

## **Constraints to Subcontracting Arrangements between SMEs and Large Firms in the Motor Vehicle Industry in Kenya**

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### **Abstract**

*The purpose of this study was to determine internal and external constraints to subcontracting arrangements between large firms and small and medium enterprises (SMEs) in the motor vehicle manufacturing industry in Kenya in order to establish the reasons for the gap in those arrangements. The sector was chosen for the study because of the governments selection of the sector to promote subcontracting arrangements between small and medium enterprises and large firms in Kenya. Secondly, the sector was chosen because of the complexity of the motor vehicle industry with one motor vehicle comprising about 10,000 component parts, all of which would be difficult for one company to manufacture in-house. The research was mainly qualitative but quantitative data was also used. Content analysis approach was used to analyze the qualitative data and descriptive statistics to analyze the quantitative data. Data was collected from two of the three motor vehicle assembles in Kenya, nine out of thirteen franchise holders and 66 of the 72 component parts suppliers who are mainly small and medium enterprises. The results indicate that the level of subcontracting that takes place in the motor vehicle manufacturing industry is minimal. This is motivated mainly by a desire to remain in the good books of the government. The big enterprises are not willing to buy component parts from local suppliers and especially not local SME suppliers mainly due to the inability of the SMEs to supply quality products to schedule, lack of local suppliers for certain parts, the proliferation of makes and models and competition from imported second hand vehicles from Japan and Europe. The proliferation of makes and models also requires frequent technological changes which both assemblers and SMEs owners find difficult to keep up with. The study recommends that the government should reduce the age of imported second hand vehicles to not more than five years, find a way of compelling the franchise holders and assemblers to buy parts locally and put in place appropriate policies regarding the sector. SMEs should also acquire up to date technology and become more competitive.*

**Key words:** Motor vehicle assemblers, franchise holders, subcontracting, large firms, Small and medium enterprises.

### **Introduction**

One of the main determinants for the success of SME growth and development is the establishment of useful linkages between large enterprises and SMEs through subcontracting arrangements (UNCTAD, 2000; Kumar & Subrahmanya, 2007). Small and medium enterprises (SMEs) play a predominant role in most developed and developing countries not only because of their number and variety and their involvement in all segments of the economy but more importantly, their role in employment creation (Baseline Survey, 1999; Thitapha, 2002; Kumar & Subrahmanya, 2007). The Poverty Reduction Strategy Paper (Republic of Kenya, 2001 – 2004), states that the potential of small and medium enterprises (SMEs) in both employment creation and raising incomes for many Kenyan families makes them an important element in the poverty reduction strategy.

According to the Economic Survey (Republic of Kenya, 2008), overall, the economy generated 469 thousand new jobs in 2006 – 2007 financial years, an increase of 5.7 from the previous year. A large population of this labor force was absorbed in the informal sector which generated 418 thousand jobs. In the following year, the informal sector created 426.9 thousand new jobs in 2007 compared to 420.4 thousand jobs in 2006. An estimated 8, 33.5 thousand persons were engaged in informal sector economic activities in 2009, an increase of 4.9 per cent from the 2008 level. The sector has always provided the necessary employment interface between the modern sector and small scale farming and pastoral activities. The ease of entry into the sector has made it a fall back opening for those leaving training institutions as they await to join the modern sector, for those leaving the modern sector and for those who cannot secure formal employment due to lack of appropriate skills (Republic of Kenya, 2010). The contribution of SMEs to the economies of developing countries is mainly emphasized in manufacturing. International Labour Organization (2005), for example, shows that small scale enterprises made up 95% of all registered enterprises in the manufacturing sector of developing countries.

The importance of SMEs to large firms in manufacturing is well documented, though more prominently in south East Asia than in African countries. Andersen (1999), reported that employment expansion of large firms attributed to the growth of small firms ranged between 40% and 53% for Korea, the Philippines, Turkey and Taiwan, and 67% and 70% for India and Colombia respectively, achieved mainly through subcontracting relationships. There is a possibility that these figures could be higher, considering that it is difficult to measure the subcontracting activity in many developing countries, due to the informality and lack of records in the SSE sector. It is also made difficult by the lack of a clear definition of the full extent of the varieties and impact of subcontracting. In other developing countries, assessment of the contribution of SMEs in real economic terms has been difficult due to the informality of the sector and due to the neglect of the sector by the government (ILO, 2005).

However despite the important role of SMEs, the sector is plagued by a number of concerns. According to Thitapha (2000), SMEs, especially in developing countries, have been exposed to intense competition due to the accelerated process of globalization which brings out the need for SMEs to develop competitiveness for their survival as well as growth. SMEs, in general are constrained in terms of infrastructural sources such as technology, finances, marketing and human resources, gender inequality, limited access to information and limited linkages to large enterprises, among others, according to Sessional Papers No2 (Republic of Kenya, 1992; 2005). The ability of SMEs to compete in the global market depends on their access to these resources and those SMEs which have better access to these infrastructural resources are able to exhibit better economic performance (Jenkins et al, 2007). Subcontracting relationships with large enterprises, provides SMEs with a better scope for accessing these resources, and offers them a short cut to enhancing productivity and other non-price determinants of domestic and international competitiveness (Meyn, 2004). Subcontracting involves purchase-supply relationship where SMEs are the subcontractors who deliver product or service to the contractors, for the production requirements of the latter as per their specifications (Kumar & Subrahmanya, 2007). In this case the motor vehicle assemblers and franchise holders are the contractors while the subcontractors are the SME component parts manufacturers.

### **Large Enterprises**

Globalization has generated both new markets and competitive forces for large firms. Constant pressure to reduce costs, shorten lead time and focus on core competences has driven firms to change their supply chain management strategies. Most large manufacturing companies now buy significant percentages of their inputs of both goods and services from other firms, with some spending as much as half of their revenues this way. Managing the supply chain for an optimal mix of cost, quality, flexibility and strategic advantages such as access to innovation is becoming an increasingly important source of competitive advantage (Hermann, 2005). Cost pressure and presence in developing countries combine to create an interesting set of opportunities and challenges for Trans National Companies (TNCs). How to gain the local knowledge and contracts required for operating effectively? How to optimize cost, quality, flexibility and other considerations in the value chain? How to manage any social or political controversy surrounding company activities? How to preserve “social license to operate”? The message is clear. Companies need to be seen to be contributing and not simply exploiting (UNCTAD, 2006). There has, therefore, been an urgent need to forge stronger ties with the local communities in which these TNCs operate. While these challenges are particularly pronounced for foreign firms with alliances in developing countries, they are relevant to domestic developing country firms as well (ILO, 2005; Jenkins et al, 2007; Kumar & Subrahmanya, 2007). In developing countries, business linkages with local SMEs, including procurement, distribution and sales, offer large firms an avenue through which to address some of these concerns. These relationships can allow large firms to reduce input costs while increasing specializations and flexibility.

They can also increase local integration and “rooting:” providing access to local knowledge, and, by spurring growth and development in the local SME sector, bringing about positive social and economic impacts in the wider community. There are thus both competitiveness and corporate social responsibility arguments in favor of business linkages (Kumar & Subrahmanya, 2007). Large enterprises operating in developing countries can forge linkages with local SMEs in many different areas of their value chains. These opportunities may include procurement, agricultural out growers’ schemes, manufacturing, sales of financial services, information and communication technologies, distribution and retail outgrowing, non core functions and services franchising, leasing and subcontracting (UNCTAD, 2006).

### **Structure of the Motor Vehicle Assembly Industry in Kenya**

The motor vehicle assembly industry in Kenya consists of four distinct categories of participants. The first category consists of the three assemblers: Kenya Vehicle Manufacturers (KVM), Associated Vehicle Assemblers (AVA), and General Motors East Africa (GMEA). The first two firms are contract assemblers while General Motors East Africa, is a franchise holder as well as an assembler. GMEA is the only assembler that does not contract assembly services to anyone else. All of the assemblers have a government shareholding together with some of the major franchise holders in Kenya. The second category consists of 13 franchise holders, better known in Kenya as importers of the completely knocked- down- kits (CKDs). They hold licenses to import and assemble on behalf of principle car manufacturers in Japan France, Italy, United Kingdom, Germany and others. About half of these have some shareholding interests in at least one of the assembly plants. GMEA is in a category of its own as it is both a franchise holder and an assembler. The distributors are usually also franchise holders. However, there are distributors who merely provide outlets for major franchise holders.

The third category is the auto ancillary sub sector comprising a variety of independent SMEs who supply the industry with assembly and replacement parts. However, because the assemblers import as complete a CKD kit as possible and import most of the other inputs, this category has tended mostly to serve the replacement market. Yet it is in this category that prospects for a wide range of small enterprises are found. The fourth category consists of body fabricators who play a vital role in subcontracting in the motor vehicle industry in Kenya. The service and repair sub-sector constitutes a fifth category that, while vital for the industry, is not directly linked into the assembly or auto ancillary sub sectors. In Kenya, this latter category employs perhaps, the largest number of the small enterprise workers in the motor vehicle industry (Kenya Association of Manufacturers, 2006). The total installed production capacity of the three motor vehicle assemblers is 23,200 vehicles on batch basis. In the year 2004, the total utilization of the assembly plants by the three assemblers was only 28.5%. The capacity of the three motor vehicle assembly plants is grossly underutilized. This could be expected to impact negatively on subcontracting within the industry as local subcontracting depends on the amount of local assembly taking place.

The research concentrates on the motor vehicle manufacturing industry for good reasons. In no other industry has subcontracting been as extensively used as in the motor vehicle industry. One possible explanation for this could be that, apart from the service inputs, a typical vehicle model, for example, uses at least 10,000 different parts of components (Womack et al, 1990). Subcontracting, therefore, seems to be a logical production organization since no single manufacturer could possibly provide all these parts internally. It would appear, therefore, that the very nature of the technical process of motor vehicle manufacturing necessitates linkages involving several firms. Moreover, despite the need for both large and small firms in industry to become more competitive, and the proposal that one of the ways through which this can be achieved is through subcontracting between SMEs and large firms, little has been deliberately done to exploit this strategy (Republic of Kenya, 2005; 2006-2010; KAM, 2006). Until the establishment in 1991 of the Kenya Subcontracting and Partnership Exchange (KSPX) to promote industrial subcontracting in the country, Kenya had not taken deliberate steps to utilize the linkages between large and small businesses.

The KSPX was set up in 1991 by the Kenya government with the help of United Nations Development Programme (UNDP), to bring together large, medium and small enterprises in a formal interaction (UNDP/Republic of Kenya Project Document, 1990), and to build a data bank to facilitate these activities. It was expected that its linkages with the various membership organizations assisting business people will ameliorate this situation, although there were serious doubts in the business circles about its survival (Masinde, 1996). Recognizing the potential of the motor-vehicle industry for external sourcing and subcontracting activities, and in view of the successful experiences of this sector in industrial development in Europe (Becattini, 1991) and in Japan (Sato, 2000), the government selected the automotive industry as the pilot sub sector for the initial promotion of the KSPX activities and inter-firm linkages in industry.

Together with a specific rationalization strategy aimed at streamlining the motor vehicle industry and encouraging local procurement of components, this strategy was expected to develop a local capacity to supply the motor assembly and other industries (Masinde, 1996). However, according to Sessional Paper No. 2 (Republic of Kenya, 2005) and the Private Sector Development Strategy Paper (Republic of Kenya, 2006 - 2010), the current situation is that linkage between Kenya's SMEs and large firms is weak. As a result, Kenyan SMEs remain passive and underdeveloped. Research has shown that linkages between large firms and SMEs can enhance the growth and competitiveness of the latter and provide the much needed employment (McCormick & Atieno, 2002; Thitapha, 2002; UNCTAD, 2006; Kumar & Subrahmanya, 2007). Yet, firm to firm linkages in the form of franchising, leasing, production complimentaries, subcontracting and other inter-firm linkage opportunities between large firms and SMEs, is still untapped in Kenya (Masai, 1991; Republic of Kenya, 1992; 2005; 2006-2010; Masinde, 1996). This paper is an attempt to narrow the information gap.

Empirical literature on subcontracting in Kenya is scant. The only studies conducted on subcontracting in the motor vehicle sub sector in Kenya were done much earlier by Masai, (1991), and Masinde, (1996). The study by Masinde (1996), pointed out that effort to rationalize the industry and encourage assemblers to procure some of their inputs locally through subcontracting had not been very successful. Yet there exists an inherent capacity for subcontracting arrangements in the industry and it was, therefore, important to explore the reasons for the reluctance of the assemblers and franchise holders to enter into subcontracting arrangements with local SMEs. This research attempted to examine the constraints to subcontracting arrangements in Kenya's motor vehicle industry so as to establish why subcontracting in Kenya remains to a large extent, untapped.

### ***Methodology***

The overall objective of this study was establish the internal and external constraints to subcontracting arrangements between small and medium enterprises (SMEs) and large firms in the motor vehicle manufacturing industry in Kenya so as to establish the reasons behind the gap in subcontracting in Kenya. The specific objectives were: 1) to examine the internal constraints to subcontracting arrangements between large firms and small and medium enterprises in Kenya's motor vehicle industry 2) to establish the external constraints that affects the subcontracting arrangements. The study adopted mainly a qualitative approach although some quantitative data was also included. Kothari (2005) states that typically, qualitative research is concerned with the assessment of attitudes, opinions, demographic information, conditions and procedures. The purpose is to portray an accurate profile of events or situations. The approach provides an insight into attitudes of the parties involved in subcontracting.

The qualitative data was analyzed using conceptual content analysis. Content analysis is a qualitative research tool used to determine the presence of certain words or concepts within the text. It uses inductive reasoning by which certain words, patterns, concepts, phrases, themes emerge from raw data. Kombo and Tromp (2006), propose use of themes to analyze qualitative data. Gaskill (2001) used the same approach. The theme categories evolved during data collection but the researcher ensured that the categories are relevant to the research questions of the study. Descriptive statistics was used to analyze the quantitative data. A census was conducted on the 88 businesses in the motor vehicle manufacturing industry consisting of three motor vehicle assemblers, 13 franchise holders and 72 component parts suppliers (mainly SMEs and a few large companies engaged in supplying the first two groups with component parts). Managers of two assembly plants and of nine franchise holders were interviewed. 66 suppliers filled and returned questionnaires. The study was conducted between November, 2009 and July 2010.

### ***Literature review***

#### **Why do large firms engage in subcontracting relationships?**

According to Harrigan and Newman (1990), to understand inter-firm relationships, the motivation and propensity of firms to relate must first be understood. By this it is meant that the firm's desire to and inclination to relate with another firm, perhaps to access resources, markets or technology is decided by the management. Recent global experiences suggest that answers can be found by examining the external pressures causing such developments, particularly those related to changes in demand patterns. These pressures are, however, difficult to replicate in an economy. Since it is the decisions of individual firms which aggregate into what is considered industry behavior, other more intrinsic managerial explanations are suggested, namely: (i) that firms are searching for competitiveness by focusing on 'core competency' (Prahalad & Hamel, 1994); (ii) the increasing importance of the strategic implications of the efficiency of the supply chain to the competitiveness of the firm (Porter, 2001); (iii) the replacement of internal markets with external markets as one strategy to increase the value of the supply chain (Porter, 2001);

(iv) the development of cooperative strategies by firms as strategy for entering markets and accessing resources and finally, (v) the development by smaller firms, of cooperative strategies for entering markets hitherto inaccessible because of scale related barriers (Brusco, 2004). Hence this category of explanations recognizes that the explanation for industry behavior can be found by examining individual firm behavior; decisions about production organization, organizational structure, sourcing activity and subcontracting. Harrigan and Newman (1990) have also argued that this decision is largely predicted on the benefits of the linkage to the firm; whether the resource or the market offered by the 'partner' is critical to its activities; the costs of the cooperation/ linkage, including transaction costs, opportunity costs, strategic inflexibility resulting from cooperation and the damage to a firm's strategic advantage when such linkage occurs; whether alternative strategies exist or whether other sources of inputs or markets can be found; and the need to cooperate in order to access desired markets or resources; the centrality, urgency and necessity of the resource or market to the other activities of the firm. Clearly, the central concern is the motivation of a firm to form relations with another firm, and how it perceives the possibilities of achieving its objectives using this strategy.

The factors motivating firm to firm linkages with other firms as part of its business strategy is therefore of central interest to this study. Kumar and Subrahmanya (2007), point out that a corporation participates in subcontracting activities for two basic reasons: because it good business and out of a sense of responsibility for community service. To say that it is good business means that linkage contracts provide the corporate buyer with needed inputs of the required quality and quantity at competitive prices, delivered in a timely manner thereby reducing costs and enabling the corporation to concentrate its capital and management skills on a more limited range of activities (its "core business"). Jenkins et al (2007), indicate that what motivates a company to engage in subcontracting are: to reduce and control operating costs in manufacturing, to improve company focus, and to access world class capabilities, to free resources for other purposes, to access resources not available internally, to accelerate re- engineering benefits, to improve the efficiency of functions difficult to manage or out of control and to make capital funds available to share risk to induce cash flow. Large firms in the motor vehicle industry considered control over resources (suppliers), markets, the government and its competitors as more important in making decisions about subcontracting. The most frequently cited motive was access to and control of suppliers, in this case the CKD kits. This priority was linked to the need to comply with government regulations as a way of ensuring access to import licenses for scarce resources. Thus, allowing for variations depending on the activity in question, for various components and sub assemblies, decisions to externalize or internalize transactions were made not necessarily with cost in mind, but to maintain this control (Masinde, 1996).

According to Tumbull (2000), at inter-firm level, because of the need to control inventory costs and to outsource, the efficient use of outside suppliers has become imperative and competitiveness is defined by access to good quality, reliable suppliers, or denying competitors access to such suppliers. Hence, merely having more efficient production techniques is not enough for competitiveness. It has become important to have more efficient relationships with suppliers of inputs and distributors of inputs. The importance of the whole of the supply and distribution chains is emphasized. Consequently, the buyer-supplier relationship is increasingly changing from an adversarial one based on price, to a cooperative one based on collective competitiveness through customer satisfaction (and resultant loyalty). For example, in the Japanese model where zero defects means that the supplier has to work closely with the buyer in order to achieve the quality and delivery standards required, short term cost minimization is not important. As Sako (2005) notes, buyers often invest time and personnel in making sure that the supplier's product meets the required quality standards without any rejects.

However, although competition based on cost minimization is important, it is not necessarily primary. Both the Japanese and European models assume that production organization is aimed at increasing productivity and efficiency; hence, subcontracting is seen as a function of these goals. Consequently, keeping the costs of the supplier chain low becomes one of the key elements for achieving efficiency, and by extension, competitiveness. The main difference in the two models is that in the Japanese approach, competitiveness is seen in terms of the long term benefits while the British model takes a short term view to competitiveness (Sako, 2005). In developing countries, however, supplier chain efficiency may not necessarily be a valid motivation since one of the primary concerns of industrialization is the localization of industry and capital. Subcontracting, particularly between SMEs and TNCs are more likely to be affected by political implications of resource ownership and control. Hence, keeping the costs of the supplier chain low is not as important as gaining access to and controlling resources. Due to uncertain economic conditions in many developing countries, firms have had the incentive to integrate as assurance against endemic resource scarcity. In these circumstances, the government is more likely to make subcontracting mandatory to encourage it (Sako, 2005).

A study conducted on subcontracting in Thailand by Thongpadke et al (2002) point out that industries usually subcontract out for several reasons. The finished product usually consists of various parts and components parts. The cost of establishing several manufacturing capabilities for some of these components do not always justify themselves. Thus it is sometimes more desirable for firms to establish subcontracting agreements when the cost savings exceed the transaction costs of such arrangements. Second, the production of these industries is usually in the mature stage of their respective product cycle. Therefore, there is no critical or strategic technology involved in the production of these parts and components. Finally, since these industries are modern and involve high technology, entrepreneurs in these industries are relatively well educated compared to others. They know how to manage the subcontracting arrangements. Furthermore, since the industries are rather competitive, subcontracting agreements to reduce costs sometimes become a necessity (Thongpadke et al, 2002).

The reasons for engaging in subcontracting arrangements vary among firms. The most frequently cited reasons for large firms are production flexibility, subcontractor's specialization, local content requirements, and avoidance of labour management problems. Reasons given by SMEs involved in the subcontracting arrangements include greater use of production capacities, assistance from parent firms and reduction of marketing costs. The most important consideration of the large firms is the ability of the SME to meet delivery schedules. The quality, price of the products and technological capability of the suppliers is also important. Suppliers, however, have tended to overlook the importance of on time deliveries, thinking that product quality and price are the large firms main priorities (Thongpadke et al, 2002).

### **Constraints to Sub-Contracting Arrangements in the industry**

Annim and Machethe (1998), in a study on business linkages in Kwazulu-Natal, point out that constraint on the expansion and improvement of linkages are, according to suppliers: limited application of new technology, poor product quality, unreliable delivery of goods or services, and high products prices as important constraints on linkages. Most suppliers with linkages considered the matching of requirements of buyers and suppliers as a constraint on the expansion of linkages when considering the issue of intermediaries in linkages. This is an indication that suppliers consider intermediaries as not helpful in solving their problems (Bbenkele, 1998). Suppliers also consider the issue of intermediaries not selling their services aggressively as one of their major constraints. More businesses with linkages, than those without linkages considered this factor as a constraint. It was not surprising more businesses with linkages indicated that they did not know of any intermediary agency (Annim & Machethe, 1998). As regards buyers, it seems that certain factors impede them from establishing linkages with small suppliers. The majority of buyers who did not have linkages with small suppliers had linkages with large suppliers. Although the same issues that were identified as important constraints by small suppliers were also identified by buyers, limited application of new technologies by small suppliers was mentioned by most buyers (with and without linkages) as a constraint of business linkages.

It is worth noting that issues of product quality, price and delivery are important for suppliers with linkages but less important for buyers and suppliers without linkages. This could suggest that these issues become important as suppliers get involved in linkage activities (Bbenkele, 1998). Lack of incentives (for example, tax rebates and subsidies) on the part of the government was mentioned by a little over half the buyer without linkages with small suppliers as an important constraint on linkages, but was viewed as important by most of the buyers with linkages with small suppliers. This could suggest that lack of incentives on the part of government is not the real reason for buyers not to have linkages with small suppliers (Annim & Machethe, 1998). In evaluating the competitiveness of SME's through linkages (Kumar & Subrahmanya, 2007), state that large companies, especially multinationals assert that there is no lack of opportunities for them to forge linkages with local SME's in host countries but rather a lack of suitable SME suppliers who could meet the TNCs corporate standards or international standards of corporation.

SMEs therefore lose such opportunities because they lack information, experience, contacts and above all the human and financial resources to implement urgently required systems and technological base of their enterprises. In South Africa, some suppliers complained that racial discrimination influenced the allocation of Approved Supplier Status (those on this list apparently receive larger orders at minimum tender prices), with priority being given to white and Asian suppliers (Skae, 1998). Another constraint seems to be unreliable and small orders especially where SME owners invest heavily on equipment to meet the suppliers. One investor had invested R 300,000 in equipment to enable him to supply the corporate with motor vehicle component parts, yet after ten months of cooperation he received no further orders for two years with no explanation as to why these had been cut off (Kimura, 2001). There was also the issue of late payment. This imposed serious hardship on them as they needed to pay their workers and sometimes their own suppliers more frequently. Another complaint by SMEs is that they find themselves at the mercy of the buyers and they have no choice but to accept the terms offered even when they recognize that these terms are exploitative (Skae, 1998).

In Thailand, most of the subcontracting arrangements that were cancelled was due to poor product quality (Thongpadke et al, 2002). Studies have established that while large firms have an inherent capacity to subcontract with the local SMEs, there were no incentives in the environment to encourage this for example; the proliferation of makes and models continues to prevent a rationalization of productive organization in the industry. This is aggravated by the importation of cheap second hand vehicles. In turn, the parts and components sub sectors were not able to cope with the complexity and variety of requirements of the of the replacement market. Consequently, it is difficult to accumulate experience to meet the quality standards demanded by the assemblers and franchise holders (Masinde, 1996). Due to their multinational status, manufacturing firms in developing countries are largely modeled on western organizational forms, generally organizing production along the principles of mass production. Consequently, inter-firm relations are unlikely to be used. While some research (McCormick & Ongile, 1996) documents some transition from mass production to flexible specialization in developing countries, in Kenya to be specific, little is yet known about the specific elements of inter-firm relations in these countries, and even less about their motor vehicle industries. However, other factors affect the development of inter-firm linkages, the most prominent being market failures brought about by, among other factors, the impact of state intervention in market mechanisms, liberalization of the economy, among others. Failures in input markets of developing countries have made it easier for firms to integrate rather than use external markets.

In developed countries, the availability and quality of suppliers is assumed. In developing countries on the other hand, the supplier base has not developed at the same rate. One of the factors affecting the localization of input procurement is the perceived “quality” of the supplier base. The vertical integration literature argues that one of the main reasons for vertical re- integration by firms is market failure – market failure affected by asset specificity, frequency of transactions, the number of buyers and sellers in that market and the balance of power between them. Although the localization strategy has been used in developing countries to develop a supplier base, the conditions that encourage vertical integration continue to exist. In the Asian countries, for example, competition is undermined by collusion among foreign firms or by the restrictions on input sourcing in contracts between local suppliers and their foreign customers. The government has contributed to this market failure by mandating local sourcing and concomitant localization levels (Mardon, 1990).

Assemblers can also hinder the development of local suppliers by withholding financial and technical support from them, either to justify their opposition to local sourcing or to justify vertical integration. According to Doner (1993), by failing to provide prototypes, technical training, sufficient lead time for new products or product changes, and favorable terms of payment, the uncertainty of suppliers increases. Evidently, this environment does not allow for cooperative relationships. Yet, it is clearly evident from the Japanese inter-firm relations that a more cooperative relationship offers a better environment in which to promote mutually acceptable criteria for analyzing costs, establishing prices, sharing profits and transferring technology (Womack et al, 1990). In Korea, for example, pressure from the government helped to encourage assemblers-supplier co-operation by promoting the suppliers through financing and training and encouraging the formation of the Korean Automobile Industry Co-operative Association. The strength of the supplier base is often evaluated in terms of product quality and supplier performance (Doner, 1993).

### **Results and discussion**

The study revealed that large firms in Kenya were unwilling to engage in subcontracting relationships with local companies and especially not local SMEs. Due to this and a number of other reasons, the assembling plants in Kenya have been seriously under- utilized for years as clearly indicated by the performance of two of the assemblers; GMEA and KVM for the period 2007-2009 (see Table 1). This under utilization has a negative impact on subcontracting in Kenya. All the assembly plants have ceased the assembling of saloon cars and now concentrate on the assembly of pick-ups and trucks.

**Table 1: Plant capacity utilization of GMEA and KVM (2009)**

Name of Assembling plant	Installed Capacity	Vol. of Assembled vehicles (2007)	Capacity Utilization %	Vol. of Assembled vehicles (2008)	Capacity Utilization %	Vol. of Assembled Vehicles (2009)	Capacity Utilization %
GMEA	7,100	2,629	37	2700	38	1993	28%
KVM	6,600	1,108	17	980	15	900	13.8%
Totals	13,600	3,737	54	3680	53	2893	41.8%

The constraints to subcontracting behavior range from intrinsic weaknesses of existing and potential suppliers to such external factors as government regulation to lack of suppliers, among others.

The overall perception of assemblers and franchise holders regarding local SME suppliers was that they were ineffective and insufficient to meet the needs of the large firms. Both the franchise holders and assemblers admitted that they were aware that the government requirement for locally assembled vehicles was at least 30% local content. However, the amount of local content purchased (of a particular part) could be more or minimal or none at all. This depends on a number of factors such as the requirements of vehicle being assembled.

### **Reasons for engaging in subcontracting relationships in Kenya for engaging in**

The main force behind subcontracting in Kenya is the mandatory requirement by the government that assemblers include at least 30% local content in their locally assembled motor vehicles. The general feeling among assemblers and franchise holders was that in view of the current supplier infrastructure status, it is logical to continue importing as complete a CKD as possible. When asked what percentage of the local content they were required to purchase, both the franchise holders and assemblers admitted that they were aware that the government requirement for locally assembled vehicles was at least 30% local content. However, the amount of local content purchased (of a particular part) could be more or minimal or none at all. This depends on a number of factors such as the requirements of vehicle being assembled. However, one manager noted that despite this mandatory requirement, other internal organizational considerations have contributed to their subcontracting strategy. The manager added that:

**We procure locally because some local products are cheaper and lead time is reduced considerably since it takes about six months for imported parts to arrive into the country. Local suppliers are also more flexible in terms of meeting assembler demands.**

Another reason that was often quoted was that they sourced locally to avoid paying import duty charged on imported component parts. There was a penalty for importing items or parts listed as protected in the legal notice. The other factor that has forced local assemblers to source locally is the East African Customs Union. The franchise holders and assemblers however felt strongly that this insistence on a specific percentage of local parts is rather misguided for the specific reason that:

**CKD assembly is not just a 'simple assembly' but a 'substantial transformation' which involves the intensive use of local labour. This employment of intensive local labour should not be ignored when local content is being measured.**

Kenya has now stopped assembly of saloon cars are currently concentrating on the assembly of pickups and trucks. This is because importing CKD kits for trucks and assembling them locally is cheaper as it conserves space in the container to carry more units. As mentioned elsewhere in this study, importing the completely built unit (CBU) would take too much space in the container. The importation of saloon cars is also driven by market demand or customer preference; economic drive or affordability is another factor as locally assembled vehicles are more expensive due to a number of factors. Most Kenyans are now buying cheaper reconditioned vehicles from Japan, and Europe.

### **External constraints to subcontracting**

#### **Preference for large firms**

The study revealed that eight out of the 66 suppliers are large enterprises (supplying mainly tyres and tubes, oils, fuels and lubricants and paints). The rest of most suppliers to the sector had less than 100 employees. Medium firms were 22 while the small firms were 36 thus bringing the total of SME suppliers to 58. The study also revealed that assemblers and franchise holders prefer to deal with large suppliers rather than with SME suppliers. A manager at GMEA reported that:

**All in all, it is preferable to deal with large firms. They are able to cope with the technological and volume requirements as they are already well established unlike small firms. You can also count on them when it comes to maintenance of quality standards and keeping of schedules.**

Hence, given prevailing circumstances, both assemblers and franchise holders, would rather transact with larger firms for organizational and quality assurance reasons. The same manager was keen to add that large firms do not necessarily mean lower prices (often assumed to result from higher volumes). He argued on the contrary, owing to their levels of efficiency, large firms are likely to charge higher prices. The fact that MSEs make up the majority of suppliers is not accidental. According to this study, the demand levels in the sector are so low that large firms have found it uneconomical to invest in the components sub-sector. Most of the investors in this sector are, therefore small to medium firms. Further, precisely because of these low levels of demand, no economies of scale are possible, and, as larger firms have been reluctant to enter the auto ancillary sub sector, only the small firms remain as operators in this market. The prospects of SME development lie in the inherent capacity of the sector to accommodate subcontracting.



Data from in-depth interviews reveal that the underlying reason for reluctance by big firms to buy from SMEs is the “lack of trust” by the large companies, perhaps emanating from their ignorance of the scope of support that SMEs can give. In an environment where these large firms have traditionally relied on themselves or on other large firms, the threat of loss of control over resources and markets in working with other firms appears dominant in the perceptions of large buyers and franchise holders. This supports expected behavior as recommended by core competence proponents like Prahalad and Hamel (1994) who posit that a manufacturing enterprise is likely to outsource more services than it provides in-house.

### **Lack of SME suppliers**

The study established that that in as much as the assembler would like to source locally, sometimes there were no local SMEs to supply certain products. The local content could therefore be zero on a certain item because there is no local supplier at all to supply the part or the available local suppliers cannot meet the specifications of the parent company. As indicated by one manager :

**In as much as we would like to purchase locally from the local SMEs, sometimes there is none available to supply a certain item. Take for example, the case of laminated glass for car windshields. We have not been successful in getting this locally from any supplier ever since we started vehicle assembly in this country. We are left with no alternative but to import the part.**

It is apparent that the number of suppliers who are able to meet the demographic and operational requirements so as to meet the needs of the assemblers and franchise holders is limited. This was also one of the main reasons why most buyers prefer not to enter into long term formal agreements with suppliers. They preferred to have an informal arrangement which can be terminated at short notice in case of problems. They, however, have a one year contract with those suppliers who have proved their worth. A manager commented that:

**Previously, before liberalization, due to monopolies, you had to be on the phone to the supplier all the time. When that failed, you then went to his premises just to remind him that you must have the order filled in as quickly as possible. You would think that they have had an adequate lead-time for the order! The problem was that they did not take the order seriously until they had only a few days to the deadline, and then they could not meet the deadline. This then also meant that the assembler could also not meet his schedule to the customer.**

As it turned out, buyer-supplier relations were relatively adversarial, with buyers retaining more than one supplier for most items. When asked the reasons for having more than one supplier, one manager put it candidly: ‘**in this business, dealing with supplier is taking unnecessary risk. We have learnt the hard way. These days we prefer to spread the risks!**’ It was evident that buyers were keen to avoid dependence on one or few suppliers, mainly because of the uncertainty in the suppliers’ business environment. In addition, as a measure against quality fluctuations, the franchise and assemblers maintained control over the transactions by providing time and quality specifications for the various orders, while also taking measures to control price. This made the suppliers feel that they were at the mercy of the buyers. This study established that only a small number of SMEs supply almost all the buyers. This fact indicates that experience in doing business with other large firms is considered important by the buyer. These findings support the findings of Skae (1998), which established small businesses with linkages tend to be those that have done business with large firms before. This suggests that buyers prefer establishing linkages with suppliers that have had dealings with other large buyers. This also implies that once a small supplier starts selling to another business, it becomes easier for the supplier to find an additional buyer.

However, the study revealed that the suppliers themselves are further involved in subcontracting to meet their contracts with the large firms. This could be attributed to their poor technological capacity and subsequent inability to meet contracts on time. The businesses involved in this second tier sourcing are the body builders of buses, trucks and trailers which are imported as CKD kits. The chassis is put together by the assembler who then subcontracts a body builder to build the body. This saves space in the containers so that more parts can be imported. Fully Built Units (FBUs) take too much space in the container. Currently, body building seems to be the most active sub sector in the motor vehicle industry.

### **Low quality of local component parts**

The reason for not subcontracting local SMEs to supply components parts locally that was quoted by all the managers of the assembly plants and the franchise holders, was the poor the poor quality of local products. These managers argued that while they would like to buy locally because sometimes local parts were cheaper and the SME supplier in close proximity to assemblers (reducing the problems of lead- time, shipping costs, and losses through shipping mishaps), this is limited by the low quality of local products. Franchise holders demand very high standards for their vehicles and will even go the extent of sending their quality experts to Kenya to vet the SME supplier before giving consent for local sourcing.

### **Technological capacity and poor methods of production**

The study established that the poor quality of the SME products is due to lack of technical capacity of most SMEs in Kenya. Most of them use outdated technology. Some SMEs may not see the need to invest in expensive technology because the volume of orders they get from the assemblers is not big enough. Most local suppliers have old machines and equipment which are inadequate to produce some parts to the required standards of the franchiser. The manager at GMEA indicated that most local suppliers have outdated machines, measuring devices and tools, which are all inadequate to produce some parts to equivalent quality as imported parts.

Most suppliers use their own technology and production techniques to produce a 'best fit' for what they interpret to be the technical specifications of a given item. The GMEA manager was even surprised that given the level of technological development of some suppliers, they are able to produce some of the complex items required at all. A manager pointed out that:

**Suppliers are also limited in their production methods. Some SMEs use very basic production techniques geared to small scale production. Coupled with inappropriate equipment and poor quality raw materials, the quality of end products is adversely affected. In addition to this, most SMEs are small or medium family businesses which suffer from poor management capacity, particularly related to quality consciousness. Also, because the small scale of operations does not allow reasonable profits, the SME suppliers are not able to attract the kind of highly skilled personnel required to deal with the technical production of vehicle component parts.**

Consequently, the quality levels of their products are perceived to be low. This often resulted in rejection of SME products by the assembler's quality manager. This resulted in the SME supplier incurring heavy losses.

### **The management capacity of the SME suppliers and unskilled manpower**

Even though the study also included some large suppliers who made up 33% of the suppliers, the majority of the suppliers were small businesses who made up 55% of the study while medium enterprises made up 12%. According to the franchise holder managers and assemblers, most of the SME businesses in the study are family businesses which suffer from poor management capacity particularly related to quality consciousness. Consequently, the quality standards of their products are perceived to be low.

### **Poor quality control by suppliers**

Because of reasons mentioned above, suppliers do not have the capacity for bench testing of products to determine various performance characteristics. Consequently, there are some defects in products (estimated to be about 20-25% of delivered inputs) delivered to the assemblers. Although these are usually returned and replaced, there are significant costs in terms of lost time to the assembler and loss to the supplier as well. If the assemblers are to benefit from such suppliers, they have to incur costs in improving the technology of potential and existing suppliers through production standards and engineering support; secondly if these low technological levels are not addressed, there are high warranty costs emanating from high failure rates of parts and components.

### **Timeliness and adequacy of supplies**

Another problem hindering subcontracting is the adequacy and timeliness of supplies. Because the supplier serves other assemblers, and also the replacement market, there are delays in meeting orders. Although other factors were considered pertinent in explaining this position, all the managers who were interviewed believe that a lot has to do with the way local suppliers conduct business. Another problem frequently associated with this was that of quality. Because of this delay, production was then rushed through the system, the pressure was on delivering the parts or components, and often, quality slips. This implies that one of the problems facing local suppliers is the inability to organize production efficiently, most inefficiencies emanating from lack of professionalism. When asked whether the larger suppliers could be placed in this category of non-professionalism, it was clear that most managers interviewed regarded their larger suppliers as generally more reliable and therefore preferred them to SME suppliers.

### **Costly raw materials**

Suppliers have limited control over the quality of raw materials they use in their production. One of the reasons issuing out of interviews was the lack of proper standards in the country. Consequently, local suppliers have not had adequate pressure to produce high quality products. According to the findings, this has also limited the extent to which parts and components can be standardized. One other factor cited is the high and transient costs of local inputs. Many of the raw materials used by local suppliers are imported, and are, therefore, subject to import duty. Hence, the actual products supplied to the assemblers and franchise holders are considered to be relatively more expensive than equivalent imported products.

For example, while noting that these estimates were provided by the assembler or franchise holder, only four of the thirty one items outsourced by General Motors (EA) used 100% local materials and labour. As many as 14 of the 31 items used no local material at all, except a small local labour content. The estimates also indicate that only three items out of 31 use 40-50% of local inputs. This is an indicator that the perception by assemblers and franchise holders that local inputs reduce the competitiveness of the motor vehicle industry may have some basis. This was, however, contradicted by one of the managers who stated categorically that it is cheaper to buy locally, given the exchange rate of the local currency against the dollar.

### **The importation of new and second hand reconditioned vehicles**

one of the factors that has seriously affected the local assembly of motor vehicles and subsequently, local sourcing is the importation of second hand vehicles from Japan and more recently from Singapore and Europe, which started in 1993 after liberalization. This has reduced the capacity of local assembly plants drastically. When asked why they prefer to import saloon cars that used to be assembled locally instead of assembling locally, they replied:

**We are in business because of the customer and if the customer prefers imported rather than locally assembled vehicles, we oblige. We also have to look at what the competition is doing so that we don't get left behind and lose market share. We also go by the policy of the mother country abroad.**

Therefore all the saloon cars that used to be assembled locally are now imported. These include Toyota saloon cars, Mitsubishi, Mercedes Benz, Volkswagen saloon among others.

### **Fines for deletion of CKD kit items**

Another factor influencing outsourcing is "deletion allowances". When an assembler agrees to source locally, it must remove or "delete" those components from the CKD packed in the manufacturer's country. The deletion allowance refers to the price reduction of the kit after the local components have been removed. This however is rarely a simple deduction matter. It is claimed by assemblers that the deletion allowances are too small, yet the locally sourced equivalents cost more. This makes vehicles assembled using local parts much more expensive than those without. When franchise holders and assemblers buy component parts locally, they have to pay a penalty to the parent company for deletion of products from the CKD kit. GMEA, for example, still pays to Isuzu for omitting any item from CKD kits. The effect of omission penalties has concerned the motor vehicle industry for a very long time since the penalties affect the assembler (or franchise holder) twice: first because of the penalties imposed by the franchiser, and secondly because of the higher costs locally.

This study found that the deductions from the cost of the CKD were far less than the price paid for the locally sourced item. Speculating on how assemblers and franchise holders dealt with this problem, an official from Kenya Association of Manufacturers commented that assemblers find it very difficult to comply with the Legal Notice requirements because of the extra costs of buying locally. In order to beat this, they resort to some unorthodox methods. Some of them simply collude with potential suppliers to issue a No Objection Certificate for an item they would like to buy abroad or retain in the CKD. The government's verification and policing system is so poor that it takes a long time to authenticate a claim that an item cannot be obtained locally. Deletion allowances are smaller for critical components, and assemblers are in a solid position to suppress the deletion allowances for popular makes and models (Doner, 1993). Similar conclusions have been made about the industry in Kenya by this study. Arguably, however, the critical factors likely to influence the formation of inter-firm linkages in developing countries is the adoption of lean or flexible production organization as a precursor to inter-firm linkages.

### **Proliferation of models and volume levels**

One of the most critical factors that has affected subcontracting is the implications of the frequency of changes in makes and models owing to fluctuations in consumer tastes. The main effect of this on the assemblers is the required frequency of re-tooling by local suppliers, which not only creates considerable difficulties for the suppliers, but also complicates the issue of help provided to suppliers by franchise holders and assemblers. On the one hand, some suppliers are not flexible enough to re-tool at the rate at which makes and models change (at least once every year). Some suppliers give up when they cannot cope with the continually changing specifications. In some cases, the assembler or franchise holder has to terminate the sourcing agreement when the supplier continually fails the requirements for quality and delivery schedules. On the other hand, even if they could re-tool as frequently as necessary, the costs would be passed to the buyer. The implication here is that local sourcing ends up being expensive and not an option to be adopted. According to one manager:

**The biggest hindrance to the development of motor vehicle assembly in Kenya has been the proliferation of brands. These change so quickly that Kenyan assemblers are not able to keep up with the level of technology required to make them. Investing in jigs is too expensive considering the limited local market.**

This proliferation of makes and models also affects suppliers as it limits the extent to which local suppliers can achieve economies of scale owing to the low volumes. Consequently, the suppliers incur the penalties of small batch production and pass them on the franchise holders and/or assemblers. It was noted that it is not possible for local SME suppliers to develop reasonable quality standards and to offer competitive prices because of the low volumes they have to produce. There are times we require at least six types of exhaust systems from our suppliers at any one time. The suppliers have to supply perhaps less than 100 of each type in the order, even if the same supplier is supplying other franchise holders as well. This low volume of production makes costs to go up, making local components expensive and uncompetitive. The proliferation of models at any one time in Kenya can be more than 200 vehicle types. This means frequent changes in technology installation by the supplier so as to meet assembler requirements. As stated by a manager:

**You need to buy different jigs for every new model and this is not worth the investment by either the assembler or the franchise holder. The radiator, for example, is different for every vehicle model. It is not reasonable to expect the SME supplier to keep up to date with the technology required for this as the local market for new vehicles in Kenya and other African countries is far too small. This has resulted in the halting of the assembly of most saloon cars. For example, even though we had been assembling the V12 locally, we could not assemble the V13 because the jig was not worth the investment, considering the small size of the local market.**

The conclusion that can be made here is that assemblers in Kenya no longer assemble saloon cars because the makes and models of saloon cars change too fast and local assemblers cannot keep up with the required technology. They now assemble mainly pickups and trucks because these models do not change as frequently. Because of the proliferation of makes and models of vehicles, it is difficult to gain experience in the production of various parts and components required by the motor vehicle industry. There are currently thousands different makes of vehicles imported into Kenya as new, used or reconditioned vehicles. Typically, each make offers an average of major variants, doubled every five to ten years. Hence, of the millions of vehicle models available in the world, Kenya imports quite a number of these and assembles only a few.

#### **The parent company's policy**

General Motors East Africa's sourcing decision, like that of the franchise holders, is affected by the policy of the parent company abroad. General Motors had in the earlier years systematically followed a local supplier development policy in its global operations. Effectively, this global strategy accounts for General Motors (EA)'s use of local suppliers. The thinking behind this was that a local supplier base addresses the specific needs of the locality, and, is therefore, sensitive to consumer needs and close enough to operations to limit problems associated with distance. The advantage in the long run is higher consumer benefits emanating from efficient analysis and solution of consumer problems. The company no longer pursues supplier development. The study identified only one cushion maker who had been given a place within GMEA's assembly plant to supply seat cushions. This lack of development of local SMEs discourages subcontracting of local SME suppliers. The parent companies also insist on sending their technical experts to verify the ability of the local supplier before the supplier can be subcontracted. This sometimes restricts the activities of the local franchise holder.

#### **High prices of locally assembled vehicles**

The relatively higher prices of locally assembled vehicles, as compared to imported equivalents, brought about by high taxation, high duty, dealers' mark ups and the high cost of local components, in addition to the higher production costs emanating from lack of efficiency which is caused, in turn, by a proliferation of makes and models. The implication of this high pricing of locally assembled vehicles is that they command a very small market share. This reduces their production and subsequently local sourcing.

#### **Abundance of foreign exchange**

It is an irony that the abundance of foreign exchange is affecting local assembly of motor vehicles negatively. Local assembly of motor vehicle is dying very fast. It has no future mainly because of the reasons already mentioned above. However, one surprising reason that came up as a result of liberalization is the unchecked availability of foreign exchange. As the manager put it:

**In the 1970s and 1980s, business was very good when there was restriction of foreign exchange. We would require foreign exchange to import sixty vehicles, for example, but the government might allow us enough foreign exchange for only twenty vehicles. We would collect orders from about twenty buyers, who were required to deposit about 30% of the cost of the vehicle with the company as a down payment. The vehicles that arrived were sold strictly on a first come first served basis to the buyers who had given orders and put a down payment. If the buyer delayed, the vehicle was then quickly sold to the next buyer on the register of enquiries. The company was selling vehicles as soon as they arrived.**

Kenya therefore needs to do what South Africa has done and invite the major motor vehicle assemblers in the world to take residence in the country and manufacture motor vehicles from within. South Africa now assembles BMW, Mercedes Benz and other vehicles locally. Unless this is done urgently, motor vehicle assembly in Kenya has no future.

### **Constraints faced by the SME suppliers in meeting the subcontracting contracts**

According to the suppliers they faced a number of problems which affected their meeting their contractual agreements with assemblers and franchise holders. These are: Delays in the supply of raw materials especially imported raw materials due to bureaucracy in imports and clearance. There is lack of readily available raw materials and lack of capital to stockpile raw materials for future use. The locally available raw materials are also of poor quality and lack of expertise of the workforce leads to compromise of quality standards. Frequent power failure and rationing of both power and electricity are other factors, not to mention the fact that electricity is very expensive in Kenya. Machine breakdowns, abrupt changes in modifications and price fluctuations seriously affect the suppliers as they cannot keep up with the frequent re-tooling and technological up date that this demands. Consequently, some of them just give up or their contracts are terminated due to inability to deliver to specification as required. The other mentioned factors are delays in payments for deliveries and lack of warranty which reduces cash flow required by the suppliers for their operations.

A study of the Korean motor vehicle industry found that many of the smaller firms in the components industry use outdated technology. They simply cannot afford to purchase high technology equipment owing to lack of financial resources and wide cyclical fluctuations in demand. It is well known that they are critically dependent on the assemblers a large proportion of demand for products for much of their capital financing. The subcontractors bear the burden of hardship imposed by business fluctuations by their having low levels of production. The assemblers have no intention of improving the small suppliers, many of whom are so small that they simply cannot afford to specialize. During hard times, car makers do not pay the suppliers on time and quickly reduces their order volume, thus costing the subcontractor. As a result it is difficult to achieve significant economies of scale and improve productivity or quality. Thus, the uncertainty that comes from working with automobile manufacturers is perhaps the most difficult obstacle that the components parts SME supplier has in bringing about further improvements in productivity and quality (Myeong-Kee-Chung, 1994).

There was also lack of a steady market as the suppliers were never sure whether the arrangement would continue as the assemblers and franchise holders preferred not to enter into long term contractual agreements with suppliers. They also felt that there was poor pricing of products by the buyers who they believe should pay better considering the high cost of production of the parts. There was also the feeling by some suppliers that the standards set by the assemblers and franchise holders were too high. Here, one cannot blame the contractors as industry standards must be maintained if locally assembled vehicles have to remain competitive, as their survival is already seriously threatened by the influx of cheap reconditioned vehicles from Japan Singapore and more recently from Europe. There was also the issue of bureaucracy and corruption in tendering and clearance. Fluctuations in exchange rates also affected importation of raw materials by suppliers who also indicated that getting skilled labour was a problem to them. The implication here is that the above factors seriously affect the performance of the suppliers and continue to hinder the fragile relationship between the two sides and subsequently, seriously hamper local sourcing.

### **Discussion of Major Findings**

This study established that the main constraints to subcontracting in the motor vehicle industry is lack of up to date technology which results in poor quality products and inability to meet the deadlines set by the assemblers and franchise holders.. This concurs with a study by Annim and Machethe (1998), on business linkages in Kwazulu-Natal, which pointed out that constraint on the expansion and improvement of linkages, are, according to suppliers: limited application of new technology, poor product quality, unreliable delivery of goods or services, and high products prices as important constraints on linkages. This study found that buyers prefer to do business with large suppliers rather than local SMEs. They claim that large business are better equipped technologically, have more skilled manpower and are therefore more likely to deliver quality goods to schedule. This supports a study by Bbenkele (1998) which found that as regards buyers, it seems that certain factors impede them from establishing linkages with small suppliers. The majority of buyers who indicated that they did not have linkages with small suppliers had linkages with large suppliers. Lack of incentives (for example tax rebates and subsidies) on the part of the government was viewed as important by most of the buyers with linkages with small suppliers. This could suggest that lack of incentives on the part of government is not the real reason for buyers not to have linkages with small suppliers (Annim & Machethe, 1998).

This contradicts the findings of this study which established that while large firms have an inherent capacity to subcontract with the local SMEs, there were no incentives in the environment to encourage this for example; the proliferation of makes and models continues to prevent a rationalization of productive organization in the industry. This is aggravated by the importation of cheap second hand vehicles. In turn, the parts and components sub sectors are not able to cope with the complexity and variety of requirements of the of the replacement market. Consequently, it is difficult to accumulate experience to meet the quality standards demanded by the assemblers and franchise holders. The overall perception of assemblers and franchise holders regarding local SME suppliers is that they were ineffective and insufficient to meet the needs of the assemblers and franchise holders. To some extent, however, buyers sourced locally to avoid paying import duty that is charged on imported parts. A number of them, however, added that the ten percent import duty levied on imports was not really adequate deterrent to encourage local sourcing.

In evaluating the competitiveness of SMEs through linkages, Samurai and Samurai (2007), state that large companies, especially multinationals assert that there is no lack of opportunities for them to forge linkages with local SME's in host countries but rather a lack of suitable SME suppliers who could meet the large enterprises' corporate standards or international standards of corporation. SMEs therefore lose such opportunities because they lack information, experience, contacts and above all the human and financial resources to implement urgently required systems and technological base of their enterprises. This concurs with the findings of this study. GMEA, which is both assembler and a franchise holder for Isuzu, pointed out that ever since they started assembling motor vehicles locally, they had never managed to get laminated glass for wind shields and have therefore been forced to continue importing the parts.

Most of the SME suppliers in this study expressed a wish that the assemblers and franchise holders could engage them in longer contracts so that they could be able to plan better (the longest formal contracts awarded to suppliers in the study was one year). The short contracts mean that they are not sure whether they will continue to be awarded contracts. This contributes to their inability to invest in expensive technology. This concurs with findings of a study in South Africa by Kimura (2001) which found that another constraint seems to be unreliable and small orders especially where SME owners invest heavily on equipment to meet the suppliers. One investor had invested 300,000 Rand in equipment to enable him to supply the assembler with motor vehicle component parts, yet after ten months of cooperation he received no further orders for two years with no explanation as to why these had been cut off. There was also the issue of late payment. The suppliers in Kenya are paid 60 days after delivery, and, like their South African counter parts, this imposed serious hardship on them as they needed to pay their workers and sometimes their own suppliers more frequently. Contrary to expectations, this study established that the abundance of foreign exchange hinders subcontracting as it encourages the importation of reconditioned second hand vehicles since every one can now access as much foreign exchange as they need. This contradicts findings by Masinde (1996), which found that the scarcity of foreign exchange hampered importation of CKDs, thereby affecting the local assembly of motor vehicles and by extension, local sourcing of component parts, there by hindering subcontracting.

### **Cheap imports from China**

A number of SMEs who used to supply the company with certain items have now closed down because of cheap parts from China and also because the buyers now prefer to import almost complete vehicles from abroad.

### **Conclusions**

The production organization in motor vehicle assembly has an inherent potential for subcontracting because of the complexity of the production process and the extensive number of parts and components that are required for motor vehicle assembly. Secondly, the current production organization in the firms interviewed allows subcontracting to take place. Finally, given the small and fragmented market for cars in Kenya coupled with high set up costs in the sector, the assemblers and importers are reluctant to invest in in-house production. Despite this amenability of the sector to subcontracting, the findings reveal a reluctance to subcontract locally, particularly from local SMEs. Several reasons touching on the lack of competitiveness in the supplier market were suggested by managers interviewed to explain this reluctance to transact with local SMEs. In addition to a poor policy framework governing the sector, lack of control over imported Fully Built Units (FBUs) and poor incentives to motivate to procure locally, the quality of the products in the market was perceived to be lower than that of the imported parts and components. There was also widespread concern that because of the production deficiencies and poor technical and managerial capacity of local firms, the local products were relatively more expensive than their imported counterparts. Consequently, only those items listed in the Legal Notices were currently being outsourced with little indication that further voluntary deletion of items from CKD kits would be implemented in the near future.

Whereas in these circumstances firms are compelled to outsource in order to maintain good relations with the government, this kind of situation is not likely to have a long lasting positive effect on the growth of small enterprises. Assemblers and franchise holders, appear to have little incentive to procure their requirements locally, particularly from small manufacturers, unless the government intervenes. The current dependency of the motor industry on the government legislation requiring assemblers to procure certain items locally is a manifestation of the fragile relationship between buyers and suppliers in the sector and the lack of commitment of large buyers towards supplier development, owing to lack of incentives. It is apparent that there is need for incentives within the sector's environment itself, rather than government regulations and controls. This may have been a sound strategy in the business environment prevailing ten or more years ago, but it is no longer feasible in an environment where market forces predominate.

### Recommendations

The following specific recommendations can be made. The government should reduce the age of imported second hand vehicles from the current eight years to five years. This will limit the massive importation and encourage local assembly, especially of saloon cars whose assembly has been halted. Motor vehicle assemblers should be encouraged to use local suppliers and locally manufactured products and only import those parts that are not available locally. This should involve specific efforts to motivate assemblers and franchise holders to source voluntarily from local SMEs. The study revealed that it is the perceived inherent weakness of the capacity of local SMEs that has hindered more linkages with them. One of the most important starting points is an evaluation of the supply side of the ancillary sector in order to highlight the weakness of the suppliers as perceived by the buyers. Comments by respondents regarding their perception of SME suppliers, in the words of one manager are that "they are ineffective and insufficient for our needs". Approaches which have helped ameliorate such deficiencies in other countries include strategies which reduce the atomization of small firms through networking and clustering at industry and enterprise levels. In Kenya, this is even more critical, given the atomization and weakening of small firms, particularly African owned small firms. Thus, in strengthening the supply side as well as motivating the buyers to source locally, policies must be put in place to address the institutional frame work to strengthen the capacity of SME component suppliers.

There is need for the government to support the sector by sourcing all its major vehicle requirements locally. These include not just the Government ministries but also its major departments like the Department of Defense, Kenya Ports Authority, the Police Department, and the Kenya Tea Development Authority, among others. By so doing, it would not just be the assemblers, but many downstream producers of components for local assembly and spare parts would also benefit from such a policy. This would also indirectly support upcoming small scale operators in the informal sector, which would have a cheaper for their spare parts requirements, arising out of the support given to local component manufacturers to produce at higher capacities. Stiff competition due to the massive importation of second hand motor vehicles, which started with liberalization of the economy in 1993, has reduced the capacity utilization in vehicle assembly plants drastically. A major loophole has been the valuation method used to determine the dutiable value, which leads to under-invoicing. There is need to make the valuation clear and transparent. It should be considered that this system has resulted in huge tax revenue losses to the exchequer. A good industrial policy should be developed by the government after consultation with the industry participants. Currently, it is difficult to identify a specific policy towards the sector. It is also critical that the participants of the sector come together regularly to decide how best to develop the sector within the articulated policy framework. A supporting environment must be put into place. The study revealed that while large firms have the capacity to subcontract from local firms, there were no incentives in the environment to encourage this.

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