GREEN DISTRIBUTION AND PERFORMANCE THE HORTICULTURAL SECTOR IN KENYA

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Abstract: The study sought to establish the influence green packaging on the performance of horticultural companies in Kenya. The study sought to find out the relationship between green purchasing and performance in the horticultural industry; establish the relationship between reverse logistics and performance in the horticultural industry; the influence of green packaging on performance in the horticultural industry; assess the relationship between green distribution and performance in the horticultural industry and analyse the moderating effect of value addition on the relationship between sustainable supply chain and performance in the horticultural industry. The study was informed by theory of reasoned action. The study adopted a descriptive research design while the target population was 236 horticultural firms in Kenya. A census was used whereby all the 236 firms included in the study. Questionnaire was used to collect the study data while the data was analysed through mixed analysis where both qualitative and quantitative techniques was used. Inferential analysis was used to establish the relationship between variables. The study found a positive relationship between green packaging and performance in the horticultural industry in Kenya. The study recommends that the management of the horticultural companies should embrace green packaging as a way of enhancing the effectiveness of their supply chain processes. This would ensure that they understand green packaging and challenges that come with the process so that they can fully embrace green packaging benefits.

Keywords: Green Packaging, Sustainable Supply Chain, Value Addition, Firm performance, Horticultural Industry.

1. INTRODUCTION

1.1 Background to the Study

In the wake of 21st century, businesses are faced with a wide range of dynamics most of which have threatened their continued performance and sustainability. From changes in technology, increased competition, globalization, to increased awareness and cultural diversity, modern businesses ought to be more diverse and properly managed for them to steer performance and competitiveness. One of the major processes in a modern firm that requires proper attention for enhanced performance and effectiveness is the supply chain. Sustainable supply chain has been emphasized across the globe as one of the major aspects of saving the World from the continued global warming and environmental unfriendly activities.

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Globally, external pressure and incentives set by governments, customers, investors and stakeholders are regarded as the starting points for sustainable supply chain management (Maignan, Hillebrand, & McAlister, 2012). This creates demands for definition of life cycle-based standards for the environmental and social performance of products to be implemented throughout the supply chain. Internal as well as external capabilities have to be developed. Lintukangas, Hallikas and Kähkönen (2013) conclude that sustainable supply chain management has to take into account a wider range of issues and therefore look at a longer part of the supply chain. The implication of this is an increased need for cooperation among partnering companies in sustainable supply chain management. But according to findings in Lemmet (2012) review, the integration is currently limited.

Packaging can be defined as all the activities of designing and producing the container for a product (Pathak, 2014). According to Manalili et al. (2014), packaging refers to the technology and material for enclosing or protecting products for distribution, storage, sale, and use. Packaging is defined by two main factors: functionality and point of destination (Arikan, 2011).

Green package, can also be called ecological package or environmental friendly package, is defined as environmental friendly package, which is completely made by natural plants, can be recycled or second use, be prone to degradation and promote sustainable development, even during its whole lifecycle, it is harmless to the environment as well as to the human body and livestock's health. In short, green packaging is the appropriate packaging that can be reused, recycled or degraded, corrupted and does not cause pollution in humans and the environment during the product life cycle.

Green procurement is concerned with the natural effects of buying while manageable packaging additionally thinks about social and financial elements. This incorporates decreasing natural effects or outflows and improving social results by supporting nearby providers or network ventures giving administrations, manageable acquisition considers the financial, social and ecological effects of design; non-inexhaustible material use; assembling and generation strategies, coordination; administration conveyance; use; activity; upkeep; reuse; reusing choices; transfer; and providers' abilities to address these outcomes all through the production network (ICPAK, 2013).

Recycling is an important step in green packaging in ensuring future generations" access to the necessary level of resources. Recycling factors of production or engaging in industrial symbiosis in which materials are sold to/received from other companies or bodies, for mutual gain, are ways to minimize organizations" negative impacts on the environment (Davila, 2012). In waste management, an institution can improve its waste resulting from packaging process through well design guidelines on how to recycle and dispose them. However, institutions can also incorporate all stakeholders in managing waste. During the time spent buying and obtainment, providers must consider a definitive attitude of the materials and segments that enter the firm, acquiring administrators can solicit upstream individuals from the store network to submit squander decrease and give ecologically well-disposed item. Providers, for example transport administration providers and item providers, can affect firms' green obtaining exercises and drive green supply chain management.

Green packaging in many cases has to do with appropriate bundling that decreases natural harm. Green bundling demonstrates the impression of natural worries in money related terms which are inborn and transferable to the client. Green correspondence encourages a positive picture and passes on a business company's worry towards nature and the general population (Ottman, 2018). Bundling gives advantages to organizations just as for customers. For example, the outside of bundling fills in as a correspondence stage for a wide range of data. This incorporates data, for example, item fixings, value, utilization information and other data that is significant for buyers. Other than that, it serves in showcasing techniques as an instrument to build intrigue of things to purchaser bringing about less stock going unsold. Bundling does likewise control the size and amount of an item (Ottman, 2018).

Performance is the extent to which an organization can create a better position than its competitors (Porter, 1985; Schwab, 2014). To maximize the performance all members of the supply chain must continually work together to serve the end consumer (Ogrean & Herciu, 2010). Porter (1985) suggests that the way a company associates with other companies in its value chain can affect performance, especially when external assets are created distinct from other value chains. Aiginger (2016) contend that strategic options for sustainability may be the decisive factor that would allow companies to create the unique performance over product images and sales, market share and new market.

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Onyango (2017) elucidated that performance explained how well a company was ready to block new entrants strategically and stand a chance to command a given market thus ensuring sustainability. Maruhe (2014) on the other hand contended that performance was the reason why most multinationals thrived in Kenya and that the companies steered their success through ensuring that all the aspects of performance such as cost leadership, differentiation, differentiation and other related strategies were upheld. While assessing the impact of supply chain on firm performance, Abdirahim (2013) established that market share, market penetration, flow of products and customer flow best explained the performance of a firm. These measures will also be adopted in the study at hand.

The horticulture industry in Kenya plays an important role in food security, employment creation, and poverty alleviation (Agricultural Sector Coordination Unit [ASCU], 2011). The sector contributes enormously to food security and household incomes to a majority of Kenyan producers who carry out one form of horticultural production or another and employs over six million Kenyans both directly and indirectly thus improving on their livelihoods (Ministry of agriculture, 2010a). However, the potential for horticultural production in the Arid and Semi-Arid Lands (ASALs) of Kenya has not been fully utilized to be of help to the communities living in those regions (Ministry of Agriculture, 2010b). This is because farming in Kenya is mainly rain fed and the arid and semi-arid regions lack sufficient rainfall to support sustainable rain fed farming (Ministry of Agriculture, 2010b).

1.2 Statement of the Problem

The Government of Kenya's Medium-Term Plan Three (2018-2022) underscores the pivotal role of the horticultural subsector comprising of cut flowers, vegetables, nuts and herbs to Kenya's export drive, economic growth and development at large (GOK,2018). According to Wainainah (2015), Kenya ranks as the largest horticulture exporter in Sub-Saharan African with a 16% EU market share. The subsector contributes enormously to food security and household income (Research Solutions Africa, 2015).

Kenya's Vision 2030 lists limited value addition coupled with high production costs among other factors as making Kenyan agricultural exports less competitive in the global market (GOK, 2017). The performance of the horticultural subsector which is the fastest growing in the Kenyan agricultural sector (Kenya Horticulture council- KHC, 2017) is affected by factors such as stringent production standards and trade regimes, climate change and variable weather, sluggish recovery in Europe, internal structural and institutional issues such as inefficiencies in supply chain (AFA, 2017).

Green packaging as one of the aspects of sustainable supply chain has been considered a key aspect in promoting performance through a well embraced way of differentiating organizational products from those of the competitors (ILO, 2013). However, very little has been done to link green packaging in sustainable supply chain and performance in the horticultural industry which has been facing shrinking competitiveness in the global market over the recent past, hence the subject of the study.

1.3 Objectives of the Study

- 1. To determine the influence of green packaging on performance in the Horticultural Industry in Kenya
- 2. To analyse the moderating effect of value addition on the relationship between green packaging and performance in the Horticultural Industry in Kenya

1.4 Research Hypotheses

H_{A1}: Green Packaging has a significant positive influence on performance in the Horticultural Industry in Kenya

H_{A2}: Value addition has a significant positive moderating effect on the relationship between green packaging and performance of the Horticultural Industry in Kenya

2. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Theory of Reasoned Action (TRA)

The TRA model, developed by Ajzen and Fishbein (1980), is a conviction frame of mind social goal model, which proposes that a person's impression of what others consider significant is influenced by their goal and that disposition assumes a noteworthy job in foreseeing conduct (Netemeyer et al., 1993). In this investigation, green obtaining is

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identified with a company's expectation to purchase an item that is less harmful to the earth and the general public on the loose.

Vazifehdousta (2013) confirmed that customer's goal to purchase green items is incredibly impacted by uplifting disposition and the apparent green estimation of the items. An examination by Rizwanet al. (2013) additionally discovered that purchaser's disposition impacts his or her green item buy goal. The hypothesis has been exposed to reactions by a few creators, the most significant analysis is that the hypothesis of contemplated activity isn't falsifiable since a hypothesis must be falsifiable to be a decent hypothesis, henceforth if the hypothesis of contemplated activity isn't falsifiable, then it is not a good theory regardless of how many researchers believe it to be useful. The theory is useful in the study of reverse logistics as it explains a firm's deliberate decision to engage in activities that promote the environmental and social wellbeing of the society.

2.2 Conceptual Framework

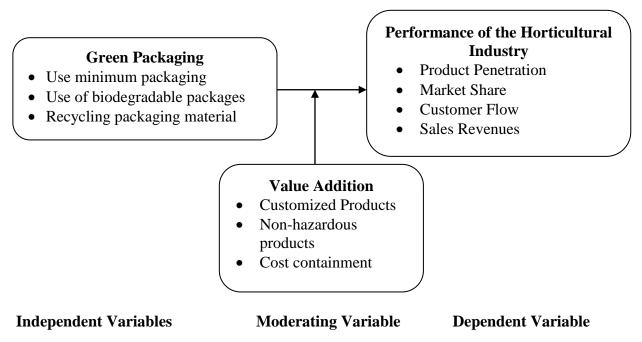


Figure 1: Conceptual Framework

2.3 Green Packaging and Firm Performance

Doszhanov and Ahmad (2015) conducted a study on the impact of green brand dimensions and green perceived value. The study aimed at identifying the relationships between green brand dimension, green perceived value and customer's intention to use green products. Data was collected through structured survey questionnaire from 384 customers of three hypermarkets in Kuala-Lumpur. Data was analysed based on multiple regression analysis. The findings of the study portrayed that there are significant relationships between green brand awareness, green brand trust, green perceived value, and customer's intention to use green products. The awareness of customers about their green products, create green brand trust among customers, and enhance green perceived value for customers to increase their intention to use green products (Doszhanov & Ahmad, 2015). Green packaging is mostly practiced in in horticultural industries which study did not address.

Previous studies have been carried out on the relationship between recycling as a sustainable supply chain practice and value addition and procurement performance across the globe. As an aspect of environmental friendliness, recycling stands as a key prospect of ensuring sustainability in the supply chain process (Preuss, 2012). Swanson, Weissman, Davis, Socolof and Davis (2015) carried out a study on developing priorities for greener state government purchasing. The study aimed at unveiling the ways and strategies put by the government to enhance green purchasing in government corporations. The study focused on state owned entities in California. Cross-sectional research design was adopted and a sample size of 109 respondents was employed. The study established that one of the key aspects used by government in

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its purchasing to steer green procurement was recycling. According to Swanson et al. (2015), recycling serves to enhance the ability of the suppliers to save on costs while at the same time reducing the waste materials released to the environment. Through this, sustainability of supply chain is achieved thus promoting procurement performance and efficiency (Swanson et al., 2015).

Hervani, Helms and Sarkis (2014) did a study on the performance measurement for green supply chain management. The focus of the study was to establish the extent to which green supply chain could be measured and on what merits. The study adopted an exploratory research design and had the manufacturing firms in Pakistan as the target population. The study established that the best approach to measure green supply chain management is recycling. According to Hervani et al., (2014), recycling means that a company is saving what would have been lost and prolonging the release time of the wastes to the environment. Hervani et al., (2014) considered recycling as an aspect that every management that is determined towards enhancing green supply chain will adopt so as to enhance re-use and reduction of waste materials. To sustain green supply chain, measures of preventing/blocking waste materials to be easily disposed to the environment is an important act to put into consideration (Hervani et al., 2014).

Locally, Ogecha (2016) did a study on enhancing internal customer service and value addition through recycling. The study sought to establish the impact of recycling on customer service and on value addition while considering recycling as an aspect of green supply chain management. The study targeted supermarkets in Kenya and had a sample of 112 respondents. The findings revealed that recycling had a significant influence on value addition and customer service through meeting the customer needs and expectations. Ogecha (2016) pointed out that using a commodity in other duties after itself being used contributed to the value addition through enabling the organization to maintain or transfer designs of products or packages thus gaining more market propensity.

The study on the effect of green packaging on business performance in the manufacturing in Nairobi County, Kenya by Sambu (2016) looked to decide the impact of green bundling on execution of various firms. The examination embraced the illustrative research plan. An enumeration of 133 administrators working for 47 firms in Nairobi County was received. Information was accumulated from respondents utilizing surveys as information gathering instruments. The consequences of the examination uncovered that green bundling is key determinants of business execution in the assembling in Kenya. As per Sambu (2016), firm supervisors should bundle their items in recyclable materials.

Ramme and Heimann (2015) completed an investigation on the green bundling from an organization's point of view and deciding variables for bundling arrangements in the German natural product juice industry. The examination tried to decide the commonness of Green Packaging in the Baden-Württemberg natural product juice industry. The investigation examined the organizations' point of view on Green Packaging, a field of concentrate for which just restricted data is accessible. Along these lines, essential information for a subjective research approach is gathered. The investigation results uncovered that the retail channels utilized by these organizations push back against returnable jugs in light of their taking care of expenses. Interviewees additionally communicated their feeling that customers' interest for Green Packaging does not do the trick to drive change in existing practices. Littler organizations centre their bundling choices around existing returnable glass bottles along these lines both limiting change over expenses and boosting green advertising potential. For bigger organizations it is conceivable to take on a pioneer job in the field of Green Packaging (Ramme and Heimann, 2015). The study however did not address on the value addition when green packaging is practiced.

2.4 Value Addition and Firm Performance

Value addition is any additional activity that in one way or the other changes the nature of a product thus adding to its value at the time of sale (Miles & Snow, 2013). Value adding is the process of changing or transforming a product from its original state to a more valuable state (Boland, 2009). Value addition can therefore be said to be a process of enhancing a product to gain more from it. In agriculture the role of value addition is to maximize production and economic value of a produce. It is production process phase that involves enhancing product quality for the consumer and hence brings about higher net value. According to Lambert et al. (2006), value addition is the variation between value of goods and services produced and the input costs used in their provision. In this context, value addition is the seafood processing industry's gross receipts (income) minus expenditure for goods and services in the production process, but this should not be mistaken for profits (Lambert et al., 2006).

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Roheim et al. (2007) analyzed the value of brands and other value addition activities meant to target specific segments in the frozen fish market. They used purchased retail point scanner data of 687 frozen fish products, collected weekly over three years (2002-2005). The sales data included quantities sold and prices by brand, package size, and product promotions. The data was analyzed using hedonic pricing model and results appeared to indicate that consumers preferred "natural" fish that was less processed, and less value added, and they were ready to pay a premium for that. This is to be expected in markets where health and wellness concern override other factors influencing demand. The other observation is that traceability is gaining more value among dealers because quality of their products has a direct impact on their reputation.

Karantininis et al. (2008) investigated what determines innovation in the agro-food industry. They used the number of products launched and investments in innovation as a percentage of sales as proxies for innovation activity of the firm. They noted that number of products launched is a misleading indicator as it is heavily influenced by product proliferation and not innovation. They concluded that organization, stage in the value chain and market power are important to innovation, and that Wholesalers and retailers tend to have a larger number of new products (Model I), whereas manufacturing firms tend to invest more in research and development.

Punjabi (2007) observed that it has become clear worldwide that the most rapid growth in agriculture has been occurring on the part of post-production activities. This is being driven by growth of middle-income consumers even in low income countries and their demands for better quality value added products. Absence of agro-industry and agribusiness resulting in low levels of value addition of agricultural commodities has been one of the main causes of stagnation in rural incomes. A substantial agribusiness sector generating a high outflow of value-added commodities is always correlated with high agricultural GDP and high rural incomes.

Mapiye et al. (2007) analysed the potential for value addition of Nguni cattle products in the communal areas of South Africa. They concluded that development and research programmes aimed at reintroducing the Nguni breed in the rural areas should take a holistic and participatory approach in agro-processing and value-addition of Nguni cattle products. Increased value addition can be achieved by provision of appropriate incentives for the establishment of agro processing industries in the rural areas and promotion of partnerships between communal farmers and agribusiness.

3. RESEARCH METHODOLOGY

3.1 Research Design

Descriptive research design entails explanation of a phenomenon, estimating a proportion of a population with similar characteristics and ascertaining the relationship that occurs amid the variables under study (Myers, 2013).

3.2 Study Population

The target population for the study comprised of the horticultural companies in Kenya. There are approximately 289 horticultural firms in Kenya where 236 of them have their offices or representatives in Nairobi. The study focused on the companies that are in Nairobi County since majority of the firms are located here thus it can be a good representative of Kenya as a country.

3.3 Sampling Technique and Sample Size

Given the heterogeneity nature of the population, census was used whereby all the 236 horticultural companies were selected as the sample size. Afterwards, purposive sampling will be used whereby only the supply chain managers, or their representatives were picked from every company.

3.4 Data Collection Procedure

Primary data was the main data used in the study. The data was collected using a structured questionnaire. The questionnaire was administered both physically/manually and through electronic means. This ensured ability to reach out to different kinds of respondents and in different localities.

3.5 Data Analysis and Presentation

The study used both descriptive and inferential statistics to analyse data. Descriptive statistics such as frequency distribution and measures of central tendency was used to analyse the data. Regression model analysis was used to test for the research hypotheses.

4. FINDINGS

4.1 Response Rate

The study had a sample size of 236 respondents. Out of 236 questionnaires distributed, 221 were duly filled and returned. This represented a response rate of 93.6%. This implies that the response rate of 93.6% was adequate for analysis, drawing conclusions and reporting.

4.2 Green Packaging

The study sought to assess the influence of green packaging on performance in the horticultural industry in Kenya. Table 1 presents the findings obtained. The study revealed that horticultural firms commitment and goodwill to enhance green packaging in the procurement operations is through using recyclable materials for environmentally friendly packaging, using unique, innovative, or high-tech materials, going natural for environment-friendly packaging, creating custom packaging boxes to preserve space and materials throughout the distribution process, incorporating packaging into the product and arranging our products in different ways.

The findings concur with Doszhanov and Ahmad (2015) study which portrayed that there are significant relationships between green brand awareness, green brand trust, green perceived value, and customer's intention to use green products. Ogecha (2016) Found that recycling had a significant influence on value addition and customer service through meeting the customer needs and expectations.

Table 1: Influence of green packaging on performance

Statement	Mean	Std. Dev
The company has put appropriate measures to reduce the packaging material used so as to reduce wastage	4.007	1.251
We encourage our suppliers to use biodegradable materials	3.817	1.142
The material used in packaging is produced in a manner that itself is environmentally friendly and non-hazardous	3.902	1.235
The suppliers of the packaging materials are effectively involved so as to enable them produce environment friendly materials	3.764	1.168
The storage of the merchandise in our firm is put at one central place to avoid repackaging	3.975	1.169
The customers are encouraged to adopt to the bio-degradable materials when seeking for repackaging of their orders	3.836	1.426
Our firm encourages recycling of materials used in packaging	3.831	1.300
The process of packaging is mainstreamed towards avoid emissions or any other polluting means	3.837	1.207
Through adherence to green packaging prospects the company has enhanced efficiency and cost saving thus enhancing value addition	3.903	1.345

4.3 Value Addition

The study sought to establish the moderating effect of value addition on the relationship between green packaging and performance in the Horticultural Industry in Kenya. Table 2 presents the findings obtained. The study revealed that horticultural firms enhance value addition to achieve its competitiveness and enhance performance, through creation superior products than competitors, having environmentally friendly products that are of higher quality, creating customized products for different market segments and having unique products that are hard to imitate in the market.

The findings concur with Karantininis et al. (2008) concluded that organization, stage in the value chain and market power are important to innovation, and that Wholesalers and retailers tend to have a larger number of new products (Model I), whereas manufacturing firms tend to invest more in research and development. Mapiye et al. (2007) indicated that increased value addition can be achieved by provision of appropriate incentives for the establishment of agro processing industries in the rural areas and promotion of partnerships between communal farmers and agribusiness.

Table 2: Value addition in the Horticultural Industry

Statement	Mean	Std. Dev
Our company has ensured access and availability of customized products across all our supply chains	3.738	1.168
The company is committed towards having non-hazardous products across all its product lines in the market	3.988	1.182
Since the company started focusing on sustainable supply chain management the operational costs have been contained to some percentage	3.902	1.235
The company has increased its internal efficiency as a result of focusing on sustainable supply chain management	3.850	1.220
Value addition in the products by our company has contributed to the company's performance	3.909	1.359

4.4 Performance of Horticultural Industry

In this section the study sought to determine from the head of supply chain section the competitive position of their horticultural firms. The study findings are present in Figure 2. From the findings, the study revealed that major source of performance for horticultural firms was quality of the products, adherence to environmental laws in their operations, market segmentation through products for each market, packaging products that differentiate us from the competitors, having collaboration with suppliers who observe environmental laws and involvement in environmental corporate social responsibility activities. The findings concur with Liao, Hu, and Ding (2017) who revealed that performance was to a great extent determined by the innovativeness of an organization. Subba (2016) established that through proper measures of supply chain management and ensuring that it was effectively done, the performance of the crop production companies was achieved.

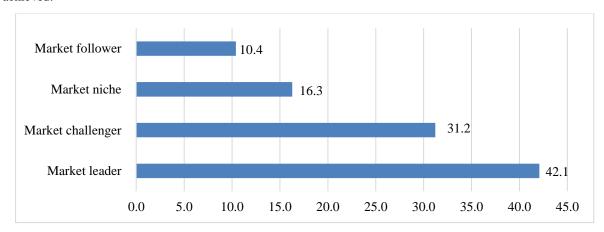


Figure 2: Competitive Position of Organization in Relation To Other Players

4.5 Inferential Statistics

4.5.1 Correlation Results for Green Packaging and Performance

Green packaging and performance in the horticultural industry in Kenya is seen to have a significant relationship (p=0.000<0.05). In addition, the relationship between these green packaging and performance was found to be positive and strong (r=0.679). This suggests that the level of performance in the horticultural industry in Kenya is dependent on green packaging.

Table 3: Correlation Analysis on Green Packaging

		Firm Performance	Green Packaging
	Pearson Correlation	1	.679 ^{**}
Firm Performance	Sig. (2-tailed)		.000
	N	221	221
	Pearson Correlation	.679**	1
Green Packaging	Sig. (2-tailed)	.000	
	N	221	221

^{**.} Correlation is significant at the 0.01 level (2-tailed).

4.5.2 Hypothesis Testing

H_{AI}: Green Packaging has a significant positive influence on performance in the Horticultural Industry in Kenya

The linear regression model was also used to explain the relationship between green packaging and performance of horticultural industry in Kenya. A model summary, Analysis of Variance (ANOVA) and regression coefficients were used. As the model summary in Table 4 shows, the R-square (R²) for the model is 0.461. This is an indication that 46.1% of the variation in performance of horticultural industry in Kenya is as a result of green packaging.

The Analysis of Variance (ANOVA) results are as shown in Table 4. From the model, the F-value is 187.596 at a significance level of 0.000<0.05. The model shows that a significant relationship exists between green packaging and the performance of horticultural industry in Kenya, hence the model is statistically significant.

The findings on regression coefficients revealed that the Beta coefficient of green packaging was 0.679. This is an indication that green packaging would influence the performance of horticultural industry in Kenya by 67.9%. The Pvalue for the model was 0.000 which is less than the standard p-value of 0.05. This implies that green packaging significantly influence the performance of horticultural industry in Kenya. The alternative hypothesis is therefore accepted.

Table 4: Linear Regression Model Results

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.679 ^a	.461	.459	.56313		
a Predictors' (Constant) Green Packaging						

NOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	59.489	1	59.489	187.596	.000 ^b
1	Residual	69.448	219	.317		
	Total	128.937	220			

a. Dependent Variable: Firm Performance

b. Predictors: (Constant), Green Packaging

Regression Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	В	Std. Error	Beta			
(Constant)	.814	.160		5.100	.000	
Green Packaging	.679	.050	.679	13.697	.000	

a. Dependent Variable: Firm Performance

H_{a2}: Value addition has a moderating effect on the relationship between green packaging and performance in the horticultural industry in Kenya.

The findings also show that moderated green packaging has positive influence on performance in the horticultural industry (1.020). The influence was significant with p-value of 0.000. This therefore suggests that the alternative hypothesis that value addition has a significant positive moderating effect on the relationship between green packaging and performance of the horticultural industry in Kenya is accepted.

Table 5: Moderated Beta Coefficient

	Model	Un standardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.909	.336		2.707	.007
	Green Packaging* Value addition	1.020	.083	.860	12.288	.000

5. CONCLUSION AND RECOMMENDATIONS

The study found that green packaging and performance in the horticultural industry in Kenya is seen to have a significant relationship. In addition, the relationship between these green packaging and performance was found to be positive and strong. The study concluded that horticultural firms enhance value addition to achieve its competitiveness and enhance performance, through creation superior products than competitors, having environmentally friendly products that are of higher quality, creating customized products for different market segments and having unique products that are hard to imitate in the market.

The management of the horticultural companies is mandated to ensure effective performance of the companies by promoting key and essential measures that ensure cost-saving, enhanced customer satisfaction and increased quality of products. This would be mainly achieved by embrace of sustainable supply chain practices, where most of these practices uphold minimization of costly and environmentally unfriendly materials and processes.

The study recommends that the companies should involve all shareholders in green packing activities. This would ensure that they understand green packaging and challenges that come with the process so that they can fully embrace green packaging benefits. The study recommends that the horticultural firms should include green distribution as one of their strategies. This is because green packaging in essential if the company should be committed to in order to remain innovative, effective, competitive and efficient in today's ever changing dynamic marketing environment.

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