



Effect of Customs Documentation and Procedures on Kenya's Agricultural and Manufactured Commodity Exports to Uganda

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Aim: The study sought to examine the effect of customs documentation and procedures on Kenya's agricultural and manufactured commodity exports to Uganda.

Place and duration of Study: The study was conducted at Busia and Malaba borders, on Kenyan side. The study took place between March and July, 2021.

Research Design: The study used transversal descriptive research design.

Methodology: From the total population of 1860 Kenyan exporters to Uganda, a sample size of 329 respondents was chosen using Yamane's sampling formula. Data was collected using questionnaires. Validity and reliability of research instruments was verified through the pilot study. The research adopted descriptive statistics analysis and inferential statistical analysis. For inferential statistics, correlation and multiple regression analysis were used. Descriptive statistics analysis was done using means, standard deviation, percentages and frequencies. Data presentation was done in graphs, tables and diagrams. The study conducted diagnostic tests for normality and multicollinearity. The Statistical Package for the Social Sciences (SPSS) version 23.0 was used for data analysis.

Results: 280 questionnaires were completed, giving a response rate of 85.1%. The results indicated that time for customs documentation and procedures was ($\beta_2 = -0.352$, $P = .000 < 0.05$). This meant that a one-unit rise in time for customs documentation and procedures would result in a 0.352-unit decrease in the agricultural and manufactured commodity export.

Conclusion: Time for customs documentation and procedures had a negative and significant effect on agricultural and manufactured commodity export. The study recommended on the governments of the two countries to harmonize standards expected on traded commodity and coordinate acquisition of commodity export documents.

Keywords: Non-tariff barriers; commodity exports; international trade; economic integration.

1. INTRODUCTION

Globally, merchandise trade grew by 3.0% in 2018 compared to 4.6% in 2017. This loss in momentum was attributed to increased trade tensions and high levels of trade barriers [1]. International border management has become complex with many state agencies taking part in customs documentation and procedures. For instance, commodity which move across international borders are being subjected to customs duty and other regulatory controls by customs administrations and other agencies at the border. Such agencies include those involved in health safety, food safety and standards conformity [2]. According to the World Bank, 75% of the border delays in Africa are caused by poor facilitation of trade [1]. Border delays makes African countries' intra-trade five times more expensive than those of Asia and three times more expensive than those of South America [3].

According to the study by the East African Business Council (EABC) on the status of NTBs in the EAC states in 2019, customs documentation and procedures; failure to recognize East Africa Community (EAC) Certificates of Origin and failure to recognize quality marks issued by EAC Bureaux of Standards are key prevalent NTBs in EAC [4]. Measures to eliminate these NTBs have been hampered by conflicts experienced in the region, limited finances and the desire to protect local infant industries and national sovereignty [5]. Weak regional enforcement mechanisms have brought challenge to EAC integration process. For instance, the existence of several forums for conflict resolution such as Trade Remedies Committee, diplomatic and political processes have prevented creation of a strong regional institutional framework for resolution of disputes [6].

World Bank report of 2018 on Ease of Trading Across Border Indicator ranked Kenya as number 106 out of 146 countries while Uganda ranked 127 [1]. When compared to the Common Market for Eastern and Southern Africa (COMESA) regional average, intra-trade between Uganda and Kenya requires 34% more

time for customs documentations and other procedures till complete cross border trade compliance [7]. This study therefore intended to examine the effect of customs documentation and procedures on Kenya's agricultural and manufactured commodity exports to Uganda. In the study, the independent variable was customs documentation and procedures while the dependent variable was value of export commodity. It was expected that customs documentation and procedures would reduce value of commodity exports [3]. However, some studies showed that customs and administrative procedures have no effect on value of commodity export [8].

2. LITERATURE REVIEW

2.1 Conceptual Literature Review

EAC Council of Ministers have held several meetings aimed at simplifying and synchronizing customs documentation and procedures at the border points. Little success has been achieved to date [5]. To help reform customs procedures and processes, Uganda has opted to use Automated Systems for Customs Data (ASYCUDA) developed by UNCTAD while Kenya uses Similarity Based Complex Analysis System (SIMBA). To date, there is no smooth linkage between these two systems [7]. Many agencies are involved in export inspection and documentation in the EAC [1]. Uganda, for instance, has many public agencies that manage food safety and quality standards resulting to customs processing taking one week on average. In addition, certain functions performed by agencies delegated monopoly power are being called to question by the private sector firms [7].

According to the EAC Trade and Investment Report of 2018, intra-EAC trade involved mainly agricultural and manufactured goods. For agricultural goods, traded commodity include wheat flour, maize, tobacco, rice, tea and coffee. Manufactured commodity includes petroleum products, cement, sugar vegetable fats and oils, pharmaceutical products, steel, beer, plastics, salt, paper and iron.

2.2 Theoretical Literature Review

The study was based on Institutional Theory. According to this theory, institutional contexts create an impetus for action patterns. The focus is on 'action situation' which refers to social space where there is interaction of individuals and exchange of goods and services. The 'action situation' results to patterns of interactions and outcomes [9]. Such interactions exist as a result of institutional forces [10]. The theory considers informal cross-border trade as illegal trade by the fact that it lacks legitimacy since it involves evading laid down legal procedures. The theory further argues that cross-border alliances are essential in promoting cross-border trade as they represent fast ways to access assets, skills and information in a hosting country [10].

According to the theory, the process of having harmonized trade documents, negotiation and consultation among countries seals agreements facilitating cross-border trade and regional market integration [11]. However, the proponents of this theory argue that the process of market integration has been very slow and little has been achieved making exporters face difficulty of complying with many non-harmonized documentary requirements causes by countries having personal interests [10].

2.3 Empirical Literature Review

Bowen [3] did a study on impact of non-tariff trade barriers on trade in East Africa. Her study focused on Kenya's exports to Tanzania. The study involved the use of descriptive research design. A sample of 348 respondents was selected from a total population of 2,654 respondents using Yamane's formula. Analysis of quantitative and qualitative data was done using both descriptive and content analysis. The non-tariff barriers identified included corrupt police officers and border officials as well as long customs procedures. Such barriers were noted to make the cost of transportation high and with much delays. Corruption also compromised the quality, type, state and recommended quantity of exports. The study recommended non-tariff barriers to be abolished.

According to the study by Kiriti [12] on barriers to trade in East Africa Community: the case of Kenya. Procedural barriers were noted to affect intra-trade between Kenya and her partners in East Africa. Kenya's partners in this study were Burundi, Uganda, Rwanda and Tanzania. Procedural barriers discovered included

excessive documentation requirements, stamping and testing, as well as sluggishness of public officials. From the study, procedural obstacles have led to heavy losses being realized by private businesses due to delay at ports and weighbridges as well as non-official payments to police and custom officials. Descriptive statistics design was used. Interview guide and questionnaire were used to collect data.

Okute [5] studied the effects of non-tariff barriers on Kenyan exporters within the East African Community. This study used explanatory research design. A sample size of 121 respondents was chosen from 9,585 Kenyan exporters using Yamane's formula. Questionnaires were used in data collection. Data analysis was done using both correlation analysis and descriptive analysis. The finding showed that there are too many agencies involved in certification. The study further noted that unsynchronized working hours at border posts, many police blockades and transit licenses for EAC exporters are key NTBs to trade.

Nkoroi [13] in his research on assessing the informal cross-border trade between Kenya and Uganda, adopted multi-method approach of study design. Purposive sampling and random sampling techniques were used. Questionnaire was used as a research instrument. The study showed that informal cross-border trade (ICBT) was a key source of income for people staying at border, while for the government, ICBT was illegal activity which has caused unfair competition that has led to loss of revenue. Key causes of ICBT were customs documentation and procedures which were noted to be costly and needed a lot of time to acquire.

Disdier et al. [8] did a study on impact of regulations on agricultural trade with evidence from Sanitary and Phyto-Sanitary (SPS) and Technical Barriers to Trade (TBT) agreements. The study covered various countries in Africa, Europe, Asia and America. UNCTAD database was used. There was use of gravity equation as it is a reduced form of trade flow prediction. Without certificate of conformity and Sanitary/Phytosanitary certificate, some of the agricultural products could not be imported. For the certificates to be issued, traded products must meet all SPS and TBT measures. The study concluded that developed countries are insignificantly affected by SPS and TBT

measures in their exports while developing countries are significantly affected. EU imports are more negatively and significantly affected by tariffs, SPS as well as TBT than imports from other Organization for Economic Co-operation and Development (OECD) countries [14,15].

3. RESEARCH METHODOLOGY

The study employed transversal descriptive design. Questionnaires were used to collect data from exporters. The questionnaire was designed to capture the traders' general and specific information regarding the objective of the study. It had structured questions which were both open and closed ended. Questionnaires were used to collect data which was quantitative in nature.

Data analysis involves summarizing raw data and interpreting it so as to derive meaning [16]. The research adopted descriptive statistics analysis and inferential statistical analysis. For inferential statistics, correlation and multiple regression analysis were used. Descriptive statistics analysis was done using means, standard deviation, percentages and frequencies. Data presentation was done in graphs, tables and diagrams. Correlation analysis was done to explain the strength and direction of the relationship between value of export commodity and its macroeconomic determinants [16]. Regression analysis was estimated to show the influence of customs and administrative procedures on value of commodity exports. The Statistical Package for the Social Sciences (SPSS) version 23.0 was used for data analysis.

Diagnostic tests conducted were multicollinearity test and normality test as the study involved collecting cross-sectional data. Regression analysis requires data to be normally distributed [17]. Normality test was done using Shapiro-Wilk test in which a P value (Sig. value) which is greater than 0.05 shows that the data is normally distributed [18]. A test for multicollinearity was to establish whether the independent variables were linearly related. The variance inflation factor (VIF) was used to test for multicollinearity.

4. RESULTS AND DISCUSSION

4.1 Descriptive Summary

4.1.1 Documents used for agricultural and manufactured commodity export

Fig. 1 shows international trade documents used by Kenya's exporters at Busia and Malaba

borders. All the traders used trade license/permit in commodity export. Most of the other documents were used by more than 90% of the traders. Some of the documents mentioned but were not covered in quantitative data analysis included exit note, release note, packing list and fumigation certificate. Such documents were covered in qualitative analysis. Majority of the traders noted that "clearing agents are involved in clearing process at both Busia and Malaba borders which also involved acquiring exit note and release note." This agrees with the study by Kilibarda [19] who observed a symbiotic relationship between the traders and the clearing agents where clearing agents are paid to undertake customs clearance on behalf of the traders.

According to a customs official and a Kenyan clearing agent at Busia border, "import licensing requirements, non-harmonized procedures in acquiring certificate of conformity, health certificate, covid-19 certificate and non-harmonized border charges are key impediments to Kenya-Uganda trade." This was in agreement with Kiprotich et al. [20] who stipulated that a trader requires a certificate of origin, certificate of conformity, an invoice, phytosanitary certificate among other specific permits for export trade.

4.1.2 Average time taken to acquire commodity export documents

Table 1 shows the average time taken to acquire commodity export documents by Kenyan exporters. Majority of the traders 42.69% (n=108) acquired trade license/permit within 6-24 hours. Phytosanitary certificate was acquired by majority of the traders, represented by 38.88% (n=14), within 2-3 days. Health certificate was acquired by majority of the traders, represented by 40.00% (n=12), within 6-24 hours. Averagely, the exporter requires more than a day to get all the documents.

The findings by World Bank report [1] affirmed the study by stating that it takes an average of 40 hours for a Kenyan to comply with export requirement and ensure goods exit the border. According to the study by World Trade Organization (WTO) report [21], Sub-Saharan African countries' average border compliance time for exports is 97.1 hours (approximately four days) unlike the Organization for Economic Co-operation and Development (OECD) countries whose compliance time is 12.7 hours (half a day). Most of the trade association officials

confirmed that, “high compliance time result to some perishable goods being devalued, some traders opting for informal routes and extra costs being incurred on parking, storage,

shipping lines and truck rent.” According to Apondi [22], 56.4% of the traders mentioned complex documentation procedure as a cause for informal trade.

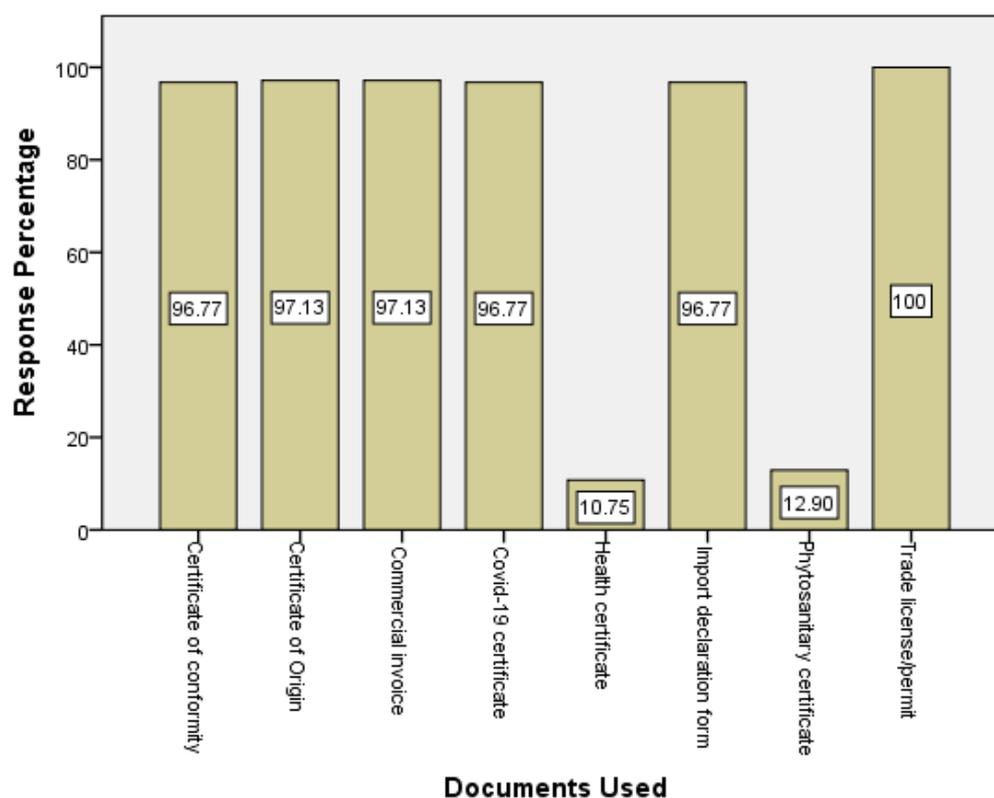


Fig. 1. Documents used for commodity export
Source: Researcher (2021)

Table 1. Average time taken to acquire commodity export documents

Document		1 hour	2-5 hours	6-24 hours	2-3 days	3-7 days	More than 7 days	Total
Trade license/Permit	n	3	75	108	78	10	6	280
	%	1.07	26.79	38.57	27.86	3.57	2.14	100.00
Phytosanitary certificate	n	0	4	8	14	7	3	36
	%	0.00	11.11	22.22	38.88	19.44	8.33	100.00
Health Certificate	n	5	7	12	5	1	0	30
	%	16.67	23.33	40.00	16.67	3.33	0.00	100.00
Certificate of conformity	n	1	7	51	85	118	9	271
	%	0.37	2.59	18.81	31.37	43.54	3.32	100.00
Commercial Invoice	n	60	140	68	4	0	0	272
	%	22.06	51.47	25.00	1.47	0.00	0.00	100.00
Covid-19 Certificate	n	75	1	137	57	1	0	271
	%	27.68	0.36	50.55	21.03	0.36	0.00	100.00
Import Declaration form	n	90	129	50	2	0	0	271
	%	33.21	47.60	18.45	0.74	0.00	0.00	100.00
Certificate of Origin	n	55	103	89	25	0	0	272
	%	20.22	37.87	32.72	9.19	0.00	0.00	100.00

Source: Author (2022)

4.2 Inferential Analysis

4.2.1 Correlation analysis

The findings in Table 2 indicate that time for customs documentation and procedures had a moderately negative and statistically significant association with agricultural and manufactured commodity export ($r = -0.587$, $P = .000 < 0.05$). This implied that increase in time for customs documentation and procedures was accompanied by decrease in the agricultural and manufactured commodity export. Exporters got tired and discouraged of the very long documentation and customs procedures in export trading.

The findings are in line with the study by Wanjiru [23] who found that non-tariff barriers were negatively correlated with international importing practices ($r = -0.192$). This implied that negative change in non-tariff barriers leads to increased efficiency of international trade for Nairobi traders dealing with automobiles. However, the study by Mutwiri [24] contradicted the findings since it showed a positive correlation between import licensing and financial performance of automobile assemblers ($r = -0.678$) and a positive correlation between quality control and financial performance of automobile assemblers ($r = -0.712$).

4.2.2 Regression analysis

4.2.2.1 The analysis of variance (ANOVA)

The ANOVA analysis intended to investigate the extent in which customs documentation and procedure is statistically significant in predicting the value of agricultural and manufactured commodity exports to Uganda. The results are shown in Table 3.

The F statistic for the ANOVA model was 146.141, with a P value of 0.000. Since the P value was smaller than the standard value

($P < 0.05$), then the model was statistically significant in predicting the agricultural and manufactured commodity export.

4.2.2.2 Regression of coefficient results

The regression of coefficients result indicated that time for customs documentation and procedures had a negative and significant effect on agricultural and manufactured commodity export ($\beta_2 = -0.587$, $P = .000 < 0.05$). This meant that a one-unit rise in time for customs documentation and procedures would result in a 0.587 unit decrease in the agricultural and manufactured commodity export. The results are shown in Table 4.

The findings are in line with the study by Maziku [25] who found that existence of high transaction cost caused by NTBs had a negative and significant effect on trade ($\beta = -0.777$, $P = .002 < 0.05$). The study by Wanjiru [23] conformed to the findings as it stipulated that there is a negative and significant effect of international trade barriers on international importing practices ($p = 0.026$, $r = -0.362$).

4.3 Regression Assumptions

Normality test and multicollinearity test were conducted as they are appropriate for testing cross-sectional data.

4.3.1 Normality test using shapiro-wilk test

For normality test, the Shapiro-Wilk test was conducted, and a P value (Sig. value) greater than 0.05 shows data is normally distributed [26]. From the results, time for customs documentation and procedures had a P value of 0.055 as shown in Table 5.

The significance value was greater than 0.05 which confirmed that variables were normally distributed.

Table 2. Correlation matrix

		Commodity export	Time for customs documentation and procedures
Pearson Correlation	Commodity export	1.000	
	Time for customs documentation and procedures	-.587	1.000
		.000	

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

Source: Author, 2022

Table 3. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1505.715	1	1505.715	146.141	.000 ^b
	Residual	2864.271	278	10.303		
	Total	4369.986	279			

a. Dependent Variable: Commodity export

b. Predictors: (Constant), Time

Source: Author, 2021

Table 4. Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.382	.546		26.360	.000
	Time	-.193	.016	-.587	-12.089	.000

Table 5. Normality test

	Statistic	df	Sig.
Time for customs documentation and procedures	.891	280	.055

Source: Author, 2021

Table 6. Collinearity statistics

	Tolerance	VIF
Time for customs documentation and procedures	.721	1.387

Source: Author, 2021

4.3.2 Test for multicollinearity

Using the variable inflation factor (VIF) and tolerance statistics, the researcher conducted multicollinearity test. Multicollinearity exists when VIF was greater than 10 and the tolerance being less than 0.2 [18]. From the results, time for customs documentation and procedures had VIF of 1.387 and tolerance of 0.721 as shown in Table 6.

Individual VIF values were less than 10 and tolerance values were greater than 0.2, which indicated that the variables were not multicollinear.

5. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary and Conclusion

The study examined the effect of customs documentation and procedures on Kenya’s agricultural and manufactured commodity exports to Uganda. The study was based on Institutional Theory The population for the study was 1860 traders from which a sample of 329

traders were selected for the study. Transversal descriptive design was used. Data was collected using questionnaires. The research adopted descriptive statistics analysis and inferential statistical analysis. Diagnostic tests conducted were multicollinearity test and normality test as the study involved collecting cross-sectional data.

From the findings, time for customs documentation and procedures had a negative and significant effect on agricultural and manufactured commodity export ($\beta_2 = -0.587, P = .000 < 0.05$). Export documents used by the majority of the respondents included trade license/permit, certificate of conformity, commercial invoice, covid-19 test certificate, import declaration form and certificate of origin. Most of the respondents spend more than 6 hours before acquiring certificate of conformity, covid-19 certificate and health certificate.

5.2 Recommendation

The researcher recommends on the governments of the two countries to harmonize standards expected on traded commodity and

coordinate acquisition of commodity export documents. This would minimize possibility of Kenya's exports being restricted entry in Uganda and Kenyan export documents being accepted in Uganda.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

The products used for this research are commonly and predominantly used products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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