



**THE ROLE OF VALUE CHAIN ACTIVITIES ON CUSTOMER SATISFACTION IN THE COFFEE SECTOR
IN KENYA**

NJOKA MWENDIA ROBERT

THE ROLE OF VALUE CHAIN ACTIVITIES ON CUSTOMER SATISFACTION IN THE COFFEE SECTOR IN KENYA

Njoka, M., Jomo Kenyatta University of Agriculture and Technology (JKUAT), Nairobi Kenya

Dr. Wario, G., Jomo Kenyatta University of Agriculture and Technology (JKUAT), Nairobi Kenya

Accepted December 13, 2014

ABSTRACT

Coffee has continued to play a key role in Kenya's economy. However, coffee prices have been declining over time. Severally, studies have pointed at productivity and marketing as the main contributors to this decline. Performance is the total output achieved from the activities of the business enterprise.(Otundo,2009). Customer satisfaction emanates from good performance. This study aimed to establish the role of value chain activities on customer satisfaction. The specific objective was to establish the role of value chain activities on customer satisfaction in the coffee sector in Kenya. A descriptive research design was used. Descriptive and inferential statistical analysis of data was done using SPSS. The findings of the study were that value chain activities have a statistically significant role on customer satisfaction. The study recommended that managers must reinvent and reconfigure their strategies in regard to value chain activities in order to satisfy and retain customers.

Key words: *value chain, customer satisfaction, primary activities, secondary activities, support activities.*

1.1 Background of the study

According to Chege (2012), the agricultural sector contributes about 24 percent of Gross Domestic Product (GDP) and provides about 70 per cent of total employment in Kenya (GOK, M2009). About 85 per cent of Kenyan population relies on coffee, tea, maize, wheat, livestock and horticulture for their livelihood. Coffee and tea provide 45 per cent of the wage employment in agriculture, underscoring the importance of these sub-sectors to the economy. He further notes that Kenya's position in the global economy is declining across most of its export sectors. The country's export cluster map shows that most of her exports represent less than 0.10 percent of the world export share and have lost world market share over the past decade (Condliffe et al 2008). Kenya's exports as a share of GDP declined from 40 percent in 1960 to 26 percent in 2009 (World Bank, 2010). Kenya coffee is rated as one of the best globally and 99 per cent of it is exported mainly to Germany, Sweden and Belgium, United States of America and Saudi Arabia (EPZA, 2005). Kenya produces quality Arabica coffee, globally recognized and usually used to blend and upgrade other relatively inferior brands (EPZA, 2005).

The performance of coffee sub-sector has been declining since late 1980s. By 1978, coffee accounted for 9.5 percent of GDP but this share reduced to 0.6 percent by 2005 (World Bank,

2005). Coffee accounts for only about 4 percent of Kenya's exports (World Bank, 2010). Coffee production fell from 130,000 metric tons in 1987/88 to 50,000 metric tons in 2010/2011. Kenya has the potential to produce 200,000 metric tons of coffee beans.

1.2 Problem statement

The Kenya economic performance between 2000 and 2010 was mixed, depicting an oscillating trend but impressively resilient after a wave of shocks, Chege, (2012). He observes that the economy's growth was 0.5 per cent in 2002, picked to reach 7.0 per cent in 2007 but declined to 1.6 per cent and 4.6 per cent in 2008 and 2010, respectively. The agricultural sector contributes about 24 percent of Gross Domestic Product (GDP) and provides about 70 per cent of total employment in Kenya (KER 2009).

The performance of coffee sub-sector has been declining since late 1980s. By 1978, coffee accounted for 9.5 percent of GDP but this share reduced to 0.6 percent by 2005 (World Bank, 2005). Coffee accounts for only about 4 percent of Kenya's exports (World Bank, 2010). Coffee production fell from 130,000 metric tons in 1987/88 to 50,000 metric tons in 2010/2011. Kenya has the potential to produce 200,000 metric tons of coffee beans.

The dismal performance of the coffee sector in Kenya has been attributed to a number of factors. These include the collapse of 1989 international coffee agreement, global competition from countries like Vietnam and market glut, Chege, (2012). In addition, local factors such as incomplete liberalization process, growing inefficiencies in cooperatives, and structural challenges in the coffee supply chain have contribution to declining coffee performance (World Bank, 2006). These developments have resulted in poor producer prices, forcing the farmers to divest from the coffee sector.

Wainaina, (2005) noted that with world prices falling by almost 70 percent since 1997, coffee farmers have complained they now get very little return for their hard work. Many now consider coffee to be a liability and, despite a law, which prohibits farmers from uprooting their coffee plants, the farmers are clearing their land for other crops. Coffee production has plummeted from a peak 130,000 metric tons in 1988 to only 52,000 tons in 2002.

Betty, (2009) argues that when a company starts to hear their customers saying “it’s very difficult to do business with you” without providing exact details; when a company sees their internal customer service scorecard showing good numbers, but the customer survey result shows “poor service”; or when a

company starts to see their long term customers switching to their competitors; it is the time for the company to evaluate their value chain to understand what they need to do to win the trust and confidence back from their customers.

Chege, (2012), observes value additions along the coffee value chain have been dismally low and skewed against the farmer who gets 7 per cent of the market value, which is hardly a tenth of what accrues at the various stages in the value chain. He recommends that the coffee sector can borrow the vertical coordinated networks model of value chains from the cut flower. Chege, (2012) notes that coordinated and all-involving value chain activities in the cut flower sector have led to greater customer satisfaction.

In view of these citations and recommendations, this research proposal will seek to find out the role of value chain activities in customer; satisfaction in the coffee sector in Kenya.

1.3 Objectives

The main objective of the study was to establish the Role of Value Chain Activities on Customer satisfaction in the Coffee sector in Kenya.

1.4 Hypothesis

H0: Value chain activities are not significantly related to Customer satisfaction

H1: Value chain activities are significantly related to Customer satisfaction.

2. Literature Review

2.1 The Independent variable: Value chain activities

Porter (1990), defines a value chain as a set of activities that an organization carries out to create value for its customers. Porter proposed a general-purpose value chain that companies can use to examine all of their activities, and see how they're connected. He argues that the way in which value chain activities are performed determines costs and affects profits, so this tool can help managers understand the sources of value for their organization.

Promoting value chain development is increasingly being recognized as a promising approach to address not only economic development, job creation and inclusive growth, but a wider range of social and environmental development issues. (Andreas and Christian, 2011)

According to Ross (2014) value chain describes the entire range of activities that are necessary to bring a product or service from the setting up level, through different levels of production (involving a combination of physical transformations and different services utilization), delivery, to final the consumer, and doing away with it after using it. Value chain is

an important construction in order to understand the way of distributing the obtained income from design, production, marketing, coordination and recycling.

Dagmar (2001) notes that the value chain analysis describes the activities the organization performs and links them to the organizations competitive position. Value chain analysis describes the activities within and around an organization, and relates them to an analysis of the competitive strength of the organization. Therefore, it evaluates which value each particular activity adds to the organizations products or services. This idea was built upon the insight that an organization is more than a random compilation of machinery, equipment, people and money. Only if these things are arranged into systems and systematic activates it will become possible to produce something for which customers are willing to pay a price.

Bacanu, (2006) notes that in competition terms, value is the amount of money that buyers are willing to pay in return for what are being given by the company. Value is reflected in total income – price reflection of the firm product or of the product units that the firm can sell. A firm is profitable if the value it can obtain is higher than the costs involved in the product making. To create value for the buyers, higher than production and delivery costs, is the purpose of any generic strategy.

Ingrid(2006) writing about coffee in Honduras observed that in order to have a better understanding of where the small coffee farmers stand in the global value chain, it is important to analyze who the actors are and what their interactions are like. Globalization, trade liberalization and economic growth in newly industrialized countries have changed lifestyles and consumer demands. In industrialized countries, there is an increased, year-round demand for variety, quality, and niche products such as organic foods. Over the last 15 years the demand for specialty coffee has increased. Developing countries once relied on undifferentiated coffee exports, but nowadays the real gains are in specialty, organic or free trade coffee, in other words, in a differentiated product.

2.2 The dependent variable: Customer satisfaction

According to Batra and Athola, (1990) customer satisfaction is a term frequently used in marketing. It is a measure of how products and services supplied by a company meet or surpass customer expectation. Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals."

As research on consumption experiences grows, evidence suggests that consumers purchase goods and services for a combination of two types of benefits: hedonic and utilitarian. Hedonic benefits are associated with the sensory and experiential attributes of the product. Utilitarian benefits of a product are associated with the more instrumental and functional attributes of the product (Batra and Athola 1990).

According to Bluestein et al (2003) customer satisfaction is an ambiguous and abstract concept and the actual manifestation of the state of satisfaction will vary from person to person and product/service to product/service. The state of satisfaction depends on a number of both psychological and physical variables which correlate with satisfaction behaviors such as return and recommend rate. The level of satisfaction can also vary depending on other options the customer may have and other products against which the customer can compare the organization's products.

Work done by Parasuraman, Zeithaml and Berry (Leonard L) between 1985 and 1988 provides the basis for the measurement of customer satisfaction with a service by using the gap between the customer's expectation of performance and their perceived experience of performance. This provides the measurer with a satisfaction "gap" which is objective and

quantitative in nature. Work done by Cronin and Taylor propose the "confirmation/disconfirmation" theory of combining the "gap" described by Parasuraman, Zeithaml and Berry as two different measures (perception and expectation of performance) into a single measurement of performance according to expectation.

Expectations of a customer on a product tell us his anticipated performance for that product. Consumers may have various "types" of expectations when forming opinions about a product's anticipated performance. For example, four types of expectations are identified by Miller (1977): ideal, expected, minimum tolerable, and desirable. While, Day (1977) indicated among expectations, the ones that are about the costs, the product nature, the efforts in obtaining benefits and lastly expectations of social values. Perceived product performance is considered as an important construct due to its ability to allow making comparisons with the expectations.

According to Kaplinsky et al (2007), within organizations, customer satisfaction ratings can have powerful effects. They focus employees on the importance of fulfilling customers' expectations. Furthermore, when these ratings dip, they warn of problems that can affect sales and profitability. These metrics quantify an important dynamic. When a brand has loyal

customers, it gains positive word-of-mouth marketing, which is both free and highly effective. Therefore, it is essential for businesses to effectively manage customer satisfaction. To be able do this, firms need reliable and representative measures of satisfaction.

Bluestein et al (2003) argued in researching satisfaction, firms generally ask customers whether their product or service has met or exceeded expectations. Thus, expectations are a key factor behind satisfaction. When customers have high expectations and the reality falls short, they will be disappointed and will likely rate their experience as less than satisfying. For this reason, a luxury resort, for example, might receive a lower satisfaction rating than a budget motel—even though its facilities and service would be deemed superior in 'absolute' terms."

3. Research Methodology

3.1 Research design

This research used the descriptive approach. Orodho (2003) defines a descriptive survey as a method of collecting information by interviewing or administering a questionnaire to a sample of individuals. Kothari (2005) points out that the major purpose of descriptive research design is a description of the state of affairs as it exists. Zicmund (2000) argued that

this design is considered as appropriate since it is more concerned with describing the characteristics of a particular phenomenon by seeking to answer questions like what when and how.

3.2 Sample and sampling procedure

In this study the target population was managers and executives of the main bodies mandated to deal with coffee in Kenya namely Coffee Board of Kenya and KPLC. This study targeted a respondent of 95 managers and executives from the three licensed companies namely Trade license holders (57), Roaster license holders (19) and Packers license holders (19) (Export Processing Zone Authority,2005). The researcher used a census approach since it affords more extensive and detailed study hence giving more accurate and exact information as compared to the sampling method.(Gupta, 1994). The top managers are the key decision makers and are directly involved with strategy formulation and implementation. As such, they were considered to be the most suitable unit of analysis.

3.3. Research Instruments and Data Collection and Analysis

The researcher used the questionnaire for collecting primary data. It contained a set of questions asked in a logical sequence and written in open and semi-structured form. The

questionnaire helped the researcher to capture variables that could not be directly observed such as views, opinions, perceptions and feelings of the respondents. On a five-point scale, the respondents gave their views that were used to measure the effect of value chains activities on customer satisfaction.

The questionnaires were later coded and edited for consistence and completeness. SPSS was used for data analysis since it could handle large amount of data. Both qualitative and quantitative techniques were used. Descriptive statistics and content analysis were also applied. This type of analysis has been used before in similar studies by Kombo (1997), Njau (2000), Hongo (2011) and Imaana (2011).

4. Results and Discussion

The return rate was 86% accounting for a response of 82 respondents out of the total expected 95 respondents. Kothari (2005) asserts that such a response rate would provide adequate information for reliable interpretation of the data intended. The objective of this study was to establish the role of Value Chain activities on customer satisfaction in the coffee sector in Kenya.

4.1.1 Age of the respondents

	Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	44	45.6	46.3	46.3
Below 40(young)				
Above 41 (aged)	51	52.8	53.7	100
Total	95	98.4	100	
Missing system	0			
Total	95	100		

Table 1: Age of respondents

The respondents' age distribution indicated that the coffee sector is managed by mature personnel aged above forty one years. The results in the table below indicate that 46.7 percent of all the respondents were aged below forty one while 51.6 percent were above forty one years.

4.1.2 Education level of the respondents

The table below indicated the education of the respondents that were under study.

	Frequency	Percent	Valid percent	Cumulative percentage
Postgraduate	14	14.7	14.7	14.7
Graduate	30	31.6	31.6	46.3
Valid Diploma	46	48.4	48.4	94.7
Certificate	5	5.3	5.3	100
Total	95	100	100	

Table 2: Education level of the respondents

From this table it was clearly evident that the coffee sector in Kenya is run by people of high educational backgrounds. Above the diploma level the results were 94.7 percent while below the diploma level only 5.3 percent.

4.1.3 Effect of value chains activities on customer satisfaction

A regression test was run on the data to establish the objective of the study: the Role of Value Chain activities on customer satisfaction. The table below was generated;

Model		Sum of squares	Df	Mean squares	F	Sig.
1	Regression	4.455	2	2.227	15.961	.000 ^a
	Residual	16.328	92	95		
	Total	20.783	94			
a. Value chain activities(constant)						
b. Dependent variable: Customer satisfaction						

Table 3a: Effect of value chain activities on customer satisfaction.

The table shows that there is a statistical significance between group means ($p=000$). This means that customer satisfaction is affected value chain activities. The F ratio shows there was a real effect since it is greater than one.

More analysis done on the data to further show the relationship between value chain activities and customer satisfaction is as shown in the table below:

	Frequency	Percent	Valid percent	Cumulative percent
Valid	3	3.2	3.2	3.2
Very small extent				
Uncertain	19	20.0	20.0	23.2
Great extent	52	54.7	54.7	77.9
Very great extent	21	22.1	22.1	100
Total	95	100	100	

Table 3b: Effect of value chain activities on customer satisfaction.

This further indicated that only 3.2 percent of the respondents did not think that value chain activities affected customer satisfaction. Another 20.0 percent were uncertain. But the majority at 76.8 percent was positive that value chain activities affected customer satisfaction

either to a great extent or to a very great extent.

The researcher conducted a chi square test on the data with the following results:

	Value	Df	Asymp. Sig.(2-sided)	Exact Sig.(2-sided)	Exact Sig.(1-sided)
Pearson Chi-Square	10.230 ^a	1	.001		
Continuity Correction	8.683	1	.003		
Likelihood Ratio	13.037	1	.000		
Fisher's Exact Test				.001	.001
Linear-by-Linear Association	10.145	1	.001		
N of Valid Cases	95				
a. 0 cells (0%) have expected count of less than 5. Minimum expected count is 7.35					
b. Computed only for a 2*2 table					

Table 3c: Effect of value chain activities on customer satisfaction

The Chi-Square results show there was a strong relationship between the Value Chain activities and Customer satisfaction. The Chi-Square value is 10.230 with a p value of .001. The Chi-Square assumptions are not violated as seen in note a. this was a further indicator that customer satisfaction depended strongly on

proper Value Chain activities along the chain of coffee production in Kenya.

5. Conclusion and Recommendations

5.1 Conclusion

The study sought to establish the role of Value Chain activities on customer satisfaction in the coffee sector in Kenya. Based on the findings above, the study concludes that Value Chain activities significantly affect Customer Satisfaction. The results established that there was a statistical significance of the association between Value Chain activities and Customer Satisfaction.

5.2 Recommendations

In view of the study findings and conclusions, this study makes the following recommendations:

1. The operators and actors in the coffee sector in Kenya should embrace improved and efficient value chain activities that aim to

increase and improve customer satisfaction. This is because customers are more satisfied and are likely to remain loyal if the value chains yield better profits.

2. Value chain activities need to be communicated to all stakeholders and collectively undertaken so as to maximize the levels of output and ensure the customers feel as part of the whole system. **5.3**

Suggestions for further research

As Humphrey (2004) pointed out, learning and the acquisition of technological capabilities can be stimulated through involvement in global value chains but there is no guaranteed path to upgrading as a result of this involvement. This research recommends further research on the role of managers in evaluating and reconfiguration of value chain activities as a dynamic capabilities approach to customer satisfaction and retention in the coffee and other agricultural products in the Kenyan economy and in the global market.

References

- Andreas, S. and Christian von Dranchenfels.(2011), *Value Chain Development*, ILO Geneva, Switzerland.
- Bacanu, B. (2006), *Firm Competitiveness Through Value Chain Activities*. New York: Free Press.
- Batra, Rajeev and Olli T. Athola (1990), "Measuring The Hedonic And Utilitarian Sources Of Consumer Attitudes," *Marketing Letters*, 2 (2), 159-70.
- Berry, Leonard L.; A. Parasuraman (1991). *Marketing Services: Competing Through Quality*. New York: Free Press. [ISBN 978-0-02-903079-0](#).
- Betty, T. (2009), *Statistics For Business And Economics*, 8th ed. Upper Saddle River, New Jersey. Prentice Hall.
- Bluestein, Abram; Michael Moria; Ronald Sanderson (2003). *The Customer Satisfaction Audit*. Axminster: Cambridge Strategy Publications. [ISBN 978-1-902433-98-1](#).
- Chege, G.(2012), *The Nairobi Process And The Context For The Foundation For The Future*, The British Academy, London.
- Condliffe, P.F.J. (2008), *Conflict Management: A Practical Guide*, 3rd Ed. Lexusnexis. Butterworths
- Day, R.L. (1977), *Extending The Concept Of Customer Satisfaction*, N.A, Howard.
- Dogmar, V.R.(2001), *Real Estate Management*, European Business School Journal.
- EPZA, (2005), *Tea And Coffee Industry In Kenya*, international research network, Nairobi, Kenya.
- GoK, (2009), *On "Industrial Transformation To The Year 2020"*, Government Printer, Nairobi, Kenya.
- Gupta , S.C. (1994), *Business Statistics*. Bombay, Himalaya Publishing House.
- Hongo, C.O. (2011), *Strategic Responses to the Environmental Changes in the Sugar Industry*: Sony Sugar Company Limited, unpublished MBA Project, Kenyatta University.

Humphrey, J., 2004. *Upgrading in Global Value Chains, World Commission on the Social Dimension of Globalization*, Working Paper No. 28, ILO, Geneva.

Imaana, E.N. (2011), *The effects of Competitive Strategies on the Performance of Commercial Banks in Meru Town, Kenya*, Unpublished MBA Project, Kenyatta university.

Ingrid (2006), *Small Coffee Producers In Honduras*, accessed from [www.about.com/coffee+Honduras](http://www.about.com/coffee/Honduras).

Kaplinsky, R., Morris, M., (2007). *A Handbook for Value Chain Research, International Development Research Centre*, Ottawa.

Kombo, H.K.(1997), *Strategic Responses By Firms Facing Changed Environmental Conditions: A Study Of Motor Vehicle Franchise Holders In Kenya*, Unpublished MBA project, University of Nairobi.

Kothari, C.R.(2005) *Research Methodology: Methods And Technique*, second edition, Washira Praksan.

Miller, R.S. (1997), *Relationship Commitment And Attention To Alternatives*, Journal Of Personality And Social Psychology

Njau, G.M. (200), *Strategic Responses By Firms Facing Changed Competitive Conditions: The Case Of East African Breweries*, unpublished MBA project, university of Nairobi.

Orodho, A.J , Kombo, D.K. (2003), *Research Methods*, Nairobi, Kenya.

Porter, M.E. (1990), *Competitive Advantage Of Nations*, Havard business review.

Ross Beard (2014), *Why Customer Satisfaction Is Important*. Business journal.

Wainaina ,B. (2005), *How To Write About Africa*, Oxford Press, Nairobi,Kenya

World Bank, (2010), *Development And Climate Change*. Climatechange.worldbank.org

Zicmund, W.G.(2000), *Business Research Methods*, Harcourt College Publishers.