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Performance of Energy Development Agencies in Kenya. Case of Kenya
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Influence of Transportation and Logistics Law on Supply Chain Performance of Energy Development Agencies in Kenya. Case of Kenya Power and Lighting Company Limited

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ABSTRACT

Companies of any size may not effectively operate without having to be aware of the legal, government and regulatory issues that affect them. Logistics and transportation companies are confronted by a multitude of pressures that raise new legal issues and spur an ever-greater need for legal advice that is dynamic and global in its perspective in supply chain. This article sought contribute to the body of knowledge by establishing the influence of transportation and logistics law on Supply chain performance in Kenya Power and Lighting Company Limited. The study variables were the modes of transportation and logistics law and the influence of transport and logistics on Supply chain performance of Kenya Power and Lighting Company. The article employed a desk study review methodology. Past studies on modes of transportation and the influence of transportation and logistics were critically and thoughtfully analyzed. A critical review of the empirical literature is conducted to identify the main thematic concepts of the paper. From empirical studies, it was established modes of transportation and logistics law are fundamental to the supply chain performance. The study recommended that KPLC should be keen to implement laws and regulations from importation to transportation. Other local key laws and regulations include National Transport and Safety Authority Operation of Commercial Service Vehicles) Regulations, 2018 in order to o build and integrate the transport management in the daily operations.

Keywords: *Modes of transportation, Transportation and Logistics law, Supply Chain Performance, Kenya Power and Lighting Company Limited.*

1.0 Introduction

1.1 Background of the study

Legal aspects are actually areas of law jurisdictions that govern the logistics and transportation sector which provisions are made by the government in ensuring and creating a fair playground for all companies involved. Companies of any size cannot do business with having to be aware of the legal, government and regulatory issues that affect them. Logistics and transportation companies are confronted by a multitude of pressures that raise new legal issues and spur an ever-greater need for legal advice that is dynamic and global in its perspective. And in striving to optimize their competitive advantage, transportation and logistics players face escalating liability and insurance risks, tightening regulatory structures, diverse international legal regimes, and heightened demand for innovative finances. Even the best companies forget that their supply chains are only as strong as the transportation system that supports them. The answer is having the right information in understanding the legal and operational challenges ahead. Logistics is the process of planning, implementing and controlling the efficient and cost-effective flow and storage of raw materials, in-process inventory, finished goods and related information from the point of origin to the point of the consumption for the purpose of conforming to customer requirements.

Supply chain performance is influenced by transportation and logistics procedures and policies. According to Giannakis and Papadopoulos (2016), transportation is the main factor that influences the performance of firms and the relationship between the suppliers and the company. Minimizing the wastage of time in transportation of goods and services will improve the satisfaction and consecutively, the revenue of the company will improve and the market share increase. Logistics management is that part of supply chain management that plans and controls the movement of goods and services from the point of collection to the final destination to enhance the satisfaction consumer (Hsu, Tan & Mohamad, 2016).

According to Mwangangi (2016), mode of transportation chosen by the company determine the supply chain performance and the net income. These modes of transport include; Roads, Railways lines, pipelines, Air and maritime transport. Road transport is the most used and flexible of all the transport modes and is the most popular way to transport and distribute materials and products in Kenya within different geographical areas (Sanchez, Harris & Mason, 2015). Kenya-Uganda

railway was transformed to Rift Valley Railways (RVR) to enhance efficiency, however, customers complained RVR lacked customer focus and capability to deliver services and so the carrying capacity stood to be less than six percent (Musau, Namusonge, Makokha & Ngeno, 2017). The railway should be open to competitive usage and development of new standard gauge lines to offer more reliable and affordable services. Moreover, Kenya's infrastructural environment is characterized by poor road networks, traffic jams in cities, dilapidated railway, port congestion, slowing down of cargo flows which are collectively limiting the capacity of the transport system.

Logistics firms in Kenya fall under the Kenya International Freight and warehousing association (KIFWA) which is the sole representative of all logistics firms in Kenya (Katana, 2017). Other associations that govern logistics firms in Kenya include the Federation of E.A Freight Forwarders Association and Kenya Institute of Supplies Management. The main objectives of these associations is to promote and protect the legitimate trade of logistics agents, promote a high standard of service by its members to their customers, promote adoption of uniform documents and standard terms and conditions of service by members, collect, and circulate information and statistics affecting members or the business and representing the view of the members to the government agencies (Ndung'u, 2018).

Shipping lines have for a long time been protected by international maritime regulations that have shielded them from the changing customer needs while trading in the global markets. They set unjustifiable freight rates and even surcharge those levies charged within territorial and local ports. Kenya Maritime Authority (KMA) the regulator of maritime affairs ought to develop regulations that protect cargo owners from exploitation by shipping lines. The commercial shipping element of the Merchant Shipping Act 2009 is therefore importance to businesses.

Transportation and logistics in supply chain management in KPLC has been marred with challenges especially in sectors of efficiency and transparency (Awino, 2015). The role of customs in the clearance and movement of cargo is to collect and protect revenue but this should be done without compromising on trade facilitation. In 2019, a law on cargo clearance came into effect. The regulation requires all cargo coming to Nairobi to be cleared at the Inland Container Depot Nairobi via the Standard Gauge Railway. The rules are meant to improve efficiency at the Port of Mombasa and increase the amount of cargo moving through the SGR. Following the change in clearance procedures, Kenya Revenue Authority plans to disable its Cargo Management System

given that there'll no more nominations of Cargo by KPA to Mombasa Container Freight Stations. Some of the laws governing transport and logistics in Kenya include the Transport Licensing Act 40, Electric power Act 1997, Energy Act in 2006, International maritime regulations Disposal, and Merchant Shipping Act 2009 and Customs Duty laws.

Kenya Power and Lighting Company Limited (KPLC) is a limited liability company, where the majority shareholder is the government of Kenya and its institutions, while the rest is owned by private shareholders (Makanga & Paul, 2017). KPLC is responsible for ensuring that there is adequate line capacity to supply and maintain the quality of electricity across the country i.e. distribution and retailing of electricity. Before a major power sector restructuring in 1997, KPLC also managed all generating stations on behalf of the state. Reform of power sector commenced in the early 1990s and has made steady progress. The Electric power Act 1997 and the Energy Act in 2006, accelerated the reform by creating an autonomous regulatory body (Atambo & Momanyi, 2016). KPLC has a training School that was started in 1957 by the then East African Power & Lighting Company Ltd and whose aim is to develop the technical skills needed by the company.

1.2 Statement of the problem

Despite having made significant progress in infrastructure development in recent years, Kenya's transport infrastructure was inadequate to meet the country's needs. Kenya 's development plans included significant improvements to roads, railways, seaports, airports, water, and sanitation, as the country attempts to increase its competitiveness in the global market (Giannakis & Papadopoulos, 2016). However, the logistics performance in Kenya had deteriorated from an overall global ranking of 76th in 2007, it was the 122nd out of 155 countries on the Logistics Performance Index (World Bank, 2013). Low logistics efficiency was a key concern and business risk for companies importing to or exporting from Kenya as well as the logistics service providers involved (Mwangangi, 2016). Poor transportation and logistics in the supply of electricity in the rural have led the Rural Electrification Company (REC) to take most of the rural schemes which previously used to be managed by KPLC (Oromo & Mwangangi, 2017).

The existing laws governing the logistics in Kenya are not streamlined for efficient logistics and supply chain. Some of them include Transport Licensing Act 404, Electric power Act 1997, Energy Act in 2006, International maritime regulations Disposal, Merchant Shipping Act 2009 and customs duty laws. Kenya's transport infrastructure is under pressure from the rising levels of

traffic both on rail and road. At the same time, limited maritime infrastructure and poor inland infrastructure are under immense pressure from the massive increase in imports and exports (Kenya Shippers' Council, 2018). The existing logistics operations are strained by port congestion, falling reliability levels, a challenged road transport capacity, the inability of railways to meet demand and the ever increasing user's demands for reliable and predictable services. Shipping lines have for a long time been protected by international maritime regulations that have shielded them from the changing customer needs while trading in the global markets. The laws and institutions to combat public inefficiency are in place and yet the situation does not improve. The study chose the Kenya Power and Lighting Company because it is more prone to the supply chain challenges and the study will offer amicable solutions to the challenges of supply chain performance and find the influence of transportation and logistics law on the supply chain performance.

1.3 Objectives of the Study

The general objective of the study was to examine the influence of transportation and logistics law on supply chain performance of energy development agencies in Kenya.

The specific objectives of the study were;

- i. To examine the modes transportation and logistics on supply chain performance of Kenya Power and Lighting Company
- ii. To establish the influence of transportation and logistics laws on Supply chain performance of Kenya Power and Lighting Company

1.4 Research Questions

- i. What are the modes of transportation and logistics law on Supply chain performance of Kenya Power and Lighting Company?
- ii. What influence does the transport and Logistics laws have on supply chain performance of Kenya Power and Lighting Company?

2.0 Literature Review

2.1 Theoretical Review

2.1.1 Logistics Theory

Logistics is defined as the planning, organization, and control of all activities in the material Flow, from raw material until final consumption and reverse flow of the manufactured product, With the aim of satisfying the customer's and other interest party's needs and wishes i.e., to provide good

customer service, low cost, low tied-up capital and small environmental consequences (Christopher, 2012). Logistics is also defined as those activities that relate to receiving the right product or service in the right quantity, in the right quality, in the right place, at the right time, delivering to the right customer, and doing this at the right cost (Kithiia, 2015). Logistics management is that part of procurement management that plans, implements, and controls the efficient, effective forward and reverses flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customer's requirements (Walker & Jones, 2012). Logistics management activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply or demand planning, and management of third-party logistics service providers (Cagno & Micheli, 2010)

2.1.2 Theory of Efficiency

In economics, the term economic efficiency refers to the use of resources so as to maximize the production of goods and services in the company (Kitsao, 2017). An economic system is more efficient than another one when it can provide goods and services to society without using more resources. In the practical World, a phenomenon can be called economically efficient when an entity cannot be made better off without affecting another entity (Commonly referred to as the Pareto efficiency), thus, no additional output can be obtained without increasing the number of inputs, Production proceeds at the lowest possible per-unit cost. These definitions of efficiency are not exactly equivalent, but they are all encompassed by the idea that a system is efficient if nothing more can be achieved given the resources available. There are two main strains in economic thought on economic efficiency, which respectively emphasize the distortions created by governments and the distortions created by markets. These are at times competing, at times complementary either debating the overall level of government involvement, or the effects of specific government involvement. Broadly speaking, this dialog is referred to as economic liberalism or neoliberalism, though these terms are also used more narrowly to refer to particular views, especially advocating *laissez-faire*.

Further, there are differences in views on microeconomic versus macroeconomic, efficiency, some advocating a greater role for government in one sphere or the other (Barr, 2004). A market can be said to have allocative efficiency if the price of a product that the market is supplying is equal to

the value consumers place on it, represented by marginal cost. Because productive resources are scarce, the resources must be allocated to various Industries in just the right amounts, otherwise too much or too little output gets produced. When drawing diagrams for firms, allocative efficiency is satisfied if the equilibrium is at the point where marginal cost is equal to average revenue. This is the case for the long run equilibrium of perfect competition. Productive efficiency is when units of goods are being supplied at the lowest possible average total cost. When drawing diagrams for firms, this condition is satisfied if the equilibrium is at the minimum point of the ATC curve. This is again the case for the long run equilibrium of perfect competition (Barr, 2004)

2.2 Empirical Review

2.2.1 Modes of Transportation and logistics and supply chain performance

Globalization has transformed the world's economy. The steady growth in world economies has tremendously increased industry's demand for the rapid and timely delivery of goods. Kenya's industry has risen to the challenges and opportunities that have been occasioned by globalization in recent years. The country's transport infrastructure is under pressure from the rising levels of traffic both on rail and road. At the same time, limited maritime infrastructure and poor inland infrastructure are under immense pressure from the massive increase in imports and exports (Irandu, 2016).

Heavy investments in infrastructure in Kenya has meant increased importation of heavy machinery and equipment. Increased spend on such projects as expansion of road network, building of the Standard Gauge Railway (SGR) as well as geothermal, wind and solar power projects has resulted in shipping in of abnormal cargo. It is not uncommon to spot huge boilers, for example, being moved, snaking their way to factories either in Kenya or in neighboring countries. The rising number of such abnormal cargo on the road prompted Kenya National Highways Authority (KeNHA) to formulate regulations, which were enforced in mid-October 2013, to reduce damage on the road and ensure safety of other motorists. The concern has been how this type of cargo is procured and transported with no or minor damages.

Abnormal cargo, according to the Kenya National Highways Authority Regulations 2013, is one that exceeds the legal load or dimensional limits under the Road Traffic Act. The overall length for rigid vehicle is restricted at 12.5 metres that of articulated vehicles at 17.4 metres, while a combination of vehicles is 22 metres under the traffic law. The allowable axle load limit on roads

in the six-nation East African Community is 56 tonnes, with an additional cargo attracting an overload penalty.

KeNHA, however, issues special exemption permits to transportation and logistics firms in business of moving abnormal load on a case by case basis. Such licenses attract an additional fee ranging from Sh5, 000 to Sh250, 000 depending on the size and weight of the cargo. The exemption permits for oversize load are only issued after logistics firms satisfy the authorities that safety conditions for specific cargo have been met, says Auni Bhajj, the regional director for development and external affairs at Bollore Transport and Logistics. France-owned Bollore is among about 20 firms in Kenya with logistical capacity to move abnormal cargo. The firm transported heavy and lengthy wind turbine generators from Mombasa to Lake Turkana Wind Farm between 2016 and 2018.

The existing logistics operations are strained by port congestion, falling reliability levels, a challenged road transport capacity, the inability of railways to meet demand and the ever increasing user's demands for reliable and predictable services. The road transport sector moves about 95 per cent of the cargo in Kenya and along the Northern Corridor. The development of legislative clauses that provide for standard contracts of haulage in road transport would professionalize the industry and protect hauliers and cargo owners from sudden steep increases in input costs such as fuel. In a competitive environment such as road transport, a sudden increase in fuel costs would encourage the road hauliers to circumvent safety legislations and engage in unorthodox business practices such as overloading, longer driving hours for drivers and diversion and pilferage of cargo (Kenya National Highways Authority, 2018)

According to the Ministry of Transport, Infrastructure, Housing & Urban Development (2018), the improvement of logistics performance is an important policy objective. Great focus should be put on the performance of customs, trade related infrastructure, inland, and transit logistics service provision, air and sea port efficiency, and the utilization of information technology for timely trade in goods at low costs. Industry demands logistics solutions that can cope with the pressures put on them by governments, the public, competitors, customers and the supply chain itself. There should be options for users to choose between modes, operators and routes.

Road-based logistics services are dominant due to the slow off take of the railway system However, governments have gone into regulatory controls through licensing regimes, axle load controls and

random checks due to the pressure that the road transport is putting on the existing infrastructure coupled with high maintenance costs, overloading, security and environmental concerns. This has resulted in increased costs and reduced flexibility, a factor that has compelled users to seek other modes which are unavailable mainly as a result of the non-performance of Rift Valley Railways (Kenya Railways Corporation, 2018).

Muchori (2015) analyzed the effect of congestion in the road traffic on freight logistics efficiency at the port of Mombasa. Building on the infrastructural pressure on the road from Nairobi to Mombasa which has continued to put strain logistics operations at the port, the study employed a descriptive survey design and used a sample size of 150 respondents from a possible 10450 employees. The correlation results revealed that traffic congestion had a positive correlation with transport cost. Consequently, traffic congestion impacted negatively on the efficiency of freight logistics.

Mukolwe and Wanyoike (2015) assessed how management practices used in logistics affect operational efficiency in Mumias Sugar Company. Using descriptive and inferential statistics, the study revealed among other findings that transport management and the practices used for physical distribution are synonymous with the flow of raw materials and goods that is cost-effective which impacts positively on operational efficiency. Mwangangi (2016) examined the influence logistic management has on the performance of manufacturing firms. The study used both primary and secondary data drawn from employees

Ndubi, Iravo and Onchiri (2016) examined the effect variability in lead times has on the performance of inbound logistics at Safaricom Limited. Using linear regression model, the study identified lead times in terms of production, shipping, the TAT time for customs brokerage, and the velocity for inspection of goods as having direct and significant effects on the performance of inbound logistics measured in terms of delivery time, cost and quantity (Mukolwe & Wanyoike, 2015). Although much literature exists regarding transport and logistics management and its benefits, most studies focus mainly on the logistics component. Besides, no literature exists showing how to transport management for instance directly impacts on the performance of the supply chain of firms in the textile sector.

Gitahi and Ogollah (2014) investigated how practices used to manage fleet influence service delivery to refugees under the UNHCR Kenya program. The study builds on the premise that

transportation is central to logistics. The study used descriptive research design and targeted 390 employees. From the sample of 117 who participated in the study, it was concluded that the rate of fuel consumption on tracking, fuel monitoring, fuel sourcing, fuel allocation on a day to day basis, and the rate at which fuel usage is monitored influence delivery of services to refugees in the UNHCR program in Kenya.

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A study conducted by Otieno (2008) found that the efficient transport system is positively related to the improved supply chain efficiency, minimizes the operational costs and improving the service quality of the firms. Tracey (2004) categorized transportation into inbound and inbound transportation. The inbound transportation connects the firm to the suppliers or the providers and can be recognized as essential aspects since it has an influence on the execution of the other function that involves the production and distribution of goods and services. Inbound transportation ensures the provision of the right material at the right time and at the right location within the stipulated time. The inbound transportation is very important and contributes to 10 % of the material cost and thus becomes a significant parameter to keep the track. Therefore, the high-quality product and lower cost of production are associated with increasing inbound transportation performance.

2.2.2 Transportation and logistics law on supply chain performance

There exists laws on Transportation and logistics law on supply chain in the country. Some of the laws governing transport and logistics in Kenya include the Transport Licensing Act 404, Electric power Act 1997, Energy Act in 2006, International maritime regulations Disposal and Merchant Shipping Act 2009.

Axle load rules and regulation act that governs the weight & volume limits of vehicles depending on the road in use. E.g. for heavy & bulky goods there are certain weight limits that they are specified to have & the road that they are to use. For example in Kenya, KENHA-Kenya national highways authority has been given this mandate in ensuring that the permissible axle loads are adhered to and if not legal strict measures are taken by paying a fine up to Ksh 400,000 if the truck is overloaded and the gross weight is 10tones and this has been stipulated in the act cap 403 of the laws of Kenya. Kenya has 13 weighbridge stations located in various parts of the country all the stations are static (Permanent) weighbridges, pausing the danger already covered above besides being haven of corruption since many offender do not want to pay the heavy fines stipulated by the traffic act. Actual weights of the vehicles are measured at these weighbridges and compared to the maximum allowable weights as defined in the Legal Notice No. 118 on the Traffic (Amendment) Rules 2008. Any vehicle found to be in breach of the law in terms of overweight, is fined and detained until the overload problem has been addressed and the court case is closed and any charges paid.

The Kenya Roads Act, 2007 and the Sessional Paper No.5 of 2006 on the Development and Management of the Road sub-sector for sustainable economic growth provided the legal and institutional framework for the management of roads. The Road Transport Department (RTD) was initially under the Ministry of Transport and Communications before being absorbed by the Kenya Revenue Authority on 1st July 1995 through an act of parliament. The Registrar of Motor vehicles heads the Department. Within the Licensing section is the Transport Licensing Board (TLB). The TLB discharges the provisions of the Transport Act as provided in the Transport Licensing Act (Cap. 404) of the laws of Kenya. It provides coordination and control of means and facilities for transport in the country. The transport Licensing Act stipulates that all vehicles carrying goods and passengers whose tare weight exceeds three tones must be licensed.

Consequently, the functions of the Transport Licensing Board involve receiving applications, scrutinizing, approval of applications, and issuance of the following license categories. Road service license for passenger buses and tour vehicles, Limited “B” carrier license for lorries carrying goods on hire or reward. Private “C” carriers for lorries carrying own goods and short term license issued to applicants of “B”, limited carriers and Road service License (RSL) before the Board sits to deliberate on their applications, authorizing variation of routes or goods to owners of TLB license, variation of timetable to owners of Road Service License, replacement of vehicles

with TLB license from one owner to another, scheduling and preparing agenda and gazettelement of TLB meetings notifying the applicants when to appear before the Board, as well as gazettelement of successful applicants of TLB license and keeping records of all vehicles with TLB license (The Kenya Roads Act, 2007)

The Axle Load Weigh-In-Motion system would integrate with KRA system so that detailed records of new vehicles on the Road are automatically available to the users once they have registered with the Authority. Transit vehicles are weighed only once at Mariakani in case the cargo is from Mombasa port or at the first weighbridge for other entry points. These provisions are given to ‘customs sealed containerized transit cargo under Police escort’. Police is very key in enforcement of the processes to be undertaken by the transporters and hence functionality of the prototype. All suspected overloaded vehicles must be directed to the scale, and if found overloaded they are appear in court to pay a fine (KENHA, 2017).

In 2019, a law on cargo clearance came into effect. The regulation requires all cargo coming to Nairobi to be cleared at the Inland Container Depot Nairobi via the Standard Gauge Railway. The rules are meant to improve efficiency at the Port of Mombasa and increase the amount of cargo moving through the SGR. Following the change in clearance procedures, Kenya Revenue Authority plans to disable its Cargo Management System given that there’ll no more nominations of Cargo by KPA to Mombasa Container Freight Stations (KENHA, 2018).

Katana (2017) conducted a study on the determinants of strategy execution in shipping companies in Kenya. The study adopted the descriptive research design. The findings of the study established that Logistics firms in Kenya fall under the Kenya International Freight and warehousing association (KIFWA), which is the sole representative of all logistics firms in Kenya. Additionally, other associations that govern logistics firms in Kenya include the Federation of E.A Freight Forwarders Association and Kenya Institute of Supplies Management (Katana, 2017).

According to Wang, Gunasekaran, Ngai and Papadopoulos (2016), logistics management requires the industry players to ensure that all the aspects associated with the supply chain are very efficient. From the time the demand is made to have goods and service delivered, the entire process starting from parking, storage, shipping and billing and delivery times are very important to define the efficiency of the company. In order to minimize loses and any damages, the supply chain managers have to make sure that there is no form of disruptions in the whole process.

Njambi and Katuse (2013) conducted a study on third-party logistics in distribution efficiency delivery for competitive advantage in fast moving consumer goods companies in Kenya. The study established logistics management continued to grow with Fast Moving Consumer Goods Companies opting for this mode to deliver their products across the country and beyond and not so much on other manufacturing sectors. Moreover, the majority of those firms adopted third-party logistics (3PL) in their business and did not care much to have improved inter logistics management.

A study conducted by Wu (2013) found out that the information sharing, quality of the information and the quantity of the information has a positive sign on the productivity of collaboration of firms. Moreover, the sharing of the information that very sensitive in nature is something vital to the success of the cooperation (Prajogo & Olhager, 2012). The integration of the aspects of the information sharing in the supply chain systems is important for the purpose of forecasting, planning as most of the firms needs to forecast and plan for the future. In particular, effective and adequate collaboration relies heavily on the sharing and detailed information at the right time. Moreover, Oromo and Mwangangi (2017) found that information sharing contributes the lowering the demand vulnerability and creating a higher level of trust among the stakeholders in a supply chain

2.3 Conceptual Framework

A conceptual framework is a road map that the study intends to follow with the aim of looking for answers to the problems raised by the research questions (Orodho, 2012). The conceptual framework is shown in Figure 1.

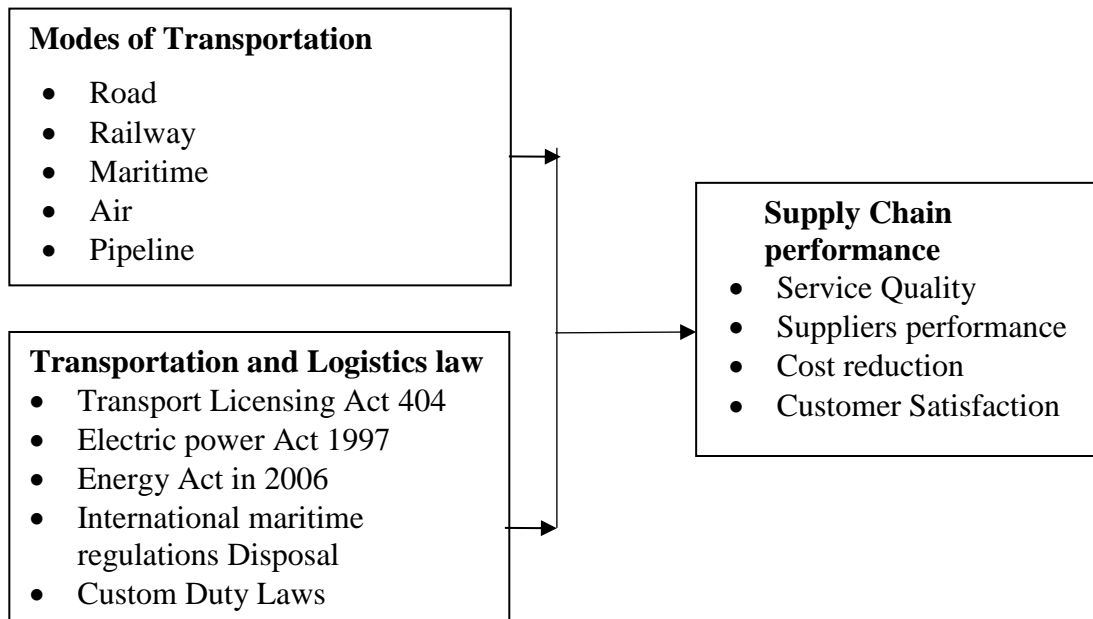


Figure 1: Conceptual Framework

3.0 Research Methodology

The study examined the influence of transportation modes and logistics laws on supply chain performance of energy development agencies in Kenya. The study used a desk study review methodology where relevant empirical literature was reviewed to identify main themes. A critical review of empirical literature was conducted to establish ways promoting transportation modes and logistics law on supply chain performance of Energy Development Agencies in Kenya. The transportation management provides a link between the production, storage, and consumption, therefore, the success of the firms' performance depends on the good execution of the transportation management system.

4.0 Results and Discussion

Based on the results from the empirical review, road transport was the most used and flexible mode of transport in transportation. Most of the products of KPLC are been transported by the use of roads and have adopted a transportation management system that increased the level of transparency and improved the quality of projects undertaken by the company. Transportation is

the base of efficiency and economy in business logistics to expand other functions of the logistics system. In addition, a good transport system brings benefits not only to service warehousing services but also to company competitiveness.

International agreements on taxation may hamper the introduction of fiscal instruments resulting in undesirable fiscal treatment of transport modes. Transport policies affect the welfare or profit of households and firms that in turn will try to influence these policies. This leads to the development, over time, of political processes with both formal and informal rules constraining the room that governments have to maneuver. The introduction of traffic laws meant that for all parties in the road transport supply chain, the consignor, consignee, packer, loader and scheduler, drivers, owner-drivers and operators as well as directors, partners and managers – were able to be held responsible for their actions (or inactions) relating to breaches of the road transport, fatigue, speed, mass, dimension and load restraint laws.

Moreover, transport and logistics on Supply chain performance of Kenya Power and Lighting Company had a positive association. The primary vision and objective of the logistics management practices are to ensure sustainable chain development and setting logistics events and procedures for the purpose of getting optimum outcomes with the lowest overheads with all the conservation and customer satisfaction. Logistics management practices in the KPLC have a high significance in the improvement of their supply chain performance hence all they should put in place measures to ensure supply chain management practices are fully adopted. Inefficiency and lack of top management support; cost, resistance to change and misunderstanding of the Logistic modernization program were most faced challenges.

5.0 Conclusions

The research aimed to establish the Influence of transportation and logistics law on supply chain performance of Energy Development Agencies. There exists laws on Transportation and logistics law on supply chain in the country. Some of the laws governing transport and logistics in Kenya include the Transport Licensing Act 404, Electric power Act 1997, Energy Act in 2006, International maritime regulations Disposal and Merchant Shipping Act 2009. Transportation and logistics systems have interdependent relationships that logistics management needs transportation to perform its activities efficiently and meanwhile, a successful logistics system could help to improve traffic environment and transportation development. It was found that transportation

contributes to the highest cost among the related elements in logistics systems, the improvement of transport efficiency could change the overall performance of a logistics system. Transportation plays a significant role in the logistics system and its activities appear in various sections of logistics processes. Without the linking of transportation, a powerful logistics strategy cannot bring its capacity into full play. The development of logistics will be still vigorous in the following decades and the logistics concepts might be applied in more fields.

The supply chain performance needs to be integrated at all levels of the firm's operation while taking into the account the transportation and logistics management system since it will go a long way in improving the overall performance of the company. There is increasing concern over the effects of inefficiency in the transportation of goods and services in Kenya Power and Lighting Company. Strategies to curb these evils have been ineffective to a large extent, due to the fact that the effect of inefficiency on public offices has not been substantiated yet. The study provides a good basis for the development of the transport management frameworks and logistics information systems, which can be used to sealing the loopholes in public procurement.

6.0 Recommendation

The study recommends that the supply chain managers at the Kenya Power and Lighting Company should be keen to implement laws and regulations from importation to transportation. Other local key laws and regulations include National Transport and Safety Authority Operation of Commercial Service Vehicles) Regulations, 2018 in order to build and integrate the transport management in the daily operations. This will promote the procurement and distribution of products to increase the market share, improve the minimization of the cost, reduction of the time and positively create a significant improvement in the overall performance of the company. There is a great need for the various stakeholders to be involved in cargo transportation. Moreover, the logistics information management positively predicts the performance of Kenya Power and Lighting Company. As a result, there is a need for the managers in the company to invest highly in the logistic information sharing between the suppliers and the customers and by extension; the overall performance of the company will improve. KPLC should adhere to laid down applicable government laws and regulations policies such as customs clearance regulations and procedures so as to eliminate unnecessary goods clearance and discharge delays and penalties which would normally lead to loss of key organizational customers and reduced company profitability.

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