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*Impact of East African Community Single Customs  
Treaty implementation on Customs Revenue Collection  
in Tanzania*

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## **Impact of East African Community Single Customs Treaty implementation on Customs Revenue Collection in Tanzania**

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### **Abstract**

*The study aims at examining Single Customs Territory (SCT) impact on Customs Revenue Collection country-wide. Specifically, the study intended to examine single customs territory impact on import and export volumes in Tanzania. The study employed secondary data collected from customs department at Tanzania Revenue Authority (TRA), Dar es Salaam port (TPA) spanning from 2011 to 2021. Descriptive research design was employed in this study with both inferential and descriptive statistics adopted to come to a conclusion on the subject. Data analysis was through SPSS software version 25. It was found that significant relationship between dependent variable (Customs Revenue) and independent variables (Import and Export volume) exists whereby importation and exportation were seen to relate positively. Furthermore, it was observed in the model that explanatory variables explain customs revenue variation by 94.2.%. Importation experiences a growth trend over past 11 years as per the trend analysis however, exportation was not stable over past 11 years. The study recommends policy and strategies review to attract more trade/ traders at Tanzania Port Authorities (TPA) so as to have intrinsic benefits that come with it, since importation and exportation have a large impact on customs revenue..*

**Keywords:** *Revenue Collection, Importation, Single Customs Territory, Tanzania Port Authorities*

### **Introduction**

East African Community (EAC) history dates back to the late sixties where it was inaugurated officially on 01ST December, 1967 with three partner states namely United Republic of Tanzania, the Republic of Kenya and the Republic of Uganda. It went to operational existence for 10 years before it ceased operations in June 1977 due to ideological differences. It was later inaugurated in July, 2000 as a regional intergovernmental organization meant to serve seven partner states at the moment. EAC members include the Republic of Burundi, South Sudan, Democratic Republic of Congo (DRC), Republic of Rwanda, the Republic of Uganda, the Republic of Kenya and the United Republic of Tanzania with its headquarters in Arusha, Tanzania. The Single Customs Territory (SCT) can be explained as a milestone towards customs union, an ideal union which would be in operational existence where duties and restrictive regulations would be waived and goods moving between partner states would be subjected to minimal internal border customs controls with free circulation of goods being an ultimate target (Mpakaniye, 2020). In Single Customs Territory partner states are regarded as one Customs Territory that is; only one customs declaration is made in the country at which goods are consigned. A single declaration declared replaces the old system which requires multiple customs declaration. Time and cost saving have been the benefits of using this

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system to date among other things. Single Customs Territory (SCT) implementation in East African Community has a goal on facilitation of goods flow for the enhancement of intra-trade in East Africa (Kamau and Odongo, 2020).

Single Customs Territory (SCT) concept has emerged as a compelling approach to address among other things enhancement of goods movement across borders, barriers to trade and streamlining procedures (Keck & Piermartini 2018). The establishment of the East African Community Single Customs Territory foundation is through a combination of different aspects namely protocols, member states national legislations & regulations and international agreements. East African Community (EAC) Establishment Treaty serves as an overarching legal framework and provides various integration processes foundation including the establishment SCT (Heriel and Arnold 2024).

A complete customs union can be achieved among other things by minimization of internal border customs control on goods & services, removal of restrictive regulations and duties between partner states which can lead to free circulation of goods and services. Single customs territory (SCT) can be explained as a key step towards maximum establishment of EAC customs union. Simplification and harmonization of customs documents, relaxation of burdensome customs procedures and automation of customs information have been seen to increase trade flows across borders and reduce trade costs between 10–18 per cent (OECD 2018).

All aforementioned measures have a common goal in trade facilitation in intermediate manufactured goods and in perishable agricultural goods which prominently feature in global value chains where predictability and lead time in delivery are critical, huge gain would probably accrue to low-income countries (OECD 2018; World Bank 2019a; WTO 2015).

There has been progress in EAC partner states on export time for example dropping down from 28 days in 2013 to 3 days on average in 2019 (World Bank, 2019b). However, SCT implementation has been relatively asymmetrical across EAC member states, significant challenges are seen on coordination between cross-border agencies & domestic and timely release of goods across border.

In spite of the achievements made in implementation of trade facilitation agreements among partner states in the EAC most countries in sub-Saharan Africa (SSA) lag behind, cross-border flow of goods have numerous challenges including document compliance, time related to operating border activities, trading costs which are extremely and relatively high compared to other countries in the world (Kamau and Odongo, 2020).

Ease of trading across borders indicator ranked Sub Saharan Africa (SSA) 140 out of 190. Average exports border compliance time is 97.1 hours (four days) compared to 12.7 hours (half a day) in OECD countries while the border compliance cost is US\$603.1 compared to the OECD average cost of US\$136.8. Trading in SSA have been dealt a major blow particularly on burdensome procedures which have added to the greatest extent the cost of trading in SSA with document compliance taking 71.9 hours (three days) to clear costing US\$172.5 compared to 2.3 hours and US\$33.4 in OECD countries (World bank, 2020).

The overall objective of the Single Customs Territory implementation by East African Community (EAC) partner states is simplicity of doing business/trade across borders through simplification and harmonization of customs documents, automation of customs systems and removal of burdensome customs procedures. The move would reduce time in doing business/ trading and cut costs (Kamau and Odongo, 2020).

As a result of few partner states not adjusting fully to SCT system, congestion at border posts (lack of one-stop border post), unmatching systems & breakdown and corruption are huge challenges and setback in the EAC Single Customs Territory implementation (Mpakaniye, 2020).

Other popular challenges facing EAC customs union before SCT are multiple customs declarations at internal borders, different application of customs instruments and laws, application of varying valuation approaches and complex procedures on clearance involving many governments, multiple security bond regimes and weak enforcement mechanisms, (Memo, 2014).

SCT empirical studies impact on the EAC region is basically focused on the exports of Uganda, Kenya and Rwanda (Sindiga, 2021; Kamau and Odongo; 2020; Mpakaniye, 2020) shown mixed outcomes. Notwithstanding that fact, studies for the establishment of SCT impact framework on customs revenue in Tanzania are limited. The volumes & value of imports flowing into Tanzania and export out of Tanzania or

to partner states post and pre SCT introduction were still unknown. This study bridged this gap by determining the impact of SCT on customs revenue collection in Tanzania.

### **Literature Review**

In this part of the study theoretical & empirical literature related to single customs territory and customs revenue collection were reviewed and addressed the gap to be fulfilled.

### **Theoretical Framework**

This paper was anchored on protectionist theories. Protectionist theories is a continuation of 16th - 18th century mercantilists' trade doctrine which supported government self-sufficiency through favorable balance of trade. Mercantilists policies rely on government interventions to restrict imports and protect domestic industries. The policies focused on accumulation of resources and wealth while maintaining favorable trade balance with other states. For a country to grow faster they argued for more export than imports. During that time wealth was measured in gold and silver. For a country that exports much more, gold (inflow) would be paid as a reward. In the short run the amount of gold was fixed and not all nations could have such inflows at the same time and trade gains might be enjoyed only at other nations expense. Mercantilists policies were challenged by Adam Smith who advocated free trade based on absolute advantages of nations. In his view, free international trade would result in gains from specialization and international division of labor be shared simultaneously by all nations. Moreover, when nations specialize in industries in which they have absolute factor advantages, trade gains would flow to every nation not at others expense. Hence, zero government intervention need that would only deteriorate allocation of resources and productivity (Mitchell and Dorfman, 1967). This theory was relevant as it focused on importation, exportation and revenue collection.

### **Empirical Review**

Sindiga (2021) noted Kenya Revenue Authority (KRA) customs data spanning from the year 2010 to the year 2020 through panel econometric model captured the Single Customs Territory framework Establishment on Kenyan customs revenue. In its results import volumes increased by an average of Kshs. 1.062 and import values (CIF) increased by an average of Kshs. 1.104 as a result of SCT framework introduction. However, SCT framework introduction led to a drop in export volumes by an average of Ksh.1.917 and in exports values (FOB) by an average of Kshs. 2.128

Mpakaniye (2020) studied EAC effect on single customs territory on Rwanda's trade facilitation. Different benefits of SCT to trade facilitation were revealed such as time release, reduction of doing business costs, risks reduction associated with transit of goods, non-compliance, reduction in administrative costs, efficient revenue management and enhance application of information technology.

Bilateral EAC countries trade flows assessment in the free trade area found that factors such as diaspora remittances, contiguity, country size and corruption index have a positive effect to trade Oparanya et al (2019). In its findings they suggested that diaspora remittance, corruption index, contiguity, country size have an impact (positive) on the region's bilateral trade. On the other hand, mobile subscription ratio, net population effect and foreign direct investment (FDI) flows have negatively impacted intra-trade flows among member states.

Heriel and Arnold, U (2024) examined trade facilitation effect between Kenya and Tanzania as a result of Single Customs Territory (SCT) the primary focus been on the Diaspora remittance, inter-agency cooperation roles, technological integration (independent variables). Findings suggested that for a successful trade facilitation within the SCT context, legal framework plays a pivotal role. Harmonization of policies (trade tariffs) among member states (Kenya and Tanzania) emerged as a key cross-border trade enabler. Further, it was revealed that enhanced collaborative border management committees and inter-agency cooperation significantly contribute to efficient trade processes. Advanced technology integration and electronic platform including ICT systems is a key driver to efficient trade facilitation through operational costs and massive reduction transit time.

Kamau and Odongo (2020) studied Single Customs Territory Impact on Tanzania's exports to East African Community. They found that under the EAC Single Customs Territory Tanzania's exports (merchandise) to East African Community countries remained low. Challenges remain on time it takes to export goods and trade costs which remains high. Policy proposals include reduction of time required to export & border costs, expeditious harmonization of investment cargo-related infrastructure documentation & customs system and ratification of agreements value addition of exports.

According to Leyaro (2021) Tanzanian trade into EAC markets was significantly supported and enhanced by the East African Community and East Africa customs. Through an augmented structural gravity model

in measuring the effects of forming and joining a regional integration bloc it was observed that Tanzanian trade to the East African market has grown significantly. Apparently, Kenya continues to be a top trading partner to Tanzania in EAC bloc markets, Kenya trade deficit from 2015 onwards changed into a surplus suggesting balance of trade improvement. On the other hand, Tanzania's significant trade balance surplus with other EAC Partner States was observed. Tanzania's trade patterns were observed to be steady and primarily inter-industry rather than intra-industry suggesting economy's non productivity and structural change. Moreover, it suggests EAC markets and Tanzania trade is not linked with transformation and industrialization. Furthermore, persistent trade imbalances in the EAC (Kenya in particular) in the long run threaten a backlash and is not good for the sustainability and future integration process in the EAC.

The reviewed empirical studies focused on Kenya's export, Tanzania, Rwanda and Uganda. (Sindiga, 2021; Kamau and Odongo, 2020; Mpakaniye, 2020) have shown mixed outcomes. However, limited studies on SCT framework impact on customs revenue in Tanzania have been conducted. Tanzania's value and volumes of import and export to partner states in post and pre SCT introduction were still unknown. This study aims at bridging this gap.

## **Methodology**

This study was conducted at customs department at Tanzania Revenue Authority (TRA) Dar es Salaam port (TPA). The study employs Descriptive research design with both descriptive and inferential statistics adopted to draw a subject matter conclusion. Secondary data collected from Tanzania Porty Authority (TPA) from 2011 to 2021(11 years) were used in this study. Engagement of SPSS software version 25 was done to facilitate the data analysis process. Interpretation of descriptive data were through mean and standard deviation. Changes over a span of 11 year was checked via Trend analysis. Relationship of the variables was analyzed and tested through Regression analysis and Pearson correlation. Results were presented using simple graph and table.

## **Diagnostic Tests**

Discussed below is the diagnostic test carried out in this research.

### Multicollinearity

Ensuring independent variables are weakly related to each other ( $r < 0.90$ ) is the sole aim of multicollinearity, Shrestha (2020). Tolerance factors and VIF are used to test Multicollinearity in this study.

**Table 1: Collinearity Statistics**

Variable	Collinearity Statistics	
	Tolerance	VIF
Import volume	.230	7.700
Export Volume	.237	7.889
Transshipment volume	.202	9.832

Table 1: In the table above all variables have VIF and tolerance values are less than 10 ( $<10$ ) and greater than 0.2 respectively which conclude that for both variables' multicollinearity doesn't exist; Thus, it can arguably be correct to assume that this assumption was met.

Multicollinearity assumption is not assumed be violated from the acceptable range if tolerance measure and VIF is greater than 0.2 ( $>0.2$ ) and less than 10 ( $<10$ ) respectively, Pallant (2013).

### Heteroscedasticity

Heteroscedasticity was normally checked by The Breusch-Pagan-Godfrey test in this study. Error variances were equally served as the test's direction in the null hypothesis. In order to compare the null hypothesis to the alternative yielding the test statistic, the Breusch-Pagan Godfrey test is used. Table 2 lists the outcomes.

**Table 2: Heteroscedasticity Test**

Variables	P-Value (Chi-Square)
Import volume	0.036
Export volume	0.015

Table 2; Implication of  $p < 0.05$  is such that variables are free from heteroscedasticity in time series data.

### Stationarity Test



Stationarity was tested by Dickey-Fuller (ADF) test (Riley et al, 2019). Time series variables data in this research was determined on whether non-stationary and had a unit root. Table 3. Present the result.

**Table 3: Unit Root Test**

<b>Variables</b>	<b>P-Value</b>
<b>Import volume</b>	0.003
<b>Export volume</b>	0.026

Table 3; in all variables calculated p-value is less than 0.05; thus, rejection of the null hypothesis that means data series are stationary and no unit root is presented by data.

### **Findings and Discussions**

This section presented key findings of the study both descriptive and inferential findings. Trend analysis was also presented. In this study discussion of key findings in relation to theory and other studies was also presented.

### **Descriptive Statistics**

The study investigates the characteristics of imports, exports and revenue collection data for 11 years from 2011 to 2021, whereas mean, standard deviation, maximum and minimum were computed for each variable; Standard deviation close to two indicates data points are close to mean otherwise the mean is not stable. Table 4 presents the results of the descriptive statistics.

**Table 4: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Import- volume (Million tons)	11	9	14	12.08	1.711
Export -Volume (Million tons)	11	2	4	2.89	.595
Revenue Collection (Million Tshs)	11	293,095.00	817,969.50	592,790.1100	182,629.60344

Table 4: Various figures of standard deviation in this study were indicated, mean, a maximum and minimum value for the variables.

On the importation, the finding indicates standard deviation (1.711) and positive mean (12.08); considering standard deviation is a little under two (2) it implies the importation is stable for the country for the past 11 years. Thus, 12.8 are the average volume million in tons the country imports while 9 million in tons is the minimum imports and 14 million in tons is the maximum importation.

On exportation the finding indicates the positive mean (2.89) and standard deviation (0.595); considering Standard deviation little under one, it implies export rate contributes positively to the country economy for the past 11 years. Thus, 2.89 is the average volume million in tons the country earns from export per year, while 2 million in tons is minimum exportation and 4 million in tons is the maximum exportation.

For revenue collection, the study indicates the positive mean (592,790.1100) and standard deviation (182,629.60344); whereas, 817,969.50 million in Tshs is the maximum revenue collected and 293,095.00 million Tshs is minimum revenue collected over past 11 years. This implied that on average the amount collected per year is favorable.

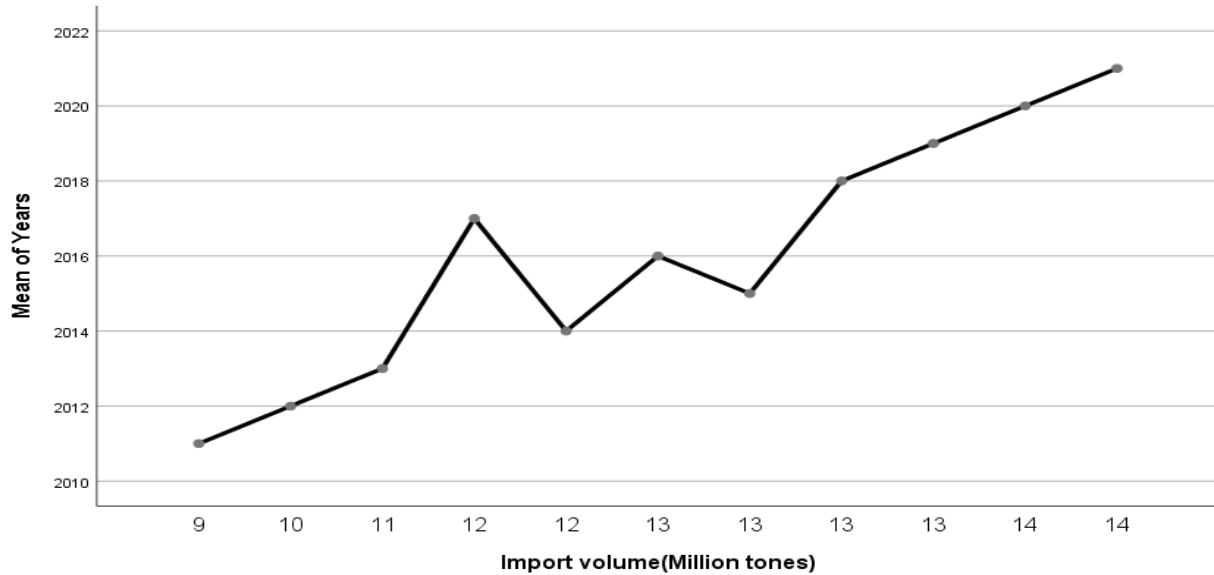
Further, the study noted that the greatest mean is of importation (12.08), followed by the exportation (2.89); this implies that for over the past 11 years the country was dependent much on the importation of goods and services. Thus, importation contributes much on the revenue.

### **Trend analysis**

Inspection of the annual trend of the variables from 2011 to 2021 was done in this study with the purpose of establishing the trend for exports, imports and revenue data for 11 years.

### **Importation**

The importance to use annual trends to establish the trend of importation in Tanzania Port Authorities for over the past 11 years was observed. Figure 1 presents the results.

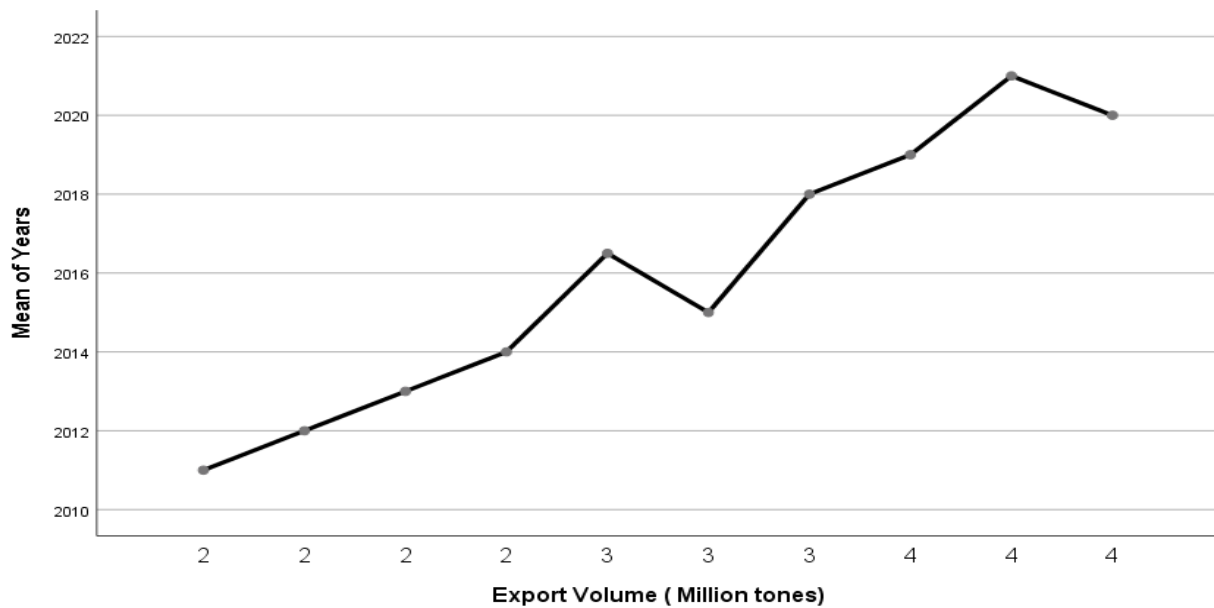


**Figure 1: Importation**

Figure 1; the trend of country importation indicates a growth which implies that TPA earns from importation of goods and services. However, for the years 2017 to 2019, the trend experiences some up and down movements.

### Exportation

Figure 2 presents the results.

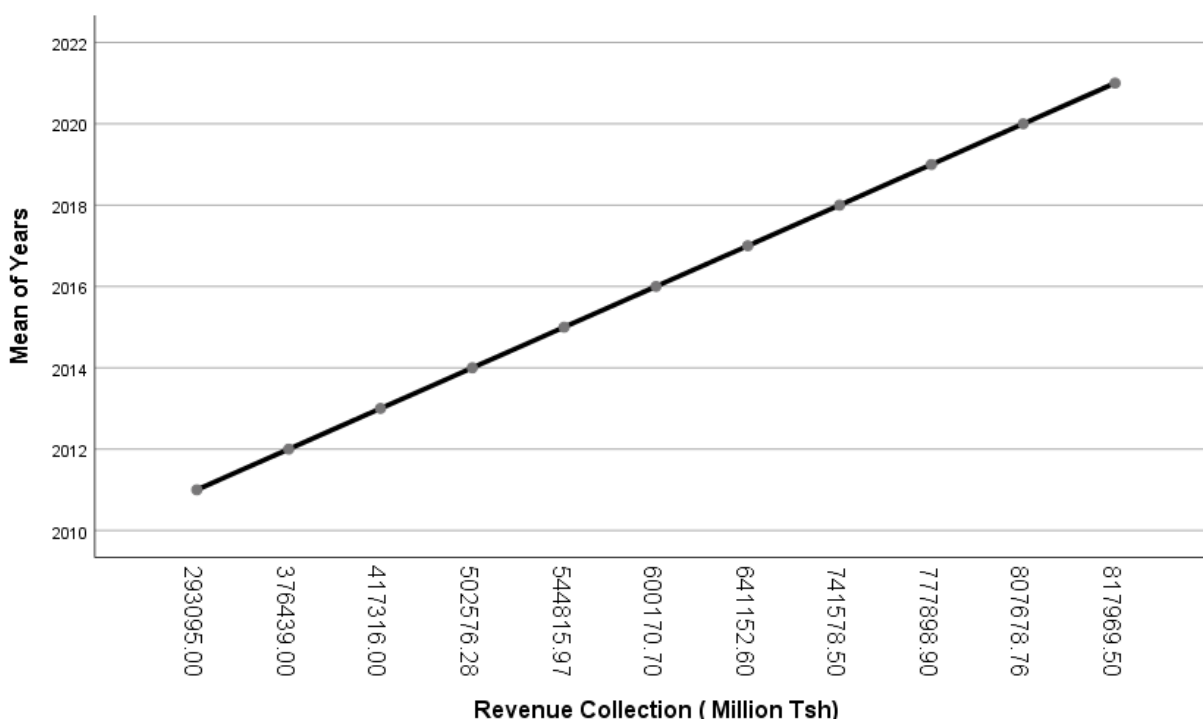


**Figure 2: Exportation**

Figure 2; the trend of country export indicates a growth that is; since year 2011 to 2017 the country exportation rate tends to increase. However, in year 2017 to 2018 the trend declined. From year 2019 to 2021 the trend increased. This indicates that the country economy is increasing to support the demand within the country and exportation; thus, it contributes to the development and growth of the country's economy.

### Revenue Collection

Annual trend analysis to establish the trend of revenue collection in Tanzania Port Authorities (TPA) for over the past 11 years was seen as proper tool. Figure 3 presents the results.



**Figure 3: Revenue Collection**

Figure 3; the data showed that the TPA experiences a trend growth of revenue collection from past ten years. This indicated that after the implementation of Single Customs Territory the revenue collection of customs increased.

### Inferential Statistics

Statistical Package for Social Sciences (SPSS) was employed to facilitate computation of variable measurement. Correlation and linear regression analysis were used in this study and the results are presented below;

### Correlation Analysis

Investigation of the Existence of a relationship between independent variables and the dependent variable was done. The sole purpose was to check on the relationship that exists between dependent (*Revenue Collection*) and independent (*Importation and exportation volume*) Table 5 presents the results.

**Table 5: Correlations output**

			Revenue Collection (Million Tshs)	Import volume (Million tons)	Export Volume (Million tons)
Revenue (Million Tshs)	Collection	Pearson Correlation	1		
		Sig. (2-tailed)			
		N	11		
Import -volume tons)	(Million	Pearson Correlation	.908**	1	
		Sig. (2-tailed)	.000		
		N	11	11	
Export -Volume tons)	(Million	Pearson Correlation	.962**	.904**	1
		Sig. (2-tailed)	.000	.000	
		N	11	11	11

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

The Pearson's' product moment correlation between import (p=.000, r=.908), export (p= .000, r=.962), and a positive Custom Revenue Collection. As p -value for significance was less than 0.05 alpha thresholds relationships were also found to be significant as a result.

In determination of a combination of predictor variables which forecast dependent variables, multiple regression analysis was applied. Where by

$$RC = \beta_0 + \beta_1IV + \beta_2EV$$

Whereby:

RC = Revenue Collection

IV = Import volume

EV = Export volume

$\beta$  = Coefficients

Model summary was shown on table 6.

**Table 6: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.970a	.942	.916	52774.51193
a. Predictors: (Constant), Import volume, Export Volume				

Table 6; The Linear association between y and x seems to be stronger since coefficient of determination is such that  $0 < 1$ . The coefficient of determination augment and support the argument also known as R square of 0.942. It implies that 94.2% of the total variations (Total Revenue collection) in TPA is explained by Single Customs Territory (SCT); Specifically, Import volume and Export volume.

The Analysis of Variance is depicted in Table 7.

**Table 7: Analysis of Variance**

ANOVA <sup>a3</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	314039676762.250	4	104679892254.083	37.585	.000 <sup>b</sup>
	Residual	19496043767.593	7	2785149109.656		
	Total	333535720529.844	10			
a. Dependent Variable: Revenue Collection (Million Tshs)						
b. Predictors: (Constant), Import volume, Export Volume						

Table 7; Indicated the model was statistically significant. Furthermore, the results implied export and import volume are good predictors of customs revenue collection. This as well was augmented by the reported p (0.000) and an F statistic of 37.585. Table 5; Depicts Regression Coefficient for Single Customs Territory and Customs Revenue Collection.

**Table 8: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	162396.822	236834.377		.686	.015
	Import volume (Million tons)	7550.487	27060.195	.071	.279	.038
	Export Volume (Million tons)	191848.821	78745.598	.625	2.436	.045
a. Dependent Variable: Revenue Collection (Million Tshs)						

Table 8; Showed a significant and a positive relationship between import volume ( $\beta=, 7550.487$   $p=0.038$ ) and Customs Revenue Collection. Moreover, there was significant and a positive relationship between export volume ( $\beta=191848.821$ ,  $p=0.045$ ) and Customs Revenue Collection.

### Conclusions and Recommendations

This section presents an analytical discussion of key findings in relation with other studies and theories. The discussion based on objective of the study.

#### Single Customs Territory impact on import volumes in Tanzania

This was the first objective of the study. Under this objective it was found that importation volume experiences a growth trend. Significant and positive relationship between import volume ( $\beta=, 7550.487$   $p=0.038$ ) and Customs Revenue Collection was found to exist. These results concurred with Sindiga (2021) on Single Customs Territory framework impact on Kenyan Customs Revenue (KRA) establishment. The results depict import values (CIF) increment by an average of Kshs. 1.104 while import volumes increment on an average of Kshs. 1.062 following the introduction of SCT framework.

The study findings differ from Oparanya et al. (2019) who found that mobile subscription ratio, net population effects and foreign direct investment (FDI) flows have a negative intra-trade flows impact among member states.

### **Single Customs Territory The impact on export volumes in Tanzania**

This was the second objective of the study. It was found that country's export trend experiences a growth that is; since year 2011 to 2017 the country exportation rate tends to increase. However, in year 2017 to 2018 the trend declined. From year 2019 to 2021 the trend increased. This indicates that the country's economy is increasing to support the demand within the country and exportation; thus, it contributes to the development and growth of the country's economy. Moreover, there was a positive and significant relationship between export volume ( $\beta=191848.821$ ,  $p=0.045$ ) and customs revenue collection.

These results concurred with Sindiga (2021) who established Single Customs Territory framework impact on Kenyan customs revenue. SCT framework Introduction led to a decline of export volumes by an average of Ksh.1.917 and exports values (FOB) by an average of Kshs. 2.128.

The findings differ with Kamau and Odongo (2020) who conducted study on Single Customs Territory impact on Tanzania's exports in the East African Community (EAC). In its findings it was observed that Tanzania's exports merchandise to East African Community members' states remained low under the Single Customs Territory. Challenges were seen on high trade costs and time it takes to export goods.

In summary, it was found that importation volume experiences a growth. Furthermore, a positive and significant relationship between import volume ( $\beta=, 7550.487$   $p=0.038$ ) and Customs Revenue Collection was found. Country's export trends were found to experiences a growth, that is, since year 2011 to 2017 the country's exportation rate tends to increase. However, in year 2017 to 2018 the trend declined and from year 2019 to 2021 the trend increased. Moreover, positive and significant relationship between export volume ( $\beta=191848.821$ ,  $p=0.045$ ) and Customs Revenue Collection was found.

It is recommended that since importation, exportation and trans-shipment have a huge impact on customs revenue collection, there should be policy and strategies review to attract more trade/ traders at Tanzania Port Authorities (TPA) so as to have intrinsic benefits that come with it, since importation and exportation have huge impact on customs revenue. The study suggests a deeper and extensive study across East African countries (EAC) (partner states) to check on the validity of this study results for other East African nations. Future researchers can extend the study coverage to accommodate other factors such as import value, export value and transship value.



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