International supply chain practices in developing countries: A study in Tanzania

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Abstract

This paper reports the results of a study on international supply chain practices in developing countries, with particular reference to the public transport sector in Tanzania. It discusses factors/problems affecting international sourcing processes. The case study methodology and semi-structured interview questionnaire were used to collect data. The study reveals that the international supply chain in developing countries like Tanzania faces many problems compared to that of developed countries, for example, the use of outdated technology in domestic market, lack of trust, documentation problems, and lack of integrated computerised system to link with overseas suppliers, and so on. The insights on problems provide valuable information on global challenges and opportunities in international sourcing processes. Recommendations to solve some of the problems are discussed.

Keywords: international supply chain, public transport, developing countries, Tanzania.

1.0 Introduction

International supply chain management has tremendously gained importance since the past decades due to the competitive business environment. The internationalisation of supply chains has increased foreign competition in the countries’ local markets. For this reason, companies are forced to make quick and wise decisions at strategic and operational levels. Companies have to decide where to purchase goods and /or services internationally.
All decisions on international supply chain must be linked to the company’s corporate strategy. Key decision areas in the international supply chain management are type of product/service, location, manufacturing, inventory management, transportation modes, distribution channel, finance, and skilled personnel to manage the supply chain. All eight key decision areas in the supply chain affect international purchasing. It requires effective and efficient management, planning, control, and co-ordination of all activities in the supply chain to purchase sufficient goods from the source (e.g., overseas) to the final consumer or user in the organisation. The activities must be performed when needed at the right time, not earlier or later in the international supply chain. Companies must examine critically the value added activities by the international supply chain and their impact on the company’s performance. The international sourcing process, if not handled properly, can hinder the performance of the company. Although problems of international supply chain or international sourcing process are well documented in the literature for developed countries, little is known regarding problems of international supply chain in developing countries.

The objective of this paper is to describe existing international supply chain problems facing developing countries, with reference to Tanzania. This paper focuses on the public transport sector, and highlights the responses from the supplies officers and chief supplies managers of the two leading transport companies in Tanzania. The paper draws from the experiences of the supplies managers with international supply chain experiences. The paper covers background information, international supply chain experiences in public transport sector in Tanzania, literature review, research
methodology, findings, and lessons learned from the study, conclusions, and recommendations.

2.0 Background information

Tanzania is one of the fastest growing economies in Africa after years of economic structural adjustments. Since the mid-1980s, Tanzania has implemented far-reaching reforms in the political system, economic management, and government administration. In 1992, a multiparty democracy system was introduced and successful multiparty elections were held in 1995, 2000, and 2005. The economic reform programmes that commenced in 1986 have changed the command-based economy (central planned economy) into a market one. Trade, exchange rates, and interest rates are now fully liberalised. The reform of government-owned companies has privatised/divested about half of the more than 4001 government-owned companies (Tanzania, 2007). The Gross Domestic Product (GDP) in real terms grew by 7.1 percent in 2007 compared to 6.7 percent in 2006. The increase in agriculture, construction, and services contributed to the growth (Tanzania, 2009).

In 2007, the transport sector grew by 6.5 percent compared to 5.3 percent in 2006. The growth rate attributed to improvement in infrastructure for transportation. The sector’s contribution to GDP was 4.2 percent in 2007, compared to 4.3 percent in 2006. The transport sector has an effective role in contributing to social and economic development of Tanzania. The sector performance has continued to grow due to both government’s efforts and private sector investment in road rehabilitation, modernisation of port
services, and improvement in railway, marine, air, and road transport services. The government sold 51 percent of shares of the Tanzania Railway Corporation to a private company (Tanzania, 2009).

Most countries in developing countries like Tanzania benefit in engaging in international supply chain by purchasing goods / services internationally (or globally) in order to meet the requirements at low costs. However, international supply chain in developing countries like Tanzania faces a lot of problems, at a company level, as well as at government level due to regulations.

3.0 International supply chain experiences in public transport sector in Tanzania

This paper identifies factors/problems affecting the international supply chain (international sourcing process), and how they affect the Tanzanian public companies’ performance. The paper discusses benefits, problems, and practices, including international supply chain problems and benefits, factors influencing international supply chain, commercial relationships, how to determine international sources, effects on international operations, general performance, lessons learned from the study, and conclusions and recommendations. The results lead to a clear understanding of problems and practices in international supply chain in developing countries, with particular reference to the transport companies in Tanzania.
Figure 1.0 shows the current international supply chain in the public transport sector in Tanzania. Goods move from various international suppliers to the Tanzanian port of entry (harbour or airport), bonded warehouses, customs department, transport companies, and the final customers, passengers/users. There is physical movement of goods and services from the suppliers to passengers/users, and the flow of information and cash (payments) from the passengers/users to the international suppliers.

Figure 1.0: The international supply chain network from international suppliers to customers in Tanzanian public transport sector

Supply of goods and services

Various Suppliers → Shipping Company → Focal Transport Company → Customers: Passengers/Users

Port of entry: Harbour or Airport → Bonded Warehouses → Customs Department

Information and cash flow from the customers

Source: Own research observation

In order for the international supply chain to work efficiently and effectively, and adding value, there is a need for management to alleviate some of the purchasing and supply chain problems identified by the respondents. In addition, the government can improve the transport network in the country. Proactive and vision managers who can build
relationships are needed to make the international supply chain work efficiently in the domestic market.

4.0 Literature Review

4.1 Supply chain

The definition provided by Morey (1997) emphasises on specific management functions. Morey defines supply chain management as “the process of planning, organizing, and controlling the flow of materials and services from suppliers to end users/customers. This integrated approach incorporates suppliers, supply management, integrated logistics, and operations” (In Bloomberg, et al., 2002, p. 1).

The competition in a global market has forced companies (organisations) to focus on supply chains where the inter-network competition is based. Mentzer, et al., (2001) define supply chain as a set of companies involved in the upstream and downstream flows of products, services, finances, and information from a source to a customer.

Supply chain is a complex network of organisations covering both on the upstream side including tiers of suppliers and on the downstream side including a network of customer companies, retailers and financial consumers (Desouza, et al., 2003). Dershin (2000) claims that the supply chain is the “mother of all processes” because of the nature of its size, scope, and complexity, nearly all the processes in the supply chain are not under control. In addition, Msimangira (2003) emphasise that the purchasing and supply chain function is strategic, and supply chain executives need training in SCM processes. Tracey and Smith-Doerflein (2001) also stress the need for trainers to assist in the development of individuals in the area of supply chain management. The findings from the study by Gowen III and Tallon (2003, p. 32) propose “an interactive role of managerial and employee support to enhance the effectiveness of employee support to training and to mitigate the adverse effect of implementation barriers on the success of SCM practices.”
In order for an organisation/business to be successful in the competitive environment, there is a need to integrate an organisation’s network of a commercial relationships. Competition is no longer among separate businesses, but among groups of firms that are linked together in a chain for delivering customer value (Chandra, 2000).

4.2 International supply chain

International supply chain management (ISCM) has been gaining importance for nearly two decades. The increase in global business competition has forced the companies to re-examine their international supply chain management processes in order to remain competitive. Although ISCM literature is growing, the issue of international supply chain problems in developing countries has received little attention. Much of the discussion has concentrated on international supply chain practices in developed countries, and less emphasis on problems facing suppliers or buyers in the supply network from developing countries. Companies in developed countries put more emphasis on supply chain performance with their competitors.

International suppliers need to know their customers’ demand. According to Bowersox (1997), demand integration requires that companies should have previously developed a set of profound long-term agreements to improve relationships with selected customers and suppliers. There are few international supply chain practices which have been investigated (e.g., Wilson, 1999; Moodley, 2002; Blowfield, 2003; Robertson, 2003; Rienstra, 2004; Dewan et al., 2005; Wasti et al., 2006; Taps and Steger-Jensen, 2007; Barnes and Morris, 2008; Krueger, 2008). The literature covers less information on the international supply chain in the transport sector.

David (1995, p. 343) define an international supply chain as “a complex, dynamic system in which disruptions interact with long shipping and lead times to generate costs.” David (1995) conducted a study on international sourcing and supply chain stability and found that demand-related disruptions caused significant and unexpected costs in terms of expedited shipping high inventories, and lower demand fulfilment. Birou and Fawcett’s (1993) research on international purchasing benefits, requirements and challenges
revealed that the key challenges to international sourcing includes technical issues like logistics challenges to cope with long supply chains, the search for qualified suppliers, culture and language differences, duty and customs regulations.

Klassen and Whybark’s (1994) study on barriers to management of international operations revealed top five barriers, such as complexity of global logistics, the management of a network of foreign plants, and concerns about culture and language differences. They stated that the key barriers are composed of managerial concerns and technical issues. Their findings are similar to that of Birou and Fawcett (1993). Fawcett et al. (2008, p. 35) found that “all managers recognize technology, information, and measurement systems as major barriers to successful supply chain collaboration. The people issues such as culture, trust, aversion to change, and willingness to collaborate are more intractable.”

Morash and Clinton (1997, p.15) found that “international trade, sourcing, and global transportation pipelines require knowledge of individual countries’ supply chain structures in order to create seamless and efficient transportation and logistics performance.” Their study results confirm that different countries employ different existing transportation and logistics structural methods to achieve supply chain integration. “Structural integration of supply chain such as operational coordination and information sharing, can reduce transportation time and thus total supply chain costs” and emphasised that Just-in-Time (JIT) delivery is important (Morash and Clinton, 1997, p. 5). However, Msimangira’s (1993) study on using JIT in developing countries revealed that there are many problems which affect the usage of JIT: international delivery delays, inadequate transportation infrastructure, unreliable product demand forecasts, and financial constraints. Akkermans et al. (1999) propose that it is possible to implement effective international supply chain management strategies by promoting cross-functional careers and by actively responding to customer needs. In addition, Prasad, et al. (2001) argue that supply chains learn and adapt to the dynamic global environment. Prater et al. (2001) support the findings of Prasad, et al. (2001, p. 823) and
conclude that “to be reliable in an certain and changing environment, firms must be able to quickly respond to changes.”

Sheu, et al. (2006) warn about international supply chain security, and stress that security issues need to be solved before international supply chain becomes a fully collaborative system. Furthermore, Fawcett et al. (2008) state that people are the key bridge to successful collaborative innovation in supply chain enablers such as technology, information, and measurement systems. Krueger (2008) addresses ethical issues surrounding global supply chains of multinational companies in developing countries, with reference to China. “Global firms face severe constraints in their full capacity to enhance the dignity and character of workplace conditions in China” (Krueger, 2008, p. 113).

Overall, the literature findings show that companies participating in the international supply chain are facing different problems. The problems of international supply chain facing the developing countries are less investigated compared to the developed countries, and little is known about developing countries, with reference to Tanzania and similar countries regarding the factors/problems affecting international sourcing process in the transport sector. The research question for this study: what are the key problems of international supply chain facing Tanzania, and how to solve them?

### 5.0 Research Methodology

This study used a case study research methodology, which is appropriate to the interpretive research approach (Yin, 2003; Eisenhardt, 1991) for the issues raised in this study. We invited five purchasing and supply managers from five transport companies in Tanzania to participate in the study. Only two supplies managers from two companies accepted to participate in this exploratory study to gain an understanding of current
international supply chain practices. The transport companies selected for analysis in this study are among the largest transport companies in Tanzania. The common factor is that they have all engaged in international supply chain processes for many years. Both companies are struggling to survive in the competitive international supply chain.

In-depth interviews were the primary data collection using a semi-structured interview questionnaire. The development of interview questionnaire based on the initial interviews with senior supplies managers in the transportation companies. Several managers engaged in international sourcing process reviewed the questionnaire and pre-tested it. Semi-structured interview questionnaires were mailed to participating supplies managers before the interview, and this shortened the time to respond to the questions during the interview. In addition, the participants completed the interview questionnaire before the interview. Therefore, it was easy for the respondent to follow the questionnaire during the interview. The researchers recorded all the interviews.

6.0 Data analysis

Two case studies of transport companies were analysed to determine the key issues (Eisenhardt, 1989) and data analysis was done using cross-case analysis (Yin, 2003). Overall, the results of interviews with the supplies managers show that the common international supply chain problems are: use of outdated technology in the domestic market, lack of trust, documentation problems, lack of integrated computerised system to link with suppliers, non-existence of original suppliers, currency for payments and fluctuation of value, cultural differences, specification requirements, supplier assessment,
clearing of goods procedures, purchasing function not normally involved in some
purchasing processes, and international commerce terms (incoterms) used by suppliers.
The cited problems need to be solved first through collaboration between the buyers and
sellers (suppliers), before attaining an effective international supply chain in competitive
global business environment.

7.0 The findings

The following cases show an overview of international supply chain problems faced by
the two large transport companies. In addition, the cases illustrate the international
supply chain issues, with reference to the domestic part of the supply chain. Table 1.0
shows the summary of key international supply chain problems. Responses from the in-
depth interviews completed in two transport companies are in sections 7.1 and 7.2. The
names of companies used are fictitious for confidentiality.
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<tr>
<td><strong>Table 1.0: Key international supply chain problems in Tanzania</strong></td>
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<tr>
<td>1.</td>
<td>The use of outdated technology in the domestic market</td>
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<td>2.</td>
<td>lack of trust</td>
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<td>3.</td>
<td>Documentation</td>
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<td>4.</td>
<td>lack of integrated computerised system to link with suppliers</td>
</tr>
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<td>5.</td>
<td>Original manufacturers of parts no longer exist</td>
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<td>6.</td>
<td>Quality assurance determines the nature of supply chain</td>
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<td>7.</td>
<td>Manufacturers/suppliers don’t accept small orders</td>
</tr>
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<td>8.</td>
<td>Price increases before opening a letter of credit in favour of the supplier</td>
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<td>9.</td>
<td>lack of reliable internet services, especially speed</td>
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<td>10.</td>
<td>Currency requirement for making payments</td>
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<td>11.</td>
<td>Suppliers sometimes select expensive method of transport</td>
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<tr>
<td>12.</td>
<td>Culture of suppliers imposed on local operations</td>
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<tr>
<td>13.</td>
<td>Overseas suppliers require specifications and drawings of products which are expensive</td>
</tr>
<tr>
<td>14.</td>
<td>Difficulty to obtain information on the reliability of the overseas supplier</td>
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<td>15.</td>
<td>Purchasing function sometimes is not involved in making purchasing decisions.</td>
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7.1 CASE 1: COMPANY YR

Problems of International supply chain

(i) Limited number of suppliers/manufacturers because most of original manufacturers no longer exist. This implies making special orders for engines’ spare parts.

(ii) Documentation problems resulted from changing of importation procedures in Tanzania i.e., from pre-shipment inspection to destination inspection.

(iii) Quality assurance for most needed material, engines’ parts, and other rolling stocks restricts the wider selection of supply chain. Any mistakes in quality aspects may result in fatal accidents. The supply chain network must be the one recommended by the supplier.

(iv) Quantity problems. Outsourcing of materials that involve making special orders sometimes may force the company to order more than maximum stock required as suppliers/manufacturers reject small quantity orders.

(iv) Price increase notification just before opening a Letter of Credit in favour of the suppliers/manufacturers. This mostly happens to orders of foundry materials, iron-steel related materials, and copper materials.

Factors influencing international supply chain in the company

(i) State of technology in use: most of the engines and other rolling stocks are of outdated technology. This limits the company from using full potential of the international supply chain.
(ii) Nature of items involved: materials used in the company need special attention on quality aspects. Therefore, it is important to select the right sources of supply.

(iii) Suppliers’/Manufacturers’ past performance in meeting company’s requirements. This helps to know the supplier’s reliability.

(iv) Country of origin helps in predicting quality of goods/products imported.

(v) Delivery time/lead time also plays an important role, especially for emergency requirements.

(vi) Validity of price also matters when it comes to items that require large amount of funds.

(vii) Credit facility: some manufacturers offer credit facility to the company, and these manufacturers are well positioned in the local market, and have a chance of being selected again.

(viii) Post sales services: other items outsourced require installation and commissioning. If the supplier offers such services, it increases the chance of the supplier to be selected.

**Types of supplier commercial relationships with the company**

(i) Communication – the company uses fax, telephone, e-mail to send quotations overseas to different suppliers and manufacturers.

(ii) Direct contact – this is achieved by visiting the company’s suppliers and manufacturers overseas, attending trade fair and exhibitions, suppliers and
manufacturers visiting the company in Tanzania, and the time when negotiating purchasing terms.

(iii) Suppliers/manufacturers send to the company information regarding old and new items available. They provide update catalogue, brochures, and magazines that contain products’ information.

**Problems of supplier commercial relationships’ facing the company**

(i) Internal problems: sometimes the company’s internet server may be down, thus forcing the company to use other media of communication that are more expensive.

(ii) Lack of trust: sometimes suppliers fail to meet the agreed delivery time, thus creating delays, and disrupt company’s operations.

(iii) Documents amendments after delivery: some suppliers or manufacturers are reluctant to amend shipping documents, especially after they have dispatched the goods and payments are already made. This practice is common to some of countries’ suppliers and manufacturers.

(iv) Lack of computerised system support to connect the company in Tanzania directly with the suppliers/manufacturers overseas.

**Factors influencing suppliers’ commercial relationships in the company**

(i) The modes of communication available in the company and their reliability.

(ii) The urgency of the material involved.

(iii) The type of supplier involved whether a regular supplier or a new supplier.
(iv) The complexity of the item involved. Too complicated items require frequent communication with the suppliers, and sometimes attract a direct visit to overseas suppliers.

(v) Poor performance in past contract. If the supplier did not perform well in the past, and there is no competition, then this situation forces the company to correct anomalies with the supplier.

(vi) Mode of transport selected. For air freighted material normally communication is shortened after the goods are accepted by the carrier.

Type of system support (e.g., ERP: SAP, Oracle, etc., or any computerised system) the company uses

The company does not have any computerised system support for commercial relationship purposes.

Any critical incidents happened in the company regarding

(a) **International supply chain**

Documentation problems caused by failure of the supplier to submit final documents to the agent of the exporting country, and also failure to fill Request For Information (RFI) form that must be submitted to the exporter’s agent. All these documents delay clearance process at the destination in Tanzania.

(b) **Supplier commercial relationships**
The company has not experienced any critical incidents regarding supplier commercial relationships.

**Problems related to the following issues in the international supply chain**

(a) **Currency used for making payments**

There are no problems associated in making foreign payments because the company has got a foreign account overseas used in funding material sourced in hard currencies.

(b) **Method of transport**

The company determines the mode of transport suitable depending on how fast they need the material, the volume of material, and the risks involved.

The method of transport selected may have cost implications.

**The company determines a suitable international source for goods and services by selecting:**

(i) A source that complies with the company’s specifications and drawings.

(ii) A source that complies with price validity of 90 days.

(iii) A source that its delivery period is in line with the company’s requirement.

(iv) A source that has good past performance with the company.

(v) A reliable source of supplies.

(vi) A source that sometimes offers a credit facility.

(vii) A source that supplies materials not counterfeited.
(viii) A source that supplies materials from the country of origin in line with the company’s requirements.

(ix) A source that complies with mandatory procedures required by the local authority regarding documentation requirements.

**Issues affecting the company’s international operations**

(a) Culture – Some of the suppliers would like tenders to be processed at the same speed as it is done in their countries. Also, they want immediate payment without any delay. Given the company’s ill financial position, it has been difficult to cope with such speed, and as a result, some suppliers have lost interest in the company’s tenders.

(b) Currency of payment: All foreign suppliers need their payment in foreign currencies. This has forced the company to open a foreign account overseas for making overseas payments.

(c) Travel and communication: regarding valuable items, the company arranges some visits to suppliers. The delegation is composed of experts from user department and supplies department. In fact this practice increases costs to the company, though the benefits outweigh costs.

(d) Specification requirements:

The company’s overseas quotations include specifications and drawings, irrespective of whether the suppliers have supplied them before or not. This also increases the cost, especially in preparing drawings.

(e) Supplier assessment: Sometimes it has been very difficult to get all information related to the reliability of the foreign supplier, and therefore,
the risk can be minimized by using reliable suppliers who are more expensive.

(f) Multinational Corporations:
Given the nature of the company’s operations and the technology in place, some of the multinational corporations have not been able to handle most of the company’s transactions.

(g) The use of recommendations:
The use of recommendations from other companies helps to increase the number of suppliers. The major source of suppliers’ information is obtained from other companies in the transport sector. By increasing the number of suppliers for certain items implies also the possibility of sourcing at a competitive price.

**The performance of the company in relation to the international supply chain problems**

**Problems**

(i) High prices involved in placing special order for spare parts that are not off shelf.

(ii) Cumbersome procedures and costs off shelf involved in clearing of goods sourced overseas.

(iii) High costs involved when travelling for inspection purposes.

(iv) Price changes before the shipment of items create a lot of inconveniences, especially on documentation.
(v) Suppliers are reluctant to sell small quantities for some of the products, and therefore the company is forced to increase the order quantity.

(vi) Failure of suppliers to adhere to delivery time agreed

Companies in Tanzania can effectively benefit from the international supply chain

(i) Sourcing goods and services not available locally.

(ii) Sourcing at competitive prices.

(iii) Being part of international supply chain to supply goods to other countries, and also act as an agent for local and overseas manufacturers.

Local companies also can benefit by engaging in distribution and transportation of goods produced locally or imported to other countries.

(iv) Having a wider range of selection of goods and services needed by their companies.

(v) Maintaining smooth production when materials are not available in one country can be sourced from other countries.

(vi) Using different sources of supply for high quality materials.

(viii) Making Tanzania’s companies understand the culture of other people around the world, and adopt suitable strategies to deal with cultural problems that directly affect their businesses.
7.2 CASE 2: COMPANY YX

Problems of international supply chain

(i) Most international suppliers require payment in advance or confirmed irrevocable letter of credit before shipment of the consignment irrespective of long-time business relationship we have had. This means the organisation has to have cash to acquire its inputs to operations.

(ii) The introduction of value added tax (VAT) element in the acquisition process of the inputs to operations particularly the spare parts and components has had an impact on organisation’s capability to finance the purchases as required for smooth running of business. VAT is paid in cash/cheque to the government as a process of customs clearance but on submission of returns the government does not payback cash to the organisation. It is a policy that the government offsets the differences as non-cash transactions hence adversely affecting the liquidity position of the organisation.

(iii) In some cases the purchasing function is not adequately involved in the international supply chain especially in acquisition of capital goods.

Types of supplier commercial relationships with the company

The company maintains a register of approved suppliers who can be contacted when need arises. The company is committed to the supplier, who wins a tender, only when a confirmed irrevocable letter of credit is established.
Problems of supplier commercial relationships facing the company

There is no serious problem at the moment.

Benefits of supplier commercial relationships in the company

The supplier can maintain the prices offered against required materials even when there is long delay in arranging for payment in respect of the awarded tenders.

Factors influencing supplier commercial relationships in the company

(i) The need for overseas materials, especially spare parts and components.
(ii) The quality of materials.
(iii) Technological gap between the local supplier and international supplier.

Type of system support (e.g., ERP: SAP, Oracle, etc. or any computerised system) the company uses

(i) CS 3 Tetra – an information system used mainly to support finance and stock control
(ii) Epix – an enterprise web portal solution for intranet/extranet Internet services.

Any critical incidents (problems) which happened in the company regarding the following:

(a) International supply chain

“Capital goods were purchased for a particular project. The purchasing function was not adequately involved. Inspection of the consignment found that the materials purchased did not conform to the required specifications suggesting there was a problem in order specifications. The whole consignment was rendered useless left lying on the yard.”
(b) Supplier commercial relationships

There is no such incidence at present.

Problems related to the following issues in the international supply chain:

(a) Currency used for making payments
Some suppliers complain when the company decides to pay them in currency different from the quoted currency because suppliers claim that they end up losing money.

(b) Method of transport
The company uses sea freight mode of transport. There are situations whereby the suppliers consolidate the company’s consignments with other importers’ goods. Such arrangements have some cost implications to the company, especially when processing customs clearance.

(c) International commerce terms (Incoterms) used
The company sometimes face problems with suppliers who offer CIF (cost, insurance, and freight) delivery terms though the country import policy requires the use of CRF (cost and freight) Terms. There is a need to use the correct incoterm in a contract.

(d) Delivery address and the lead time
There is no serious problem facing the company.

(e) Special instructions
There is no serious problem facing the company.
(f) Clear specifications and drawings

Most of goods imported by the company are of engineering nature. The original equipment manufacturers normally supply the specifications literatures and drawings along with equipment/goods. In case of equipment/components upgrading or modification, the Original Equipment Manufacturer (OEM) normally avails the updated technical literatures with the commercial attaché with manufacturer country’s embassy. Customers buy these technical literatures. The informant reported that, “the problem with my organisation is that the purchasing function is not authorised to deal directly with the commercial attaché. As a result, the purchasing function finds itself lacking the updated literatures.” When the potential suppliers offer updated specifications in most cases they do not comply with the buyer’s specifications.

The company determines suitable international sources for goods and services

(i) Use suppliers of other companies in the same industry/sector.

(ii) Competitive bidding processes.

(iii) Use trade directories.

Issues affecting the company’s international operations

(a) Culture

This is not a problem at the moment.

(b) Currency for payments

This is not a problem at the moment.

(c) Travel and communication
(i) The international sourcing does not involve much travelling.

(ii) Almost all international source countries are speaking English. Therefore communication as far as language is concerned is never a problem.

(iii) With the availability of Internet technology communication has been easy and effective.

(d) Specification requirements for products and services

See under problems in international supply chain: clear specifications and drawings.

(e) Supplier assessment

The company has not experienced a significant assessment effect.

(f) Multinational corporations

The company has not experienced a significant multinational corporations’ effect.

(g) The use of recommendations

The company uses recommendations from other importers in the same industry.

The performance of the company in relation to the international supply chain problems/benefits

The introduction of value added tax (VAT) element in the process of acquisition of internationally sourced components has an impact on the financial capacity of the organisation to make input to operations, especially in buying spare parts at the right
time. The situation has implications on cargo transporting capacity, which is the core business.

Companies in Tanzania can effectively benefit from the international supply chain

(i) On the buying side, by creating more transparent and competitive environment that would enable the companies acquire quality product/services and realising the maximum values of their money.

(ii) On the selling side: improving the quality of product/services produced in Tanzania. Companies must compete in the international markets instead of trying to protect the industries from competing with international companies.

In summary, it shows that though both two large transport companies operate in the same domestic business environment, some of the problems are unique to the company. Most of the problems identified in the study support the findings in the literature (e.g., Birou & Fawcett, 1993; Klassen & Whybark, 1994; & Fawcett, et al., 2008).

7.3 Lessons learned from the study

This paper highlights international supply chain practices in developing countries, with particular reference to the public transport sector in Tanzania. The international supply chain of goods (e.g., spare parts, engines, etc.) from overseas suppliers to the local public transport companies has not been working effectively and efficiently (in the local part of the international supply chain) to meet the requirements of the customers. If low performance service levels continue at the same pace, the government may decide to
privatise the companies or enter into a partnership with the private sector in order to alleviate some of the operational problems.

Although both companies understudy gained some benefits from participation in the international supply chain, our findings indicate that all the respondents from the companies agree on the nature of critical problems they are experiencing in the domestic part of the international supply chain. These problems must be solved first before the domestic part of the supply chain can be efficient, and meet the customers’ demand at the right time, with the right quality of transport service, at minimum cost. Efficient domestic supply chain will increase productivity, and improve service level to the customers. Though the respondents didn’t cite training in international supply chain management as a problem in an interview, one respondent during an interview indicated that the problem of top management not involving the purchasing personnel when purchasing capital goods is a clear picture of the level of training at the strategic level of the organisation. This shows that there is a need to train top management in supply chain management. Also, Msimangira (1994) revealed the same problem in a study on the roles of senior and middle management in developing countries, which revealed that middle managers have more practical vision for future than top (senior) managers.

Top management of the transport companies, support from the government, and well trained supply chain management personnel, who can manage the international supply chain, especially at domestic level can enhance the importance of international supply
chain management in the public transport sector. The need for trained personnel in supply chain management supports Msimangira’s (2003) findings.

7.4 Conclusions and recommendations

This study presents findings about the international supply chain practices and performance in transport organisations in developing countries, with particular reference to Tanzania. The responses in this study indicate that there are many international supply chain management problems, from the overseas suppliers to the focal transport companies in the domestic market. Some of the problems are related to the use of outdated technology in the domestic market, lack of trust, documentation problems, quality assurance, quantity, price setup, information systems (lack of integrated computerised system to link with suppliers), lack of reliable international communication, payment methods/currencies, incoterms preferred by suppliers, specification requirements for products, clearing procedures of imports, failure to meet delivery time, and value added tax imposed on imported goods. In some cases, the purchasing function is not involved in the international supply chain, especially when purchasing capital goods.

In addition, personnel involved in international supply chain activities need training in international supply chain management in order to manage effectively and efficiently the supply chain, and at the same time minimize the operational costs.
In order to improve the economic growth there is a need to upgrade the transport network. Using an effective and efficient transport system, Tanzania can achieve expected national development which can add value to the end of the international supply chain in the domestic market. It is not possible customers to receive goods/services at the right time if the transport system is ineffective. The government should continue to engage the private sector in the development of the transport infrastructure in order to increase productivity. There is a need to create a more competitive business environment in Tanzania.

Regarding commercial relationships with overseas suppliers, transport companies in Tanzania should negotiate in advance the contractual business terms. There is a need for both overseas suppliers and customers (importers) to clearly understand cultural differences in conducting business in order to improve service level and productivity. Suppliers and customers can both benefit in the international supply chain by establishing a fair long-term commercial relationship.

Companies in developing countries need to integrate their operations, especially the sourcing processes into the international supply chain, and collaboration is the best way to remove or reduce obstacles for effective international supply chain.

This paper has provided the result of an initial exploratory study on international supply chain practices in the transport sector and an insight for further research in Tanzania and other similar developing countries. An in depth study of international supply chain in the public and private sectors is required to determine hard evidence of the level of
international supply chain practices and performance in the transport sector, using a large sample. A similar study can be replicated in other sectors of the economy where supply chain management plays a major role.

The major limitation of this paper is that the data were collected from a small sample (two public transport companies) and we cannot generalise our findings. A future large scale case study (using multi sectors) or survey of public and private transport companies may provide different results, and establish a general understanding of the nature of domestic part of the international supply chain. Further research to determine critical issues of international supply chain facing other industries in developing countries is required. Also, how international suppliers can help (assist) developing countries to improve international supply chain management practices.

References


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