

INFORMAL CROSS BORDER TRADE AND ITS EFFECTS ON KENYAN HOUSEHOLDS' POVERTY LEVELS, EVIDENCE OF BUSIA BORDER-KENYA

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ABSTRACT

Informal cross-border trade is business done by small, unlicensed, vulnerable traders between neighboring nations. This study sort to establish whether informal cross border trade had any effect on the poverty levels of Kenyan's residing in Kenya -Busia border. Descriptive research design was utilized along with structured questionnaire to collect both qualitative and quantitative primary data. The study targeted 2,400 informal cross border traders from which a sample of 332 households was selected using Cochran's 1977 formula. Convenience sampling, Cluster and simple random sampling were used to pick households for the study. Qualitative data were subjected to a thematic analysis whereas Quantitative data was analyzed by descriptive and inferential analysis using Statistical Package for the Social Sciences (SPSS) version 2020. The study found out that 33.1% of variation of poverty reduction was explained by informal cross border trade which means that trade had a significant influence on poverty reduction (t-statistic=1.448, p-value=0.002 < 0.05). The value of R- squared under general regression was 0.657 hence 65.7% of variations of the Kenyan households' economic welfare was explained by informal cross border trade and at 0.05 level of significance, households' welfare was affected by informal cross border trade as denoted by 0.002 which is less than 0.05 level of significance (t-statistic=13.055, p-value=0.002 < 0.05). Proper policies on reduction of tariff and non-tariff barriers, liberalisation of import licensing, removal of foreign exchange restrictions, management of import quotas and export quotas, easing of customs formalities and good utility of the one-stop border posts border can reduce informal cross border and legitimize most business involved in it.

Key words: Informal Cross Border Trade, East Africa Community, World Trade Organization Common Market for Eastern and Southern Africa, General Agreement of Trade and Tariff

1. INTRODUCTION

A notable portion of countries in Africa recorded tremendous economic growth after obtaining independence from the colonialists. When the growth period came to an end, several countries' economies in Africa faltered and then declined (Nkoroi, 2016). The possible reason was a lack of human resources, unfavorable policies and inadequate capital to foster economic sustainability. The continent has experienced a decade of falling per capita earnings, high levels of hunger, and accelerating ecological degradation. The latter has worsened conditions further, with the productivity in firms and farms declining significantly. Research works by Ubba (2020) stated challenges in the African continent are also attributed to the informal cross border trade (ICBT). Bensassi, Jarreau, & Mitaritonna (2019) define cross border trade (CBT) as the practice involving buying and selling goods and services between individuals and firms between two or more states. The informal trade is part of the cross-border trade. However, it is illegal or of business considering that legal commodities are concealed from the public and government authorities responsible for ensuring that no party engages in tax evasion practices. The trade is thus hidden from the trade regulators, making its revenues not to be included in the national statistics of the Gross Domestic Product (GDP) (Akyüz, 2017).

The concern of ICBT had gained precedence among research organizations and individuals. Although the trade occurs in different forms and is recognized by unique names, it has adverse effects on the economy of nations. The notable names used to refer to the informal trade are black markets, over and under-invoicing, parallel market activities, underground, unofficial and illegal business (Bensassi et al., 2019). The activities are not documented in the government business registers and accounting books used to analyse the GDP of a nation. The absence of records documenting the business activities gives the wrong signal to policy makers while also casting the traders in bad light within the business sectors (Kawala, Hyuha, William, Walekwa, Elepu, & Kalumba, 2018).

Since a significant amount of cross-border trade, like that between Britain and France, is growing steadily, it is challenging for national statistics to collect significant data. The vast majority of participants are survivalist businesses that are not registered or licensed. The economy of both countries has been significantly damaged by this. ICBT has been disregarded by a number of East African countries, although it still plays a crucial role in the rural economy and covert regional integration, as stated by Dihel and Goswami (2016). For instance, Southern and Eastern Africa have several incidences of informal trade. It is estimated that maize worth up to 60,000 metric tonnes is smuggled annually to Zaire from Zambia, and it costs the latter \$3 million

(Sperling, Birachi, Kalemera, Mutua, Templer, Mukankusi, & Rubyogo, 2021). The same incidence is reported in Malawi since a significant portion of its surplus maize is sourced illegally from Mozambique (Sperling et al., 2021). Therefore, Africa's southern and eastern regions are experiencing intense informal trade that positively affects the financial stability of the involved parties at the expense of the economic downfall of their respective states.

The East African Community (EAC) has high cases of informal trade reported across borders. The traders within these nations smuggle products across the boundaries without being noticed by the regulatory bodies. In the long run, the activities are not documented and therefore not accounted for when preparing the annual GDP reports. Bensassi and Siu (2021) noted that the ICBT in EAC can make up to 40% of the region's GDP if the regulatory bodies account for it. The trade activities include but are not limited to women's unrecorded economic activities who sell groceries at the border market to the large amounts of cereals and consumer goods moved from one end of a nation to the other.

A noteworthy proportion of the CBT between Kenya, Uganda, and Tanzania is informal. Women constitute the largest portion of small-scale traders involved in the black-market activities. Even though there have been efforts to promote trade integration between the three countries, the involved trader's still face informal trade activities. High taxation, restrictive policies such as quotas and tariffs, and corrupt regulators at the borders make it hard for the traders to engage in legal business activities (Struwig, Nuwagaba & Krüger, 2019). The importers are the worst hit since they incur significant expenses to have goods brought into their countries. Therefore, the high taxes explain why the rates of informal trade are high.

1.2 Statement of the Problem

Cross Border Trade (CBT) has gained a lot of interest among researchers over time and is one of the areas which has triggered many debates on how it has improved the lives of citizens in countries which engage in it. Although CBT occur through formal cross border trade and informally through ICBT, insufficient information on its contribution to the national accounts of countries has been accounted for, which therefore make them to come up with inadequate policies to regulate and promote trading activities. Bensassi and Siu (2021) notes that the ICBT in EAC can make up to 40% of the region's Gross domestic product (GDP) if the regulatory bodies accounted for it. Despite the intensive trade promotion protocols and market reforms aimed at easing commodity movement and abolishing the business restrictions, the nationals still engage in informal trade (Maweje & Nampewo, 2018).

According to Muga (2018) majority of the investors rely on ICBT as their main source of income because they use the income generated from ICBT to meet their household's basic needs

specifically food, school fees for their children, rent and healthcare services owing to the tax-free concession. A study done by Dihel & Goswami (2016) revealed that women contribution in value addition of informal traders to the GDP in Benin, Mali and Chad is 64%, 46% and 41% respectively. The proponents of ICBT argue that it provides excellent opportunities for entrepreneurs to start-up businesses since the cost of starting up business operations is low, creates employment, improves people's living standards, and fosters access to medical services. The business individuals in these practices evade paying taxes and even registering fees, which always impedes individuals with aspirations of setting up business empires (Tyson, 2018). Those opposed to ICBT argue that the failure of the involved individuals to pay taxes implies underreporting the GDP of the nations, thereby negatively impacting the economic stability of the nations. The business practice retards the economic growth of a nation since the tax evasion culture makes it hard for the two governments to improve the living conditions of their people(Luke, Masila&Sommer, 2020).

This justifies the need for this study to examine whether ICBT has contributed to reduced poverty and increased welfare in Kenya or not. ICBT is a means of poverty alleviation and women and men engage in it has come out as source of employment. This study would then examine whether Kenyan household welfare has improved as a result of cross border trading.

1.3 Objectives of the Study

This study's main goal is to establish the effect of informal cross-border trade on Kenyan households' poverty levels and economic welfare. The study's precise goals are;

- i. To determine the effect of informal cross border trade on household poverty levels on Kenyan households living around the border.
- ii. To examine the effect of informal cross border trade on economic welfare on Kenyan households living around the border.

1.4 Research Hypothesis

These are there search hypotheses that this study was based on:

H01:Informal cross border trade does not significantly affect household poverty levels of Kenyan households living around the border.

H02: Informal cross border trade does not significantly affect economic welfare of Kenyan households living around the border.

1.5 Scope of the Study

The goal of the study was to ascertain the effect of ICBT on Kenyan households' economic welfare. The study was conducted between January and April 2022 and focused on unregistered cross-border traders operating along the Kenyan border in Busiatown. A sample of 332 traders was selected from the target population of 2,400 informal cross border traders. The survey questionnaire and interview guide for focus group discussions were used to collect data for the study. The strategic location of Busia as a one-stop border post had an influence on how the Busia border was taken into account in this study.

2. LITERATURE REVIEW

2.1 The Theory of Absolute Advantage by Adam Smith

This theory is grounded on the idea that some nations have the absolute advantage of producing some products better than others, hence considered for export or import. Adam Smith created the theory in 1776 to refute his mercantilism theory (Tsaliki, Paraskevopoulou & Tsoulfidis, 2018). Based on the theory, nations are endowed with different and unique resources that place them at a competitive edge of producing more commodities in a particular line than other countries. The theorists, therefore, argued that governments should not impose restrictions against importation and exportation since no country can produce all the commodities needed by nationals, hence the need for CBT (Meoqui, 2021). Smith also argued that trade between nations should flow naturally based on the market forces. Hypothetically, the theorists provided an example of two nations, A and B. Smith argued that if country A has the resources and capability of producing a commodity in large quantity within a timely fashion, then it should be allowed to produce the product and sell it to other nations (Tsaliki et al., 2018). The same case should be applied to country B. According to him, the specialization gives the countries a competitive advantage and each nation has at least one product that it can sell best in the international market.

The theorist provided some benefits that come with this arrangement. First, he noted that specialization allows the countries to remain efficient, with their labour force being skilled in a particular production line. The production also would be efficient since the countries with absolute advantage would receive incentives and subsidies to encourage more production (Meoqui, 2021). The theory of absolute advantage postulates that the increased efficiencies resulting from specialization allow a business to benefit more from trade at an international level. Smith argued that the wealth of a nation should not be ascertained by the value of gold and silver it has but the degree to which the people's living standards are improved through the CBT (Tsaliki et al., 2018). These arguments thus challenged his theory of mercantilism. The theory applies to the ICBT between the Kenyans and Ugandans. Most of the nations in these countries export products they have an absolute advantage of producing in their respective nations to earn

a living and improve their living standards. The latter is measured by their ability to live above poverty and access education and medical services when the need arises.

2.2.0 Concept of Cross Border Trade

The economic growth and financial stability of house holds is significantly influenced by trade. Through trade, the stability of households is enhanced with people accessing the best medical services and educational opportunities (Bensassi&Siu(2021).Pieterse (2020) defines cross-border trade as the transaction in commodities between residents and non-residents of a state. Therefore, it is a trading partnership between individuals of different countries and involves crossing state boundaries to sell or purchase goods and services. The services include but are not limited to computer and information, financial, insurance, construction, communication, transport and travel, and manufacturing activities. Therefore, a sale and purchase activity are considered a cross border trade when it involves exchanging goods and services for money or other commodities between citizens of different countries.

Cross border trade occurs in two major forms. The first is informal business, conducted between individuals from different neighbouring countries. The parties are vulnerable to harsh economic conditions and unregistered to conduct trade. Kahiya and Kadirov (2020)opine that ICBT is a burgeoning business in sub-Saharan Africa, with its persistence having both positive and adverse socio-economic implications. According to the Organization for Economic Cooperation and Development, there are four main categories of unauthorized cross-border trade (OECD). The first type of ICBT includes entities and individuals that operate outside informally, meaning they are not registered and therefore lack operating licenses (Hastings & Wang, 2018). The second category relates to formally registered firms but with tendencies to circumvent duties and taxes. Third on the list are the entities and individuals formally registered but fully evading taxes and duties by reporting low returns from their operations (Pieterse,2020). The last category refers to companies facilitating smuggling and trafficking (Kahiya&Kadirov, 2020). Thus, informal trade involves carrying out unregistered and illegal business activities.

The second category is formal trade. Pieterse (2020) defines it as business activities that involve registered trade endeavours. The parties engaged in this exchange pay taxes and other levies and practice ethical and legal activities. There are also formal structures in the organizations that conduct formal trade. For instance, they have pay structures that dictate how much the employees should earn. Also, the trading partners have agreements that define their activities. For instance, they have clear policies and the quantity of purchases and sales for a specified

period. The working period is also structured with the organizations following regular attendance and employees allowed to work for hours stipulated in the labour laws.

2.2.1 Concept of Household Economic Welfare

Economic welfare is a broad term that explains how households are doing in financial stability and access to medical services and education opportunities. In most cases, economic welfare is measured in real GDP and real income. An increase in value from one base year to the other suggests that people are better off and therefore have access to means to foster quality living (Nguyen & Nguyen, 2019). Economic well-being affects access to educational opportunities because households with sufficient income can afford to pay for their children's education. Also, the real income derived from business and other revenue-generating activities influence the consumption patterns of individuals within households, thus contributing to their welfare (Nguyen & Nguyen, 2019).

Economic welfare also affects the housing status of individuals. People with steady and well-paying jobs or those involved in profitable business activities have access to good housing facilities and live in an environment free from pollution (Berisha & Meszaros, 2020). The income-generating activity and poverty levels have a significant relationship. Poverty is expressed when households have a steady and high income to meet their needs while saving and investing their income.

2.2.2 Informal Cross Border Trade and Poverty Levels

Chikanda & Raimundo (2017) define poverty as a state in which individuals and households lack the financial resources and essentials to promote a minimum standard of living. The involved parties earn less than \$1 a day. Therefore, poverty implies that income generated from households' employment and economic activities is too low that it cannot facilitate the acquisition of resources that foster quality living. Thus, the condition is characterized by a lack of proper housing, quality medical care, clean water, and healthy food. Nations have unique metrics for measuring the number of people living in poverty, with any income below \$1 being the global standard (Chikanda & Raimundo, 2017). Poverty is thus a cause of other problems like medical complications since individuals suffering from the condition lack proper housing and access to quality medical care.

Cross-border trade is essential in eradicating poverty. States that have opened their borders for trading activities tend to grow faster while developing innovations that foster increased higher productivity (Ubba & Koder, 2020). They also have high income and job opportunities resulting from business activities.

Mutsagondo, Karimanzira, and Makanga (2016) studied the effects of CBT on eradicating poverty. The author established that cross-border trade benefits poor households by offering consumers a wide variety of consumer goods. The author also established that trade works at three levels to boost a nation's growth and reduce poverty. The first is right policies that foster trade expansion to generate job opportunities, increased earning, and stable economies in households (Mutsagondo et al.,2016). The governments can foster cross-border trade in sectors that provide more job opportunities to ensure that their citizens are employed, and their economic welfare is improved. Lastly, Mutsagondo et al. (2016) found that cross-border trade allows individuals from low-income households to participate informal and informal trade since they are assured of markets for their produce. In the long run, the individuals' standard of living improves due to the enhancement in their income levels.

Cross-border trade is effective in achieving the millennium development goals. The third world countries depend on national and global economic growth to attain these goals. Arp, Ardisa, and Ardisa (2017) studied the effects of cross-border conflicts on poverty alleviation. They established that this form of trade is essential for stimulating economic progress and alleviating poverty. According to Arp et al. (2017), cross-border trade eradicates extreme poverty and hunger, thus addressing the first-millennium development goal. Cross-border trade also reduces by half the number of households suffering from hunger and those living below the poverty line (Arp et al., 2017). Additionally, the author established that trade contributes to international partnership development while removing the trade barriers likely to hinder national and regional trade. Therefore, CBT is an enabler for the reduction of poverty.

3. RESEARCH METHODOLOGY

3.1 Research Design

This study adopted a descriptive survey research design owing to its ability of fact analysis and aids in the development of a thorough comprehension of the study subject. Descriptive research also gives the researcher the chance to analyze how people behave in real-world situations like in the case of cross border traders (Mugenda, 2008). This study was conducted at the Busia-Kenya border which is a strategic one stop border hosting cargo under the EAC and COMESA protocol.

3.2 Target population, Sampling Procedure and Sample Size

This study had target population of 2400 informal cross border traders where this study sampled 332 respondents using Cochran 1977 formula. Convenience, Cluster sampling and simple random sampling was employed in selecting of the sample size. The sample size was arrived at as follows;

The Cochran formula is:

$$n_0 = \frac{Z^2 pq}{e^2}$$

(Cochran,1977)

Where:

n_0 is sample size of an infinite population.

e is the error margin

p is the estimated proportion of the population under study

q is 1 – p

the Z value is found in a Z table.

Table 3.1 lists their preferred products.

Table 3.1: Target Population

Specialization of traders	Frequency	Proportion
Fish	450	19%
Fruits	436	18%
Fresh food	424	18%
Mutumba clothes	488	20%
Cereals	252	10%
Others	350	15%
Total	2,400	100%

Source: Busia County, Department of Trade, Cooperatives and Industrialization(2022)

According to Kotrlik& Higgins (2001), when there is inadequate information on the subject under study, use p = 0.5, confidence level of 95% and a 5% precision. Using the Z-table, 95% level of confidence gives Z values of 1.96.

Therefore, sample size (no) = $(1.96)^2 (0.5) (0.5) / (0.05)^2 = 385$. For a finite population, the Cochran formula is:

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

Where: n_0 is sample size recommendation,

N is the population size

n is the new adjusted sample size.

Therefore, with a population of 2,400 informal cross border traders under the study, the adjusted sample size was arrived at as shown below:

$$n = 385 / (1 + (384/2400)) = 332.$$

The above sample size was distributed according to their proportion in the population under study as shown below.

Table 3.1: Sample size

Specialization of traders	Frequency	Proportion	Sample size
Fish	450	19%	63
Fruits	436	18%	60
Fresh food	424	18%	60
Mutumbaclothes	488	20%	66
Cereals	252	10%	33
Others	350	15%	50
Total	2,400	100%	332

Source: Researcher, 2022

Convenience sampling, Cluster sampling and simple random sampling were used in this study. To collect evidence on the effects of ICBT on Kenyan households poverty levels ' economic welfare by focusing on a case study of trade between Kenya and Uganda, the study used survey questionnaires to collect data from informal cross border traders. Trained research assistants were instrumental in the administration of interviews and questionnaires. The researcher and research assistants engaged with the traders voluntarily on interviews and administered questionnaires to get more information on ICBT and economic welfare.

3.3 Data Analysis Techniques

Data analysis entails condensing raw data and interpreting it to derive meaning (Politano, Walton&Parrish,2018).Both descriptive and inferential statistical analyses were used in the investigation. Regression analysis and inferential statistics were employed. Means, standard deviation, percentages, and frequencies were used in the descriptive statistics analysis. Tables, graphs, and diagrams were used to present the data. The effect of informal cross-border trade on households' economic welfare was measured using regression analysis.

General Regression Model Description

The following multiple regression model was adopted in this study:

$$Y=\beta_0+\beta_1X_1\text{..... Equation 1.1}$$

Where; **Y** represents Household Poverty levels

β_0 represents they-intercept

β_1 , represent coefficients of informal crossborder trade

X_1 , represent in dependent variable (informal cross border trade)

3.9. Ethical Considerations

To ensure ethical principles the researcher got an authorization letter from Masinde Muliro University of Science and Technology (MMUST) to validate the research work was for academic purpose only. A research permit was also obtained from The National Commission for Science, Technology, and Innovation (NACOSTI) in Kenya. At the study area permission was also obtained from the Busia County Commissioner, Director of Education and Director Ministry of trade. The respondents were informed of the whole process before data collection .The respondents were informed to conceal their identity and free to withdraw from the research process any time they felt uncomfortable. The respondent was assured of no hidden media being used, no lies or deceit during the data collection process.

4. RESEARCH FINDINGS AND RESULTS

This section the study's findings as they emerged from the data analysis.

4.1 Reliability and validity of the instruments

The degree of consistency in data produced by an instrument determines its reliability, which was established by first confirming internal consistency and then conducting a pilot study in the Isebania Border. A questionnaire is deemed credible, according to Mutai 2000, if the Cronbach's Alpha coefficient is higher than 0.70. A sample of 10 respondents from Isebania Border was done to ascertain whether the questionnaire was valid and reliable. Malaba border was not chosen since it portrayed similar characteristics as the Busia border. The informal cross-border trade independent variable and the two dependent variables (poverty levels, economic welfare) were subjected to a reliability test using SPSS version 2020. The findings are presented below.

Table 4.1 Reliability test

Variable	Cronbachalpha
Poverty levels	.879
Economic welfare	.869
Crossborder trade	.857

Source:(Researcher,2021)

All of the variables passed the test above and earned Cronbach's Alpha values greater than 0.7, meeting the minimum requirement of 0.7 for data internal consistency (Mugenda,2008). Cronbach's alphas of the constructs, which demonstrated that the study constructs were highly associated to one another, were regarded to have suggested a satisfactory level of validity and reliability for the constructs in this study.

4.2. Validity of the instrument

The appropriateness of any research value, tools and techniques, and procedures, such as data gathering and validation, is referred to as validity (Mohamad, Sulaiman, Sern&Salleh, 2015). Additionally, validity establishes the reliability of the methodology, sampling procedure, data processing procedure, and study conclusion (Golafshani, 2003). A number of validity checks were done during the questionnaire's development to make sure the research instrument had the ability to give answers to the intended questions assesses the things it was intended to measure and functions as intended. Through discussions with the informal cross-border traders chosen for the pilot study, the questionnaire's stated questions were used to determine the validity of the data collection instruments. Validity was also done through analysis by experts at Masinde Muliro University of science and Technology Economics department going through the questionnaire to see whether the questionnaire captured all the objectives.

4.3 Response Rate

The study sampled three hundred thirty-two (332) households' respondents to take part in the study however 285 respondents completed and returned the questionnaires. Table 4.2 provides an overview of the questionnaire return rate.

Table 4.2: Questionnaire Return Rate

		Frequency	Percent
Valid	Returned	285	85.8
	NotReturned	47	14.2
	Total	332	100.0

Source: Field Data,2021

As a result, 285 of the questionnaires were correctly completed and used in this study's analysis. This was within the bounds of a big sample size and represented a questionnaire return rate of 85.8% of the sample size. For data analysis and reporting, a response rate of 50% is sufficient, a rate of 60% is generally good, and a rate of more than 70% is exceptional Mugenda (2008). As a result, the study's response rate of 85.8% was sufficient for data analysis and the publication of its conclusions regarding the effect of ICBT on Kenyan households' economic welfare. The answer rate of 85.8% was agreeable to studies by Muga (2018) who also had a response rate 88 percent as she assessed impact of ICBT on the expansion of women-owned companies along the Busia border.

4.4 Demographic Characteristics of the Respondents

The goal of the study was to determine how the effect of ICBT on Kenyan households' economic welfare. As described by Manirampa (2014) in his study on the impact of ICBT on the socio-economic development of small-scale traders in Rwanda, the sample characteristics reviewed included age, gender, marital status and level of education. These characteristics were examined to ascertain whether there was a correlation between them and the respondents' trading activities.

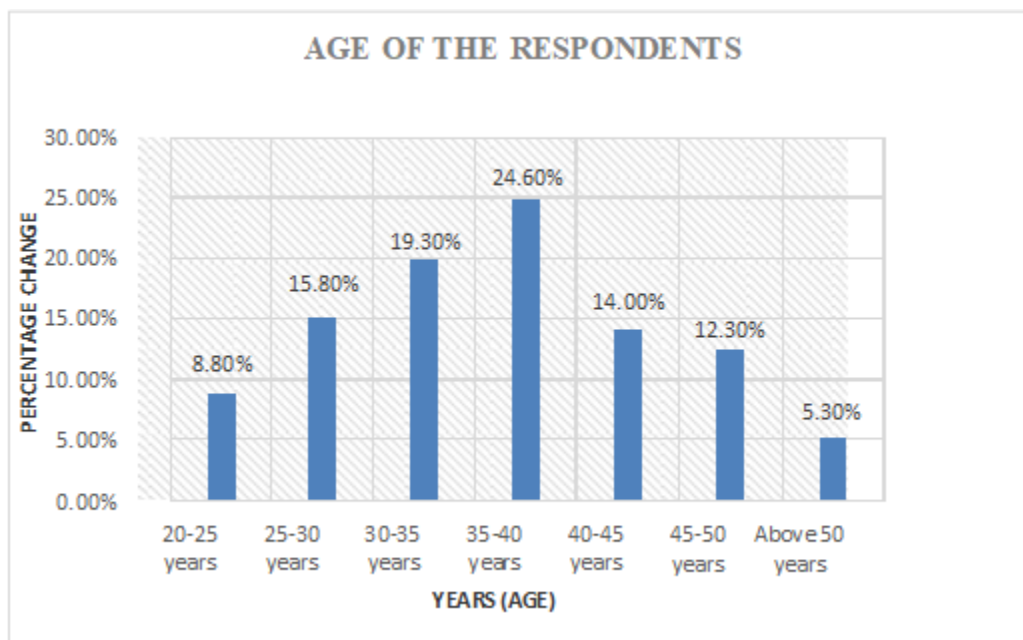
4.5 Age of the respondents

The majority of respondents (24.6%) were between the ages of 35 and 40, followed by those between the ages of 30 and 35 (19.3%), 25 to 30 (15.80%), 40 to 45 (14.0%), 45 to 50 (12.3%), and 20 to 25 (8.8%), with those above 50 (5.3%) making up the minority. It was also found from the focus group discussions that the above age distribution was attributed to the introduction of many young people to ICBT by their parents or guardians because they were

energetic and aggressive in trade. The decrease in age after 40 years was caused by tiresomeness and successful introduction of the young people to takeover from the parents or guardians.

The majority of ICBT participants, according to Wrigley-Asante (2013), are between the ages of 30 and 40. In EAC, this age is characterized by a large number of married people who have more responsibilities to attend to but are in need of more formal sources of income, which forces them to engage in informal activities such as ICBT in order to meet their obligations in light of the realities of contracting economies (Muga, 2018).

Figure 4.1: Age of the respondents

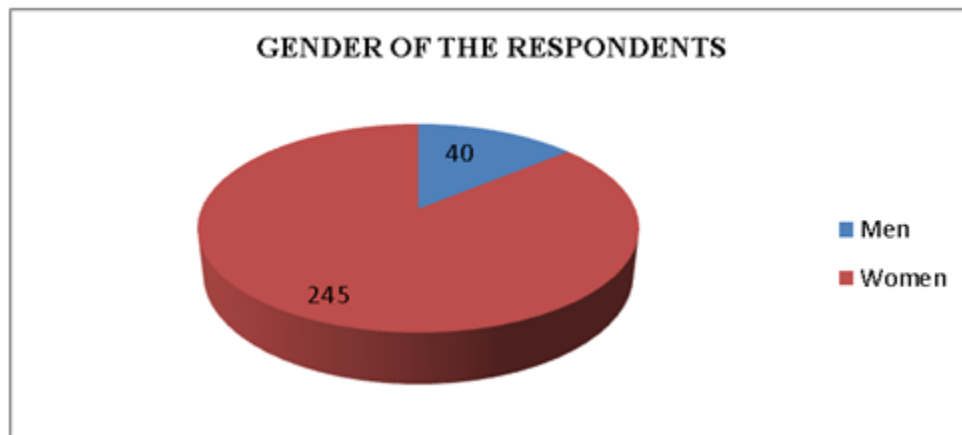


4.6 Gender of the respondents

It determined that women made up 86 percent of the respondents among informal cross-border traders in Busia, Kenya, while men made up 14 percent. The previous studies on ICBT showed that women mostly did ICBT in small scale are more compared to men who involved themselves in large scale ICBT. This research work is in tandem with studies in South and West Africa, the largest proportion of informal cross border traders constitute of women who represent between 70% - 80% (African Trade Policy Centre, 2009:4). In Rwanda, women make up 74 percent of informal cross-border traders, and 90 percent of these women traders rely only on ICBT for their revenue (UNWOMEN2012). According to Xheneti, Smallbone & Welter (2013) the primary economic actors are women informal cross border traders (WICBT) whose activities

should be recognized as an array of the formal sector because they contribute to regional integration, create employment and wealth, reduce poverty and pay taxes.

Figure 4.2: Gender of the respondents



Source: Field Data,2022

4.7 Effect of ICBT on poverty levels

The effect of ICBT on poverty levels of Kenyan households living around the Busia border will be the main topic of this section. Table 4.4 displays the descriptive executive summary.

In the scale of 1-5 (where 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5 = strongly agree)

Table 4.4: Descriptive statistics on effect of ICBT on poverty levels

Description	N	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	S. D
Informal crossborder trade has led to access of various food Varieties in Busia border.	285	3 (1.0)	11 (4.0)	51 (17.8)	152 (53.5)	68 (23.8)	4.25	1.132
Informal crossborder trade has increased access to social amenities in Busia border	285	23 (7.9)	11 (4.0)	79 (27.7)	87 (30.7)	85 (29.7)	4.06	1.220
The ease of obtaining family income has increased as a result of informal cross-border trading.	285	17 (6.0)	24 (8.8)	82 (28.5)	68 (24.0)	94 (32.7)	4.00	1.120

Informal crossborder trade has eased accessibility to food, shelter And clothing	285	30 (10.6)	70 (24.4)	64 (22.1)	97 (34.1)	24 (8.8)	4.104	1.274
Informal crossborder trade has increased asset accumulation Among households in Busia border.	285	17 (6.0)	24 (8.8)	82 (28.5)	68 (24.0)	94 (32.7)	4.01	1.120
Informal crossborder trade has led to improvement of employment Opportunities in Busia border.	285	67 (23.4)	27 (9.6)	72 (25.2)	86 (30.0)	33 (11.8)	3.98	1.274
Informal crossborder trade has increased access to safe drinking Water in Busia border.	285	28 (9.7)	56 (19.8)	96 (33.6)	96 (33.6)	9 (3.2)	3.91	1.118

Source: Field Data,2022.

According to the study, 152 (53.5%) of the respondents felt that ICBT has led to access of various food varieties in Busia border, as indicated by a mean of 4.25 and a standard deviation of 1.132. Furthermore, it was discovered that 87 respondents, or 30.7%, believed that ICBT had increased access to social amenities in Busia border. This finding was confirmed by data with a mean of 4.06 and a standard deviation of 1.220. 94 (32.7%) respondents strongly agreed that the ICBT has increased the ease of obtaining household income, which had a mean of 4.00 and a standard deviation of 1.120.

On the other hand, 97 respondents (34.1%) agreed that ICBT has made it easier to get clothing, food, and shelter, and this opinion was confirmed by a mean of 4.104 and a standard deviation of 1.274. This study's findings, which are backed by a mean of 4.01 and a standard deviation of 1.120, show that 94 (32.7%) of the respondents strongly agreed that ICBT has enhanced asset accumulation among households in Busia border. In Busia border, it was discovered that 86 (30.0 percent) of the respondents agreed that ICBT has led to improvement of employment opportunities in Busia border. A mean of 3.98 and a standard deviation of 1.274 were used to corroborate this. Finally, although 96 (33.6 percent) of the respondents agreed with the statement that ICBT has increased access to safe drinking water in Busia border, 96 (33.6 percent) of the respondents were not sure. This group had a mean of 3.91 and a standard deviation of 1.118.

Based on the aforementioned data, it can be concluded that the ICBT between Kenya and Uganda has improved the economic wellbeing of the Kenyan households living at the Busia border by reducing poverty. According to Nkoroi (2015), more than two thirds of the population in both Kenya and Uganda live in absolute poverty, and ICBT plays a beneficial role on poverty reduction through the provision of jobs and earnings. ICBT is one of the channels that people find it easiest to embrace, even though it may not be the ideal strategy to address poverty reduction (Gonzalez and Lamanna, 2007).

4.7.1 Hypothesis testing

Information on the testing of the research hypotheses is provided in this section of the study.

HO1: There is no significant effect of informal crossborder trade on poverty levels of Kenyan households living around the border.

Table 4.5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.457 ^a	.331	.337	5.03507

Source: Field Data,2022

According to the study's findings in Table 4.5, R-square is 0.331. This suggests that informal cross-border trade in Busia border accounted for 33.1% of the difference in poverty levels.

Table 4.6: ANOVA test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4320.7741	1	4320.741	170.431	.002 ^b
	Residual	5704.1760	284	20.07456		
	Total	10024.9501	285			

- a. Dependent Variable: Poverty levels
- b. Predictors: (Constant), Informal crossborder trade

Source: Field Data, 2022

Based on the results in Table 4.6, the ANOVA test showed that, in this model, the independent variable, ICBT, is significant at the 0.05 level of significance ($p=0.002 < 0.05$), indicating that it is essential in predicting the levels of poverty in the Busia border.

Table 4.7: Coefficients of the Model

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std.Error	Beta		
1 (Constant)	5.411	1.017		5.319	.0149
Informal cross border trade	.745	.514	.457	1.448	.002

a. Dependent Variable: Poverty levels

Source: Field Data, 2022

According to Table 4.7's study results, ICBT significantly influenced Busia border's poverty levels (t-statistic=1.448, p-value=0.002 < 0.05). ICBT had a meaningful impact on poverty levels in Busia border. This can be affirmed by correlation analysis of ICBT and poverty levels.

Table 4.8: Correlations between ICBT and poverty levels

		ICBT	Poverty levels
ICBT	Pearson Correlation	1	-.804**
	Sig. (2-tailed)		.001
	N	101	285
Poverty levels	Pearson Correlation	-.804**	1
	Sig. (2-tailed)	.001	
	N	285	101

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

Source: Field Data, 2022

The results of correlation analysis are as shown in Table 4.8. The findings indicated that there was a negative and significant relationship between ICBT and poverty levels. This is depicted by a Pearson correlation coefficient $r = -0.804$, $p\text{-value} = 0.001 < 0.05$ which was significant at 0.05 level of significance. This implies that ICBT results in decrease of poverty levels amongst the residents of Busia border.

Mutsagondo, Karimanzira, and Makanga (2016) studied the effects of cross-border trade on eradicating poverty and they established that cross-border trade benefits poor households by offering consumers a wide variety of consumer goods. They also found that trade works at three levels to boost a nation's growth and reduce poverty. The first is right policies that foster trade expansion to generate job opportunities, increased earning, and stable economies in households. Thus, ICBT is a source of livelihood to people involved in it for survival.

The second level is that governments can foster cross-border trade in sectors that provide more job opportunities to ensure that their citizens are employed, and their economic welfare is improved. Lastly, they found that cross-border trade allows individuals from low-income households to participate in formal and informal trade since they are assured of markets for their produce. Their standard of living eventually rises as a result of an increase in income.

5. FINDINGS, CONCLUSIONS AND POLICY RECOMMENDATIONS

- 1) According to the study, respondents concurred that international commerce was their primary source of income. The majority of respondents claimed that high rates of job loss in urban centers led to an increase in ICBT participation. The flexibility of ICBT to suit all potential interested parties made it appealing. Respondents concurred that the high rate of youths choosing ICBT has contributed to its expansion because there are few opportunities for formal employment.
- 2) According to the respondents, women made up the majority of traders. The respondents mostly concurred that women experienced gender discrimination in the workplace. Because there was a lack of coordination across the associated ministries, government policies did not effectively affect the real process. A lack of confidence in social security benefits pushed new hires to enter the trading industry, and respondents concurred that a region's culture greatly influences the development of ICBT in a borderland community.
- 3) According to the survey, respondents largely believed that women were responsible for the majority of the workers in ICBT. In order to provide for their family, women relied on informal trading. Most women were able to make a living through small-scale trade. The majority of women, according to the respondents, were the targets of gender discrimination in the society.
- 4) Though the authorized crossing points were overseen by national security officers, informal trading took place. The respondents admitted that they were affected by unclean markets. According to respondents, businesswomen are the most susceptible to unfair commerce. Respondents stated that there were little trade rules and extremely high taxes that hindered formal trade.

- 5) According to the study, respondents were affected by the bureaucratic processes that took a lot of time. The respondent claimed that ineffective import and export bureaucratic regulations existed. According to the respondents, unfair rules and regulations increased the cost of doing business.
- 6) In Busia, socioeconomic activity had increased due to informal trading. Respondents concurred that more graduates are entering the workforce. According to the respondents, the trade attracts a wide diversity of people due to its sophistication. MOST respondents agreed that the GDP resulting from trade was significantly understated due to scanty informal trade revenue statistics.
- 7) According to the study, ICBT, which has an R-square value of 0.331, accounts for 33.1% of the variation in poverty levels in Busia border. The results confirmed that ICBT had a significant effect on poverty levels in Busia (t-statistic=1.448, $p=0.002<0.05$). Therefore, the null hypothesis was rejected at the 5% level of significance, proving that informal cross-border trade had a significant effect on poverty levels in Busia border. As a result, every unit rise in the ICBT resulted in an increase of 0.745 in the amount of poverty levels in the Busia border.
- 8) This demonstrates that by increasing availability and cost, ICBT had a crucial role in improving food security for the vendors. Because most informal cross-border traders were able to buy plots of land and build residences there, the study demonstrated that their living conditions rose. It was also clear that the majority of the traders earned enough money to support their families, pay for their children's education, pay for medical expenses, grow their businesses, and increase their savings.

5.4 Recommendations

- 1) The EAC should come up with proper cross border trade protocols and reduce bureaucracies involved in it so as to promote conducive activities concerning crossborder trade.
- 2) In order to draw in a large number of cross-border traders, Kenya's government needs to develop appropriate laws that support formal trade across borders so that its contribution can be taken into account in the country's books of account.
- 3) There search also urges Kenya's government to implement effective poverty-eradication policies to do away with the notion of engaging in illegal cross-border trading to make ends meet.

- 4) The report goes on to advise women to handle their small-scale trades well in order to survive. Market should be cleaned up. Women shouldn't be at risk from unethical trade. Low taxes and few trade restrictions should be implemented to support the expansion of female-owned enterprises in Kenya.
- 5) The County Government of Busia through the department of Trade, Cooperatives and Industrialization should come up with policies, measures and programs which bring all cross-border traders on board in order to quantify their contribution to poverty levels and household welfare.
- 6) Households' economic welfare should also be promoted especially to the poor people. This is because most of them venture into illegal ICBT which is practised in small scale so as to earn a living.

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