Effect of Logistics Activities on Performance of Agro Processing Firms in Uasin Gishu County, Kenya

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Abstract: *Superior performance of an organization now depends on its ability to become a fully integrated partner within a supply chain context hence focusing on delivering customer value through logistics as a means of remaining competitive. Pursuant to this, the study intended to find out the effects of logistics activities such as Transport management, Material handling, on the performance of agro processing firms. In a bid to effectively achieve this, the study adopted a descriptive survey design based on samples drawn from across the agro processing industry. The target populations were 629 employees drawn from the agro processing companies in Uasin Gishu County. Cluster sampling technique was employed and Krejcie and Morgan table was used to calculate the sample size of 242 respondents. Data was collected by use of both questionnaires and interviews and analyzed by use of both inferential and descriptive statistics using SPSS version 20.From the results Correlations between Transport management, material handling, where $r=.509^{**}$, $r= .612^{**}$, respectively were positively and significantly correlated to performance of agro processing firms where P<0.01.The logistics activities which were understudy contributes 54.9% of the variation in performance of agro processing firms (Adjusted R Square = 0.549).These findings can help in addressing the challenges of organization performance emanating from logistics activities. The study therefore submits that the agro processing firms should maintain a balance between the logistics activities and their cost and service quality in order to realize increased performance.*

Keywords:*Logistics Activities,Organization performance*

I. Introduction

`   Long-term, sustainable superior performance is the ultimate goal of organizations(de Kluyver & Pearce, 2006).Such higher performance now depends on the ability of manufacturing companies to be fully integrated partner within a supply chain frame work(Cooper, Lambert, & Pagh, 1997).Today organizations have focused on delivering customer value through logistics as a measure of remaining superior (Mentzer& Flint, 2001).This has been embraced from Globalization of markets and operations begetting new perspectives of various managerial functions within the organization environments which are characterized by supply chain and physically distributed global processes (Hajiesmaeili, Rahim, & Amir, 2016). All these has been compounded by dynamics in the global demands of today's customers such as better prices, more convenient customer services and a legion of options at their disposal.In this regard organizations must focus resources and attention directly on supply chain operations such as logistics to strengthen their global competitiveness (Green, Whitten, & Anthony, 2008). Failure in the performance of a firm's supply chain courtesy of inefficient logistics activities results in competitive losses and can ultimately lead to collapse (Ntayi & Eyaa, 2010). According to Lear-Olimpi, (1999) logistics play a significant role in pursuing supply chain excellence which will leads to upgraded organization performance. As manufactures work to improve the logistics processes, they support their organizations supply chain strategy resulting in improved performance for the overall supply chain and eventually their manufacturing organization.

        Logistics is the responsibility to design and administer systems to control movement and positioning of raw materials, work-in process, and finished inventories at the minimum total cost(Bowersox, Closs, & Cooper, 2007). According to The Supply Chain Management Professionals,(2007) logistics management is defined as that part of Supply Chain Management that plans, implements, and controls the efficient, effectively forward and reverses the flow and storage of goods, services and related information from the point of origin and the point of consumption in order to meet customers' demands. The fact that logistics is a unifying link intra organizationally between the production and marketing function and inter organizationally between suppliers

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and customers cannot be gain said (Green, Whitten, & Anthony, 2008).Autry, Zacharia, and Lamb, (2008) contends that logistics must focus on the coordination, collaboration of activities, logistics social responsibility, and strategic distribution planning, technology and information systems. These altogether are the fulcrum of customer-firm-supplier relationship management which improves customer satisfaction and operational performance and in consequence impacts on organization performance.Quesada, Rado, and Scarlett,(2012) asserts that Supply chain management excellence positively affects organization performance owing to reduced lead times ,inventory costs and improved customer satisfaction .Logistics through its activities therefore remains one of the business processes that must be integrated throughout the supply chain in manufacturing organizations to better serve the ultimate customers while enhancing the performance of the organization and individual chain supply members (Cohen & Roussel, 2005).Schramm and Morschett, (2006),Opines that marketing performance (sales and market share growth) and financial performance (return on investment and profit growth) are consequences of performance of logistics activities. It can therefore be argued that logistics activities must be ingrained in organization strategies so that it can secure high performance.Major supermarkets chains such as Tesco (Tesco-company information, 2000) and Sainsbury's in Europe, Fleming, Kroger, Supervalu and Safeway in the USA and Jusco in Japan are struggling for increased efficiencies through adoption of technology in all areas of logistics activities which act as key to growth and expansion in the supermarket industry (Kumar & Corsten, 2007). Srivastava, (2006)investigated the state of logistics and supply chain practices in India and found that, while Indian managers are well aware of the essence of integrations of supply chain and logistics, the infrastructure necessary to facilitate such seamless integration is as yet unavailable. This has engendered pressure in emerging markets to rapidly adopt logistics activities in an effort to compete globally and secure maximal organization Performance. According to Nyaberi and Mwangangi, (2014) in their study on Effects of logistics management practices on performance of Rift Valley Bottlers Limited in Kenya found that logistics management practices contributes to increase in profit, sales volume, service delivery, production levels and quality of product which denotes organizational performance.

The core business of big manufacturing organizations which include Agro-processing companies is mainly to manufacture, even though they still have to procure materials for production, warehouse, and manage inventory and transports manufactured products to the end users which are logistics activities (Nyaberi & Mwangangi, 2014).According to Green, Whitten, and Anthony, (2008) logistics can engender competitive advantage which guarantees organization performance. Competitive position of a business mainly results from the evaluation of what the firm delivers with regards to value creation as compared to what other competitors offer (Gorynia, 2004) cited in (Olaf & Grrzegorz, 2015).Recent research has gone further and indicates that, in general, periods of sustained competitive advantage have grown shorter over time (Wiggins &Ruefli 2005) cited in(Terry, 2007).Wisner, (2003) hypothesized a positive relation between logistics activities and organizational performance but did not report on data related to his hypothesis. Nyaberi and Mwangangi, (2014) in their study on effects of logistics management practices on organization performance in Kenya: a case of Rift valley bottlers limited in Uasin Gishu County adopted a sample size of 80 drawn from a population of 100 employees hence, low precision in the result. Besides, the data was only analyzed using descriptive statistics thus could not make valid conclusions. In addition literature states that different components of supply integration with logistics activities may be important depending on different circumstances and type of strategy that a firm employs vary (Boon-itt, 2009). Building on this and alluded limitations of previous studies in this area, the current study has been designed to fill in the existing gap in literature by assessing the effects of logistics activities on the performance of agro processing industries in Uasin - Gishu County.

1.1 Problem Statement

Agro processing companies deal with processing of agricultural produce as their core raw materials. Kathikeyan (2016) looked into the main problems facing the marketing of agricultural produce and brings it out that majorly they rely on logistical activities such transportation, storage and handling as well as inefficient ways of managing information. Failure in the performance of a firm's supply chain courtesy of inefficient logistics activities results in competitive losses and can ultimately lead to collapse of an organization. Producers and Marketers of agricultural produce incur post-harvest loses ranging between 30-75% an index of low performance due to poor logistical activities(Oparanya, 2012).Logistics operation plays key function in supporting organizations as they strive for more well-organized management systems (Cozzolino, 2012). Despite logistics being very important, many production organizations perform short of customer expectations in this area (Kahia & Mike, 2014).The inefficient logistics system together with the inefficient internal management would undermine the organization to respond to the expectation of the customers with the lowest cost at the shortest possible time frame including the quality level which does not meet customer expectation and would contribute the competitive disadvantage situation against their rivals (Nyaberi & Mwangangi, 2014). Intense competition and market saturation are forcing manufacturing organizations including agro processing firms to access new revenue streams nationwide and worldwide through logistics activities (Bosire & Kayisime,

2013). These Organizations are expanding their array of products through services and increasing focus on customer service and loyalty programs (Agnese, 2003; Blisard., 2002).All these trends create new challenges for logistic system operations. However   The efficiency of Logistics activities varies under different circumstances and depends on the strategy that a firm employs(Boon-itt, 2009).Besides African countries where Kenya is not an exception are suffering largely due to the non-application of the principles of supply chain management practices such as logistics to business activities(Mensah, Diyuoh, & Oppong, 2014.This has motivated the design of the current study which will be to assess the effects of logistics activities on the performance of agro processing firms in Uasin - Gishu County.

1.3General objective
To assess the effects of logistics acti-vities on the performance of agro processing firms in Uasin - Gishu County, Kenya
1.3 Specific objectives
The study was guided by the following specific objectives
1. To find out the effect of transport management on the performance of agro processing firms in Uasin - Gishu County Kenya.
2. To determine the effects of material handling on the performance of agro processing firms in Uasin - Gishu County Kenya.

II.   Literature Review
2.1 Transport Management
Transportation can be defined as the act of moving goods or people from an origin to a required destination. It also includes the creation of time and place utilities. Transportation plays a key role in the supply chain, because without the efficient movement of finished goods and raw materials the entire system would not be able to work at its full potential (Green, Whitten, & Anthony, 2008). According to the investigation of National Council of Physical Distribution Management in 1982, the cost of transportation, on average, accounted for 6.5% of market revenue. Transport Logistics, has evolved very naturally into a premier provider of 3PL services which specialize in providing its clients with cost effective, high tech solutions for the most demanding supply chain challenges (Bryman, 2006).The technology unit of TLI, has developed its own proprietary software systems that equip both shippers and delivery agents with the vital information necessary to manage and control their shipment data. These systems allow   customers' great flexibility from web based tracking to DC Bypass capabilities. A study by Wiendahi, (2009) established that transportation is the operational area of logistics that geographically moves and positions inventory (Cohen and Roussel, 2005; Wagner, 2010).

Because of its fundamental importance and visible cost, transportation has traditionally received considerable managerial attention. Almost all enterprises, big and small, have managers responsible for transportation. Speed and consistency combine to create the quality aspect of transportation. In designing a logistical system, a delicate balance must be maintained between transportation cost and service quality. In some circumstances low cost, slow transportation is satisfactory. In other situations, faster service may be essential to achieving operating goals.

2.2 Material Handling
Material handling is a whole process that concerns materials and finished product, a physical (spacial) movement of goods from the manufacturers to intermediaries and finally to the ultimate consumer (Mandrish, 2005). Material handling finishes this by giving time and place utility, in other words, accessibility and its objectives are like any other marketing goals: consumer's satisfaction and profit for the firms (Mandrish, 2005,). Manufacturing in an existing plant is a constantly changing process. Machines are changed and new ones added further, which gives a chance to get better the production logistics system for that reason. Material handling provides the means to achieve customer response and capital efficiency (Simchi-Levi, Kaminsky & Simchi-levi, 2007). Material handling describes logistic processes within an industry. Material handling aims to ensure that each machine and workstation receives the right product in the right quantity and quality at the right time. The concern is not the transportation itself, but to streamline and control the flow through value adding processes and to eliminate non value adding processes. Material handlings can operate in existing as well as new plants. Logistics management is that part of the supply chain 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 requirements (SimchiLevi, Kaminsky & Simchilevi 2007). Track and tracing, which is an essential part of production logistics due to product safety and reliability issues, is also gaining importance, especially in the automotive and medical industries (Hines, 2004).

III. Research Design And Methodology

3.1 Research Design: The study adopted a descriptive research design, a scientific method which involves observing (surveying) and describing the behaviour of a subject without influencing it in any way (Saunders, Lewis, & Thornhill, 2007).The target population was 629 employees comprising of 60 from Brookside, 70 from new KCC, 120 from Rivatex, 140 from Raiply, 69 from Unga Ltd, 130 from Rupa and 40 from Oldoinyo -lessos in Uasin - Gishu County. The respondents were drawn from administration, transport, procurement, warehousing, marketing as well as customer service of these agro processing firm.

3.2 Sample Size:

A sample size refers to the number of people in the respondent group determined by the scope of the research and based on precision rate and confidence level (Collis & Hussey, 2009). According to Frazer and Lawley (2000), Sample frame is the number of population participants and how they are accessed. In this study the Sample Frame consisted of Brookside, New KCC, Rivatex, Raiply, Unga Ltd, Rupa and Oldoinyo Lesos. The study used Krejcie & Morgan table,(1970) to calculate the sample size which was 242 .

3.3 Sampling technique:

The study adopted a cluster random sampling technique. This sampling technique aims at selecting groups that display variation on a particular phenomenon (Collis & Hussey, 2009). In this case, the firms' serves as clusters, from which random sample within these groups were being selected. The size of each group was determined through proportional allocation. The method involves selecting at random from a list of the population (a sampling frame) the required number of participants (Frazer & Lawley, 2000). Therefore 242 respondents were selected for a sample for this study.

3.4 Data Collection :

The study used a mixed method approach in data collection which is the use of quantitative methods through administering of the questionnaire, as well as a qualitative approach by interviewing respondents and reviewing existing literature (Bryman, 2006; Easterby-Smith, Thorpe, & Jackson, 2008).

3. 5Data analysis :

Data was analyzed using descriptive and inferential statistical techniques where under inferential statistics multiple regressions was used to determine the effect of a set of independent variable (logistic activities) on dependent variable (organization performance), coefficient of correlation using the Statistical Package for Social Sciences (SPSS)version 20.0 package.

The regression model is as follows:

$$y = \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \varepsilon \dots \dots \dots \dots (1)$$

Where y is organization performance, dependent variable$x$ is logistics activities, β is the standardized regression coefficient.

X_1=transport management

X_2=material handling

X_3=packaging

$X_{4=}$ information communication technology

IV.   Data Analysis, Results Findings And Discussion

4.1 Descriptive Statistics of transport management Variable

The researcher sought to establish the level of agreement to various aspects of transport management. Five questionnaire items were used to examine the prevailing status of transport management in the agro processing industries in Uasin Gishu County. According to the findings presented in Table 4.1 the respondents agreed that delivery time has reduced (M=4.02 SD=0.629). Besides, a majority of the respondents tended to agree that Cost incurred is minimal (M=3.96 SD=0.901).Some respondents feel that There is good supplier management (M=4.03 SD=1.037).Some respondents tend to agree that good relationship has enhanced performance (M=3.54 SD=0.888). Lastly the respondents tend to agree that there is no damage to products being transported (M=3.60 SD=1.022).The implications of these results is that the agro processing firms may acquire better performance results by effectively, managing their transport system.

Table 4.1 Transport managemen

Response items	Mean	Std. Deviation
Delivery time has reduced	4.02	.629
Cost incurred is minimal	3.96	.901
There is good supplier management	4.03	1.037
Good relationship has enhanced performance	3.54	.888
There is no damage to products being transported	3.60	1.022

4.2 Descriptive Statistics of material handling Variable

Research also sought to establish the effects of material handling on performance of agro processing firms. Consequently, five questionnaire items were used to examine the prevailing status of material handling in the organization. In table 4.2, respondents tended to agree that the Quality of products has improved because of good material handling (M = 3.92, SD = 1.317); they also tend to agree that good material handling has enhanced production levels (M = 3.72, SD =1.098).Respondents also agreed that good material handling has increased sales volume (M = 3.95, SD =0.974). The respondents were further undecided that the organization is meeting customer expectations (M = 3.20, SD =1.008). However the respondents were in agreement with the fact that material handling enables the quality of products to be improved (M = 4.40, SD = .687).

Table 4.2 Material handling

	Mean	Std. Deviation
Quality of products has improved because of good material handling	3.92	1.317
Good material handling has enhanced production levels	3.72	1.098
Good material handling has increased sales volume	3.95	.974
The organization is meeting customer expectations	3.20	1.008
Material handling enables the quality of products to be improved	4.40	.687

4.3 Correlation between logistics activities and Organization performance

From the results, it can be seen that correlations among the logistics activities were significant. Correlations between Transport management and material handling, where r=.509**, r= .612**, respectively were also positively and significantly related to performance of agro processing firms where $P<0.01$. This implies that all the logistics activities under study jointly have a positive and significant effect on performance of agro processing firms in Uasin - Gishu County as such the management of these agro processing companies should pay high premiums on these logistics activities among others to secure high performance of agro processing firms.

Table 4.3: Test for Linearity

	Transport management	Material handling	Organization performance
Transport management	1		
Material handling	.147*	1	
Organization performance	.509**	.612**	1

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

4.4 Effects of logistics activities on the Performance of agro processing firms

Multiple regression analysis was used to test the formulated hypotheses. First, the model summary was analyzed to establish the strength of the conceptualized logistics activities in predicting performance of agro processing firms in Uasin - Gishu County . Results presented in Table 4.4 reveal that the two logistics activities namely Transport management and Material handling contribute 54.9% of the variation in performance of agro processing firms (Adjusted R Square = 0.549).Therefore, the remaining 45.1% is explained by other logistics activities not considered in the study. Durbin–Watson statisticwas to detect the presence of autocorrelation in the residuals (prediction errors) from a regression analysis. As a rough rule of thumb, if Durbin−Watson is less than 1.0, there may be cause for alarm. In this study Durbin−Watson statisticwas found to be 1.650 suggesting that the model has no autocorrelation.

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.744^a	.554	.549	.41183	1.619
a. Predictors: (Constant), Transport management and Material handling					
b. Dependent Variable: Organization Performance					

Second, the ANOVA output was examined to check whether the proposed model was viable. Results shown in Table 4.5 reveal that the F-statistic was highly significant (F= 111.609 p<0.05),this shows that the model was valid.

Table 4.5: ANOVA[b]

Sum of Squares	Df	Mean Square	F	Sig.
37.859	2	18.929	111.609	.000[a]
30.529	180	.170		
68.387	182			
a. Predictors: (Constant), Transport management and Material handling				
b. Dependent Variable: Organization Performance				

F statistics 111.609 P<.05   shows that variables are jointly significant.The model significantly improved the ability to predict performance of agro processing firms. Thus, the model was significant leading to rejection of the null hypotheses.

4.5 Regression Coefficients of Organization Performance

Results of the regression coefficients presented in Table 4.12shows that the estimates of β values and give an individual contribution of each predictor to the model. The β value tells us about the relationship between organization performance with each predictor. The positive β values indicate the positive relationship between the predictors and the outcome. The β value for transport management (.428) and material handling (.549) were positive. The positive β values indicate the direction of relationship between predictors and outcome. From the results (Table 4.12) the model was then specified as:-

$$y = \beta_1 x_1 + \beta_2 x_2 + \varepsilon \text{ ...}$$

Organization performance= .428Transport management +.549 Material handling + ε ...

The coefficients for each of the variables indicates the amount of change one could expect in organization performance given a one-unit change in the value of that variable, given that all the variables in the model are standardized basing on the standardized coefficients. Results reveal standardized regression coefficient for transport management   (β=0.428), implies that an increase of 1 standard deviation in transport management is likely to result in a 0.428 standard deviations increase in organization performance. Standardized regression coefficient for material handling (β=0.549), implies that an increase of 1 standard deviation in material handling is likely to result in a 0.549 standard deviations increase in organization performance. T-test was used to identify whether the predictors were making a significant contribution to the model. Whenthe t-test associated with β value is significant then the predictor is making a significant contribution to the model. The smaller the value of significance (the larger the value of t) meaning greater is the contributor of that predictor. The results show that transport management (t =8.510, P<.05) and Material handling (t =10.895, P<.05). These findings indicate that transport management and material handling as predictors, which significantly affect performance of agro processing industries in Uasin Gishu County. These results imply that amongst the logistics activities under study material handling is most important predictor for performance of agro processing industries in Uasin Gishu County.The variance inflation factor (VIF) was   used as an indicator for multicollinearity. VIF specifically indicates the magnitude of the inflation in the standard errors associated with a particular beta weight that is due to multicollinearity. A value of 10 has been recommended as the maximum level of VIF (Hair, Money, Samouel, & Page, 2007).From the findings all the VIF values were less than 10 implying that there is lack of multicollinearity.

Table 4.6: Regression Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	β			Tolerance	VIF
	(Constant)	.086	.252		.340	.734		
	Transport management	.475	.056	.428	8.510	.000	.978	1.022
	Material handling	.467	.043	.549	10.895	.000	.978	1.022
a. Dependent Variable: organization performance								

V. Discussion of Results

Transportation plays a key role in the supply chain, because without the efficient movement of finished goods and raw materials the entire system would not be able to work at its full potential (Green, Whitten, & Anthony, 2008). From the findings, respondents from the agro processing firms in Uasin Gishu County diametrically agreed that delivery time has reduced, cost incurred was minimal in transport management and a boost to supplier management. This implies that there is need for further potentiation of transport management as a recipe for reducing lead times at reduced cost which would certainly beget good supplier relationship and heightened organization performance as attendant consequences. From the results there was a significant positive correlation between transport management and performance of agro processing firms r= 0.509[**] P<0.01. These results were found to be in congruence with some of previous studies (Evangelos & Ramfou,

2010;Tseng & Taylor, 2005; Onyango, 2011) who found positive significant correlation between transport management and organization performance. Effective Transport management translates to organization's performance as it relates to its ability to deliver goods and services in the precise quantities and at the precise times required by customers. In this regard efficient and effective transportation system within the context of their supply chain, agro processing firms must endeavor to trace and evaluate the causality mechanisms between the transport function and their performance. This implies that agro processing firms should pay high premiums on delivery speed, delivery dependability, and delivery flexibility in order to secure customer satisfaction which ultimately engenders maximal performance. Material handling provides time and place utility, in other words, accessibility and its objectives are like any other marketing goals: consumer's satisfaction and profit for the firms (Mandrish, 2005,). From the research findings there was a significant and positive correlation between material and organization performance r= 0.612^{**}P<0.01in agro processing firms. These findings are consistent with the ones in previous researches (Kathurima, Ombul, & Iravo, 2016; Guilherme, Giovana, & Maria, 2011;Keitany, Wanyoike, & Richu, 2014).This implies that that more attention should be given to handling and management of materials in organizations to avoid unnecessary costs which can compromise on profitability. This is underscored by the fact that materials are the lifeblood and heart of manufacturing firms and none of them can operate without appropriately handling its materials.

VI. Conclusions

From the findings this study makes a number of conclusions. The study explored the relationship between logistics activities and performance of agro processing firms. The study concludes that the constructs were understudy like transport management, material handling, packaging and information and communication are key in enhancing the performance of agro processing firms in Uasin Gishu County. This is evidenced by the fact that these constructs jointly and independently affect to some magnitude the performance of agro processing firms. From the findings it can be noted that the effect of all the   logistics activities under study would positively and significantly affect performance of agro processing firms. It therefore calls for the formulation and promotion of policies which strengthens the improvement of the logistics activities besides focusing on their implementation. In consequence these policies would become ingrained in management and operations of supply chain of agro processing firms and not just an additional component of corporate policies thus high performance. Based on resource dependent theory, the supply market is inherently unstable thus it   provides a framework on how organizational actions can reduce uncertainty resulting in a more stable supply market. And this can be incessantly achieved through efficient logistics activities. Thus the findings of the current study provides an absolute support to the suggestion that logistics activities   be recognized as a significant precursor for the performance of agro processing firms.

VII.   Recommendations

In view of the findings of the study and the guidance from the literature review, it is apparent that efficient and effective management of logistic activities for organizations is an important ingredient to satisfy the various needs of supply chain management and in return eliciting high performance of the agro processing industry .While there are other factors crucial for organization performance, From the results ,The industry should pay more attention in addressing transport management, material handling ,packaging and information communication in order to increase the performance of the industry. In this regard, the current study makes the following recommendations. Authorities of the agro processing industry should acquire better performance by having policies geared towards improving transport management efficiency. The organization should ensure material handling system improved on besides other logistics activities to avoid unnecessary costs which can compromise on profitability. However there is need for technology trend analysis as it plays a great role in increasing material handling systems. The agro processing firms should   embrace packaging as an important marketing strategy which glamorizes products in order to attract the consumer's attention. However packaging quality should be given eminence. The agroprocessing industry should strive to improve on communication by entrenching more innovative technologies into their communication system.This will ensure effective Information and communication flows worth engendering maximal performance.

7.1Policy recommendations

Logistics is not the focus of any one government department or entity, but rather the purview of a number of different agencies. An approach revolving around all the policies that significantly affect supply chain efficiency will improve competitiveness of agro processing firms and may substantially enhance their commercial relevance in all their logistics operations .This study therefore submits to management and policy makers of the agro-processing firms   to take appropriate measures in formulation, implementation and evaluation logistics oriented technology trend analysis policies which are geared towards enhancing and sustaining high performance of agro processing firms. The management of Agro processing firms should also

formulate internal assessment policies which is critical to for total understanding of their present and projected logistics capabilities through an outside expert who can independently and objectively identify both the gaps and opportunities, and compare them against the best practices in the industry. Regulatory requirements regarding health, product safety, security should be embraced in undertaking logistics activities in order to engender organization success.

7.2 Suggestion for further studies

The present study focused on the effects of logistics activities on the performance of agro processing firms in Uasin - Gishu County. With transport management, material handling, packaging and information communication as independent variable while performance of agro processing firms being the dependent variable. To gain a more comprehensive understanding on this theme, future research should be done on other context considering other outcomes of effective logistics activities to the organization.

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