

REVIEW

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# A systematic review of informal cross-border trade in African economies towards vision 2030

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## Abstract

Informal cross-border trade (ICBT) is spreading across Africa driven by high poverty levels and influenced by factors such as climate change, political instability and economic marginalisation among others. This desktop-based review synthesised the existing literature to explore the dynamics of ICBT in Africa. Findings reveal that while formal trade remains limited, ICBT thrives due to weak economic integration frameworks like SADC, ECOWAS and COMESA which often overlook informal trade. Biased policy reforms, retrenchments and exclusion from formal markets further exacerbate informality. ICBT significantly contributes to Africa's GDP, particularly as women who represent over 70% of participants engage in this trade due to marginalisation from the formal economy. Although both men and women participate in ICBT, the later tend to face serious vulnerabilities, including health risks such as HIV/AIDS, sexual exploitation and harassment often as a means of evading taxes or gaining access to services. The trade includes a wide array of goods both legal and illicit facilitated by corruption and inadequate border infrastructure. Despite its challenges, ICBT remains a vital livelihood strategy for many Africans. Rather than seeking to eliminate it, the article advocates for the development of a framework to formalise, regulate and safeguard ICBT while aligning it with sustainable development goals. Enhancing border infrastructure, gender-sensitive policies and institutional support can help maximise ICBT's benefits while mitigating associated risks, fostering inclusive and sustainable economic growth in Africa.

**Keywords** Informal cross-border trade, Policies and regulations, Nature, Challenges, Sustainability, Sustainable development goals, Africa

## 1 Introduction

Informality refers to the production of legal goods and services by firms and workers that do not comply with formal business or labour market regulations [34]. This phenomenon is largely attributed to weak governance on regulations and policies implementation, and enforcement that in turn promote informality in a variety of forms, including informal cross-border trade (ICBT). ICBT refers to the illegal activities of cross-border commerce conducted by unregistered small-scale traders (Kahiya and Kadirov 2020) [40]. It involves trading in legitimately produced goods and services, which evades certain taxes



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and regulatory burdens (Olomi et al. 2018) [9]. This entails that ICBT is characterised by the flow of goods traded by both formal and informal entities that are not recorded within the government records and thus traders evade paying taxes as required by trade regulations and policies. The assertion clarifies that the laws and policies implemented to govern the trade are less effective in meeting people's demands which force business merchants to breach the commerce legislation. Hence, ICBT is dominated by operators who participate in buying and reselling of goods as a small-scale operation. In Africa there are different types of ICBT including informal traders who entirely operate outside the formal procedure and the registered traders who breach the regulations within the trade process (Khiya and Karidov 2020) [39]. Globally, 2 billion people (61%) are employed in ICBT [45]. In developing countries, the informal economy accounts for 80% of the GDP [32]. These large proportions reveal that ICBT is the backbone of many livelihoods across the globe particularly in developing nations, Africa.

Northern African countries' ICBT, particularly Tunisia and its foreign trading partners, Turkey and China, participate in informal cross-border trade using the land and maritime corridors (Meddeb 2021) [25]. This implies that ICBT operates using the formal border ports through unlawful procedures which in turn facilitates the smuggling of legal and restricted goods that are unrecorded in customs and government reports. Political instability and assassinations in countries including Tunisia and Libya promote the unlawful trade within their borders (Meddeb 2021) [4, 25]. Hence, unstable political situations in African countries initiate weak institutions and weak law enforcement which promote the illegal flow of goods. This type of trade violates the bilateral trade agreements between Tunisia, Libya and Algeria (Meddeb 2021), which shows that the enacted economic integration policies are failing to meet people's demands which forces them to illegally import and export goods.

ICBT in Eastern Africa is initiated by the flow of staple foods, 95% of livestock and cereals through undefined trading routes particularly in Northern Kenya, Eritrea, Ethiopia, Somalia, Sudan and Djibouti (Ghebreyesus et al. 2008; Little et al. 2010) [8, 17]. Food insecurity is regarded as the contributor among other aspects that promote ICBT in Africa since people are forced to illegally source food outside their borders for sustenance. Further, the Horn of Africa borders are characterized by government and administration centres far away from ports, bureaucracy and the presence of terrorists' clans which facilitates the intrusion of illegal goods and services (Little et al. 2010) [24, 51]. Therefore, inadequacy of administration infrastructure and cumbersome border processes enable corruption through bribery to allow the illegal flow of goods and services.

Similarly, in West Africa ICBT is dominated by 90% of unemployed people trading high value goods including petroleum (gasoline and oil) and human trafficking is also common (Jarreau 2019) [3, 5, 33]. High unemployment rates expose people to increased poverty which drives them to engage into unlawful trade activities of human trafficking and petroleum as a way of generating income for better livelihoods. It is also an insight that despite illegality, ICBT contributes to employment creation and regional economic growth of countries sharing the informal common market which also implore the need to formalise that type of trade. The dormant and discoverable relationships of informality in West Africa include Senegal–The Gambia and Nigeria–Benin–Togo clusters and these links are based on their religious connections from the Yoruba, Igbos and Hausas groups [5, 20]. ICBT is pervasive whereby it perpetuates within the groups sharing same

social characteristics such as ethnicity. In West and Central Africa 60% of women participate in ICBT as street vendors of food, cosmetics, clothing and herbal medicines and are identified as porters “Deka Deka” for little remuneration that is only limited for family upkeep (Khiya and Karidov 2020) [22, 39]. This shows that ICBT mostly risks women because they are exploited to conduct unlawful services for low returns. Therefore, ICBT needs to be strengthened by implementing legislation and policies to allow it to provide more and recorded earnings and protect women in cross-border trade.

In Zimbabwe, an estimated population of 70–80% of women participating in ICBT smuggle cheap new and used products including clothing, furniture, food and cars [12, 15, 16, 44, 49]. This context shows that ICBT is crucial as it contributes to importation of different new and second-hand cheap goods and products which are affordable by the poor people in African communities. Despite the benefits of ICBT, women are exposed to the risk of health issues such as HIV infections [26, 46], showing that women in ICBT are often exposed to adverse health conditions which implore the need to develop mechanisms which protect females from health risks. Additionally, ICBT in central Africa, and Southern Africa is characterized by the trade in clothing, furniture, agricultural and horticulture products [12, 15, 35, 37, 38, 42]. Outsourcing a variety of goods and products have the potential to negatively affect local industries production and contribute to increased environmental effects through solid waste from no longer usable imported materials.

The contribution of ICBT to total imports between African countries, employment creation and income generation shows that this type of trade needs to be improved and protected. Continued ICBT and marginalization of women shows that the current adopted trade policies are ineffective to manage informality. The flow of weapons used to destabilise social and political security and the exposure of women to health implications call for the need to effectively introduce legislation and policies that govern ICBT. The idealized framework to be developed will facilitate Africa's Agenda 2063 achievement of leaving no one behind when women are considered in the formal productive work to safeguard them from ICBT exploitation associated with health risks. There is also close alignment of the United Nations Agenda 2030 that is reflected in 17 Sustainable Development Goals (SDGs), for example SDG 5 aims at achieving gender equality and empowering all women and girls by better accommodating females in more productive work spheres. On the other hand, SDGs 10 aims at reducing inequality within and among countries that can be achieved by revitalizing global partnership (SDG 17) including the African Continental Free Trade Area and the associated Protocol on Women and Youth in Trade that promotes collaboration among governments, trade unions and civil society. By identifying gaps in existing literature and adopted practices such as regional economic integrations, the study will implore improved dimensions of attaining a borderless continent that corroborates with the continental trade free area goals. Averting the problems in ICBT, women exploitation, corruption and flow of restricted goods because of informal trading will be lowered. Existing studies on informal cross-border trade (ICBT) remain fragmented, context-specific and regional. Afreximbank [2] quantified trade flows in ECOWAS but ignored other regions, while Sierra Leone's data showed national trends without cross-country insights [48]. ECA's initiative (2023) highlighted border challenges and gender issues but did not align with Vision 2030. This study addresses these gaps by reviewing ICBT across Africa and aligning

findings with Africa Agenda 2063, thereby providing a holistic basis for streamlining ICBT into African formal economies. Therefore, it is against this background that the study seeks to develop a framework to manage the malice in informal-cross border trade in African economies in line with global and national development vision for 2030.

## 2 Theoretical framework

This study is underpinned by the Dual Economy Theory advanced by W. Arthur Lewis in his seminal work, *Economic Development with Unlimited Supplies of Labour* (1954). The theory posits that developing economies are characterised by the coexistence of two sectors: a modern, formal, capital-intensive sector, and a traditional, informal, labour-intensive sector. Its central assumption is that surplus labour from the informal sector sustains the economy when the formal sector cannot absorb employment needs. The theory has been applied in numerous African contexts to interpret the persistence of informality, such as Hart's [21] study of urban informal employment in Ghana and Chen's [10] analysis of informal economies in global value chains. This framework is relevant to the present review as it explains the structural coexistence of formal cross-border trade and informal cross-border trade (ICBT), aligning with the study's variables of regulation, employment absorption, and livelihoods under Africa's Vision 2030. However, the theory has been criticised for oversimplifying the boundaries between sectors and treating informality as transitional. To address these limitations, the study complements the Dual Economy lens with contemporary perspectives that view informality as a permanent and adaptive system rather than a residual one.

The study is also anchored on the Institutional Theory, rooted in Douglass North's *Institutions, Institutional Change and Economic Performance* (1990). This theory emphasises that economic performance is shaped by both formal institutions (laws, regulations, governance systems) and informal institutions (norms, networks, and trust) that influence transaction costs and enforcement. The theory has been widely applied to African ICBT contexts, such as Bouët et al. [7] assessment of cross-border cocoa trade between Ghana and Côte d'Ivoire, and Golub's [18] work on ICBT networks in Gambia-Senegal and Benin-Nigeria. Within this study, the Institutional Theory is highly relevant as it explains how institutional weaknesses, regulatory fragmentation, and enforcement gaps shape traders' choices to operate informally. This links directly to the constructs of governance, regulation, and informal market resilience in the systematic literature review.

Despite its utility, Institutional Theory has limitations. Critics argue that it can be too broad or vague, often identifying that institutions matter without specifying the micro-level mechanisms through which they influence individual trader behaviour. To mitigate this, the study integrates evidence from empirical case studies that show how institutions interact with trader practices in African borderlands, thereby grounding the theory in observable outcomes. When combined, the Dual Economy and Institutional frameworks offer a robust theoretical lens: the former highlights structural labour and livelihood dynamics, while the latter explains the regulatory and governance environments that sustain ICBT. Together, they allow for a nuanced interrogation of cross-border trade informality in Africa in relation to the goals of Vision 2030.

### 3 Methodology

The research used a systematic review by adopting the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology. This literature review paper was conducted as desktop-based research. Desk-top research is ideal for review articles because it involves reanalysing secondary data sources without conducting field surveys (Gumbo et al. 2024, 2025). The Scopus database was used in the research as the main source of secondary data. Scopus database was used because it comprises the peer reviewed and high impact journals of various study disciplines which makes it ideal for desktop-based research. Sci-Hub was used to access the selected documents that the Scopus database could not retrieve. Initially, the researchers agreed on the key search terms to use in the selected databases (Table 1).

The Scopus database included the use of “Informal cross-border trade” as the key-words. Advanced search documents enabled the access to 55 documents. The suitability of the selected documents was based on the literature written in English which is the core language of the authors’ affiliation university. The inclusion and exclusion criteria began by limiting the documents by country where only African countries were selected and presented a total of 31 documents. Correspondingly, the selection by articles limited the documents to 24. Further, 19 documents were nominated by limiting using the publication year. Documents that were published within the period of 2015 to 2023 were selected. This period was selected because it bounds the implementation of the United Nations Sustainable Development Goals (SDGs) hence, it facilitated the review of informal-cross border trade in African economies in line with the United Nations Vision 2030 incorporating set targets from these SDGs. Subsequently, the csv file was exported for downloading and 19 documents were downloaded. Title-based and abstract-based selection was also conducted, and all documents were considered relevant. The accessed 19 documents were considered suitable for the research because they contained relevant information through full-text reading (Fig. 1).

### 4 Limitations of the study

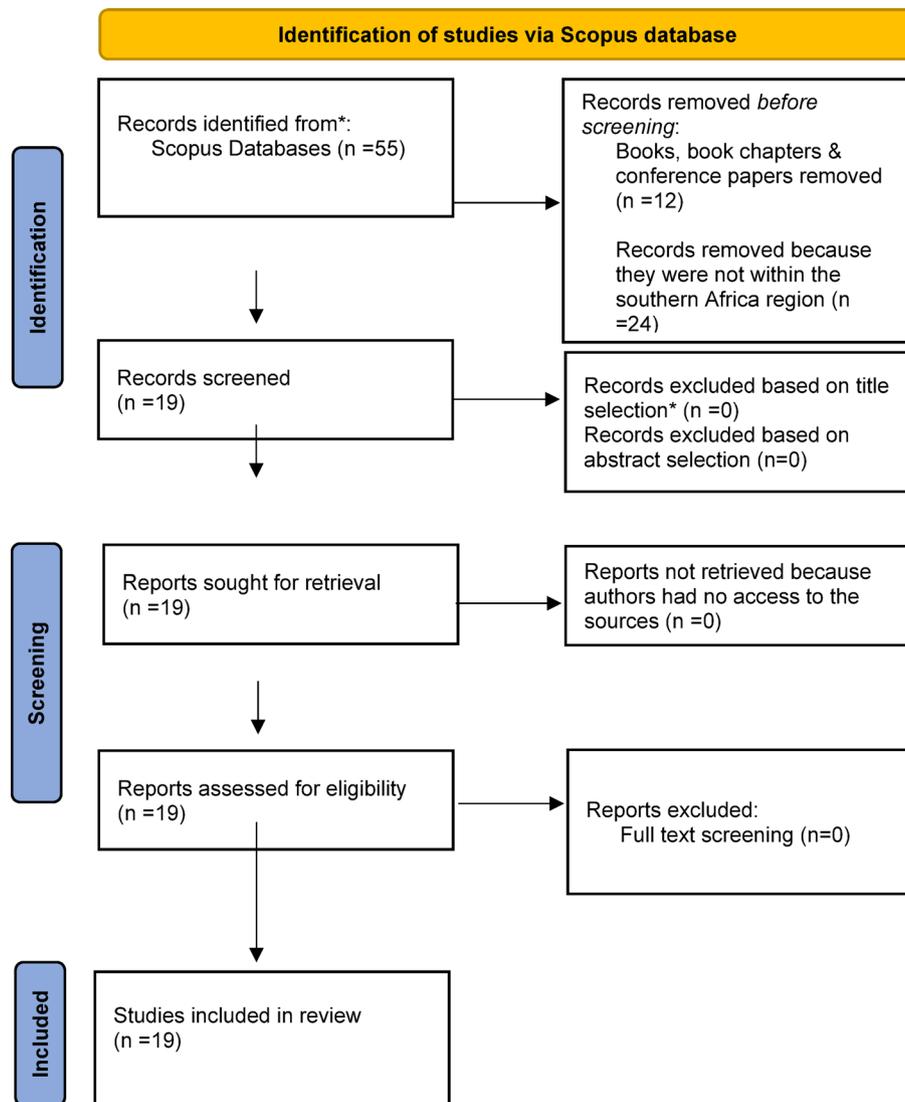
This study has limitations that should be acknowledged. The systematic literature review relied solely on the Scopus database. Although reputable, it may not provide full coverage of all relevant research on the subject for the African continent with 54 countries. As a result, important studies indexed in other databases or contained in grey literature might have been overlooked. The review was based on 19 documents after exclusion and inclusion criteria focusing specifically on Africa, which limits the breadth of perspectives captured. This likely increased the likelihood of redundancy across sources. These factors may restrict the generalizability and depth of the findings. To address these gaps, future studies should consider broadening the search strategy to include multiple databases, such as Web of Science and Google Scholar, as well as regional repositories and

**Table 1** Scopus database selection criteria

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TITLE-ABS-KEY ("informal cross border trade") AND ( LIMIT-TO ( AFFILCOUNTRY, "South Africa") OR LIMIT-TO ( AFFILCOUNTRY, "Zimbabwe") OR LIMIT-TO ( AFFILCOUNTRY, "Botswana") OR LIMIT-TO ( AFFILCOUNTRY, "Tanzania") OR LIMIT-TO ( AFFILCOUNTRY, "Mozambique") OR LIMIT-TO ( AFFILCOUNTRY, "Zambia") OR LIMIT-TO ( AFFILCOUNTRY, "Lesotho") OR LIMIT-TO ( AFFILCOUNTRY, "Uganda") OR LIMIT-TO ( AFFILCOUNTRY, "Kenya") OR LIMIT-TO ( AFFILCOUNTRY, "Ghana") OR LIMIT-TO ( AFFILCOUNTRY, "Senegal") OR LIMIT-TO (AFFILCOUNTRY, "Cameroon")) AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (PUBYEAR, 2015) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2023))

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**Fig. 1** Selection and screening criteria using sources from Scopus database

grey literature. This would help reduce duplication, ensure a more comprehensive evidence base, and generate richer insights that better reflect the diversity of scholarship on the topic.

## **5 The nature of ICBT in Africa (causes, types of goods traded, participants, trade policies)**

Although there is dearth of information on ICBT, the existing literature explicitly shows various aspects that uniquely characterize this particular practice [9]. Moyo [30, 31] informal cross border trade plays an important role in improving the socio-economic status of the Southern African Development Community (SADC) and the whole of Africa. The rise of ICBT in SADC is attributed to the regional integration such as the SADC Protocol on Trade (1996) which neglects the needs of the ICBTs through limited trade initiatives [30, 31]. Benjamin et al. [5] urged that intra-regional trade is small whilst ICBT is pervasive. The predominant ICBT symbolises the need for comprehensive trade control measures which accommodate and suit people's needs to minimize and manage

informality. The fact that ICBT has various characteristics, it implies that this type of commerce has its causes, different types of goods traded and both positive and negative impacts to the African economies.

Sabela et al. [45] alluded that women dominate the ICBT in developing countries because they are marginalised in the African Continental Free Trade Agreement which worsen their situation of marginalisation and exploitation. Pieterse [43] also noticed that the escalating informal trade in the SADC region is because of the Regional Infrastructure Development Master Plan which is surrounded by expensive and unreliable transport and logistics services, insufficient energy supply, poor, uncoordinated and inadequately maintained road and rail infrastructure, inadequate IT infrastructure and poor essential service delivery. The poorly formulated economic policies and lack of trade infrastructure hinder the ability of the SADC plan to meet regional people's demands which forces them to engage into ICBT.

Pieterse [43] also reported that informal intra-regional trade is common in Africa where imports and exports are sourced between Zambia, Malawi, Lesotho, Botswana, Zimbabwe, Namibia, Mozambique, the Democratic Republic of Congo (DRC), Swaziland and Cameroon, South Africa and abroad countries namely China and Dubai. This shows that ICBT is a global phenomenon which yawns for attention as resembled by the illegal flow of goods between countries located in different continents. Pieterse [43] added that the type of goods that are imported include homeware, furniture, foodstuffs, kitchen appliances, tools, electronics (mobile phones and accessories, television or audio equipment), new and second-hand clothing and shoes, medicine, cosmetics, car parts, liquor, luggage, hardware, sporting goods, computer software, books, sugar, fertilizer, beer, coffee and tobacco. More so, the ICBT in Sub-Sahara is also attributed to biofuels use and climate change which affect the food supply and prices [27]. This shows that the African region may fail to achieve the SDG 8 on decent work and economic growth, SDG 13 of climate action by failing to combat the weather variations and commodity prices which negatively impact food supply within the agrarian region which often results to ICBT through importing foodstuffs from where they are affordable.

In Uganda the ICBT was institutionalised under the Uganda Bureau of Statistics and recorded that it constitutes a greater proportion (29%) of exports into the country while sharing the monitored border crossings with Democratic Republic of Congo (DRC) [9]. Charles [9] also confirmed that Uganda's ICBT has eight monitored crossings with its neighbouring countries, four trade crossings with Kenya, Kenya, three each with Rwanda and Tanzania, and two with South Sudan. This clarifies that ICBT in Africa is dormant and caused by intra-trade facilitations which neglect people with limited capacities to conduct formal businesses leading to illegality. The ICBT also perpetuates the regional integrations as highlighted by Charles [9], some of the exports into Uganda are from Rwanda which is a member of the East African Community. The common goods that are traded between Tanzania, Burundi, Rwanda, Uganda, Kenya, Somalia, Djibouti, Ethiopia, Sudan, South Sudan, and DRC encompasses maize and maize flour (37%), wheat flour (16%), rice (15%), sugar (14%), sorghum (11%), and dry beans (9%) which strongly assist with food supply in the Eastern region [9]. ICBT is unique and has a greater influence in adequate provision of goods because it encompasses the trade of various types of products.

Ng'asike et al. [33] affirmed that the 21st Somali state downfall and violence strikes, trade liberalisation in Kenya, national and county governments promoted the Somali-Kenya informal cross-border livestock trade. The socio-economic and political challenges in African states escalate the informal economic practices which extend to other national political boundaries because of disjointed and discarded trade governance associated with state instability. This shows the need for the African governments to improve the trade facilitation regulations and policies, economic and political improvement to meet regional people demands thereby reducing informality in cross-border trade. Mawejje and Nampewo [27] also noted that in Uganda the ICBT of foodstuffs is because of food price hikes and ineffective implemented trade policies.

The increase in food prices in a country promotes illegal importation of food for nutrition supplement because of people failing to afford locally produced agricultural and staple commodities. Ibengwe et al. [23] reported that Tanzania also presents the illegal cross-border fish trade (ICBFT) which accounts for 972.6 million tons. Further, the extensive borders in the Horn of Africa with fewer customs and banking facilities significantly promotes ICBT [23]. Limited custom ports and banking facilities promote the informal and unrecorded cross-border trade because it promotes a blind eye which poses a significant lack of financial accountability at border operations. In contrast to the above, the Ugandan one-stop border post has resulted in the decline of trade tariffs which has also enabled businesses to be formal because of the trade facilitation [23]. This should be practiced Africa wide to enable free movement of goods, money, services and people through reducing border posts regulations and policies which promote ICBT.

ICBT in West and Central Africa, like all other regions, women constitute 60% of illegal traders [9]. Charles [9] also affirmed that women operating in ICBT within the Cameroon-Nigeria border practice this illegal commerce because they have little capital to start formal businesses. The proliferation of women into ICBT is attributed to inadequate financial base to conduct formal businesses because informal practices are characterized by a wide range of opportunities of escaping to incur into duty and tax payments. Owing to the situation, there is a need to pay attention to the factors contributing to more women in ICBT in Africa. These women in ICBT within the Western and Central Africa face various implications including sexual harassment to get access of facilitating informality [9]. Women in ICBT exposes their life to health and life safety risks to safeguard their detention or confiscation of goods. African countries should consider women in a variety of formal and better paying economic activities to enable them to improve monetary access to enable them to conduct legal businesses characterised by reduced or no harassment implications.

Despite low tax on importation in West Africa, ICBT is pervasive perpetuating the kinships namely Senegal–The Gambia and Nigeria-Benin-Togo [5]. The ICBT in West Africa is conducted based on religious ties which further emphasises that these participants share the same interests which strengthen their mutual bond in this type of commerce. Moyo [30, 31], not regarding the inadequacy of ICBT data, Nigeria accounts for a large proportion of intra-regional trade. The identification of a significant contribution of ICBT to African countries where there is scarce data to account for this type of trade presumes that it is paramount to consider it in governmental trade gazettes to merge its outcome with that of formal trade to effectively boost regional economies. Dzawanda et

al. [16] reported that ICBT solely depends on itself and evades imposed regulations in times of disasters such as the COVID-19 disease restrictions.

Dzawanda et al. [16] also contends that traders do not receive any form of assistance from the government during disaster periods. This shows that the Nigerian government is attempting to destroy the informal economy rather than sustaining it which is the main source of disadvantaged livelihoods. In contrast, ICBT in Nigeria gains illegal protection from the law enforcement officers through corruption [16]. Dzawanda et al. [16], the law enforcers participate in informality at border posts because they receive inadequate remuneration which forces them to receive bribes to improve their income for family upkeep. The Nigerian government should give the legal officers operating at ports of entry a satisfactory remuneration to rid them from corruption in order to enhance effective border operation where all goods undergo proper taxation which will in turn benefit the whole country instead of few individuals. The ability of everyone to benefit from trade outcomes admit the regional countries achievement to the African Agenda 2063 of living no one behind when all people are accounted to receive state benefits.

ICBT in DRC with its Great Lakes traders is characterised by the flow of staple foods which is accounted to be 5 times more than the formal trade [9]. This signifies that ICBT contributes to large proportions of both imports and exports among the trading partners which prompts the need for African governments to agree on creating a borderless continent that facilitates the free movement of people and goods. Charles, [9] alluded that in the SADC region, women constituting about 70% are participants in ICBT. Therefore, women across the SADC region are regarded as core players in ICBT and DRC is not spared since it is also a member of the economic integration of the Southern African region. ICBT in the SADC region is feminised.

In the 1980s in Zimbabwe, the Economic Structural Adjustment Programme (ESAP) was initiated with retrenchments and many people lost their jobs which facilitated a large proportion to participate in ICBT [13, 14]. Similarly, Charles [9] contends that informal cross-border in the African poor households is regarded as a source of income. The implementation of national transformation policies and programs that are biased in development has the potential to affect people's livelihoods which is the main driving factor to ICBT. The growth of ICBT in the 1980s in Zimbabwe reveals that this informal trade practice is an old phenomenon owing for attention. In addition, [16, 29] contend that the outbreak of global pandemics such as COVID-19 resulted in reduction of manpower in companies and restrictions that were calling for shunning in unnecessary movements involving crossing national boundaries as way to stop the spread of a deadly disease. The above studies added that COVID-19 was responsible for the growing ICBT in Southern Africa especially in countries namely, Zimbabwe, Zambia, Malawi, Botswana and Mozambique. These countries have experienced increased ICBT because of people that were forced to stay at home to avoid the spread of the disease which in turn affects their economic activities. Subsequently, this forces people to engage into this ICBT to improve their precarious livelihoods.

Dzawanda et al. [16] reported that 100% of the respondents in Zimbabwe's Gweru ICBTs pursue this type of practice because they are less considered by the government in receiving assistance during the times of disasters such as in the COVID-19 pandemic strike. Pieterse [43] and Dzawanda et al. [12, 15] added that the ICBTs in Zimbabwe's Gweru central business district (CBD) are identified as street vendors. Inadequate

support to people from African governments in disastrous events force people to illegally source goods from outside their political boundaries for sustenance. Hence, ICBT in Zimbabwe seems like a practice that is not practiced within the comfort zones but because of pushing factors. Dzawanda et al. [12, 15], Pieterse [43], Manjokoto and Ranga [26] posited that in Gweru and Mutare the informal commerce revealed that 58% of participants engaged into illegal trade between 2009 and 2015 and goods in circulation encompasses electrical goods, furniture and kitchen utensils, clothing, home and decor products, footwear, wooden curios, cosmetics, jewellery, and bags (handbags, satchels, and traveling bags). ICBT in Zimbabwe is an old business practice characterised by the buying and selling of different outsourced goods. Pieterse [43] revealed that most of the imports that are informally traded are illegally sourced from Johannesburg in South Africa because it dominates the retail shops which make it the giant supplier of goods SADC wide, and Zimbabwe is not spared.

Research in Botswana revealed that delays at border ports and the gradual increase in product tariffs such as from 10 to 12% promote ICBT because the merchants decide to escape paying these taxes [9]. Bureaucracy and gradual increase in product duties promote ICBT in Botswana since people opt to smuggle goods which seem to be easier, faster and cheaper. Charles [9] opined that the ICBT constitutes a proportion of 61% with 70% being women engaging in this type of trade within the SADC region and Botswana is not spared. Again, Salia et al. [46] conveyed that ICBT in Mozambique presents 71% of women, "*Mukhero*". This clarifies that informal cross border trade in Africa is merely dominated by females. There is a need to resolve the causes that contribute to more women participation in ICBT within the SADC region. The trending names of ICBTs in African countries assume that this type of business is strongly rooted in African livelihoods therefore, it needs to be safeguarded rather than destroying it because the region is challenged by a massive economic downfall associated with high levels of poverty.

The Zimbabwe's ICBT participants that source goods from South Africa using the "malaitsha" (porters) who have strong links with the police to illegally transport goods and also to facilitate the flow of goods at Limpopo River by also utilising donkey powered scotch carts Dzawanda (2022) [12, 15, 29]. In addition, Moyo [29] and Dzawanda et al. [16] indicated that in Zimbabwe within the Gweru's 38% ICBT participants transport goods through runners and 62% they cross borders illegally to acquire goods and they also pay bribes. Hence, ICBT which operate between Zimbabwe and South Africa is promoted by corruption through the customs' officials receiving bribes to enable illegal flow of goods through using formal border posts as well as utilising different forms of transport. ICBT between Zambia, Malawi, Mozambique, Tanzania and Zimbabwe perpetuate ethnicity bonds and it also involve the flow of illicit goods through informal routes and false declaration at formal border ports at entry points [12, 15, 37, 38]. This situation of smuggling prohibited goods including hard drugs, wild and human trafficking is at peak in Zimbabwe, Zambia, Malawi and Mozambique which urges the need to improve border security to avoid the illegal flow of illicit goods and to improve social security to reduce human trafficking.

## 6 Opportunities associated with ICBT African economies

The ICBT of maize and maize flour (37%), wheat flour (16%), rice (15%), sugar (14%), sorghum (11%), and dry beans (9%) improves food supply during the times of food shortage shocks in the Eastern region of Africa [43]. Not regarding the informal nature, ICBT is vital as it is a source of nutrition supply to the African people which also assists to attain the SDG 2 of ending hunger at large when adequate food access is enhanced. In DRC, Rwanda, and Uganda the rife in ICBT has facilitated the positive regional development through propagating the attention which resulted in the implementation of Trade Information Desks at 10 borders with the support of World Bank's Great Lakes Trade Facilitation Project [9]. Trade Facilitation Project aimed at improving the Common Market for Eastern and Southern Africa (COMESA) and East African Community to lessen customs certification by less than US\$1000 (COMESA) or US\$2000 (EAC) per consignment to cross border duty-free [9]. Hence, the skyrocketing ICBT has brought a positive benefit to the COMESA and EAC by facilitating the adjustments of trade facilitation that promoted the affordable formal importation and exportation of goods for all trading partners.

ICBT is common in Sub-Saharan Africa, constituting 85% of employment [9, 12–15]. Charles [9] added that ICBT accounts for a significant representation of 43% of the official gross domestic product in Sub-Saharan Africa. This implies that ICBT is common in developing community of Africa and despite the informality nature of this type of commerce, it is a crucial activity to African economies because it contributes to the growth of the regional economy and offers employment opportunities at large. ICBT constitutes 30–40% of the regional trade in the Southern African Development Community (SADC) and 42% of foreign trade in East Africa [9, 43]. Hence, there is a need to transform ICBT by enacting laws that consider this business practice to enable clear accountability of its contribution to African economies among other activities when configured to be a legal transboundary commerce. ICBT needs to be legalised because it assists to achieve a wide range of SDGs that can assist the region to be ranked at better levels among other continents with stable economies [45].

Salia et al. [46]'s study reported that “the ICBT practiced by 70–80% of women, contributes towards supporting families, reducing poverty and unemployment, empowering women and growth of their countries”. Not regarding the illegality in nature, ICBT is vital in promoting the role of women in self-sustaining activities to alley them form depending on their male counterparts. The presence of women in the economic sector poses a positive success towards achieving the SDG 5 of gender equality by recognising them in the productive sector. Besides that, like all other regions across Africa, ICBT in SADC countries including Mozambique and South Africa benefit from increased food access through importing goods from neighbouring regional economic integration member states.

Similarly, in West Africa, the Senegal-The Gambia and Nigeria-Benin–Togo ICBT accounts for almost a half of the GDP and 90% of employment opportunities [5, 43]. A large proportion of people in West Africa secure jobs for supporting their livelihoods through opportunities presented by the ICBT in their region. The large proportion of employment opportunities offered by ICBT are critical in achieving the Africa' Vision 2030 as well as SDG 1 of ending poverty through job creation. Similarly, regardless of the illegal nature, informal cross-border corruption facilitation benefits the law enforcement

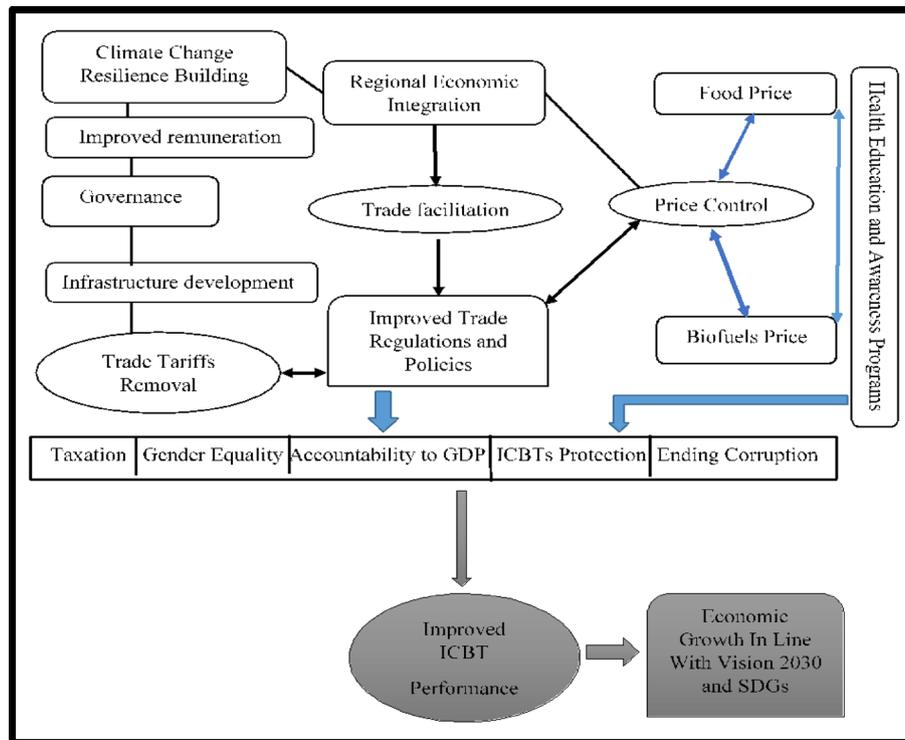
officers in Nigeria who are employed to work at ports of entry through receiving bribes which increase their remuneration [16]. Informal cross-border presents a significant advantage to the officials working at borders which improves their inadequate earnings which suffice for family upkeep.

## 7 Challenges associated with ICBT

Dzawanda et al. [16] alluded that in Zimbabwe ICBT is characterized by no business insurance and is under threat since the government is trying to end this informal practice which affects the country at large to achieve SDG (SDG) 1 of no poverty and SDG 2 of zero hunger. This shows that ICBT is not a long-lasting economic activity because it is under threat of the Zimbabwean government and the underprivileged people are headed to precarious livelihoods. Besides that, Charles [9] and Dzawanda et al. [16] availed that the Zimbabwe's ICBTs are surrounded by various challenges including harassment as a result of xenophobia and extortion by legal personnel to conduct bribes so as to attain privileges to smuggle their goods. Regardless of positive benefits posed by ICBT, the traders face a lot of challenges including multi-dimensional attacks in foreign countries and they are also headed to legal prosecution when caught practicing this informal activity.

Salia et al. [46] reported that women participants in Southern Mozambique with low financial capacity are exposed to sexually transmitted diseases including HIV, Syphilis, and Human Papilloma Virus (HPV) and Gonorrhoea as they offer sex for either goods, money or services. Therefore, in Southern Mozambique, ICBT presents a lot of health risks to women with limited financial bases who are less able to support themselves as they tend to engage into "sex workers". Salia et al. [46] also added that these vulnerable women (6%) have limited knowledge about the sexual transmitted infections or Human Immunodeficiency Virus (HIV) transmission. The study added that almost 15% of women had occasional sex, 7.5% had sex for goods and services, 17% virginal discharge, 95 genital pruritus (itching) and 3% ulcer/wound/genital tumour (Sali et al. 2020). Sabela et al. [45] added that women in ICBT are vulnerable to brutality and touts to facilitate informal border crossings. This shows that ICBTs with low perception on the risk of sexual intercourse transmitted diseases have poor awareness of high risky sexual behaviours. Risky sexual activities associated with infectious diseases limit the ability of the African region to attain the SDG 3 of good health because of the increase in preventable ailments. Salia et al. [46] and Sabela et al. [45], "women in informal cross-border trading (WICBT) suffer from stigmatisation, poor transportation, corruption, extortion, robbery, confiscation of goods, long queues and delays at borders". Despite harassment faced by women in Southern Mozambique's ICBT, these female participants promote the rife in corruption to illegally access goods or services which deprive the growth of the African economies. The escalating venality through bribes by customs officials at border posts hinder the success to end corruption as suggested by Africa's Vision 2063.

In the East African States, informal cross-border fish trade accounts for US\$1.8 million whilst the government records US\$ 165 006 which represents a revenue loss to the government. This shows the need to reduce trade tariffs associated with high costs of exporting and importing goods to promote the legal trade which will in turn benefit the governments and their respective states. Nshimbi [37, 38] reported that ICBT between Zimbabwe, Malawi, Mozambique and Zambia is associated with human trafficking.



**Fig. 2** Framework to manage challenges associated with ICBT in Africa.

Source: Authors

Hence, the informal cross-border practice in the Southern part of Africa presents social insecurity because of trading activities involving risking other people's lives. Ng'asike et al. [33] informal cross border trade is common in Somalia and the country accounts for an estimated 60–70% of cattle flows to other marketplaces outside its political boundary. This shows that ICBT does not only affect the people's lives through human trafficking, but livestock is also not spared from exploitation.

## 8 An idealised Africa-wide framework to manage challenges associated with informal cross-border trade

The proffered framework (Fig. 2) was developed based on the existing literature which informed on the nature of ICBT, opportunities and its challenges to the African economies. The existing literature and analysis informed that ICBT is a vital economic activity to African countries hence, it needs to be improved as it seems less possible to be eliminated for the meantime regarding the disadvantaged livelihoods status within the region. Therefore, the mechanism (Fig. 2) was conceptualized by incorporating different aspects that were regarded as useful to improve the performance and avert the challenges associated with ICBT. Through improving the performance of ICBT, its contribution to the achievement of SDG 2 of reducing poverty will be facilitated. Initially, Maweje and Nampewo [27] urged that climate change cause the increase in food prices in East Africa particularly in Uganda which often promote ICBT of foodstuffs. The proffered framework urged the need to build climate change resilience so as to promote better agricultural production in order to enable adequate food supply within the region. The availability of agricultural commodities within a country is vital as it reduces the practice of illegally sourcing food from other nations. The practice of climate change resilience

building also significantly remarks a particular country's achievement to SDG 13 of climate action which calls for a set of measures aimed at reducing, managing, enhancing adaptation and coping capacities of communities to extreme weather events. The ability of the region to produce adequate food within the region reduces the forced and costly informal-cross border trade acquisition of foodstuffs from other countries which fosters the achievement of SDG 2 of ending hunger.

Regional economic integration is also regarded as a significant initiative which promotes a borderless continent in Africa through insisting on the need for improved trade facilitation. The existing trade and facilitation need to be improved because they neglect the ICBT when substantiating formal trade as posited by Moyo [30, 31]. Therefore, the integrations are crucial in facilitating the improvement of trade regulations and policies by removing stiff trade restrictions that promote informality. The ICBT is pervasive and records more benefits as compared to government's earnings brought by formal trade through traders evading paying expensive taxes [5, 9, 23]. Therefore, reduced goods taxes encourage ICBTs to conduct their business in a near-formal or formal way which will help the African governments to generate more revenue from taxation on imports and exports. Accountability of ICBT to Africa's gross domestic product will increase when ICBTs are enabled to conduct their business formally through paying duties. The ability to promote a borderless continent will catalyse the goal of Africa to reduce inequalities among countries when all nations become able to import and export goods across their political boundaries when equal trade opportunities are presented. By achieving this goal, it will be a great improvement to corroborate SDG 10 of reduced inequalities among countries by revitalising partnership.

Reduced inequalities among countries promote free trade which enables the African countries towards becoming middle-income economies as targeted by Africa's Vision 2030 and Agenda 2063 when transparent and cost-effective flow of goods, money, services and people are presented. This can be achieved when proper governance is exercised in Africa. Exercising proper governance enables strong institutions and vibrant law enforcement which upholds with SDG 16 of peace, justice and strong institutions. In addition, proper governance promotes the protection of informal cross-border traders, civil society from exploitation and trafficking. Human trafficking is common, women face brutality and harassment in ICBT [12, 15, 37, 38]. Hence there is the need to properly enforce trade regulations and policies to protect women from exploitation through engaging them in planning and implementation of protection initiatives. Considering women in planning issues and safeguarding them from exploitation suffice the SDG 5 of gender equality since females are predominant players in ICBT.

Pieterse [43] opined that the implemented initiatives to promote trade in Africa are characterised by expensive and unreliable transport and logistics services, insufficient energy supply, poor, uncoordinated and inadequately maintained road and rail infrastructure, inadequate IT infrastructure and poor essential service delivery. As a result, improving infrastructure including roads, administration facilities and information and technology services will reduce cumbersome border processing in terms of service delivery. Therefore, informal cross-border trading will be conducted sustainably when delays and costs which force ICBTs to engage into corruption are addressed. In addition, Dzawanda et al. [16] alluded that the customs and government officials promote corruption in ICBT because they receive inadequate remuneration that is less capable of achieving

their life desires. This informs that the customs and government officials working at border posts need to have their salaries improved to rid them from corruption. The capacity to manage corruption will strongly incorporate Africa's Agenda 2063 targets of ending corruption in the continent.

Salia et al. [46] and Charles [9] reported that women in Africa's ICBT are exposed to harassment and sexual activities to facilitate trade thereby divulging themselves to various infections. Therefore, the idealised framework reckoned health education and awareness programs to have an increased influence of improving female ICBTs perception on gathering the knowledge regarding consequences of engaging into sexual activities for exchange of goods, money and services when facilitating ICBT. Promoting education on health issues incorporates the SDG 3 and 4 of good health and well-being and quality education respectively when people possess enough knowledge required to live a healthy lifestyle. Lastly, Mawejje and Nampewo [27] affirmed that the use of biofuels and food price hikes promote ICBT of food stuffs from other countries where they are perceived to be cheaper. The price control and trade regulations and policies enforcement will significantly assist in managing food prices which will enable people within a particular country to have the ability to purchase food thereby reducing forced cross-border trading in acquiring nutrition in Africa. The capacity to adopt the proffered framework, ICBT will be conducted sustainably with reduced and manageable implications which will enhance the region to embrace a decent work and economic growth (SDG 8) when catastrophes in this type of commerce are properly addressed. Regulated ICBT will significantly present an accountable contribution to the regional gross domestic product through taxation among other development economic activities.

## 9 Conclusion

The African continent has facilitated various economic integrations including the EAC, COMESA and SADC, all aimed at trade facilitation. These integrations have trading regulations and policies regarding the transboundary flow of goods, services, money and people. Their shortcomings are coupled with socio-economic, political and climate challenges, have fuelled the growth of Informal Cross Border Trade (ICBT). Poverty, limited formal employment, and structural exclusion of women from the formal productive sector have forced many, especially women and youth, into ICBT as a livelihood strategy. While often a necessity, ICBT provides vital benefits, including income generation, improved food security, and support for SDGs 1 (No Poverty) and 2 (Zero Hunger). It also contributes significantly to GDP, underscoring its importance to African economies. However, ICBT is not without challenges. Women traders face harassment, extortion, confiscation of goods, health risks, and systemic corruption through bribes at border posts. These constraints highlight the need for reforms. The proposed framework promotes formalisation, transparency, and supportive policies to improve productivity, job quality, and resilience. Such interventions would protect vulnerable groups, enhance government revenue, and support SDG 5 (Gender Equality), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure), SDG 10 (Reduced Inequalities), and SDG 17 (Partnerships for the Goals). Integrating ICBT into formal value chains can further stimulate industrial development, reduce inequalities, and empower marginalised groups. If adopted, this framework would not only improve

governance and trade efficiency but also accelerate progress toward the United Nations Vision 2030 and the various SDGs.

#### Author contributions

BD invented the idea. EG, JR and BD wrote the initial manuscript. EG and BD prepared figures. B.D, M.M.M and M.D.N reviewed the paper.

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