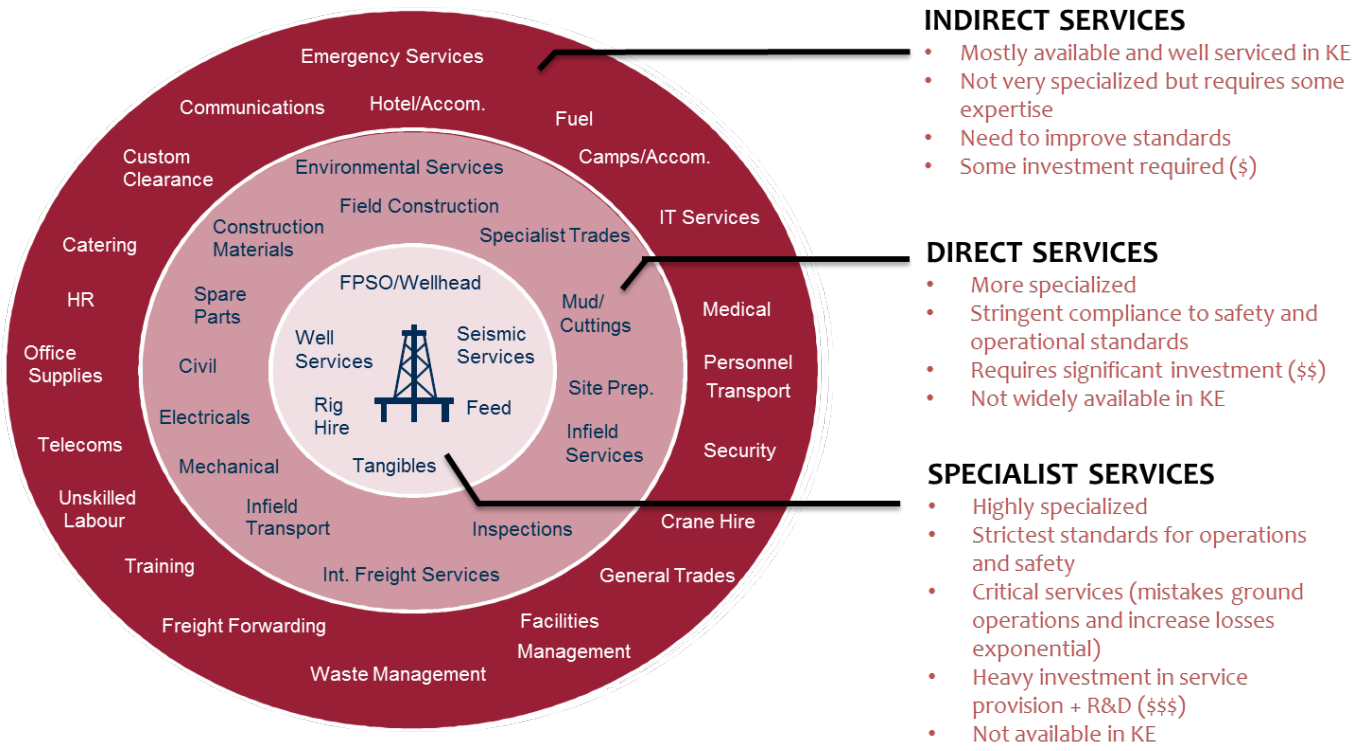

Figure 4: Analysis of Services Types in Oil and Gas
Source: Tullow Oil and Consultants' Analysis

6.3 Local Content in Law and Practice

Local content in Kenya has been addressed more explicitly in policy and law in current draft frameworks rather than in existing legislation.

For oil and gas, local content is addressed more explicitly in the PSC rather than the Petroleum Act. The Petroleum Act references local content in noting that preference to Kenyan goods and services shall be given when quality, price, and delivery are comparable to imported goods and services. The Petroleum Act also establishes a training fund for training Kenyan nationals in the petroleum industry. In the PSC, provisions in clauses 13 and 31 explicitly require use of the Kenyan workforce and optimisation of national sourcing respectively.

In the revised policies and laws, there is renewed energy to address local content specifically. The Draft Energy Policy, for instance, commits the government to enhancing manpower, technical capacity and local content in petroleum exploration, and further directs the Ministry to provide local content requirements in the reviewed model of the PSC. The emergent Petroleum Bill then directs that the Cabinet Secretary of the Ministry of Energy and Petroleum is responsible for the formulation of Local Content regulations. In addition to addressing the definition of local content, the Petroleum Bill has subsidiary legislation with more prescriptive measures on how to address local content.

The Draft Local Content regulations operationalise an Unit to monitor local content regulation compliance among contractors, and provides extensive guidelines on the procurement of goods and services over the life of a project. It directs contractors to prepare and submit local content plans for both workforce and supplier development.

The mining sector does not explicitly address local content in the primary law but does have subsidiary legislation, recently passed, that directs equity participation for citizens in all mining ventures. There is also an administrative commitment to ensure that preference for provision of goods and services as well as employment is given to Kenyan nationals. The Mining Bill 2014 makes provision for local content development and there are plans to develop subsidiary regulations that will address local content for mining in detail.

7. Insights on the Extractive Industries Value Chain in Kenya

7.1 Extractive Industries Value Chain in Brief

The value chain for the oil and gas, and mining sectors are best understood within the framework of the project lifecycle. The project life cycle for each sector divide activities into core technical and non-technical activities. These activities in turn are the source of employment and do attract the provision of goods and services. These activities are also the subject of local content strategies and represent the areas where interventions could focus.

For both mining, and oil and gas, the services required are relatively similar except for core technical or specialist services - the main difference being the technology required to extract minerals. For instance, in mining, technical services such as coring, blasting and quarrying are essential, which will not be typically used in oil and gas. The categorisation, summarised in Figures 5 and 6 immediately below, was the basis of this study and used to uncover insights on how local content development can be shaped in the sector.

Local content can be developed through opening up procurement processes to allow local contractors to supply the goods and services as depicted in the diagrams immediately below.

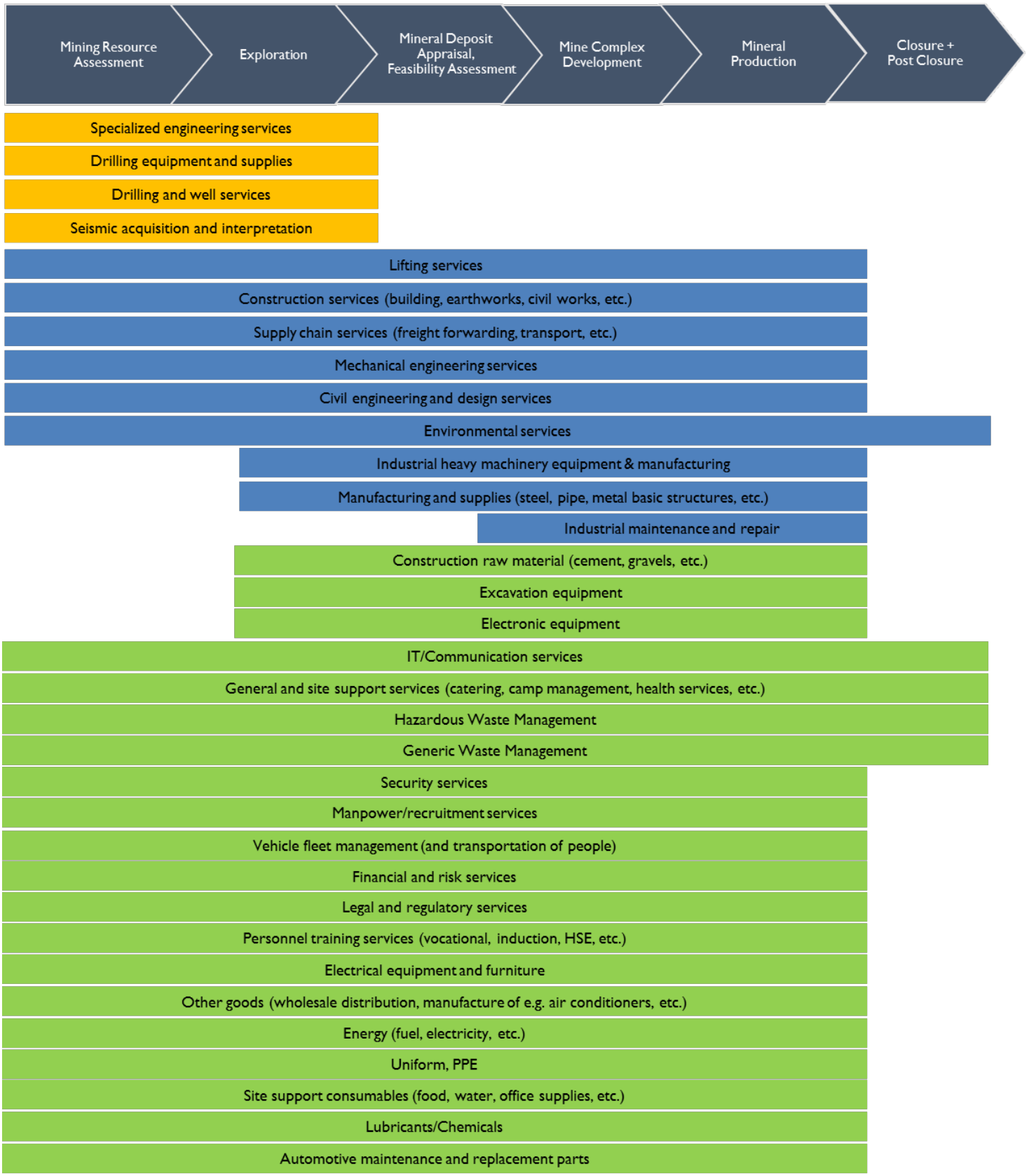

Figure 5: Mining Project Life Cycle and Related Goods and Services
Source: Interview and Research Data

Figure 6: Oil and Gas Project Lifecycle and Related Goods and Services
Source: Interview and Research Data

7.2 Business Perceptions on Local Content

As part of understanding the project life cycles and how local content can be developed, a questionnaire relating to the current and potential future demand for goods and services was distributed through the direct contacts and meetings with more than 80 companies (IOCs, Mining and main current Contractors) and to more than 200 Kenyan SMEs.

Working mainly through industry associations such as KEPSA, OGCA, and/or Kenyan Chamber of Mines, SMEs already providing goods and services to the sector or with an interest in entering the extractive industry value chain were polled on current practices related to local content. Respondents were also asked questions on the kinds of goods and services they were able to provide and the challenges they faced.

Lead contractors, mainly comprised of international service companies able to take up large scopes of work (SoWs) in the extractives sectors, were asked to provide views on the opportunities and challenges in the sector. Lead contractors in a position to subcontract local companies were listed as an important respondent group, as they would be key to increasing the uptake of local goods and services within the sector. Based on their international experience and knowledge of the extractives sectors, lead contractors were asked to share perceptions of which services they would be likely to source locally and which goods they were likely to provide readily in the sector.

Extractives companies were part of the respondents as well, and they provided perspectives on estimated budget spending, estimated local content share of budgets that can be expected, goods and services that were likely to be sourced locally, and strategies that could be used to improve the integration of local goods and services in their supply chains.

Though the response rate and quality of responses received was limited, the follow-up visits and interviews with stakeholders provided sufficient data on how to increase Kenyan local content in the extractives sector. The major findings from the survey are:

A. Indirect and Direct Services have the most appeal for local supplier development

The oil and gas and mining sectors represent an opportunity for local suppliers to develop and expand the product and service offerings. Perceptions among SMEs, lead contractors, and extractives sector companies and other respondents are that indirect services and certain select direct services required by the industry are most suited for local supplier integration. As mentioned previously, indirect services are those services that are widely consumed in other sectors of the economy, are perceived to be most well developed and most suitable for development. Because they represent goods and services consumed by other sectors of the economy, suppliers have had time to mature their businesses and specialise accordingly.

Cement manufacture and production is an example of a widely used and widely available product that is well developed within Kenya and could be classified as a direct service used in the extractives sector and other large infrastructure projects. However, due to a lack of understanding of the buyer requirements for the product, cement may continue to be imported for use in these projects. A case in point is the Standard Gauge Railway construction where the contractor perceived lack of the required grade while the potential suppliers perceived lack of interest from the contractor to purchase from them. It turned out that the cement manufacturers only needed information on the required cement grade and they could have produced it for the project. The limitation here was simply a lack of information on the required cement grade. Such information could be availed through supplier development programmes.

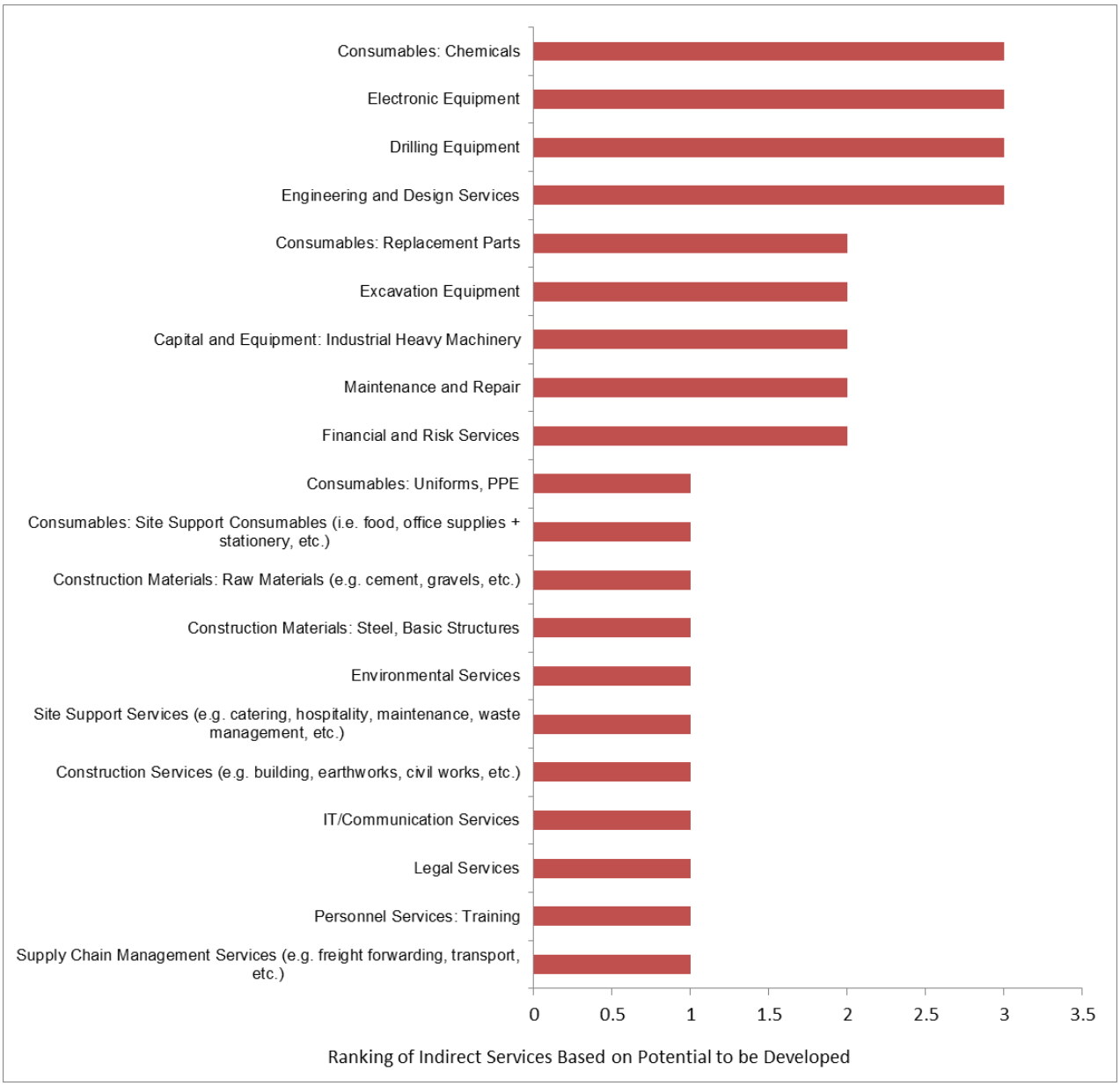

Figure 7: Lead Contractors' Ranking for Indirect Services and Potential for Development (high to low potential)
Source: Interview and Research Data

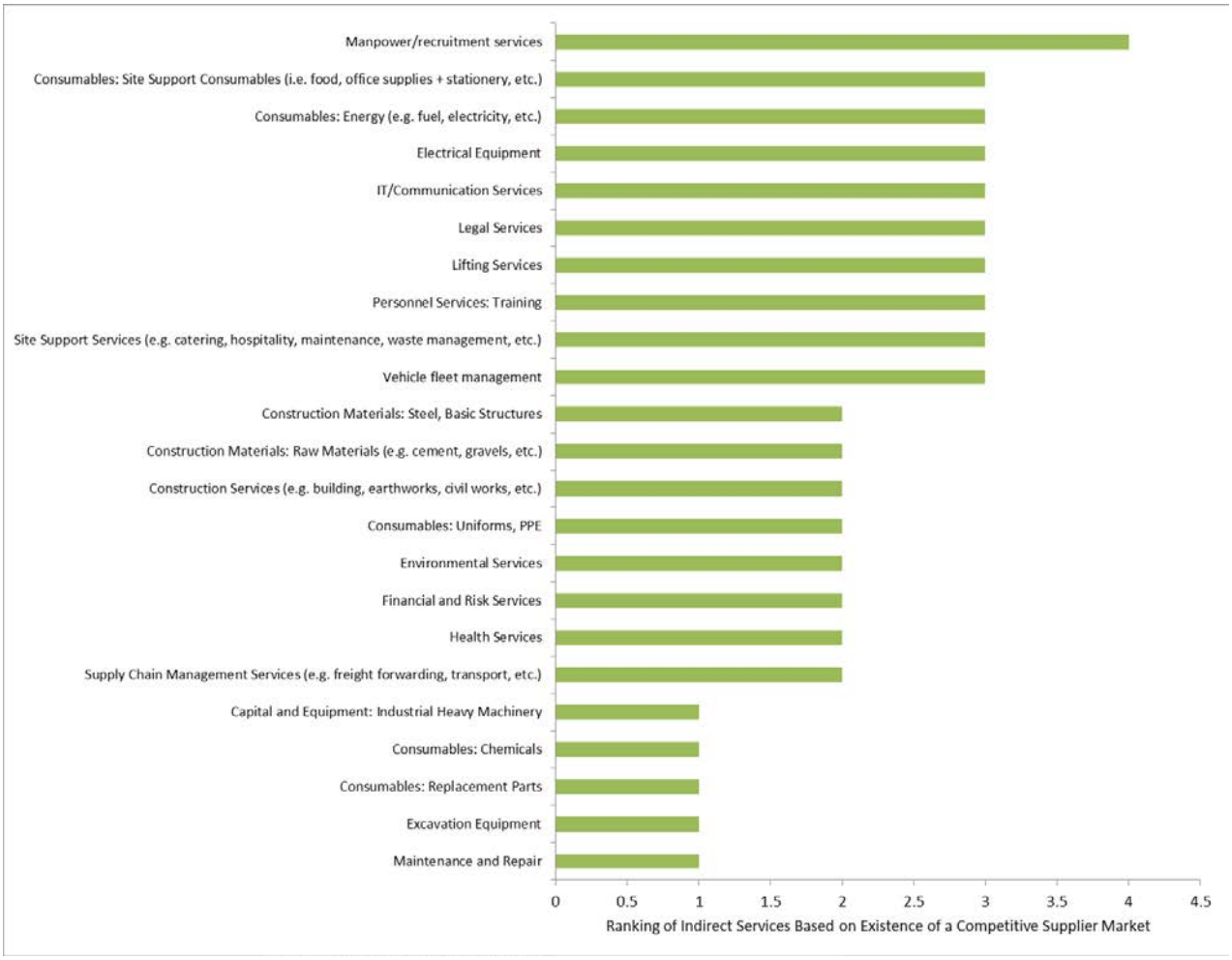

Figure 8: Lead Contractors' Ranking for Indirect Services with Competitive Supplier Market In-Country (high to low potential)
Source: Interview and Research Data

B. Core Technical Services represent a greater challenge for local supplier integration

Buyers in the extractives sector are more reluctant to integrate local suppliers for this category of goods and services because of the highly technical nature of core technical goods and services and high project risks associated with their procurement. Suppliers also perceive these categories to have the least potential for development as they are unaware of the technical requirements, and to a certain extent, recognise that these services are outside their realm of expertise. However, there are some services which over time could be introduced in the local market should interventions such as alliances, preferred supplier agreements, subcontracting, and maybe even joint ventures, be promoted.

It was noted by lead contractors that core technical services such as pipeline and infrastructure construction have a potential for development locally. This was premised on the fact that the steel and metal industry in Kenya is quite active and competitive as it supplies the East Africa region with manufactured products. However, lead contractors had serious concerns regarding the ability to meet specialised specifications such as American Petroleum Institute (API) or Oil and Gas Contractors (OGP) standards as significant support would be required to sensitise suppliers on them.

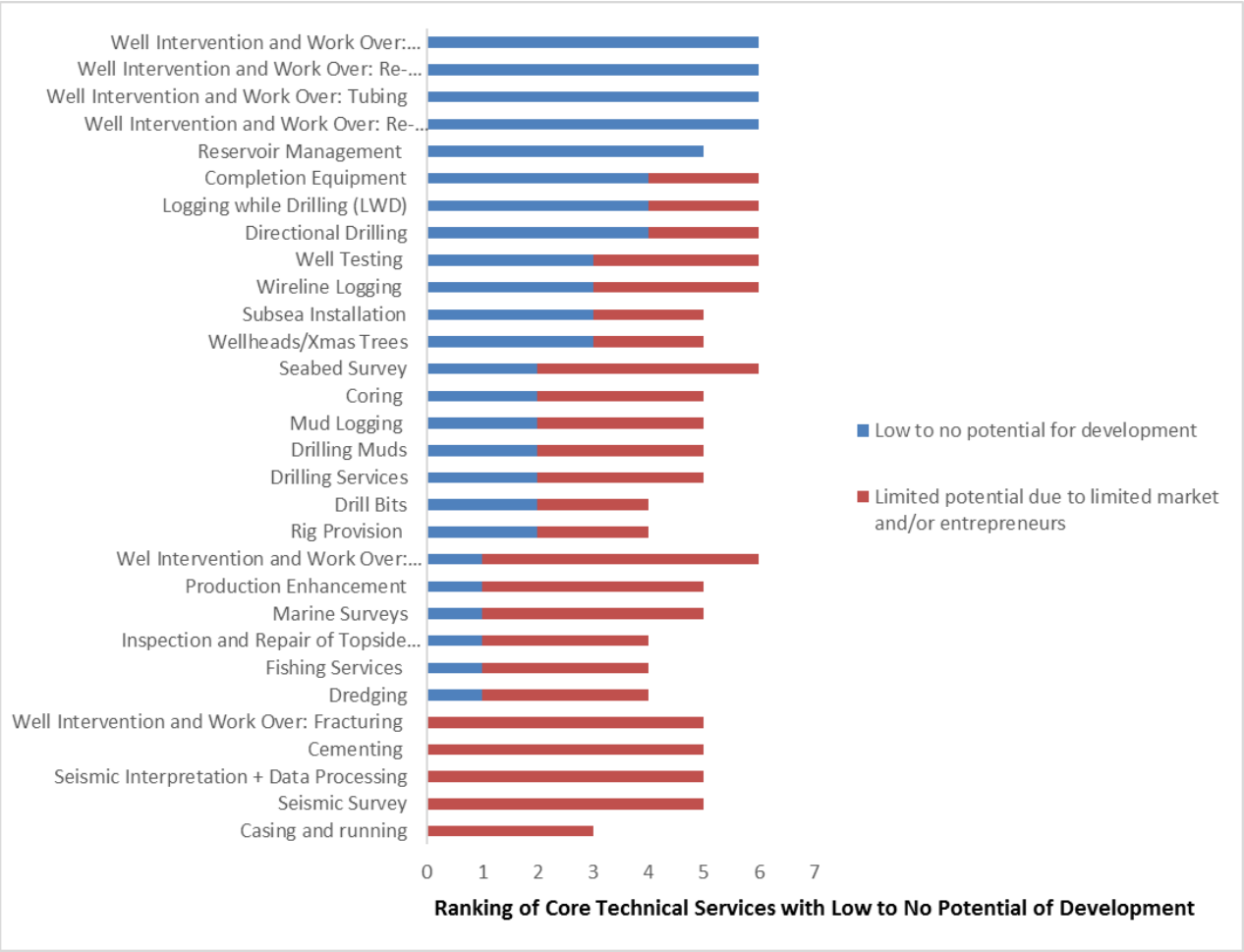

Figure 9: Core Technical Services with Limited to Low Potential for Development
Source: Interview and Research Data

C. Supply Chain constraints will limit the potential for spreading economic benefits from expanded activity

Participants in the extractives and local private sectors recognise the existence of constraints that could limit the prospects of growth and development. Among these are limited industry experience on the part of local suppliers; limited understanding of international standards for industry participation; lack of specific information on the sectors; needs in terms of goods and services and when they are needed in particular; limited access to finance for expansion but also to take on additional contracts at the same time; and challenges accessing and paying for qualified and technically astute staff to work on these projects.

An enterprise development programme would provide some mitigation against the supply chain constraints through the various programmes. Support in information dissemination from the buyers to the suppliers would provide a solution to the current asymmetry in information dissemination. In addition to this, exposure facilitation through supplier workshops and conferences would greatly impact on the lack of technical understanding of standards, the needs in terms of goods and services, as well as competitive pricing. Buyers would also require some support to ease access to information on what goods and services may be procured and when.

It would be beneficial for the creation of an online database of suppliers with the respective goods and services that in-country suppliers have the ability to meet the needs of buyers. The database would serve as a catalogue, with product listing, certification, supply quantity capability and a host of other online services for use by buyers in the market. Such a database also could be used to post tender opportunities and long range procurement needs of the industry to assist suppliers in preparation. An example of such a database is the Nigerian Petroleum Exchange (NIPEX), with an electronic marketplace where pre-qualified suppliers are listed and tenders are posted. The objectives of NIPEX are listed under section 7.3 below.

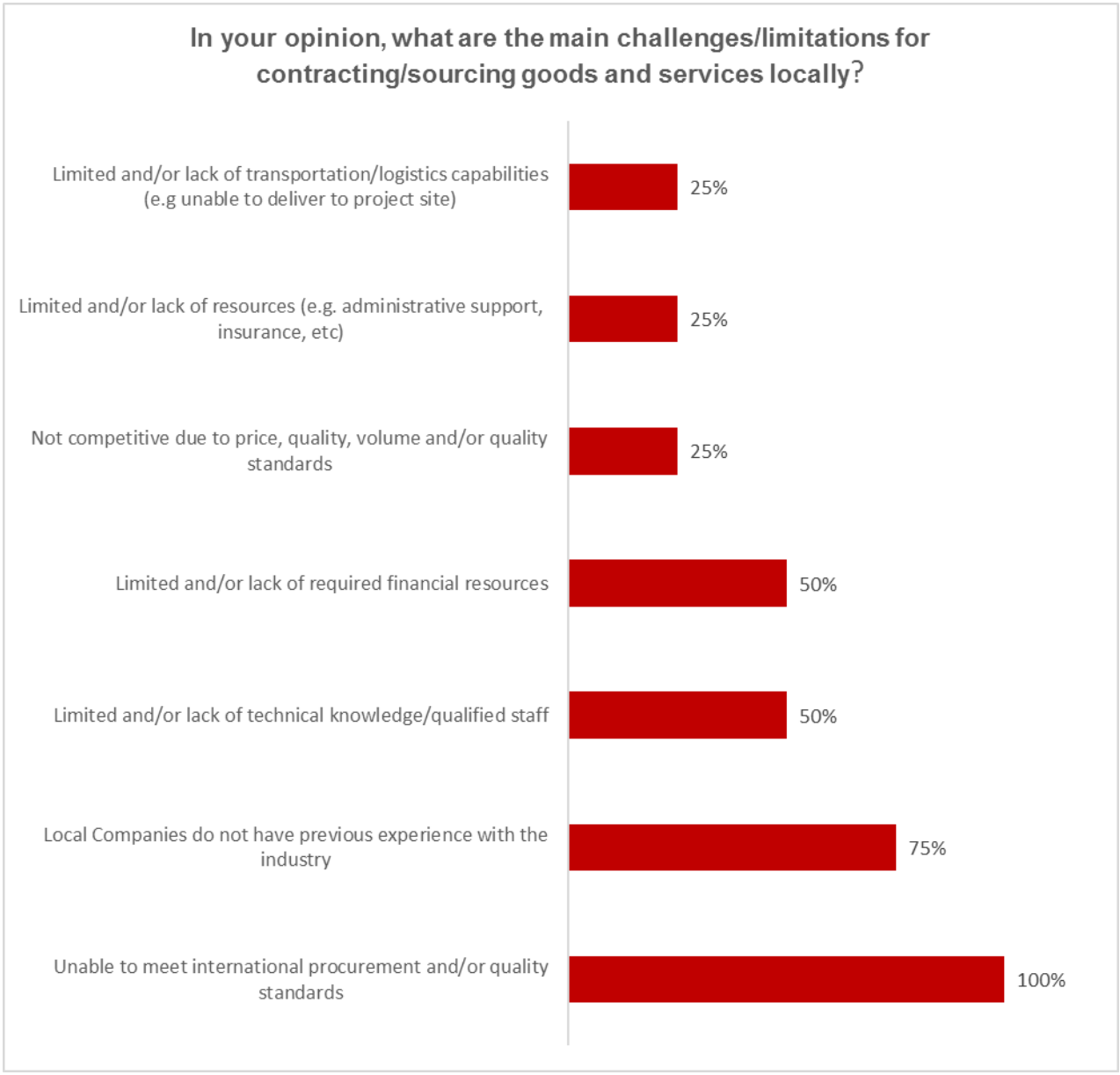

Figure 10: Lead Contractors View of Constraints in Locally Sourcing Goods and Services within the Extractives Sector
Source: Interview and Research Data

7.3 Procurement Processes as an Entry Point for Local Content

From the discussions with industry players including local suppliers, lead contractors, and extractives companies, it was clear that one of the major entry points for improving local content was the procurement process. Further research into the structure of supply chains in extractives reveals that local suppliers can only be integrated in to the supply chain if they are able to access the procurement process of companies. In Nigeria, a standardised pre-qualification system has been agreed and is implemented through an agency (NIPEX www.nipexng.com) under the Nigerian National Petroleum Corporation (NNPC).

The primary objective of NIPEX as listed on their website is to provide an electronic contracting platform for NNPC and its operating partners in the joint venture (JV) and production sharing contract (PSC) arrangement with a view to:

- Establishing a joint qualification system for the pre-qualification of contractors / suppliers for ease of supplier selection
- Reducing contracting cycle time from about 18 – 24 months to half, or shorter timeframe
- Entrenching transparency in the contracting and procurement process thereby ensuring the integrity of the process

Each oil and gas, and mining companies have their own process of pre-qualification, screening, selecting and awarding contracts to companies but the figure below illustrates the typical contractor/supplier selection process, which represents those entry points for optimisation of project local content.

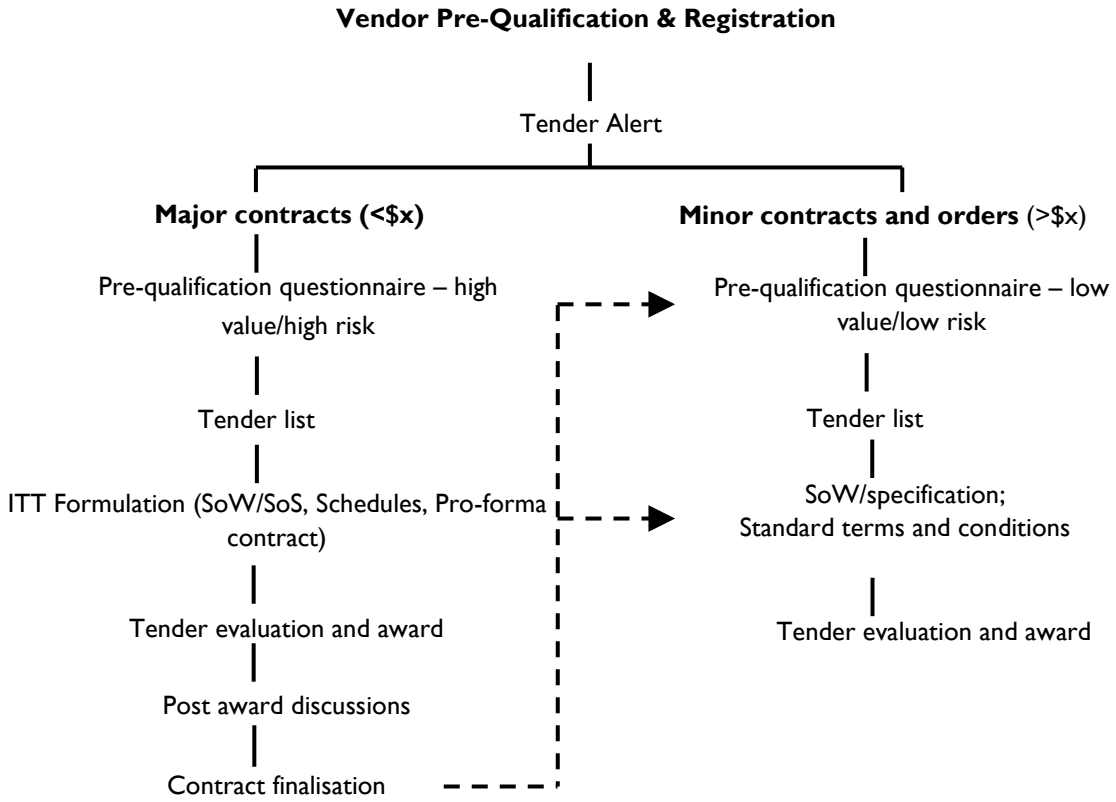

Figure 11: Summary of Contractor/Supplier Selection Process
Source: LCS Master Class Training

In addition to these structured procurement processes, for the extractives sector, the golden thread of procurement is the right quality, price, delivery schedule and, more recently, the right place to source. Indeed, most procurement managers prefer to source goods or contract services close to their operations as it could enable more management flexibility relative to contract companies abroad, which could add delays to delivery of goods and services, incur additional costs such as transport/logistics, administrative, customs duties, and even increase project uncertainty. Understanding the procurement process and being able to work within it is thus one of the key ways that local content development can be catalysed.

7.4 Procurement Processes and External Influences

It is important to note that for the extractives sector in particular, the procurement of goods and services is subject to external dynamics that can have an impact on local content development. Procurement is rightly recognised as the process through which parties may increase incomes and it is often the theatre of power struggles especially among political elites in communities. In areas where inequalities in wealth are mediated by the political elite, it is not uncommon for procurement processes to be subjected to dynamics that would assign more power to certain parties over others. In some cases, this means that the procurement process may be the subject of political and elite capture and companies must find ways to practically resolve the resulting challenges. Many times the solutions require the involvement of different parties with different levels of influence. However, it is clear that the ability of companies to successfully navigate existing power dynamics and remain objective in the procurement process is one of the determinants of successful co-existence with communities.

One of the demonstrations of the impact of these external pressures is distortions in market prices for locally sourced goods and services. It is not unusual for goods and services that are locally procured to have a premium of between 10% and 20% currently, for some of them such as fuel it could be much higher (up to 50%). After all, local vendors recognise that extractives companies and their contractors must fulfil the inclusion of local area markets even when competitive prices exist elsewhere. In

the end, the golden thread of procurement – sourcing at the right price, quality, and delivery point – must therefore consider the right place for procurement, despite the fact that it might actually be more costly. Because the procurement process offers opportunity for companies to gain a social license to operate, procurement decision making must be politically savvy without compromising the end goals of a project. Indeed, for many companies, achieving the balance is not a straightforward endeavour.

While this study did not focus on solutions to challenges such as these, it does recognise that procurement processes do not occur in a vacuum and there are real challenges in local content development that are directly influenced by power dynamics within communities.

7.5 Procurement Processes and Costs of Switching Suppliers

Entering an existing market is not always easy as there may be significant barriers that can make it more difficult for new competitors to set up and sell into the market. The procurement processes, which now must consider the right place to source goods and services along with the components of the golden thread, introduce additional costs that may render local sourcing uncompetitive.

Switching costs could be related to:

- Economies of scale
- Know-how
- Raw materials availability
- Manufacturing and production up to Industry standards
- Shipments and logistics delivery
- Service, support and maintenance
- Skilled workforce shortage
- Product differentiation technology/property rights and processes
- Capital/asset requirements
- Access to opportunities and distribution channels
- Government policy (as for instance tax relief for certain imported goods)

Many countries, in recognition of the fact that switching costs could limit the impact of local development policies have adopted local content requirements and award a price premium during the bid evaluation process in favour of local companies. For instance, in Ghana and Angola, companies are given a price premium of up to 10% of the bid price in favour of local companies if two bids are of the same quality.

8. Commercial Opportunities in the Extractives Supply Chain

The extractives sector in Kenya, when developed, could contribute to economic and social development through job creation in line with national development objectives outlined in the Kenya Vision 2030 and the Constitution of Kenya 2010. Analyst projections note that the mining sector could reach over 1% of GDP from 0.7% of GDP within a relatively short period of time and further develop to capture nearly 4% of GDP with further exploration/project development. The oil and gas sector has also been estimated to contribute up to 3% of GDP once production has started in the medium term.

Given this potential, this study had an aim to capture more specifically a number of sectors which present high value opportunities for local businesses in Kenya. Given the state of knowledge in the industry, the consulting team developed a supply chain model that captured the areas of opportunities for local businesses and then used knowledge on procurement practices to prioritise which sectors represented the best opportunities for Kenyan businesses to generate new income and create wealth. Using the study data from industry expert consultations, interviews, and questionnaire data, the consulting team linked procurement behaviour to the required goods and services in the sector, and identified which sectors presented the best commercial opportunities in the extractives sector for local businesses.

8.1 Understanding the Commercial Opportunities in the Value Chain

Based on feedback from extractives companies, external analysis on operations in Kenya, as well as interview data on similar projects, spending models in oil and gas[1], and mining were developed in the case of low cost projects and high cost projects for exploration and construction/operation phases. These scenarios approximate or illustrate the local content capture portion of project spend i.e. the amount that can be expected to remain in Kenya in the exploration and construction phases are as below.

		Oil and Gas		Mining	
		Low	High	Low	High
Exploration	Total Estimated Spend	USD 300M	USD 700M	USD 30M	USD 100M
	Estimated Local Content Capture	USD 60M	USD 140M	USD 7.5M	USD 25M
Construction	Total Estimated Spend	USD 400M	USD 1B	USD 200M	USD 600M
	Estimated Local Content Capture	USD 120M	USD 300M	USD 60M	USD 180M

Table 2: Summary of Project Scenarios
Source: Interview and Research Data; Consultants' Analysis

[1] In order to develop the spending models projecting the commercial opportunities in the value chain, the consultants polled two companies with active operations in oil and gas, and mining respectively, and got feedback on their utilisation of local content. The companies provided data on apportionment of budget spend to the various categories of goods and service representing sectors. These estimates on spends were validated through interviews with four (4) industry experts

A. Commercial Opportunities – Oil and Gas Sector

The commercial opportunities in oil and gas are summarised in the figures following. The major findings are that the largest share of local content capture is in the provision of indirect services. Some high value direct services like construction, and supply chain services represent good opportunities for local businesses. In addition, the largest spends are expected in the construction phase where scenario budgets are estimated to exceed exploration phase budgets by at least one and a half times.

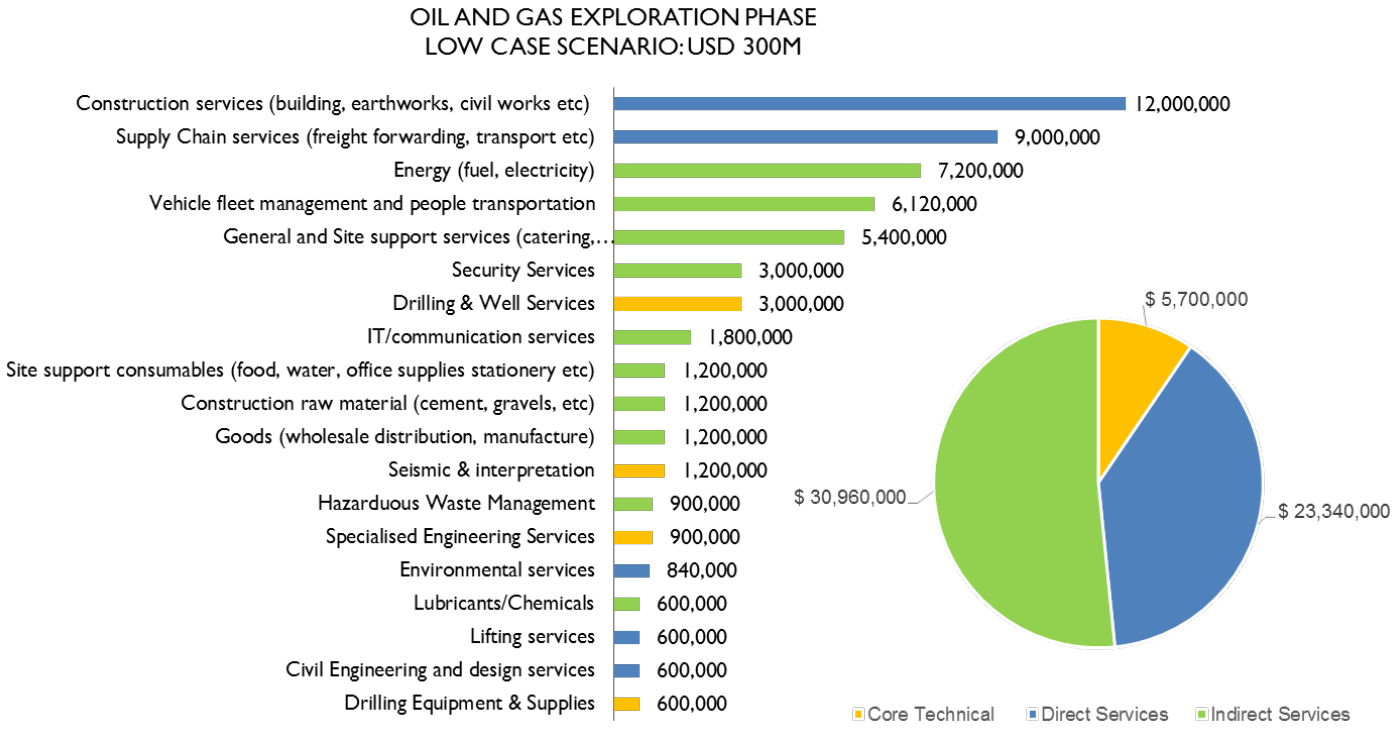

Figure 12: Commercial Opportunities by Sector – Oil and Gas Exploration Low Case Scenario
Source: Interview and Research Data; Consultants' Analysis

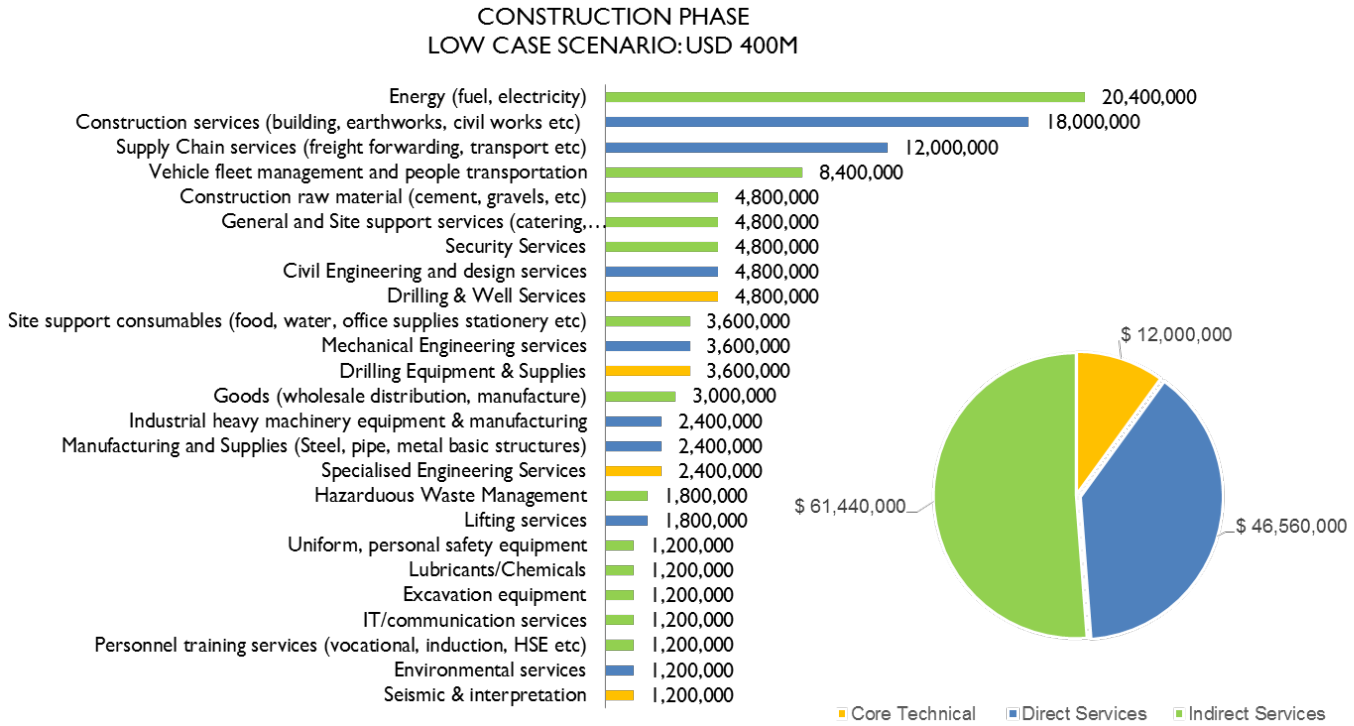

Figure 13: Commercial Opportunities by Sector – Oil and Gas Construction Low Case Scenario
Source: Interview and Research Data; Consultants' Analysis

B. Commercial Opportunities – Mining Sector

For the mining sector, the highest allocation of estimated budgets are also in indirect services with direct and core technical services having an almost even split. In the exploration phase, high value opportunities are in provision of fuel and electricity, equipment maintenance, management and technical maintenance services, and in-country transport and logistics. In the construction phase, the allocation to core technical services exceeds direct services by a small margin but indirect services still take the lion's share of the local content capture budget.

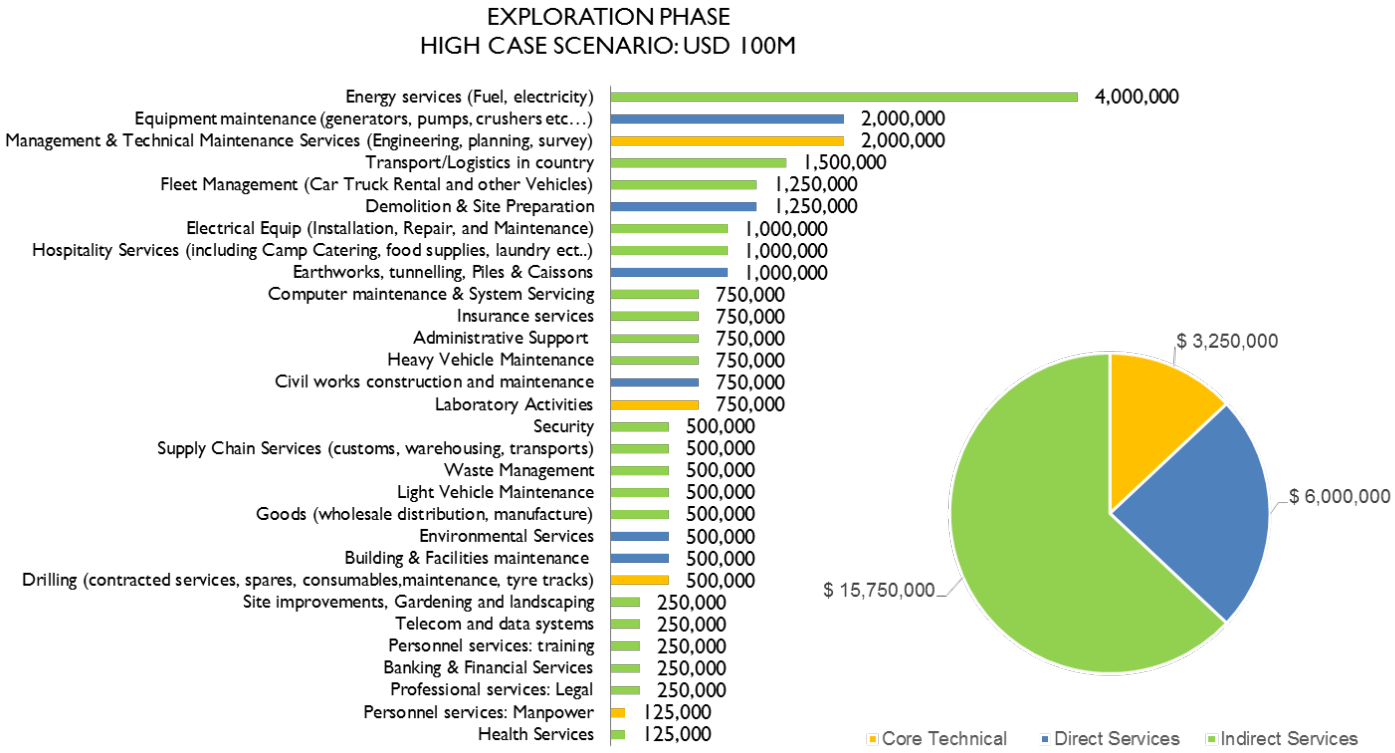

Figure 14: Commercial Opportunities by Sector - Mining Exploration High Case Scenario
Source: Interview and Research Data; Consultants' Analysis

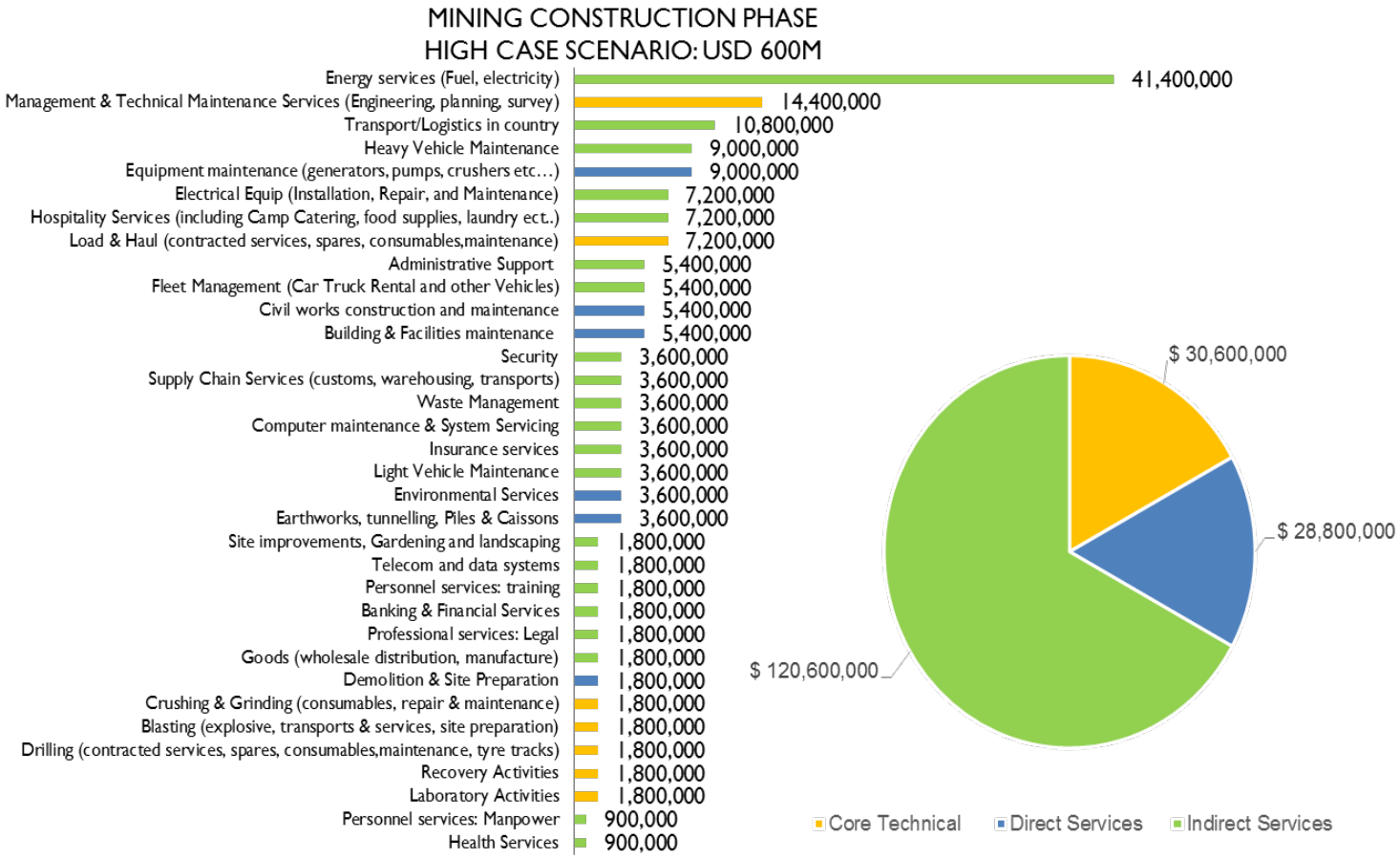

Figure 15: Commercial Opportunities by Sector - Mining Construction High Case Scenario
Source: Interview and Research Data; Consultants' Analysis

The main insights from the analysis of projections are:

- Indirect services had the highest allocations of budget spend that could be retained in-country for both exploration and production phases; and
- Direct services and core technical services represented much less in budget allocation for projects in both oil and gas, and mining.
- Among the sectors with high budget allocations are construction, provision of electricity and fuel, supply chain services (freight forwarding, transport + logistics, etc.), vehicle and fleet management (i.e. transportation of people), and general site support services (i.e. catering, food supplies, etc.).
- In the construction phase of mining and oil and gas projects, the local content share of the budget is largely spent on provision of energy (i.e. electricity and fuel).

These findings reflect the perceptions among sector players that one of the best ways to improve local sourcing of goods and supplies is to focus on integrating companies that provide indirect services. In addition, it would be worthwhile to address the constraints faced by local suppliers in the high value sectors as the impact of increasing outputs from these sectors could have a multiplier effect on the greater economy.

8.2 Ranking the Commercial Opportunities in the Value Chain

This study also revealed that understanding the commercial opportunities offered by the extractives sector is not just a factor of budget spend. In order to identify the best opportunities for local businesses, one must consider other factors other than the allocation of budget. Particularly, outlining the most lucrative sectors requires that the commercial opportunity is linked to the feasibility of capturing contracts in the various sectors. By mapping the appetite of the consumers of particular goods and services (feasibility for industry uptake – demand side) to use local suppliers against the ability of local suppliers to meet those required needs (suitability for development – supply side), a priority matrix identified the best commercial opportunities for local content development in Kenya. A number of strategies can be employed to unlock the value in each of these sectors and are summarised in the tables following.

Figure 16: Extractives Sector Prioritisation Matrix
Source: Interview and Research Data; Consultants' Analysis

Feasibility	Suitability	Quadrant Name	Sector Prioritisation by Ranking	Description	Strategy
HIGH	HIGH	SIMPLE	▪ Energy (fuel, electricity, etc.) ▪ Construction Services ▪ Supply Chain Services (freight forwarding, heavy goods transportation, etc.) ▪ Vehicle Fleet Management ▪ Security Services ▪ General and Site Support Services ▪ Site Support Consumables (fresh foods, dry foods, etc.) ▪ Mechanical Engineering Services ▪ Other Goods (wholesale and distribution of such goods as air conditioners, etc.) ▪ Uniform, PPE ▪ IT/Communication Services ▪ Personnel Training Services ▪ Manpower/Recruitment Services ▪ Automotive Maintenance and Replacement Parts ▪ Electrical Equipment and Furniture ▪ Generic Waste Management ▪ Financial and Risk Services ▪ Legal and Regulatory Services	▪ Available in the market, cost is a key driver with acceptable quality and delivery ▪ Business opportunity requires relatively non skilled specific workforce or skills available in Kenya ▪ Network of supply well established ▪ Generally Lower in the value chain ▪ Less critical to the lead company's operations	▪ The strategy for this quadrant is to **Strengthen and Expand Markets**: o Simplify acquisition process o Automate as much as possible ▪ Use long term contracts

Feasibility	Suitability	Quadrant Name	Sector Prioritisation by Ranking	Description	Strategy
HIGH	LOW	CONSTRAINED (UPPER)	▪ Construction Raw Materials (cements, gravels, etc.) ▪ Excavation Equipment ▪ Electronic Equipment	▪ Products/services with a low risk but high value, ▪ High expenditures (construction equipment installation etc.), commodity items, but constraints related to quality, delivery energy/infrastructures, financing ▪ Large marketplace capacity, ample inventories; need to be adapted to fit O&G/Mining standards or purpose. ▪ Alternate products and services in the region (Tanzania, Uganda) ▪ Market/Price Sensitive (including tax distortion factor over import)	▪ The strategy for this quadrant is to **Maximize Commercial Advantage**: o By promoting Kenyan services and products through forums, fairs, conferences, etc. o Providing information in advance ▪ Addressing common bottlenecks such as ability to access certification, access to finance, development of suitable operational systems etc.
LOW	HIGH	CONSTRAINED (LOWER)	▪ Civil Engineering and Design Services ▪ Lifting Services ▪ Lubricants and Chemicals ▪ Laboratory Services ▪ Industrial Maintenance and Repair	▪ Commodity / service has a high risk profile ▪ Required scope of work is usually too large for a single Kenyan company ▪ Commodities/services are specialised and are not easily available ▪ Few qualified sources of supply ▪ Large expenditures ▪ Design and quality critical ▪ Complex and/or rigid specification	▪ The strategy for this quadrant is to **Form Partnerships among Suppliers**: o By promoting consortium bidding and JVs o Providing matchmaking opportunities ▪ Information sharing on upcoming bids with large scope of work

Feasibility	Suitability	Quadrant Name	Sector Prioritisation by Ranking	Description	Strategy
LOW	LOW	COMPLEX	▪ Load and Haul ▪ Drilling and Well Services ▪ Drilling Equipment and Supplies ▪ Manufacturing and Supply of Steel Products ▪ Industrial Heavy Machinery Equipment & Manufacturing ▪ Specialised Engineering Services ▪ Hazardous Waste Management ▪ Environmental Services ▪ Blasting ▪ Crushing and Grinding ▪ Seismic Acquisition, Processing and Interpretation	▪ Complex specifications requiring complex manufacturing or service process ▪ Contract-based performance ▪ Few alternate products/sources of supply in Kenya ▪ Big impact on operations/maintenance (high project risk) ▪ New technology or untested processes ▪ High project dependency on these commodities / services exists ▪ Significant effect on processes when this commodity / service fails or is not available	▪ The strategy for this quadrant is to **Ensure Supply Continuity**: o By promoting unbundling contracts for low risk service in the specific scopes of work (SoW), o Have more involved sub-contracting arrangements and JVs.

Table 3: Extractives Sector Supplier Development Matrix - with Prioritised Supplier Development Targets and Related Strategies
Source: Consultants' Analysis

8.3 Job Creation Opportunities in the Extractives Sector

Local content is also concerned with the utilisation of local labour in the extractives sector and it is possible to understand the related, projected job creation and employment opportunities. This study, using the same scenarios developed to understand the commercial opportunities offered by oil, gas, and mining projects, was able to project the estimated number of jobs created in the event that several projects are developed. The feedback from project owners again as well as knowledge from similar projects in other jurisdictions, estimated that the level of budget spend on employment was between 20% and 25%. The split in the budget spend was highest for skilled and semi-skilled labour and the least in unskilled labour.

The table below summarises the estimated number of jobs that could be created for both low and high case scenarios.

		OIL AND GAS		MINING	
		Low	High	Low	High
Exploration	Total Estimated Spend	USD 300M	USD 700M	USD 30M	USD 100M
	Estimated Local Content Capture	USD 60M	USD 140M	USD 7.5M	USD 25M
	Estimated No. of Jobs Created – Direct + Indirect[2]	2,234	5,202	351	1,160
	Estimated No. of Jobs Created – Induced	13,398	31,206	2,100	6,954

Table 4: Exploration Phase Scenarios - Estimated Number of Jobs Created
Source: Interview and Research Data; Consultants' Analysis

For the construction phase, the projections on jobs created are as follows:

		OIL AND GAS		MINING	
Construction	Estimated Budget	USD 400M	USD 1B	USD 200M	USD 600M
	Estimated Local Content Capture	USD 120M	USD 300M	USD 60M	USD 180M
	Estimated No. of Jobs Created – Direct + Indirect	4,460	11,142	2,775	8,316
	Estimated No. of Jobs Created – Induced	26,760	66,846	16,650	49,890

Table 5: Construction Phase Scenarios - Estimated Number of Jobs Created
Source: Interview and Research Data; Consultants' Analysis

One of the main insights is that the majority of jobs created over time and under different scenario spends would be in the semi-skilled category, followed by skilled workers, and then unskilled workers.

[2] Direct jobs are those that are directly created in a given sector; indirect jobs are those that support the activities in the given sector; induced jobs are those that are created as a result of the economic impact of direct and indirect activities, often occurring further along the supply chain.

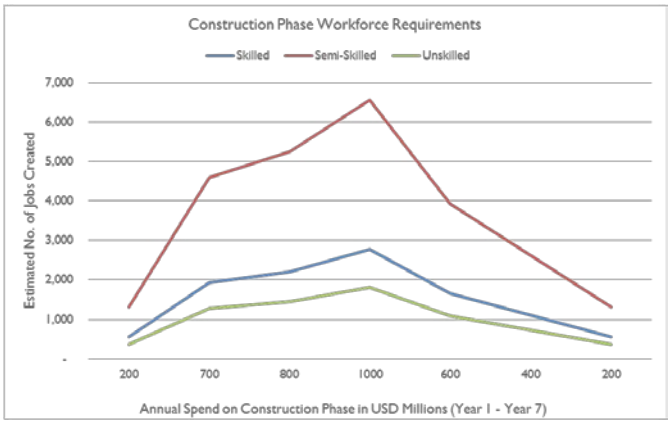

Figure 17: Illustrative Estimate of Jobs Created by Worker Category in Oil and Gas
Source: Interview and Research Data; Consultants' Analysis

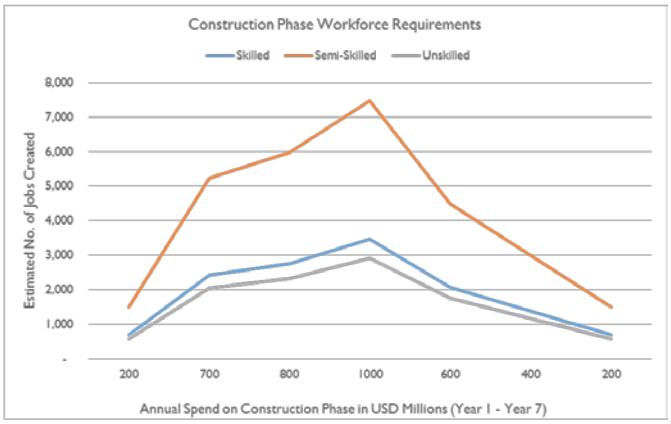

Figure 18: Illustrative Estimate of Jobs Created by Worker Category in Mining
Source: Interview and Research Data; Consultants' Analysis

The shape of the curves above retraces the logic of a construction project ramp up, reaching a peak, and then downsizing. Single construction projects will typically have sharper drops in employee counts but the scenarios demonstrated above take into account that several extractive industry construction projects would be taking place at the same time, which would then soften the downsizing slope. It is important to note also that these scenarios do not take into account the economies of scale that could be realised between the spending scenarios, but just represent the range of impact on job creation per category. This means that there is scope for even more jobs to be created should economies of scale be realised.

Relatedly, the scenario models demonstrate that the most number of jobs are created via induced employment (the additional jobs created across all sectors to meet the consumption demand of workers), followed by indirect (oil and gas, and mining, lead contractors and sub-contractors), and finally in direct jobs (within mining, and oil and gas companies). The relationship to consider in job creation is that for every one job created by oil and gas and mining companies, three jobs are created indirectly, and six jobs are induced in the greater economy. This means that direct employment by oil and gas and mining companies is more limited in comparison to the employment created by lead contractors and sub-contractors providing goods and services; it is also even more limited when compared to those jobs that are created in the public sphere as a result of economic growth outside the sector.

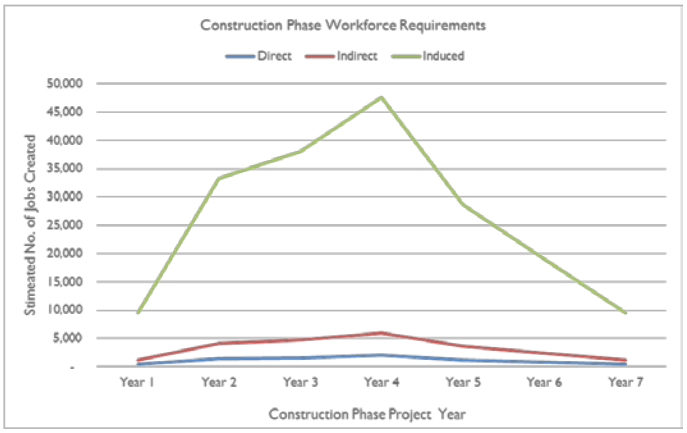

Figure 19: Illustrative Estimated Number of Jobs Created - Oil and Gas Construction Phase
Source: Interview and Research Data; Consultants' Analysis

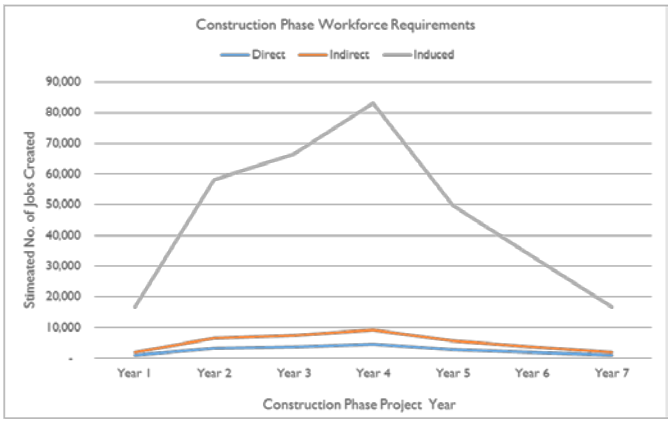

Figure 20: Illustrative Estimated Number of Jobs Created - Mining Construction Phase
Source: Interview and Research Data; Consultants' Analysis

The key relationship to note between the skills demands in the induced sector in relation to the extractives sector is that there could emerge a scenario where there is a severe skills shortage. Again, this problem could be most severe for vocational professionals as this is the job group with the highest demand in the extractives sector. If not managed properly and handled well, risks related to skills shortage could compromise the ability to see projects through and could introduce inflated costs of labour. Competing projects could also have a general inflationary effect on raw materials and assets.

Because of the need to have a trained and technically astute workforce among suppliers, supplier development programmes should address the need to access credible training for SMEs wishing to provide goods and services in the extractives sector. Indeed, supplier development interventions cannot be delinked from skills/workforce development, and collaboration to ensure improvements in tandem should be prioritised.

Given that the majority of workforce requirements are geared towards semi-skilled workers in indirect and induced employment, technical and vocational education and training (TVET) institutions should be a priority for educational institution development. There are a number of initiatives within Kenya and the greater East African region that have focused on resolving these challenges, including the Skills for Oil and Gas (SOGA) programme and the Lundin Foundation project with Lodwar Youth Polytechnic. Related directly to supplier development, some effort should be given to developing institutions from where local suppliers can access qualified workers. A collaboration mechanism between training institutions and initiatives such as SOGA and local suppliers should be developed to ensure that training is relevant and that the market is aware of where qualified staff can be found, or where additional training can be accessed for workers already in the extractives industry.

9. Summary Conclusions

9.1 Sector Priorities

There is consensus among participants that on the demand and supply sides there should be support for local supplier integration in sourcing for indirect services, and some selected direct services. Core technical services present more challenging and costly prospects except for a few goods and services which have been identified as the subject of long-term supplier development initiatives. Recommended for supplier development initiatives are the following sectors:

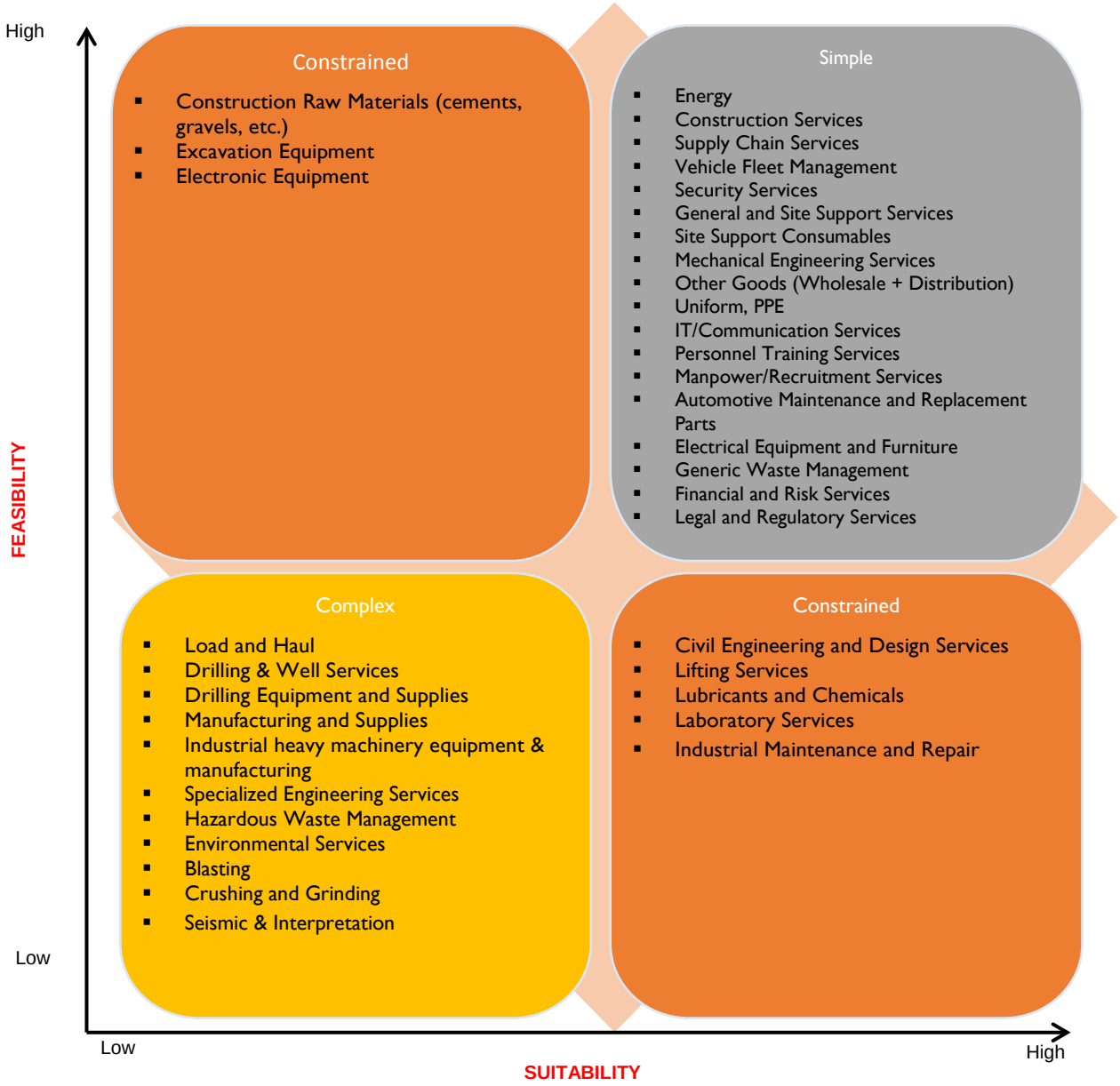

Figure 21: Priority Sectors Matrix
Source: Interview and Research Data; Consultants' Analysis

9.2 Jobs Created

While there is scope for some direct (often specialist) job creation in the extractives sector, this is far more limited than the scope for indirect and induced job creation. By stimulating increased demand for products and services in indirect sectors of the economy that support extractives industries, and in turn, catalysing demand for products supporting these *indirect* economies, there is a significant multiplier effect on indirect and induced job creation. As a result, the number of jobs induced in the greater economy due to activity in the extractives sector is six times that of the direct jobs created in the extractives sector. The majority of the jobs created will be in semi-skilled sectors and will thus require development of a robust vocational professional sector now to equip the labour market to meet growing demand in the future.

9.3 Demand Side and Supply Side Constraints

Domestic demand for Kenyan goods and services will be expected to be strong, and growing, in various targeted sectors (civil engineering, construction, raw materials, transport logistics, support services etc.) as essential to oil & gas, mining and infrastructure projects in Kenya. Real obstacles to sourcing locally may be seen in the main to be as follows:

- **Buyers are not aware of the full capacity of local SMEs that could be offered on the Kenyan market**. From the perspective of a single buyer, mapping/screening/assessing a long list of suppliers in terms of technical capacity, could consume already constrained time and other resources. This does not include the additional burden of dealing with suppliers who have not been vetted for technical competence and precise experience in their particular sector. Extractive Industry companies, but also other companies in those connected projects, use some of the same goods and services. There is a need for an information platform and matchmaking services that provide ready access to market information and pre-screened suppliers in Kenya. Pre-screening services could include a brief due diligence process on each local company's structure, management process, technical and financial aspects.

- **Extractive industries import certain products used at operational level (light manufacturing goods, chemicals/paints etc.) which could eventually be manufactured in Kenya**. One of the constraints to establishing the manufacture of such goods is the limited information exchange between industry and existing manufacturers on the requirements, and visibility, regarding demand. An information sharing platform could provide more technical specifications to manufacturers and even by extension provide opportunities for engineering and design which suits the country context, - utilises inputs that are more readily available, and also includes the technical know-how of nationals.

Other factors that may limit local supplier access to project opportunities are summarised in the table below:

INHIBITING FACTORS & RISKS	DESCRIPTION
Companies' Policies and Incentives	▪ Existing procurement policies and procedures **within the Extractive Industry companies** may be generally "fit for purpose" for conventional project procurement but not be readily suitable for facilitating local enterprise contributions. ▪ The benefits of maximising local enterprises participation into the supply chain may be realised at the corporate level. However the immediate costs, effort and risks (see below) may be borne by those responsible for procuring goods and services at the project level.
Knowledge & Skills	▪ Personnel procuring goods and services may lack specific knowledge of the local business environment and/or the appropriate skills and measures to engage local enterprises.
Contracts & Supply Agreements	▪ Contracts and agreements template are usually fit for large companies
Cost	▪ In some cases utilising Kenyan suppliers can result in cost savings. However in many cases those that haven't been mapped at project early stage in the design phase, usually will attract a cost premium, compared to larger, more established and known firms. Hence, locking out newcomers in the supply chain.
Time & Management Effort	▪ Engaging Kenyan enterprises may require additional management time and effort, especially if a contract unbundling exercise is conducted to allow smaller players to bid for reduced or sub-sets of the Scope of Work (SoW). It consists of unpacking SoW into multiple/different services to be contracted outside the main SoW. It is easier for a company to manage a single contractor than multiple contractors for the same SoW perimeter. There may also be implications for project time schedules.
Quality	▪ Local enterprises may not readily meet the required quality standards or have the requisite quality management systems in place.
Risk Management	▪ Engaging local enterprises may result in increased risk associated with contracts – on cost, time and quality issues – as well as occupational health and safety (OHS), and environmental performance.

Table 6: Summary of Inhibiting Factors and Risks Associated with Local Sourcing
Source: Interview and Research Data; Consultants' Analysis

On the supply side, the constraints that may limit Kenyan companies' ability to competitively join the supply chain of those projects may be seen to be mainly as follows:

- **Local firms tend to only be competitive when trading products produced outside of Kenya at a margin.** There is a lack of proper quality standard implementation, and experience understanding clients' requirements.

Suppliers need training on quality standards, access to finance to fund technological upgrades, and technical assistance to improve their products and services.

- **Kenyan companies often fail to meet multinationals' requirements at pre-qualification.** Request for Proposal stages, due to limited abilities in answering questions on company operational systems and procedures (mainly management, financial, health and safety processes). One remedy could be to make easily accessible those requirements and standards in use by the industry, through short support/mentoring and specific training for Kenyan companies.

- **Kenyan companies often fail to meet buyers' requirements for the totality of the Scope of Work requested as they do not have the relevant experience, know-how and financial standing**. Suppliers need help to find relevant partners, and to bid in consortia, instead of losing opportunities to enter the supply chain of the large projects.

- **Suppliers often do not reliably deliver goods and services within the time-frame or on schedule as agreed with them.** Suppliers need support to improve supply chain management systems, as well as processes and customer service.

- **Suppliers face workforce development challenges related to technical qualification and certification of staff, and at times, the inability to pay for required skilled and semi-skilled workers**. There are compelling viewpoints on the potential shortage of skilled professionals at vocational levels, should planned activities across extractive sectors take off.

10. Recommendations: Supplier Development Programme

The primary recommendation of this study to develop a **cross-sectoral supplier development programme**, targeting local small and medium enterprises (SMEs), lead contractors, oil and gas companies, mining companies, and other important stakeholders, to enhance the ability of local businesses to take advantage of the commercial opportunities provided by the extractives sector.

Developing supplier development programmes to optimise local content development is a widely recognised approach utilised successfully in other areas. These programmes generally aggregate resources to support clusters of SMEs in their efforts to provide goods and services to the extractives sector projects. The programmes will provide business development services, capacity building, and information sharing services to facilitate engagement between extractives companies and the local private sector.

Consultations with extractives industry companies and other stakeholders (SMEs, business and public bodies), have given us insight into their perspective on future linkages, as well as supplier development initiatives. Among the proposed key ideas are:

- A cross-sectoral supplier development programme would be more efficient and cost less than buyer-owned programmes. Pooling demand and supplier development resources will help in identifying potential goods and service providers, understanding their capacity, developing programmes to improve competency and access to necessary knowledge for bidding/quoting to the extractives industry supply chain requests, managing their contracts and delivering results.

- Companies involved in large projects in Kenya (oil and gas, mining or infrastructure projects) look for the same indirect type of services (logistics/transport, civil engineering and construction, mechanical, electrical, maintenance, facilities management, lifting services etc.) and goods/consumables (fuel, chemicals, raw materials, food, office supplies, etc.) whatever the phase they are in (exploration, construction, production). Hence, a combined supplier development programme will strengthen the suppliers' network, and improve technology transfer and know-how for the benefit of all.

- A programme of this nature would ideally gather information and support discussions with public bodies, the private sector and civil society, about the gaps and needs facing the extractives industry supply chain in Kenya in

terms of skills, capacity, volume, standards/certification, quality, university curricula and vocational training.

- A single programme will also help local suppliers to have increased visibility of extractives industry project plans, specifications and requirements for inputs, and supply chain processes of each company, and to be prepared to address those needs at the right time, at the right quality, while being competitive.

10.1 Institutional Form

Based on benchmarking with case studies from Ghana, Mozambique, and Trinidad and Tobago, an enterprise development centre would be the best form to undertake planning, design, and implementation of the supplier development programme. This centre would provide opportunities for various stakeholders to work together to improve the prospects for local suppliers. Among its chief aims would be the development and packaging of products that deliver programme components to related targets. It would also achieve buy-in from key stakeholders and influence collaboration among them for the benefit of achieving programme outcomes. The enterprise development centre would also function as the clearinghouse on information related to supplier development, also ensuring that sector insight reports and actions from these reports are carried out.

Mozambique: The SME Empowerment Linkages Programmes (SMEELP) and Mozlink[3]

The Mozal aluminium smelter is considered to be Mozambique's flagship project for attracting international investment. In 2001 Mozal, Mozambique's investment promotion agency (CPI) and the IFC implemented the SME Empowerment and Linkages Programme (SMEELP). This programme had the principle objective of assisting in the uplifting of local businesses by linking local SMEs to the expansion phase of Mozal's supply chain[4].

The major components and the SMEELP programme are summarised below[5]:

Step 1: Creation of SME Packages

- Packages solely allocated to SMEs
- Ensure realistic scope in terms of size and complexity
- Sufficient back up time in case of failure
- SMEs induced for standard packages, whenever possible

Step 2: Pre-assessment of SME Capability

- Financial/Technical capabilities pre-assessed and capable SMEs recommended to the project by CPI
- SME database established and periodically updated

Step 3: Training

- Tendering Training (Pre-tender): How to tender
- Induction Training (Post-Award): How to execute contracts
- On Demand Training: QA/QC, Business Management etc.
- Training Modules written and presented in Portuguese periodically updated

Step 4: Mentorship

- Custom made Mentorship Plan for each SME
- Business Mentorship: Financial/Commercial assistance
- Technical mentorship: On/Off Site Technical assistance including Safety, QA/QC and IR

SMEELP Quick Facts

- Launched on 18th July 2001 with intention of awarding 25 contracts to local SMEs.
- 16 SMEs trained under programme with a total of 28 contracts awarded worth over USD 5M.
- Services offered by these SMEs included engineering and construction firms, landscaping firms and technology firms.
- 88% of participating SMEs considered the programme to be useful.
- Challenge that remained for SMEs was the limited access to finance.
- Mozal developed triangular arrangement with local banks and the SMEs which were awarded contracts.
- SMEs could apply for loans with Mozal acting as guarantor and the amount of loan amortisation would be deducted from Mozal's payments to the SMEs.
- This **arrangement was implemented in a subsequent linkages programme, Mozlink.**

Mozlink I was implemented from 2003 – 2007 to replicate the results of SMEELP and to expand linkages between Mozal and local SMEs in the smelter's operational phase[6]. Beyond the activities included in SMEELP, Mozlink I encompassed the promotion of additional business development and financial services such that SMEs received technical training for doing business with Mozal, and specific financing products were developed for the SMEs. Mozlink I was considered to have a significant, positive impact on SMEs and the local economy[7]:

[3] Adapted from Genesis Analytics Consulting

[4] UNECA, 2004

[5] BHP Billiton, 2003

[6] German Development Institute, 2011

[7] IFC, 2008

- Mozlink built the capacity of 45 local SMEs
- Annual local purchasing from Mozlink-affiliated companies increased from USD5m in 2001 to USD13m in 2005
- Over the five-year period from 2002 to 2007, the number of Mozambican companies from which Mozal purchased goods and services increased from 40 to 250.

The success of Mozlink I encouraged four corporations in Mozambique (Mozal, Sasol, Cervejas de Moçambique[8], and Coca-Cola) to partner with IFC to design a three year SME linkages programme, Mozlink II, for implementation from the end of 2006 to 2010. This programme was focused on the same objectives as its predecessors, aiming to create market opportunities for local SMEs by leveraging off of the high-capital, long-term industrial projects launched by the four companies and IFC. Since 2006, Mozlink II has achieved the following[9]:

- Over 140 SME managers trained in management and technical best practices.
- 75 SMEs actively engaged in the programme and implementing individual improvement plans.
- Average of 34% annual total sales growth for participating Mozlink SMEs.
- By the end of 2009, corporate partners spent over $20 million on Mozlink SMEs alone.

Given the traditional challenges of contracting local SMEs, the results of the Mozlink related programmes are notable, but still limited. These programmes have highlighted a number of key learning points for future linkages programmes.[10]

- A clear business case is needed for sustained long-term linkage programmes. In order to be sustainable, linkages programmes cannot be philanthropic in nature as a result of their inherent risky, costly, and time-consuming nature
- The sustainability of a linkages programme is dependent on the clear allocation of roles and responsibilities to all those involved in the programme. SMEELP and Mozlink I illustrated this level of leadership and commitment, however, this waned once the other three partners joined the programme; this effect was further exacerbated by the fact that both Coca-Cola and Cervejas de Moçambique are not in the Extractives Industry.

It has also been noted that only backward linkages were established through these programmes.[11] This is a function of the majority of the **aluminium** that is produced being exported, as well as the lack of capacity of Mozambican firms to manufacture goods from **aluminium**. On the side of the SMEs, critics indicate there was misalignment with the SMEs' expectations and the purpose of the programme. A number of SMEs viewed the programme as a guarantee of a contract; however, the objective of the programme was rather to build their capacity and improve their competitiveness in the market.

The enterprise development centre would have a management structure which pools different participants with complementary capabilities. A steering committee, comprised usually of representatives from key stakeholder groups participating in the initiative, would be responsible for monitoring activities of the centre through the programme management office and give necessary approvals for work to proceed as required. The programme management office would have the work of implementing the supplier development programme and other complementary activities as per the project plans. They would report directly to the steering committee. The steering committee could elect to support the programme management team with a team of technical advisors that could provide expertise on key areas of implementation. The programme management team would then offer services through a team of consultants and/or other third parties.

8 Mozambique's largest beer brewery, a subsidiary of SAB Miller

9 IFC and Mozlink

10 USAID, 2012

11 German Development Institute, 2011

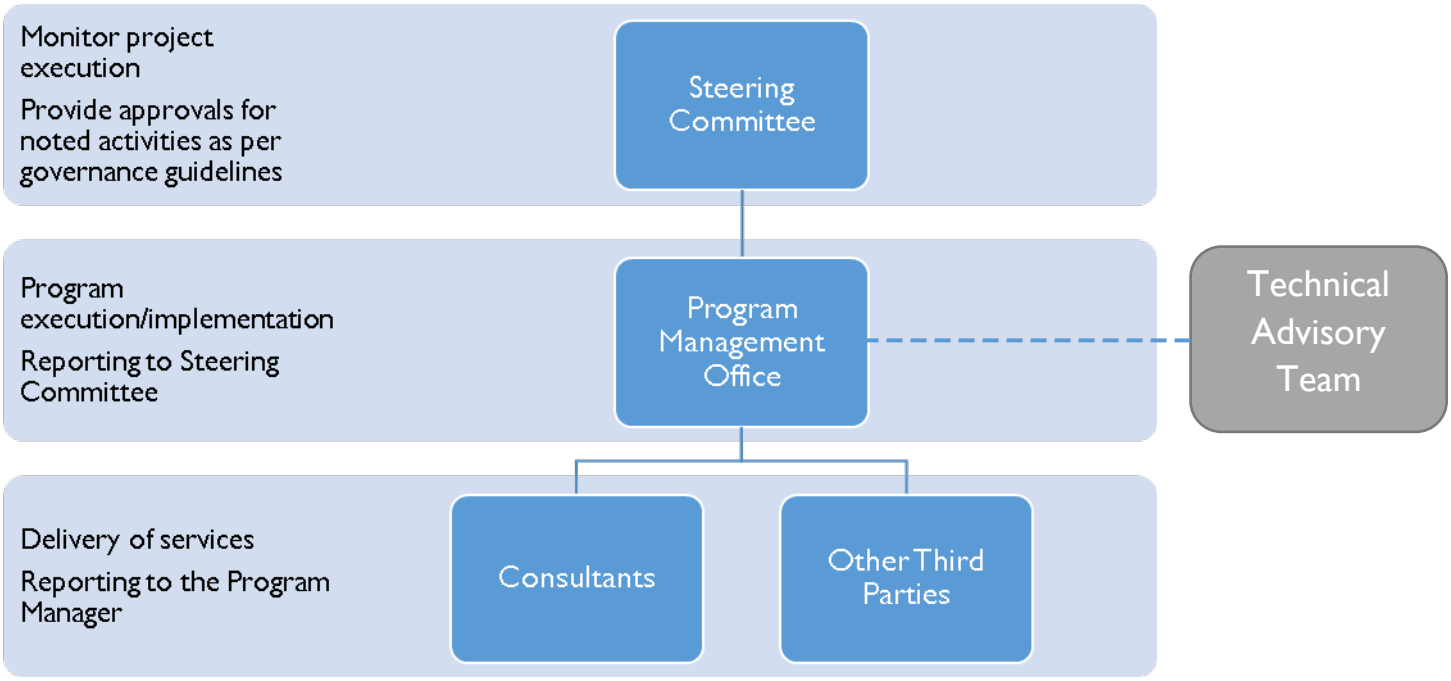

Figure 22: Enterprise Development Centre - Proposed Management Structure
Source: Interview and Research Data; Consultants' Analysis

10.2 Key Participants

The cross-sectoral supplier development programme would be national in scope and thus require the participation of government, extractives companies, lead contractors, local private sector (SMEs), consultants, relevant industry associations, and development partners.

Experience from other jurisdictions notes that for cross-sectoral supplier development programmes to work effectively, the government has to show their support and lend their convening power to the programme by bringing all the players to the table. Because compliance with government directives is important to both the supply side and demand side participants, a programme that is endorsed by the government is likely to have better participation. By adopting a collaborative approach as well, the government could provide a set of incentives for participation that could position a cross-sectoral supplier development programme for success. In some jurisdictions, for instance, extractives companies that used qualified and participating SMEs during their contracts were awarded additional points in evaluation of subsequent contracts. This meant that utilisation of locally sourced goods and services had a direct benefit to future operations and therefore encouraged participation from the buyers' side. It is also possible for the government to benefit from the supplier development programme. With input from the government, the supplier development programme can provide useful information to departments that are tasked with monitoring local content development in the extractives sector. There is scope for the government to provide financial resources and contribute to the sustainability of the programme as well.

Extractives companies and lead contractors would be the buyers' side participants and play three key roles. The first is in utilisation of the programme to pre-qualify and award contracts to participating SMEs. Supplier development programmes are more likely to succeed if there is meaningful participation from extractives companies and lead contractors. After all, their participation and the likelihood of getting contracts will spur on the participation of SMEs. It is through this participation that the greater economy is likely to register improvements in use of technology, improved quality in outputs, increased application of safety standards in operations, and many other benefits. The second role to be played by extractives companies is in providing financial contributions for the supplier development programme. Noting that some of the services (e.g. training, business development services (BDS), information hosting and sharing, etc.) will require funding, securing contributions from as many parties as possible will enhance sustainability of the programme. It is important to note that providing financial contributions may also increase the likelihood of extractives companies using the services provided. Lastly, extractives companies have access to a wealth of knowledge and training that could be useful for contractors. Integrating this expertise in the form of training seminars, workshops, and information sharing sessions could create significant value for participating SMEs.

Local private sector and particularly SMEs would be the supply side participants in this programme. They would be positioned to receive training, business development services, networking, and pre-screening services in preparation for participation in the extractives sector. SMEs participation is critical to the success of the supplier development programme because buyers can only contract suppliers who meet the procurement evaluation criteria. If SMEs do not avail themselves of opportunities to receive technical assistance and training, many of the constraints to local sourcing will persist. The incentives for participation must therefore be anchored to real opportunities for contract award.

Consultants, both local and international, would be required to provide training and business development services for participating organisations. Consultants would also be required to conduct research studies and other work that would support buyer strategies to improve local sourcing. Local companies could be required to contribute to the supplier development programme by paying a membership or subscription fee.

Industry associations and chambers must also participate in the programme. They could provide some services such as networking, business matchmaking, and marketing for the programme. An existing business association may be a suitable implementing partner for the programme as they have access to target beneficiaries, and have prior experience with running similar BDS programmes.

Development partners could provide technical expertise and resources for designing and implementing the programme, as well as channel financial resources from a number of contributors.

The figure below is adapted from an existing supplier development programme in the extractives sector and demonstrates how key participants could interact.

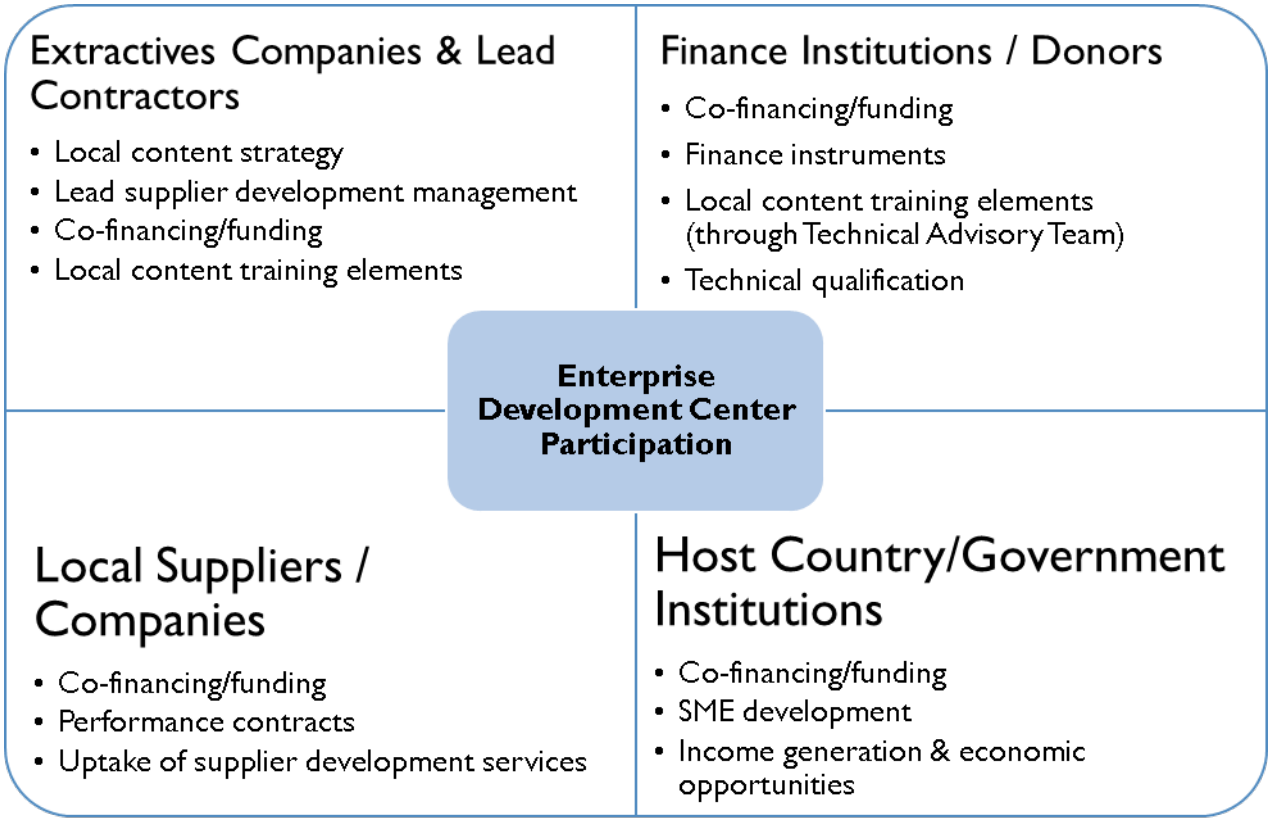

Figure 23: Enterprise Development Centre Participation
Source: Interview and Research Data; Consultants' Analysis

10.3 Supply Side Products and Services

The Supplier Development component could be initially designed and structured based on extractives industry companies' needs and willingness to share their views and wishes. The pillars of the programme could be as follows:

A. Searchable Online Supplier Database

This database would offer a first screening of technical capacity assessment and provide details online. This procurement platform would include all Kenyan suppliers in the sectors identified as priority for Kenyan sourcing. After agreeing, with the aforementioned study participants, criteria for the technical assessment of these domestic suppliers, technical consulting partners will provide non-biased screening of suppliers' capacity (including advice on areas for improvement), which will be included in suppliers' profiles (as confidential documents). Oil and gas, and mining lead contractors in Kenya, contracting these suppliers, will be able to provide feedback on contract execution, which will help to adjust training and support services.

B. SMEs Capability Development

On request, and after having clearly identified capacity through screening and assessments, specific training or support actions could be set up on critical issues such as bid/quotations processes, HSE, quality management, certification process, contract management, performance, etc. Training could be delivered by qualified companies and consultants in Kenya, specialised training firms or technical personnel from extractives industry companies for specific requests. Collaboration with related ministries (Ministry of Mining, Ministry of Energy and Petroleum, Ministry of Industrialisation, Education, etc.) would be sought, so as to have a better comprehensive approach and integrate this supplier development programme into Government local content development plans.

C. Opportunities for Matchmaking and Tender Process Facilitation

Extractives industry companies will find suitable suppliers through the platform set up, and could require assistance in facilitating invitation to tender workshops for pre-selected suppliers.

D. Access to Finance and Administrative Support

Once opportunities materialise, assistance could be provided to help apply for bank guarantee/performance bonds, secure loans and credit facilities so as to realise assets investment to be able to carry out the contract/order, look for co-funding for business development services, and other information.

10.4 Demand Side Products and Services

Supplier development interventions should also target demand side strategies that will allow programme components from the supply side to have desired effects. Among the pillars for demand side development should be the following:

A. Contract Bundling and Unbundling

A contract bundling/unbundling goods and services strategy would ensure that the required Scope of Work fits the best possible/available development capabilities in the local market. Often local businesses are themselves too small to be able to take advantage of the emerging opportunities. However, their capacity could be built up over time by identifying ways for them to enter the procurement and supply chain at feasible levels.

This exercise could go along with promoting alliances, sub-contracting agreements, preferred suppliers' agreements, as well as long-term suppliers' agreements with other registered Kenyan and/or international companies. It would ensure also that projects contracting Kenyan SMEs limit risks, while allowing Kenyan suppliers to be contracted directly. The benefit of exposure and experience will also accrue to SMEs which means that they will acquire know-how and technology, and in time be able to secure direct contracts.

B. Contracting Strategies

The supplier development programme should also focus on the development of complementary contracting strategies among buyers in the extractives sector. Following are complementary contracting strategies which could be discussed, per type of work required, with extractive industry companies and lead contractors.

- **Joint ventures:** Developers should consider where it makes sense to help Kenyan suppliers enter into joint ventures with global Engineering Procurement and Construction Management (EPCM)/lead contractors to help

increase local capacity, as well as provide a form of sub-contractor incubation. This is for instance the type of approach that could be adopted during the construction phase to ensure that some local suppliers will be available during production, where smaller work packages or maintenance will be needed.

- **Integrating local SMEs into large contracts**: Rather than unbundling contracts into smaller and simpler work packages, developers would have to supply Kenyan companies' databases to EPCM/lead contractors at the initial stage of the Invitation to Tender (ITT) and would further determine how to integrate the smaller suppliers within the larger contracts with more global scope.

- **Ring-fencing:** Demand side participants could be encouraged to set aside certain categories for exclusively local procurement. Suitable categories for ring fencing would have been deemed a good fit, due to availability of local capacity to fulfil work. For instance, contracts for site consumables, office supplies, and agriculture/food specific to the country could be selected. The impact of these types of contracts should be monitored so as not to create shortages within local markets, or drive artificial inflation of prices.

- **Rotating suppliers:** For all ring-fenced categories where there is local capacity in abundance, it may make sense to rotate suppliers over time. Rotation of suppliers allows for other providers in the market to generate new income and perhaps expand services. This strategy could introduce some risks, but if implemented cautiously, it could be useful for developing community project ventures that have specific supply agreements with extractive industry companies or contractors. One way to ensure rotation of suppliers is to change the evaluation criteria weighting from one bid to the next.

- **Price preference:** This strategy involves placing less weighting on price for local suppliers. Justified by the existence of additional criteria that would prioritise location within country as an important parameter along the golden rules of price, quality, and delivery, price preference could further assist local supplier integration. In a country like Kenya where tax distortion can render local goods and services more expensive, this strategy can be quite useful.

  The supplier development programme could support industry buyers by providing knowledge that would facilitate decision-making on these strategies. As a clearing-house for local supplier information, they could also be utilised to short list suitable candidates and sectors under each such strategy.

Existing Programmes in Kenya and Possible Linkages

There are a number of existing programmes that are undertaking supplier development activities and these include:

A. Biashara Centres

Biashara centres are a one-stop shop, implemented at the county level, for provision of Business Development Services (BDS) to youth and women taking up employment within the Micro and Small enterprises (MSEs). Implemented as the flagship initiative for UNDP's Economic Empowerment Programme, these centres are envisaged as a focal support point for enterprise development and provision of required training services. The target beneficiaries are established SMEs, aspiring entrepreneurs and SME associations and/or smallholder farming communities, with specific focus on youth and women, though medium-sized and large businesses would be ideally integrated through other value chain development programmes. Currently, these projects are being implemented in Kwale and Taita Taveta counties both of which are sites for extractives sector work, particularly in mining. According to the programme document for the Biashara Centres, UNDP plans to establish twenty (20) County Business development Centres during the 2014-2018 plan period, subject to demand, and the support of focus counties.

B. Lundin Foundation Skills Development and Enterprise Development Centre

In support of the current operations in oil and gas in Turkana County, the Lundin Foundation is developing a programme for skills development, in partnership with the Lodwar Youth Polytechnic as well as an enterprise development centre that would allow local suppliers to plug into the operators' supply chain. Among the anticipated services of the programme are capacity building, business development services, and matchmaking.

C. Possible Linkages

It is recommended that the cross-sectoral programme envisaged for the extractives sector remain separate and distinct from existing programmes. First, the intervention sought for supplier development in the extractives sector is national in scope and seeks to leverage gains in the broader economy and wider sectors. Second, the programme would leverage bases of power from the existing structure of the sector whereby local content requirements are driven from the national government. Third, the programme would be structured to deal specifically with the dynamics of extractives companies' procurement processes, which would give a definitive point of entry and higher chances for success.

Existing programmes which could be linked to the wider cross-sectoral programme for the extractives sector are as follows:

- ***Lundin Foundation as a Pilot Programme***

  The Lundin Foundation project could be funded as a pilot programme to test out some of the components required for supplier development at the county level. Because extractives companies already have a commitment to source certain goods and services from the local areas of operation (as opposed to national sourcing), then it would be useful to come up with a series of tested services and strategies to increase participation at the county and even community level. The programme would absorb the lessons from this pilot that could be applied in satellite supplier development programmes in areas of oil, gas, and mining operations.

- ***Biashara Centres for Local SMEs Intervention***

  Once a pilot programme has been conducted for the extractives sector and a responsive intervention has been designed using lessons and best practices from the pilot, then Biashara Centres could be integrated as satellite programmes of the national cross-sectoral supplier development programme. Their focus, however as county level programmes, would be to provide services that would ensure that community suppliers are integrated into the supply chains of extractives companies.

- ***Information Exchange***

  These programmes will have access to important information that could be utilised across interventions. There should be a way to manage knowledge across programmes and provide access to lessons, best practices, and expertise.

10.5 Immediate Next Steps – Insight Sector Study Reports

In order to enhance the responsiveness of a supplier development programme, it is important to understand the priority sectors outlined in this study. Though the supplier development matrix assists with ranking, it does not consider contextual information that may be critical for designing high impact programmes.

Before setting up the enterprise development centre, insight sector study reports will have to be completed, as they will provide evidence for the programme rationale and components. The sector level information will provide the necessary detail required to develop products and services for government institutions, local suppliers and the extractives companies. The studies will also clarify the roles and participation of key stakeholders as pertains to the delivery of products and services.

The outputs of the Priority Sector Studies will be:

- An overall Supplier Development Strategy that considers the critical needs of the oil and gas, and mining and infrastructure projects, and related market analysis of prioritised sectors.
- A Workforce Gap Analysis leading to identification of skill opportunities that need to be leveraged, and training segments with critical needs.
- A detailed Action Plan associated with the Supplier Development Strategy.
- A Resource Evaluation, detailing requirements for the implementation of the Supplier Development Strategy (budget, personnel, timeframe, etc.).

These outputs would then feed into a programme plan to provide enterprise development for SMEs and other local companies seeking to enter the extractives supply chain.

10.6 Conclusion

This study is the first comprehensive review of the extractives sector in Kenya and its potential to uncover new opportunities for wealth creation among local businesses. Understanding priority sectors, and the constraints that need to be addressed, can help ensure the likelihood of realising gains by the integration of these sectors in the greater economy. Furthermore, establishing supplier development programmes within enterprise development centres in communities where extractives projects are located presents additional prospects for cascading economic benefits to citizens.

www.adamsmithinternational.com

Headquarters
240 Blackfriars Road
London
SE1 8NW
United Kingdom
T: +44 20 7735 6660

Africa
2nd Floor Cavendish
14 Riverside, Riverside Drive
PO Box 26721-00100
Nairobi
Kenya
T: +254 20 444 4388/9

South Asia
Bharat Yuvak Bhawan
1 Jai Singh Road
New Delhi 110 001
India
T: +91 11 4150 2291/93/94/95

Asia Pacific
301/88 Foveaux Street
Surry Hills
Sydney NSW 2010
Australia
T: +61 2 8265 0000

Adam Smith International
@adamsmithint

Adam Smith International