

# **INTERNATIONAL JOURNAL OF SCIENCE ARTS AND COMMERCE**

## **EFFECTS OF EAST AFRICA COMMUNITY INTERGRATION INITIATIVES ON TRADE VOLUMES IN THE REGION**

**Ellah Kiyangu  
Jackson Maalu, PhD**

MBA Student, Department Business Management, University of Nairobi-Kenya  
Senior Lecturer; Department Business Management, University of Nairobi-Kenya

---

### **ABSTRACT**

*Regional integration is a strategy geared towards achieving collaboration among the region member states to realize a number of objectives. The East African Community through regional integration has put in place a number of trade facilitation initiatives that include: business flexibility, improvement in operations, adopting of regional standards and efficiency. The study sought to determine the effect of EAC integration initiatives on trade volumes in the region. The study was anchored on country similarity theory, comparative advantage theory and economic integration theory. The research was guided with two objectives namely: to establish the rating of integration initiatives towards trade facilitation in the EAC in the past five years and to establish the relationship between the EAC integration trade facilitation initiatives and the region's trade volumes. The research adopted a descriptive cross sectional survey. The EAC was the population of study and purposive sampling was used to identify the respondents. The data analysed was gathered using close ended questionnaires. The results were analyzed using descriptive statistics and regression model and presented using tables. The findings indicated that EAC integrations initiatives have a high rating in the following order: the initiatives that facilitate faster operations, followed by efficiency facilitating initiatives, then initiatives that relate to standard procedures and lastly those that enhance flexibility. The effect of EAC integration initiatives test against trade volumes revealed that the initiatives that enhance operations, efficiency and standards are positively related to trade volumes while flexibility enhancing initiatives are negatively related to trade volumes in the region. The researcher believes the initiatives by EAC member states are more than enough to enhance trade among them, what needs to be addressed is the modality of implementation and political goodwill among the leaders. Owing to time constraints and resource limitation, a further study on the same is recommended with a focus on the business operators.*

**Key terms:** Trade, Regional Integration, Strategic Operation, Trade Operations, Business Flexibility, Trade Initiatives

### **Background of the Study**

Regional Integration is a strategy used by regional blocks to discriminatively reduce or eliminate non-tariff barriers among other barriers of trade among neighboring nations. The lower most level of association between countries comprises of trading activities, whereas a deeper collaboration goes further to promotion of the same currency as well as technology transfer and sharing other than just exchange of trade. The states willing to be partners in a regional block must be willing to create a conducive environment for trading such as elimination of geographical and cultural barriers, past and conceptual similarities, competitive or complementary economic links and most importantly a common language; in order to facilitate effective trading (Makame,2012). Collaboration among block parties provide a unique framework for trade facilitation through collective tackling of non tariff barriers among them (McCormick, 1999).

The study is anchored on country similarity theory, comparative advantage theory and economic integration theory. The country similarity theory advocates that similarities between countries including the saving habits, communication language, cultural similarities, industrialization and technology infrastructure will most likely encourage the states to trade with one another because of similar attributes of its citizens and economies (Linder, 1961). The comparative advantage theory on the other hand assumes that countries differ only in their productive capacities. The theory states that production between countries can be well organized and resources utilized better to achieve economic efficiency both locally and overseas thus both nations can benefit from the free trading (Suranovic, 2007). Expounded by Balassa (2011), the theory of economic integration agrees that trade impediments can be removed from participating nations if there is certain agreements and rules governing their integration thereby increasing economic growth in the region.

The East African Community (EAC) is a Regional Integration Institution (RII). It was established under Article 2 of the Treaty for the Establishment of the East African Community that was signed on 30<sup>th</sup> November, 1999. The treaty came into being in July 2000 after the ratification of the original three Partner States: Kenya, Uganda and Tanzania. The Republic of Rwanda and the Republic of Burundi acceded to the EAC Treaty on 18<sup>th</sup> June, 2007 and became full Members of the Community with effect from 1<sup>st</sup> July, 2007 (EAC, 2015). Currently, the membership of the Community comprises the Republics of Burundi, Kenya, Rwanda, Uganda, Tanzania and South Sudan.

### **Regional Integration Initiatives**

Regional integration is an agreement between two or more countries made using a framework through which they can cooperate in trade and work together to achieve an increase in economic growth, improve relations and create stability of the region for mutual benefits. Typically integration is done by signing treaties which clearly stipulate the areas which the partner states cooperate in and outline the coordinating of regulatory bodies which will represent the states involved (McCormick, 1999). United Nations Economic Commission for Africa (1999) defines regional integration as the key strategy for

development and intra-regional trade expected to produce considerable economic gains for member countries.

Regional integration has experienced a lot of growth since many states are willing to collaborate at regional level and beyond. Regional integration begins when nations start to voluntarily cooperate or integrate the socio-economic and political structures. Regional integration takes the forms of the Free Trade Area (FTA), Customs Union, Common Market, Economic Union and finally Political Federation. Countries in the same region may have the same historical background and interests therefore it will be easier to coordinate and merge their policies. Trade facilitation is just but one of the diverse motivations which drive countries towards regional integration. The main motivations for regional integration are commercial tendencies, economic expansion, political and security. Creation of trade occurs where a common external trade policy and internal trade policies bring about a positive shift of production volume. Economic effects of regional integration trade creation, diversification and trade transfer. The level of economic integration will naturally determine the benefits of regional economic integration besides the deeper the level of integration, the greater the benefits to the participating Partner States. The willingness and commitment of the partner states plays a critical role in determining the degree of integration.

A number of initiatives have been taken at the Community level to boost trade, they include the following; The Customs Union Protocol - The intentions of the Customs Union are to further the liberalization of intra-regional trade in goods; stimulating production efficacy among partner states, enhance local, cross-border and foreign investment; also to promote economic development and industrial divergence; Trade Enhancement - The member nations had arranged to collaborate in simplification, standardization and harmonization of trade information and certification in order to improve trade in goods; Anti-dumping measures - The states have established anti-dumping guidelines; Competition Policy and Law – EAC states have implement these with an objective of deterring any activities that badly effect free trade within the Community; Re-export of goods are to be exempted from the payment of import or export duties; Non-Tariff Barriers (NTBs) to trade - Under Article 13 of the Customs Union Protocol, the EAC community will remove all existing non-tariff barriers to trade and not to enforce any new ones; Standards and Measures - Under Article 81 of the Treaty Establishing the Community, the EAC Partner States recognized the importance of standardization, quality assurance, metrology and testing (SQMT) for the promotion of trade and investment and consumer protection, among other things(EAC Report,2016). The researcher further classify these regional initiatives into four categories namely operational initiatives, efficiency initiatives, and flexibility initiatives and lastly standards initiatives. The literature shows that the regional integration initiatives are aimed towards improvement of trade procedures and standard thus there are initiatives which enhance efficiency of trade, then those that hasten the operations to facilitate trade followed by the application of uniform standards for routine checks in the borders and lastly those that improve the flexibility among trading partners (Tuluy, 2016, EAC Report, 2016; Saku, 2006 & Pangestu & Scollay 2001).

## **Trade Volumes**

Trade volumes are the total amount of commodities and or services for an entire market that are traded during a given period of time. When commodities are more aggressively traded, their trade volume is high, and when they are less actively traded, their trade volume is low. Trade volume analysis is the technique applied in assessing the health of a trend, based on volume activity. Volume is one of the oldest day trading indicators in the market (Economic Commission for Africa, 1999). Variance in trade volumes is usually a result of a number of factors namely: competition, price volatility, product recall, trade restrictions etc.

## **East Africa Community**

The East African community goes back a long way since 1967 on account of being neighbors and sharing a common colonial administration the (British colony) the three initial members of EAC were Kenya, Tanzania and Uganda. These countries established the East African Community (EAC) to facilitate trading activities which lasted until 1977 before its collapse as a result of different political principles. After the demise of the EAC in 1977, the partner states then negotiated and signed the EAC Mediation Agreement in 1984. Through this arrangement the countries distributed amongst themselves the assets and liabilities of the non-operational community which marked the end of the controlled multilateral co-operation. One of the positive elements of that Mediation Agreement was the establishment of an option of future co-operation among the three countries. This provision paved way to the reinstatement of the East Africa Community in 1999. The Accord for the formation of the new “East African Community” was signed by the Heads of State of the partner states on November 30, 1999 in Arusha, Tanzania and came into force on 7<sup>th</sup> July 2000. The EAC was formally and officially launched by the Heads of State on 15<sup>th</sup> January 2001 (EAC Establishment Treaty, 2002).

The broad goal of the EAC as envisioned in its inauguration Treaty, was to broaden and expand co-operation among Partner States in political, economic, social and cultural fields, research and technology, defense, security and legal and judicial affairs in order to establish mutually beneficial relations. It emphasized on improving economic development and creating the capacity to compete on a global perspective. The first enlargement of the Community was made in July 2007 when the countries of Rwanda and Burundi officially joined the Community. Their admission made EAC to have five member states namely: Tanzania, Kenya, Uganda, Rwanda and Burundi. South Sudan.

EAC Partner States share a common history, language, culture and infrastructure which provide an exceptional context for regional integration. The integration gives the EAC mutual benefits such as increased trading grounds, broader markets for their products, increased Foreign Direct Investment (FDI), higher bargaining power, intensified security as well as better conflict resolution in the region and lastly free movement of people and produce across the region. To add to that the EAC partner states undertake several developmental projects together such as infrastructural projects, collective employment and poverty reduction, joint environmental conservation particularly the Lake Victoria project and joint tourism promotion (EAC Establishment Treaty, 2002).

### **Research Problem**

Regional integration is a strategy for regional trade facilitation through; creating closer trading links and strengthening the capacity of the cooperating states to participate in world trade.

The sought to validate political good will and empower the National Trade Monitoring Committees to deal definitively with the overabundance of non-tariff barriers for the East African community can effectively achieve its objectives and enhance its Co-operation.

The study aims at setting out to answer the question. What is the effect of East Africa Community integration initiatives on the trade volumes in the region?

The research will inform the researchers of the relationship between the East African community integration trade facilitation initiatives and the region's trade volumes. Trade takes place in an open system and as such controlled by the forces of supply and demand. Trade facilitation initiatives are undertaken with clearly set out objectives. However, the non-realization of the objectives sets in place questions what exactly went wrong, and so is when the objectives are realized partly. It is the resulting shortcoming that the researchers are usually interested in unveiling. The findings of this research will contribute to the existing knowledge on the East African community integration effects on trade volumes in the East African community. It will also set in motion further inquiries on just how more effective can integration be explored to realize increase in volumes of trade among the member states.

### **Research Objectives**

This study has two objectives namely:

- i. To establish the rating of integration initiatives towards trade facilitation in the East Africa Community.
- ii. To establish the relationship between the East Africa Community integration trade facilitation initiatives and the region's trade volumes.

### **Literature review and knowledge gap**

The major goals of the regional integration initiatives bring closer and widen collaboration amongst the member nations and to ensure they benefit mutually. Regional integration initiatives develop well thought guidelines for the realization of their intentions. Despite the notable successes in achievement of the establishing objectives, several inadequacies moreover generally stand out. Scholars have endeavoured to scrutinise the motives behind the regional integration initiatives defects, mostly are credited to economic, socio-cultural, legal, political and geo-political factors. Among the scholars are Babatunde (2006) in his study on the influence of trade policy restructuring and regional integration on export performance, in the Economic Community of West Africa. Economic Community of West African States leaders were called upon to sustain political solidity in their region so as to appreciate the complete prospective of trade policy transformation and regional integration on their export performance. Omoro (2008) in his study on organizational effectiveness of regional integration institutions revealed that the basic fundamentals of organizational effectiveness are weakly ingrained in the EAC while deeply embedded in the EU hence the success in EU. The existing studies have generally

cited the East Africa Community integration initiatives as partly achieved, however there is no evidence of how the partial achievement of these initiatives has varied with trade volumes among the member states for the past five years.

### Data Analysis

To analyze objective one that is to determine the rating of East Africa Community integration initiatives on trade within the region; descriptive statistics were used. The SPSS software generated the mean, standard deviation and ranking of the integration initiatives to trade facilitation which were represented in tables. To establish the relationship between the East Africa Community integration trade facilitation initiatives on the region's trade volumes the researcher used the regression model and the findings were presented in tables. The value of the coefficient of correlation (R) was computed to determine the magnitude and direction of the relationship. The model was constructed using the EAC regional initiatives and trade volumes discussed in the study as follows:

$$Y_0 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

$Y_0$  was the dependent variable representing trade volume index;  $\beta_0$  was a constant factor which was also the value of the dependent variable when  $X_1$ ,  $X_2$ ,  $X_3$  &  $X_4$  are equal to zero and  $X_1$  = EAC Standards Initiatives,  $X_2$  = EAC Flexibility Initiatives,  $X_3$  = EAC Operational Initiatives  $X_4$  = EAC Efficiency Initiatives and  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ , and  $\beta_4$  are constants associated with  $X_1$ ,  $X_2$ ,  $X_3$  and  $X_4$  respectively. Random error  $\varepsilon$  represents all other minor effects on the model which were captured.

### Findings and Interpretation

The numbers of questionnaires presented to the respondents were thirty eight (38) and a total of forty two (36) questionnaires were completed satisfactorily and returned.

**Table 1: Response by EAC partners**

Country	Pop. size	Response	Percentage
Kenya	8	7	18.4%
Uganda	8	7	18.4%
South Sudan	7	7	18.4%
Burundi	6	7	18.4%
Tanzania	2	2	5.3%
Rwanda	6	6	15.8%
Total	38	36	94.7%

Source: Research Data (2016)

The table 1 shows the response from the member state partners. All the member states were represented translating to a response rate of 94.7%. However, two questionnaires were not returned.

### **Duration as a member of the Mombasa Port Community Stakeholder's Forum**

The study sought to determine the period of time the EAC members under study have been members to the forum. The findings of the study are as shown in the table 2.

**Table 2: Duration as a member of the Mombasa Port Community Stakeholder's Forum**

<b>Duration (years)</b>	<b>Frequency</b>	<b>Percent</b>
<b>1 – 5</b>	<b>32</b>	<b>88.9</b>
<b>Over 5</b>	<b>4</b>	<b>11.1</b>
<b>Total</b>	<b>36</b>	<b>100.0</b>

Source: Research data, 2016

The respondents were asked to indicate the number of years they have been members to the Mombasa port community stakeholders' forum. Majority of the respondents representing 88.9% responded that they have been members for 1-5 years and the rest for over 5 years. From the results it can be inferred that majority of the respondents are longtime members to the forum.

### **EAC Representation in the Mombasa Port Community Stakeholder's Forum**

The researcher sought to find out the EAC representation in the Mombasa port community forum.

**Table 3: EAC Representation in the Mombasa Port Community Stakeholder's Forum**

<b>Representation</b>	<b>Frequency</b>	<b>Percent</b>
Fully represented	20	55.6
Partly represented	16	44.4
Not represented	0	0
<b>Total</b>	<b>36</b>	<b>100.0</b>

Source: Research data, 2016

It can be seen that majority of the respondents (55.6%) indicated that EAC is fully represented in the Mombasa port community stakeholder's forum while 44.4% said they were partly represented. From these results it can be inferred that all EAC member states are represented in the forum.

### Rating of the Integration Initiatives toward Trade Facilitation in EAC

The respondents were asked to indicate rating of the different initiatives. The responses were subjected to descriptive statistics and the findings are as presented in the below:

#### EAC Standards initiatives on trade facilitation

The following initiatives of EAC standards were tested to inquire the extent to which their implementation has impacted on trade volumes. The findings are presented in table 4

**Table 4: EAC Standards initiatives on trade facilitation**

Elements of EAC standards	Mean	Std. deviation	Rank
Recognition of Harmonized EAC standard certificates	3.91	.707	4
Development and adoption of EAC custom procedures and custom forms to ensure standard practice	4.45	.687	3
Adoption of uniform custom laws and regulations	4.60	.497	1
Partial application of authorized operators scheme	4.42	.539	2
<b>Average</b>	<b>4.35</b>	<b>.558</b>	<b>3</b>

Source: Research data, 2016

From the findings, the average mean for EAC standards initiative was 4.35. This confirms that the initiatives have enhanced trade among the EAC member states. The respondents agreed that use of uniform custom laws was the highest ranked EAC standard initiative while recognition of harmonized EAC standard certificate was the lowest ranked initiative. The research attributed this to unwillingness among the partner States to let go of their control on goods standards certification.

#### EAC Flexibility initiatives on trade facilitation

The following EAC flexibility initiatives were rated on the extent to which their implementation has facilitated trade among the partner states. The findings are presented in table 4.5

**Table 5: EAC Flexibility Initiatives on trade facilitation**

Elements of operational initiatives	Mean	Std. deviation	Rank
Strengthening the NTB's Monitoring mechanisms	4.30	.712	2
Interconnectivity of customs systems	4.40	.467	1
Application of risk management in custom's operations	4.20	.518	3
<b>Average</b>	<b>4.30</b>	<b>.562</b>	<b>4</b>

Source: Research data, 2016

It can be observed from table 5 that the total cumulative average mean for the EAC flexibility initiative was found to be 4.30. The study revealed that EAC flexibility initiatives contributed to trade facilitation to a great extent. Interconnectivity of customs systems between partner countries was highest ranked while the application of risk management in customs operations was also sturdily felt as it was ranked number 3 with a mean score of 4.20. Improvement in interconnectivity of customs systems is largely attributed to the efforts of the member states to leverage on ICT to enhance trade among them.

### EAC Operations Initiatives on Trade Facilitation

The researcher sought to establish the extent to which implementation of EAC operational initiatives impacted trade among the EAC member states. The respondents were asked to respond to the following EAC Operations initiatives to help the researcher determine the extent of its implementation impacted on trade.

**Table 6: EAC Operational Initiatives on Trade Facilitation**

Elements of Operational Initiatives	Mean	Std. deviation	Rank
Time release study to measure bottlenecks and development of measures to address them.	4.65	.439	3
Setting up of one stop border post to reduce delays in clearance of goods.	4.60	.539	1
Adequate coordination and facilitation of transport activities.	4.00	.625	2
<b>Average</b>	<b>4.41</b>	<b>.534</b>	<b>1</b>

Source: Research data, 2016

From the findings presented in table 6, the study established that EAC operational initiatives have considerably impacted on trade among the EAC member with the average mean of 4.41. The respondents ranked the time release study to measure bottlenecks and development of measures to address them highest with an average of 4.65. This underscores the need for specific tasks/activities impacting on trade to be dealt with in their settings rather than in blanket key performance indicators (KPIs).

### EAC Efficiency Initiatives on Trade Facilitation

The respondents were asked to rank the efficiency initiatives contribution to trade.

**Table 7: EAC Efficiency Initiatives on Trade Facilitation**

Elements of Efficiency Initiative	Mean	Std. deviation	Rank
Use of EAC passport to facilitate cross border movement	4.34	.488	2

Harmonization of business hours and attempt to operate 24 hrs in some border stations. 4.38	.539	1
Harmonization of transport regulations and stds. to reduce delays and cost of doing business 4.32	.485	3
<b>Average</b>	<b>4.36</b>	<b>.504 2</b>

Source: Research data, 2016

The study established that the EAC efficiency initiatives were the second most useful initiatives in trade facilitation among EAC partner states with a mean score of 4.36. Harmonization of business hours was the highest ranked initiative as it allowed for border post cargo clearance under the 24/7 regime unlike in the past, where the truckers had to wait until morning in the event they get to the borders after 5:00pm. Use of the EAC passport to facilitate movement was ranked second with a mean of 4.34, followed by the harmonization of transport regulations at 4.32. This initiatives facilitates cargo movement and subsequent border post clearance thus reducing the transit time translating to reduced cost of doing business.

### Summary of EAC Trade Facilitation initiatives ranking

In this section the researcher sought to establish the most to the least EAC ranked initiatives categories. The findings are as presented in the table 8:

**Table 8: Summary of EAC Trade Facilitation initiatives ranking**

EAC initiatives	Mean	Std. deviation	Rank
<b>X1(EAC Standards Initiatives)</b>	4.35	.558	3
<b>X2(EAC Flexibility Initiatives)</b>	4.30	.562	4
<b>X3(EAC Operational Initiatives)</b>	4.41	.534	1
<b>X4(EAC Efficiency Initiatives)</b>	4.36	.504	2
<b>Total means</b>	<b>4.355</b>	<b>.534</b>	

Source: Research data, 2016

The EAC initiatives were analyzed to establish their rating towards trade facilitation in the East African community in the past five years. From the results, EAC member states have benefited from the operational initiatives in trading across member states, this was represented by the mean of 4.41, efficiency initiatives followed with a mean of 4.36, standards initiatives came in at three with the mean of 4.35 and finally flexibility initiatives with a mean of 4.30. According to the findings, it is imperative to say that the various categories of trade facilitation initiatives in the EAC contributed in their own

proportions to trade among the partner states with a mean of 4.355.

**The Relationship between EAC integration trade facilitation initiatives and the region's trade volumes.**

**Table.9: Average Responses of Each Element of EAC initiative and corresponding Trade volume index**

COUNTRY	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>	Y <sub>0</sub>
KENYA	0.60	0.40	0.67	0.60	0.60
	0.75	0.67	0.73	0.60	0.80
	0.70	0.87	0.80	0.73	1.00
	0.70	0.53	0.67	0.73	0.80
	0.90	0.67	0.87	0.80	1.00
	0.60	0.53	0.67	0.53	0.60
	0.60	1.00	0.93	0.80	0.40
TANZANIA	0.65	0.67	0.80	0.80	0.80
	0.65	0.53	0.73	0.67	0.60
BURUNDI	0.60	0.67	0.67	0.60	0.60
	0.60	0.67	0.67	0.67	0.80
	0.60	0.67	0.67	0.67	0.60
	0.60	0.67	0.67	0.60	0.80
	0.60	0.67	0.60	0.67	0.60
	0.60	0.67	0.67	0.60	0.80
	0.60	0.67	0.67	0.60	0.60
SOUTH SUDAN	0.85	0.93	0.93	0.80	1.00
	0.60	0.60	0.60	0.60	0.80
	0.60	0.60	0.67	0.60	0.80
	0.60	0.60	0.67	0.60	0.60
	0.60	0.60	0.67	0.60	0.60
	0.60	0.60	0.67	0.60	0.80
	0.60	0.60	0.60	0.67	0.60
RWANDA	0.80	0.80	0.87	0.80	1.00
	0.80	0.87	0.93	0.80	1.00
	0.90	0.80	0.80	0.87	0.80
	0.85	0.80	0.80	0.87	0.80
	0.85	0.87	0.87	0.73	0.80
	0.80	0.73	0.80	0.80	0.80
UGANDA	0.85	0.65	0.87	0.80	1.00
	0.90	0.80	1.00	0.80	0.80
	0.90	0.93	0.87	0.80	0.80
	0.85	0.87	0.73	0.87	0.60
	0.90	0.80	0.87	0.87	1.00
	0.85	0.87	0.80	0.93	1.00

The EAC initiatives were rated on a scale of 1 - 5 against the trade facilitation indicator of the volume of trade by partner state members. The average responses obtained for each of the elements of EAC initiatives and the trade volume perimeter are represented in table 9.

Where:

$X_1$  = EAC Standards Initiatives

$X_2$  = EAC Flexibility Initiatives

$X_3$  = EAC Operational Initiatives

$X_4$  = EAC Efficiency Initiatives

$Y_0$  = Trade volume index

The researcher then applied the regression models to determine the relationship between the integration trade facilitation initiatives and the region’s trade volumes. The models were obtained using the data presented in table 9:

**Effect of EAC initiatives on trade volumes of among partner states**

The main aim of the study was to establish the effect of EAC integration initiatives on trade volumes among the partner states ( $Y_0$ ). The independent variables  $X_1$ ,  $X_2$ ,  $X_3$ , and  $X_4$  were measured against the  $Y_0$  the dependent variable using regression analysis.

**Table 10: Regression model summary of EAC Initiatives on Trade Volume Summary Output**

<i>Regression Statistics</i>	
Multiple R	0.6429975
R Square	0.4134458
Adjusted R Square	0.3377614
Standard Error	0.1319372
Observations	36

Source research data, 2016.

From data in the above table 10 the adjusted  $R^2$  was 0.337 which means 33.7% variation in trade volume is accounted for by variation in implementation of EAC integration trade facilitation initiatives. The correlation coefficient tells us the strength of the relationship between the variables. The study also found that the correlation coefficient was 0.642; this shows that there is a strong positive correlation between the EAC integration initiatives and trade volumes among the partner states.

**Table 11: Analysis of Variance of trade volumes**

<b>ANOVA</b>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>

Regression	4	0.38037013	0.095092532	5.462760063	0.001898897
Residual	31	0.53962987	0.017407415		
Total	35	0.92			

a. Predictors: Standards, flexibility, operational and efficiency initiatives

b. Dependent Variable: Trade Volume index

From the above ANOVA table the significant value for the model was 0.001 which means that the model is significantly lower than 0.05. This means that there is a positive relationship between EAC integration trade facilitation initiatives and the region's trade volumes.

**Table 12 Regression Analysis Model EAC Initiatives on Trade Volume**

	<i>Coefficient</i>	<i>Standard</i>		
	<i>s</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>
<b>Intercept</b>	0.1720905	0.162880015	1.056547527	0.298882669
X Variable 1	0.8368039	0.361975736	2.311767944	0.027602723
X Variable 2	-0.1771392	0.263856491	-0.67134692	0.506971721
X Variable 3	0.2166244	0.37632451	0.575631922	0.569019413
X Variable 4	0.0552084	0.412986941	-0.13368081	0.894519057

Source: Research Data 2016

$$Y_0 = 0.172 + 0.837X_1 - 0.177X_2 + 0.216X_3 + 0.055X_4$$

The study derived this equation which shows the value of improvement of trade volumes among East African Community member states when holding X1, X2, X3 and X4 to constant zero would be 0.172.

A factor increase in X1 would lead to an increase in trade volumes by 0.837, a unit increase in X2 would lead to a decrease of 0.177 of the EAC Trade Volumes, a unit increase in X3 would lead to an increase of trade volume by 0.216, a unit increase in X4 would lead to a 0.055 increase in trade volumes. This information shows that there's a positive relationship between, X1, X3, X4 (EAC initiatives; Standards, Operational and Efficiency respectively) and trade volumes. However the findings also indicate that there is a negative relationship between X2 and Flexibility initiatives. From the findings the research infers that the EAC community should seek to improve further the integration initiatives that relate to standards, operations and efficiency of trade facilitation; as the partner states demonstrated willingness in undertaking the same to realize trade improvement. However, great commitment should be the guiding yard to approach flexibility initiatives that relate to sensitive initiatives like interconnectivity of systems and management of risks in the systems which pose a great trade risk. Most of the countries are governed by policies which aim at safeguarding of their trade systems from potential threats/breach. To realize the objectives of these initiatives, there is need for a member states collaborative approach.

### **Summary, Findings and Conclusions**

The conclusions are drawn from the findings of the study which sought to determine the rating of integration initiatives towards trade facilitation in East African Community in the past five years and establish the relationship between EAC integration trade initiatives and the region's trade volumes.

The objectives of the study were two; one was to establish the rating of integration initiatives towards trade facilitation; then, to find out the relationship between the EAC integration trade facilitation on the regions trade volume.

### **The Rating of Integration Initiatives towards Trade Facilitation in EAC**

The study's outcome provided insights on the rating of integration initiatives towards trade facilitation. The EAC initiatives were geared towards achieving four key objectives firstly to give EAC countries uniformity in standards of trading, create a flexible environment to do business, to adopt operational initiatives to facilitate systems administration and lastly efficiency initiatives to fast track business operations to minimize costs and thus cut on the cost of doing business.

### **The Relationship between the EAC Integration Trade Facilitation Initiatives on the Regions Trade Volume**

From the results the respondents strongly agreed that EAC integration initiatives increased trade volumes in the regions. From the regression analysis, there's a positive relationship between Standards initiatives, operational initiatives, efficiency initiatives with trade volume of EAC. It nonetheless showed that there was a negative relationship between flexibility initiatives and trade volumes. The EAC should improve further on the implementation framework of integration initiatives that relate to standards, operations and efficiency. There is need to interrogate the reason for minimal success in implementation of flexibility initiatives.

### **Conclusions**

The EAC integration initiatives facilitated trade among the partner States thus increasing the traded volumes in the past five years. Regional integration is a measure that helps in trade facilitation. They also found out that the response of exports to unilateral improvements in trade facilitation exceeded that of imports.

Regional integration trade facilitation initiatives is not a guarantee for improved trade volumes in the EAC because from the regression equation; we confirm that even in the absence of the regional initiatives there could be some improvement in trade volumes among the EAC partner states. Integration initiatives could be an essential, but certainly not an adequate condition for improvement of trade volumes among the East African Community as established in the model. The EAC initiatives can be used by countries to facilitate trade but at some point their influence/strength will diminish as indicated by a negative relationship between the flexibility initiatives in the model.

The trade gains realized from EAC member states integration are apparent, moving ahead; the EAC partner states should address the challenges encountered in realizing the full benefits of integration especially in trade. By addressing the identified challenges, partner states should be optimistic of reaping benefits associated with regional integration like in the EU.

## Recommendations

The researcher noted that there is a need to educate the partner states on the mutual benefits that accrue from regional integration. The need for political good will to drive the trade facilitation agenda is also critical as it helps in solidifying of the initiatives through relevant policy framework. There is need for the EAC Secretariat to put in place a monitoring and evaluation framework to review the effectiveness of the implementation process of various initiatives at regional level.

## Suggestions for Further Research

To get a more expanded conclusion on the effect of EAC integration trade facilitation initiatives to the trade volumes.

## REFERENCES

- Babatunde, A.M. (2006). Trade Policy Reform, Regional Integration and Export Performance in the ECOWAS Sub-Region. Nigeria: Department of Economics, University of Ibadan.
- EAC. (2011). EAC Development Strategy (2011/12-2015/16): *Deepening and accelerating integration*. Tanzania: Author.
- Economic Commission for Africa. (1999). Assessing Regional Integration in Africa: *Rationalizing Regional Economic Communities*. Retrieved from <http://new.uneca.org>
- Linder, S. (1961). *An Essay on Trade and Transformation*. Hoboken, NJ: John Wiley and Sons.
- Makame, A. (2012). *The East African integration: Achievement and challenges*. GREAT Insights, Volume 1, Issue 6. August 2012. Maastricht: ECDPM.
- Pangestu, M. & Scollay, R. (2001) *Regional Trading Arrangements: Stock take and Next Steps*, Trade Policy Forum, Bangkok, Thailand.
- Saku, S. (2006). *Challenges facing Africa's Regional Economic Communities in Capacity Building*. ACBF Occasional Paper No.5, Harare: The African Capacity Building Foundation.
- Suranovic, S. (2007). A lesson on Comparative advantage. *Journal of General Economic policy*, p.3.
- Tuluy, H. (2016). Regional Economic Integration in Africa. *Global Journal of Emerging Market Economies*, 8(3), 334-354.
- United Nations Economic Commission for Africa. (1999). *The ECA and Africa: Accelerating a Continent's Development*. Addis Ababa: United National Economic Commission for Africa.
- World Trade Organisation. (2011). *Regional Integration in Africa*. Staff working paper ERSD-2011-14.