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**Exploring cross-border cooperatives and small-scale traders in Eastern
Africa with a focus on Rwanda: What matters and why?**

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Gerard Dushimimana

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Members of the Examining Committee:

Prof. Dr Peter A.G. Van Bergeijk

Dr. Binyam Afewerk Demena

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Inquiries:

International Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

t: +31 70 426 0460
e: info@iss.nl
w: www.iss.nl
fb: <http://www.facebook.com/iss.nl>
twitter: [@issnl](https://twitter.com/issnl)

Location:

Kortenaerkade 12
2518 AX The Hague
The Netherlands

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List of Acronyms

COMESA	Common Market for Eastern and Southern Africa
COTTRARU	Coopérative de Transporteurs Transfrontaliers de Rubavu
COVID 19	Corona Virus Disease 2019
DRC	Democratic Republic of Congo
EAC	East Africa Community
ICA	International cooperative alliance
ICBT	Informal cross border trade
NGO	Non-Government Organization
PRISMA	Protocol for Systematic Review and Meta-Analysis
RCA	Rwanda Cooperative Agency
RRA	Rwanda Revenue Authority
RWF	Rwandan Franc
SACCOs	Saving and Credit Cooperatives
SSCBT	Small-scale cross-border trade
UNDP	United Nations Development Programme
USAID	United States Agency for International Development

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Above all the almighty God

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Abstract

Cross Border trade is increasingly given prominent importance in Africa's economic transformation and the well-being of traders involved in business across borders. It is a key vehicle for promoting regional integration which is essential for economic growth in contemporary globalized markets. However, while cross-border trade has been an outstanding factor for economic growth in other regions such as East Asia, and Western Europe, African countries are yet to take full advantage of this trade. This study reviewed and synthesized 18 articles that explore cross-border cooperatives and small-scale traders in East Africa. The study systematically selected and extracted articles published in English in Google scholar (2000-August 2021), using the PRISMA 2009 protocol, and conducted frequency analysis to assess and investigate the findings of selected articles and where necessary use interviews with key informants to fill the gap identified in the review. The findings suggest that challenges associated with small-scale cross-border trade were the main influence for small-scale traders to participate in cross-border cooperatives according to 28% of the 18 consolidated studies. Cross-border cooperatives improved the socio-economic conditions of members according to 55% of the studies through pooling resources, reduction of transaction cost, and representation of traders in public space and were also essential to keep traders stay in the business during Covid-19 pandemic lockdown according to 17% of reviewed articles. Compiled evidence indicated ambiguous outcomes with regards to specific roles of cross-border cooperatives. Therefore, future research should focus on the specific roles and effects of cross-border cooperatives on cross-border trade in specific East African countries.

Relevance to Development Studies

Cooperatives have at various times played an important role in helping to address poverty and vulnerability, especially for the poor and less advantaged people. In Africa, cooperatives have been instrumental in the development of agriculture and in promoting the financial inclusion of smallholder farmers and small-scale traders in the informal sector. The contribution of cooperatives is not only limited to agriculture and financial sectors but is also extended in other sectors such as cross-border trade where cooperatives are helping small scale traders to take advantage of market opportunities in the region and improve their living conditions while at the same time they are contributing to the economic development of African countries. Thus, understanding the role of cross-border cooperatives is essential to inform decision-makers in development disciplines to strengthen their contribution to society.

Keywords: Cooperatives, Cross-border, Small-scale trade, East Africa, Covid-19, Rwanda

Chapter 1: Introduction

Small-scale cross-border trade more commonly known as “Informal cross border trade (ICBT)” is referred to as “imports and exports of legitimately produced goods and services (i.e., legal goods and services), which directly or indirectly escape from the regulatory framework for taxation and other procedures set by the government, and often go unrecorded or incorrectly recorded into official national statistics of the trading countries” (Ogalo, 2010:2). Indeed, informal cross-border trade is the source of revenue for around 43% of people on the African continent (Afrika and Ajumbo, 2012). Both men and women are involved in informal cross-border trade, but it is important to point out that in the East Africa region at least 74% of people involved in ICBT are women and 90% of their revenues depend solely on cross-border trade (Bugingo, 2018: 11). This indicates that gender represents an important aspect of small-scale cross-border trade.

While small-scale Cross-border trade emerged to be an important key driver for economic growth and poverty alleviation in Africa (Brenton and Isik, 2012:1; Titeca and Kimanuka, 2012), traders engaged in cross border trade face huge challenges that undermine their economic activities including but not limited to, physical and emotional abuse as well as inadequate childcare (Njikam and Tchouassi, 2011); traveling long journey, delaying at borders, spending many hours outside of their families, and tough competition with other traders (Ama et al., 2014) as well as corruption and discrimination (García Mora and Roshan 2013; Bensassi and Jarreau, 2019). In Rwanda, small-scale traders face issues of insufficient storage facilities, discrimination, sexual exploitation lower access to market information and financial services (Bugingo, 2018: 12).

These challenges put small-scale traders in the least advantaged position compared to large traders regarding their capacity to achieve scale economies, increase bargaining power and have access to financial services, market information, and public facilities. Several scholars suggest that small-scale traders in cross-border trade could solve those challenges if they are organized into collective action groups or associations, such as cooperatives (Afrika and Ajumbo, 2012; Brenton et al. 2011).

Cooperatives offer the less privileged people the occasion to identify probable areas for investment, encourage their members to protect their benefits, increase their participation in the public policy arena and give protection to them by turning individual risks into mutual risks (Wanyama 2016: 20).

As business-oriented enterprises, cooperatives are owned and controlled by their members with the main objective to improve their wellbeing through income generation activities. According to Altman (2015) cooperatives have the potential to generate relatively high revenues for cooperative members and have the ability to achieve better rates and fair development while staying competitive with typical big private firms. This explains the increasing number of households' intention to participate in cooperatives. In Africa, it is believed that members of at least 40% of Households belong to cooperative organizations (Schwettmann, 1997). In Rwanda, around 44 % of the total population are members of cooperatives (Harelimana and Mukarukaka, 2020:2). Indeed, most cooperatives in Rwanda are found in the agricultural sector that represents 27%, followed by livestock cooperatives with 18% while cooperatives involved in trading are about 13.5% (Harelimana and Mukarukaka, 2020:2). This comes not as a surprise as (Mujawamariya, et al 2013:73) claim that agricultural cooperatives are most dominant in developing countries.

In cross border trade, cooperatives and other self-help intend to increase the participation of small-scale traders and producers in the regional market, increase their income through buying and selling in bulk, address issues of market imperfection, and reduce the transaction cost (Eaton et al, 2007: 16; Golub, 2015; Ingabire et al, 2017). In addition, cross-border cooperatives are in a good position to increase regional integration following their principle of cooperation among cooperatives. According to Kaleshu (2018: 56), regional cooperatives would certainly help to strengthen regional cooperation, which is a key component of the East African Community Treaty. Enabling cross-border operations and creating a welcoming atmosphere via a supportive structure would facilitate cooperative market liberalization, which will go a long way toward boosting regional cooperation (Kaleshu, 2018: 56). This would help small-scale traders to seize the opportunities available in the regional market and increase their income. Indeed, helping these traders to thrive and eventually move into

the formal economy, improve trade, and strengthen the private sector's foundation for future economic growth and development (Brenton and Isik, 2012).

Nevertheless, while small-scale traders are encouraged to be organized into cooperatives, the findings of what they benefit and gain from that participation remain unclear and inconclusive (Klopp and Trimble, 2020). Empirical evidence from Van den Boogaard et al. (2021:9) suggests that traders in associations face more discrimination at borders than non-members, and these associations may potentially have a detrimental effect on traders if their activities are not supported by border officials. In addition, the level of participation of small-scale cross-border traders in cooperatives, when compared to traders involved in cross-border trade, raises questions on whether those organizations have a significant impact on traders. For instance, the study by Titeca and Kimanuka (2012) in the Great Lakes region found that only 18% of traders in ICBT are members of an association or cooperative. Indeed, some data on business ownership structure from the East African region show that women involved in informal cross border trade, most of them (72.3%) were doing business as individuals, 18.9% operates as an individual but also are affiliated to cooperatives while only 8.9% operates as full members of cooperatives (Trademark East Africa, 2021). On the other hand, Mbo'o-Tchouawou et al. (2016:1) suggest almost the same participation of men and women in cross-border trading networks. However, the authors also acknowledge that there are some specific activities across borders where women are more represented than men.

Meanwhile like all sectors of the economy, small-scale traders have been affected by the covid 19 pandemic due to the restriction's measures that closed borders during the lockdown. The recent study by Gorpudolo and Akello (2021) in the Democratic Republic of Congo (DRC) reveals that restriction measures put in place to curb the Covid-19 pandemic stopped economic activities in the city of Goma that highly depend on cross border trade between Rwanda and DRC. The authors argued that the income of about 45,000 small-scale cross traders, with women being the majority, were affected by those measures due to the loss of employment that is their only way of earning a living. This, indeed, has not affected only individual traders but

also cross-border cooperatives, as most of their activities involve crossing borders, and with Covid-19 movement restriction measures, borders were closed which become a barrier for some cooperatives to continue operating. While more recent research findings revealed that cooperatives are more resilient in times of crisis than traditional businesses (Billiet et al., 2021), it is still difficult to evaluate the effect of the Covid-19 pandemic on cross-border Cooperatives at the moment. Hence, the need for this research to give a contribution.

In sum, whether cross-border cooperatives offer advantages to small-scale traders is a debatable issue from both theory and practice standpoints. A clear picture and investigation of the effects of those organizations are necessary under the current pattern of cross-border trade and regional integration which are instantaneously affecting small-scale traders while also reigniting effort to promote cooperatives as tools to improve small-scale cross-border trade. Additionally, the Covid-19 pandemic worsened the situation of cross-border traders due to the restriction measures that resulted in closing borders and limiting traders' movement. This paper intends to explore the current state of knowledge about cross-border cooperatives and small-scale traders as well as how those organizations dealt with the effects of the Covid-19 pandemic.

1.1 The current state of the (academic/ intellectual) fields

There is a growing body of literature that investigated the contribution of cooperatives in various sectors. Several scholars reviewed and synthesized the literature on cooperatives in different areas. For example, Buang and Samah (2020) focused on factors that influence the effectiveness of the cooperative board, Soeiro and Dias (2019) focused on renewable energy cooperatives, Marcis et al. (2019) investigated the sustainability performance of agricultural cooperatives, Islam et al. (2015) and Minah et al. (2019) focused on the effects of agricultural cooperatives in developing countries, while the study by Camargo-Benavides and Ehrenhard (2021) only focused on the organization form of cooperative enterprises.

In small-scale cross-border trade, Klopp and Trimble (2020) reviewed studies on corruption and gender in East Africa, while the study by Kahiya and Kadirov (2020) in the context of sub-Saharan Africa employed a macromarketing viewpoint to depict informal cross border trade as “substratum marketing system”. Moreover, there is a lack of reviews that focus on cooperatives in cross-border trade. Therefore, this research paper aims to contribute to the current state of knowledge by exploring cross-border cooperatives and small-scale traders in the context of East Africa.

1.2. Problem statement

It is important to acknowledge that different studies conducted in cross-border trade have heterogeneous findings regarding the contribution of cooperatives and other self-help groups in cross-border trade. On one hand, some studies argued that these forms of organization are essential for small-scale traders involved in business across borders, to help them address the challenges they face (Afrika and Ajumbo, 2012; Brenton and Isik, 2012; Wrigley-Asante, 2018). On the other hand, other studies reveal lower participation of small-scale traders in cross border cooperatives or associations (Brenton et al., 2011; Titeca and Kimanuka, 2012; García Mora and Roshan 2013; Trademark East Africa, 2021), while the contribution of these associations might be disadvantageous to traders if they do not have a protected supportive environment. (Van den Boogaard et al., 2021)

In addition, despite the increasing number of studies conducted on small-scale cross-border trade, there has not been any systematic review undertaken to analyze the role of collective action groups on the social-economic conditions of small-scale traders. As a result, governments are not aware of the degree to which cross-border cooperatives support small-scale traders, as well as the exact circumstances under which the benefits provided by these organizations might be realized. To the best of our knowledge, this is the first systematic review that intends to explore the effects of cross-border cooperatives on small-scale traders and how those cooperatives coped with the Covid-19 pandemic.

1.3. General Research Objective

The main objective of this study is to explore the factors behind the participation of small-scale traders in cross-border cooperatives and the socio-economic effects of participation in cross-border cooperatives on small-scale traders as well as how these organizations coped with the Covid-19 pandemic in East Africa.

1.3.1. Specific Objectives

1. To determine factors that influence small-scale traders to participate in cross-border cooperatives in East Africa.
2. To evaluate the socio-economic effects of participation in cross-border cooperatives on small-scale traders in East Africa.
3. To analyze how cross-border Cooperatives responded to the Covid-19 pandemic during border closure.

1.3.2. Research questions

The current research paper aims to address the following questions:

1. What are the factors that influence small-scale traders to participate in cross-border cooperatives in East Africa?
2. What are the socio-economic effects of participation in cross-border cooperatives on small-scale traders in East Africa?
3. How did cross-border cooperatives cope with the Covid-19 pandemic during border closure?

To answer the above research questions, the study adopted an approach of systematic literature review to explore the existing literature and where possible use the interview with key informants to supplement the review. There is a growing body of literature on small-scale cross-border trade in East Africa and it is essential to map and assess their findings to produce an overview of current evidence to inform evidence-based policy.

1.4 Relevance and Justification of the study

Cross border cooperatives as a form of private enterprises owned and controlled by members are an important tool for market information, employment, and income generation for traders in small scale cross-border trade.; they could increase the linkage between local producers and regional markets if their capacity is well built (USAID, 2013). Such organizations are in a good position to provide and protect job opportunities for less advantaged people through mutual help (Sapovadia and Patel, 2018) and could resist the economic shock such as Covid-19 since cooperatives are generally more resilient during the economic crisis (Wanyama 2016). Indeed, cooperatives help their members acquire skills and knowledge through affordable training that makes them more qualified for jobs and generates more revenues (Sapovadia and Patel, 2018) which is essential for improving the standard of living of members and their families.

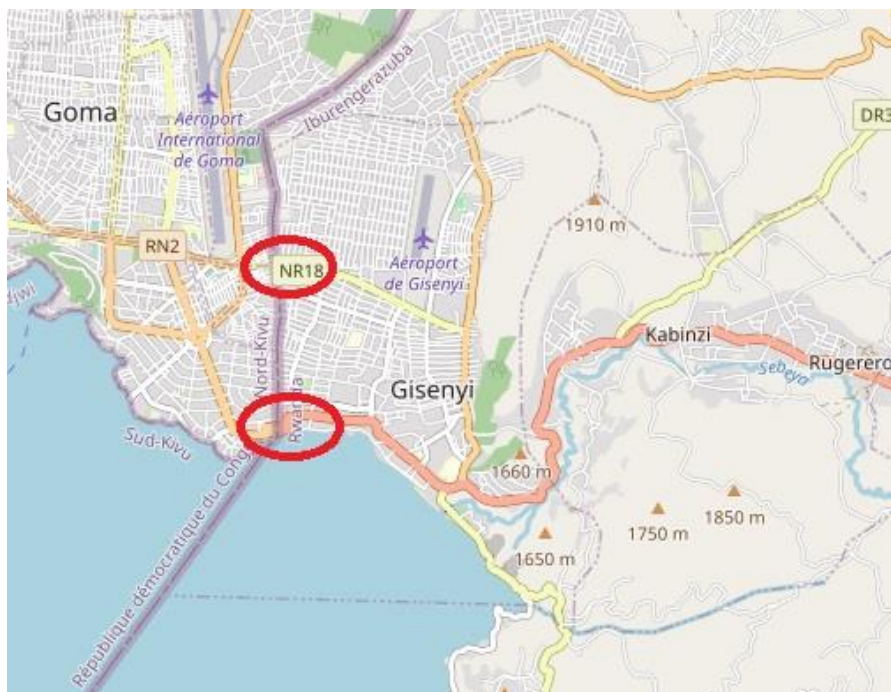
While the gender component represents an important feature of small-scale cross-border trade, it is important to recognize that women make the majority of traders in small-scale cross-border trade than men. However, both men and women face challenges at borders that undermine their businesses. For cross-border cooperatives to contribute efficiently to the improvement of socio-economic conditions of their members, it is of great concern for all actors in cross-border trade to understand the opportunities they represent for small-scale traders. In this regard, policymakers, researchers, NGOs, activists, and other development actors at large need to be aware of the benefits, contributions, and challenges faced by cross-border cooperatives. The recommendations were made to address the wellbeing of small-scale traders to support their development and acknowledge their importance in the public policy arena.

1.5. The scope and limitations

One of the limitations of this study is the change of the methodology used. The initial idea was to collect primary data from the field and use quantitative methods, but this proved to be impossible due to Covid_19 Pandemic. As a result, the study adopted the approach of systematic literature review complemented with semi-structured interviews with key informants. In terms of the area under study, this research focused

on 6 countries of the East African community (Tanzania, Uganda, Burundi, Kenya, Rwanda, and South Sudan) while reviewing the existing literature. Semi-structured interviews with key informants were conducted in Rwanda, with a reference to one border commonly known as “Petite Barriere” that links the town of Gisenyi of Rubavu district in Rwanda and the city of Goma in DRC. This border is commonly used by a large number of small-scale traders. It is estimated that more than 45,000 traders cross the border every day for trading. Due to the Covid-19 situation on the ground and the Erasmus university Covid_19 protocol for fieldwork, a limited number of semi-structured interviews were conducted respecting the restriction measures put in place. These include 7 face-to-face interviews and one phone call interview.

Map 1-1: Gisenyi-Goma borders between Rwanda and DRC



Petite Barriere border (above circle) and Grande Barriere border (below circle)

Source: OpenStreetMap contributors modified by the Author.

The remainder of this research paper is structured as follows. Chapter 2 provides a theoretical setting. Chapter 3 consists of the methodology that has been used in this research. Chapter 4 presents results and discussion before Chapter 5 concludes and suggests recommendations for future research.

Chapter 2: Theoretical setting

2.1. Introduction

To understand cross-border cooperatives, this chapter provides the definition, values, contributions, and challenges of cooperatives based on existing literature. Cross-border cooperatives and small-scale cross-border trade as well as the effect of the Covid-19 pandemic on cooperatives are also discussed.

2.2. Understanding Cooperatives organizations

2.2.1. Definition

Since the establishment of cooperatives, many concepts were introduced to define a cooperative organization by researchers but the most used definition in the literature (see Wanyama, 2016: 3; Onyilo and Adong, 2019: 14161; Musahara, 2012: 2; ICA, 1995) is the one provided by the International Alliance of Cooperatives (ICA) in 1995 which refer a cooperative society as “an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise”. This definition has become more popular in the literature for several reasons. First, it’s a summary of different definitions of cooperative; second not only it looks at the economic aspect of cooperative but also social and cultural aspects which make it more inclusive; third, it encompasses the values and principles of cooperatives that represent the identity of cooperative.

2.2.2. Cooperative Principles and Values

Cooperatives are guided by seven international principles that were agreed upon in the congress of the International Alliance of Cooperatives in 1995. Those principles are Voluntary and open membership; democratic member control; member economic participation; autonomy and independence; education, training, and information; cooperation among cooperatives and concern for the community (Wanyama, 2016: 3; ICA, 1995). Those principles make cooperative an enterprise that is built on the values of self-help, self-responsibility, democracy, equality, equity, and solidarity, while their members are attributed with characters of honesty, openness, social responsibility, and caring for others in all their activities (ICA, 1995).

2.3 Evolution of cooperatives in East Africa

For many years in Africa, traditional initiatives of collective actions existed among the population despite their core benefits that were more social-oriented than business-oriented. For instance, in Rwanda, “*Ubudehe, Umuganda*” initiatives adopted until now are forms of mutual help that concerned with people who came together to help a member of the community or the community as a whole by doing agricultural activities, building or renovating houses for less advantaged people, keeping the community more livable by constructing or renovating roads, bridges, water drainage system, planting trees and respond to any natural disaster that the community may face (Musahara, 2012: 3; Nyamwasa, 2008: 281). The objective of those initiatives was to help each other to get along with country development to avoid letting anyone behind because of lack of capacity. In Agriculture, this was for the local people to join efforts so that they can cultivate the big area within a short period. Those forms of cooperation evolved and led to saving groups that started with agricultural commodities and later on to financial saving groups *ibimina* known as tontines (Nyamwasa, 2008: 281).

Furthermore, modern cooperative organizations in East Africa are rooted in the colonial period. Several scholars traced the origin and evolution of the cooperative movement in different countries of East Africa. Wanyama et al., (2009) identified two main eras of cooperatives growth in Africa, namely “state control” and “liberalization” era. The first era of state control lasted until the 1990s when trade liberalization was taking over in Africa while the second Era started with the liberalization of trade and is believed to be at the origin of the current model of cooperatives that are owned and controlled by members. Those eras were also divided into different periods based on the history of African countries and changing nature of political and economic administration. The state control era comes from the colonial period where most of the modern cooperatives are rooted. During this period established cooperatives rather than serving the population, they were regarded as tools to meet colonizers' social-economic agenda while preserving law, order and keeping local people under their control. Most cooperatives in this period were in export crops and mining. For

instance, in Rwanda, the first established cooperatives were coffee and tea growers as well as mining cooperatives that extracted minerals.

After independence, the existing nature of cooperative development was preserved, with countries pursuing various practices and models as a result of their colonial histories. According to Wanyama et al. (2009), cooperatives operated within a regulatory regime that subsequently allowed the government to interfere in cooperative governance and management. For example, in Kenya, Uganda, and Tanzania government established organs that were in charge of the export of cash crops such as coffee, pyrethrum and cotton, where cooperatives were the only members of that organ allowed to purchase farmers' production as well as export processed products (Wanyama et al. 2009:368). Consequently, farmers were obliged to join cooperatives to be able to sell their commodities on one side and the government injected more incentives in those cooperatives which attracted more farmers at the same time giving a monopolistic nature to those organizations on the other side.

The state control era affected the cooperative movement differently in East Africa. In Tanzania for instance, before 1976 the cooperative movement was a success but later, between the 1980s and 1990s, the sector faced many problems that limited their contribution to poverty alleviation and economic growth of the country (Maghimbi, 2010). Similarly, in Uganda, the performance of cooperatives is reported to have diminished under the state control era following independence in 1962 and cooperatives operated as government organizations until the 1980s (Onyilo and Adong, 2019: 14159). According to Musahara (2012:4), The new administration in Rwanda sought to employ cooperatives to organize individuals for economic growth after the county gained independence. This resulted in legal reform and institution development that led to the increase of cooperatives from 36 between 1962 and 1966 to 553 in 1990 (Musahara, 2012:4). In Kenya, most of the primary cooperatives were established as a result of the government effort to promote the development cooperative sector. The majority of people became members of cooperatives not because of their attachment or trust, but because of governmental order requiring those involved in identical economic activity to be organized into cooperatives. (Wanyama, 2009:7). The author points that the government interference seeking to

accelerate the development of cooperatives reduced the voluntary nature of members joining cooperatives and become susceptible to social-political influence while members and the number of cooperatives were increasing. As a result, cooperatives under state control lost their values and principles hence contributing to governments' interests rather than members' benefits.

The economic liberalization that started in the early 1990s brought new changes in the cooperative sector. Through the implementation of policies of liberalization such as privatization, liberalization of internal and external trade among others, the government was forced to step out of its assistance position in cooperatives. Rules and regulations were restructured to give full ownership to cooperative members and to allow them to develop the competitive spirit with new entries on the market that were becoming a threat to the monopoly system that cooperatives have been enjoying. (Wanyama et al, 2009: 374). As a result, some cooperatives were not strong enough to cope with this transition. For instance, in Tanzania members' cooperative spirit was weakened by government control and political favoritism, which had a negative influence on their performance (Maghimbi, 2010:10). Similarly in Uganda, Agricultural cooperatives, marketing boards, and cooperative banks experienced a disintegration as a result of economic liberalization (Onyilo and Adong, 2019: 14159), while in Kenya the market forces induced transformations that gradually made weak cooperatives disappear including their umbrella (Union and confederation). In Rwanda, the liberalization period coincided with the period of civil war and genocide against Tutsi of 1994. During this period, the cooperative sector was highly affected because not only most of their activities were stopped but also members lost their life (Musahara, 2012; Nyamwasa, 2008). The liberalization put an end to the state control era and introduce cooperatives to the new competitive environment of selling and buying commodities for their survival but with full ownership and control of their members.

Despite the economic liberalization that took place while some of the cooperatives had financial issues and others already declared bankruptcy, Wanyama et al, (2009) argued that cooperatives in Africa become resilient in the face of free-market competition and continued to increase in number and members compared to the time before the start of liberalization. The authors' findings suggest that at the first instance

of implementing liberalization policies, cooperatives faced adverse repercussions in various countries mainly because of lack or inappropriate preparedness to compete with new firms due to their previously monopoly power on the market. As a matter of fact, cooperative structures that failed to meet members' needs gradually were no more operational and replaced with newly established cooperatives that become powerful with the ability to adapt to the new situation and respond to the members' needs.

2.4 Socio-economic contribution of cooperatives

Several studies attempted to show the socio-economic impact of cooperatives on poverty reduction, job creation, food security, women empowerment, technology adoption and promotion of democracy, as well as challenges faced by cooperatives. It is worth saying that all those aspects are key fundamental areas for achieving sustainable development goals.

2.4.1 Cooperatives and poverty reduction

For many years cooperatives have been considered as organizations that can help to reduce poverty among members of society. One would ask what those members-owned enterprises have in special that put them in a better position of moving people from poverty. Wanyama (2016: 20) argued that cooperatives help the poor to discover business possibilities, enabling less privileged people to protect their rights and to be represented in decision making that affect them as well as protecting the members with the risk-sharing approach. This indicates how people with the same problem regardless of their means can put together a small share capital and start an economic activity that can meet their needs. By working together and sharing ideas through general assemblies, their business starts to grow and increase their income. The bigger their business becomes, the more impact it begins to have in the community.

Furthermore, Saving and Credit Cooperatives (SACCOs) and Agricultural cooperatives played the most important role in poverty reduction in East Africa. For instance, it is estimated that the life of around 5,000,000 people and 1,600,000 cooperative members depends on cooperative activities in Tanzania, which indicates their potential contribution in reducing poverty among non-members through spillover effects while also contributing to the state's social protection and

development (Maghimbi, 2010:32). Indeed, Rice and coffee farmers improved their income as a result of SACCOs membership in Tanzania (Maghimbi, 2010:33). Similarly, in 2007, more than seven million active members of primary cooperatives in Kenya were believed to be earning their income from cooperatives (Wanyama, 2009: 26). In Rwanda, members share capital increased from 5,178,550,576 Rwf (approximately USD 5.1million) in 2019 to 31,881,597,219 Rwf (approximately USD 31million) in 2019 (Harelimana and Mukarukaka; 2020). The increase of share capital implies two things. First, it is a sign that the sector is growing by accommodating more people that need to move to the upper stage of their living conditions; second, it means that there are cooperatives whose initial investment has earned profit and as a result increase their capital. Furthermore, the contribution of cooperatives to alleviate poverty is usually associated with employment opportunities generated by those organizations.

2.4.2. Cooperatives and employment

Cooperatives are widely known for having a substantial impact on job creation and income generation. While empirical evidence regarding jobs created by cooperatives continues to be a challenge in the East African countries, (Develtere et al., 2008:73) identified three ways that cooperative societies create employment opportunities. Those include: through direct employment for those people who are hired by cooperatives and work as their everyday employees in different capacities; through indirect employment or self-employment for cooperatives members who find themselves that their income depends only on cooperative activities; and through spillover effects for those people outside cooperatives whose occupational activities are inextricably linked to transactions performed with cooperatives such as service providers and suppliers of agricultural inputs and fertilizers to name a few.

Furthermore, some examples show the role played by cooperatives in creating employment in East Africa. For instance, in Kenya, primary cooperatives helped to establish 300,000 and 34,524 jobs in Kenya and Tanzania respectively as well as 303,455 jobs created by spillover effects in Kenya while employed people in government and other cooperatives-related agencies was 3,445 and 425 in Kenya and Tanzania respectively (Dondo, 2012). Similarly in Rwanda, the estimation of full-time

staff employed by U-SACCO¹ is around 3,328 (Harelimana and Mukarukaka; 2020:3) while in Uganda, (Develtere et al., 2008:73) work reportedly find that around 2,823 were directly employed by Cooperatives. Employment opportunities created by cooperatives highlight their roles in reducing unemployment issues, especially in less developed countries.

2.4.3 Cooperatives and food security

In East Africa, like in many developing countries, the majority of people live in rural areas and depend on agriculture as their only source of income. This gives agricultural cooperatives in rural areas the potential to improve food security and nutrition. When the country is food secured, the life of people is improved through consumption and the production is enough to take the surplus to the markets with a shortage of food supply. This contributes to both government economic growth and the increase of producers' income. Indeed, nutrition among the population is improved which ensures them better health and allows them to contribute to the development of the country. Cooperatives have an important role to play in food security by increasing production and linking farmers' produce to the market. For instance, in 2004, Rice cooperatives were responsible for almost all rice cultivated in Rwanda with 40,148 members that produced 35% of the total demanded rice in the Country. (Nyamwasa, 2008:289). This number might even be higher to date given that, all rice producers in Rwanda are encouraged to be organized into Cooperatives.

Besides, Harelimana and Mukarukaka, (2020:4) indicate that the role of cooperatives in food security is also observed in supplying inputs (improved seeds, fertilizers, and pesticides) which are essential for farmers to increase productivity. Though the authors did not mention the role of the government, most of the inputs are also associated with state incentives to reduce the transaction cost. However, the advantage of cooperative members is that they are in a position to be facilitated by the state to get inputs quickly and easily because they are organized, while for non-members it might be quite expensive and take time. Indeed, with training and experience, most cooperatives provide extension services and produce improved seeds

¹ In Rwanda U-SACCOs are SACCOs that have been established in each sector (locally known as *Umurenge*) of the district all over the country. Among 437 registered SACCOs, 416 are U-SACCO

for their members which are also essential to increase productivity. Additionally, by working with financial institutions cooperatives are able to borrow money to purchase enough seeds and fertilizers as well as purchase insurance for their crops to limit the risk associated with climate change while for non-members this might be a challenge.

Furthermore, several scholars argued that cooperative membership is essential for the rapid adoption of technology. For instance, (Demena, 2011) study conducted in artisanal fishing in Eritrea, found that cooperative membership and availability of loans are factors influencing the adoption of advanced technology in fishing. Similarly, another study by Abebaw and Haile (2013) revealed that cooperatives were very essential to trigger the rapid use of agricultural technologies by smallholder farmers in Ethiopia. The use of technology in most developing countries, especially Africa is still a problem that traders and farmers are facing, and undermines the development of their activities. However, cooperative organizations can solve this problem if they are given support through different initiatives such as training and access to finance. Technology adoption is also an important factor for influencing young people to join cooperatives (Demena, 2011) and participate in food production which is important for food security and nutrition.

2.4.4. Cooperatives and women empowerment

In Africa and many other developing countries, women are often left out of economic activities that generate income because of the dominant patriarchal society. This created inequality between men and women in different sectors such as governance, employment, and participation in the decision-making arena. Consequently, discrimination against girls and women has continued to be common in certain areas. However, we are now seeing an immense contribution of cooperatives to women's empowerment that has already taken a remarkable step. Cooperatives have become a vital tool for women to improve their joint action and expand their business skills and capabilities. For example, in Tanzania, the number of women who are members of financial cooperatives increased from 86,000 to more than 375,000 between 2005 to 2010 which gives them a representation of 43% of total membership (Majurin, 2012:9). Obtaining membership in SACCOs implies using financial services such as deposit, saving, and borrowing, thus one becomes financially included.

Similarly in Rwanda with 52% of women in the total population (Kaitesi, 2020), their participation in the cooperative movement is estimated to be 45% (Harelimana and Mukarukaka, 2020:3). Likewise, in Uganda, a survey conducted in 55 agricultural cooperatives revealed a significant rise in the number of women engaged in those cooperatives by 132 % compared to men that increased by 94 % from 2007 to 2010 (Wanyama 2016:20).

Regarding the participation of women in leadership, the finding from a survey indicates that women's participation in the boards of SACCOs varies from 24% in Kenya to 65% in Tanzania, while the average in East Africa is 44% (Majurin, 2012:11). In addition, cooperatives have given women a space to discuss social-related issues among them (Kaitesi 2020, 35). From these views, it is of particular importance to conclude that cooperatives have a big share in promoting gender equality, providing employment opportunities to women, and increasing the representation of women in the decision-making space. Nonetheless, the number of women in cooperatives is generally still much lower compared to men (Majurin, 2012), though they are some emerging cooperatives that women are dominating men such as cross-border cooperatives (Harelimana and Mukarukaka, 2020:3).

2.4.5. Cooperatives and democracy

Among seven universal principles of cooperatives include the principle of democratic member control. This principle reflects the governance of cooperatives through different ways including that they are organizations established by members, controlled, and governed by members, and work for members with all members having equal voting rights, and no one is above the others. The principle of democracy is at the center of trust, mutual respect, transparency, and accountability that make the identity of a cooperative. It is also what makes them essential players in the proceeding of social engagement particularly in rural and informal economies (Wanyama, 2016:49). The study by (Friis-Hansen et al, 2017:52) in the context of Uganda suggests that the future of Uganda's socio-economic development will be heavily reliant on cooperatives' ability to operate successfully due to their important role in the mobilization of people and resources for prosperity, fostering a much-needed sense of self-help, reducing the problem of migration from rural areas to the cities by

providing job opportunities in agricultural and handicraft enterprises in rural areas. These and other characteristics, such as being the best democratic schools, render cooperatives vital allies of economic growth (Friis-Hansen et al, 2017:52)

Additionally, (King and Hickey, 2016) argued that associations such as civil society organizations and cooperatives are essential in building democracy from the down which can help to explore the intermediate processes. They facilitate detection of the medium processes involved in establishing democracy, such as the importance of confronting normative issues of inequality, as well as the importance of developing trust linkages, partnerships, and synergic interactions for both civil and political society, which can make government agencies more effective to respond to the public pressure (King and Hickey, 2016). As a matter of fact, states need a well-functioning cooperative sector that is able to drive socio-economic development democratically.

Furthermore, the contribution of cooperatives across all sectors including but not limited to poverty alleviation, job creation, food security, and women empowerment as well as their democratic identity, make those societies a utopian model for achieving sustainable development goals (Wanyama, 2016; Harelimana and Mukarukaka; 2020).

2.5 Challenges of cooperatives

Notwithstanding the contribution of cooperatives in the socio-economic development of the society and their presence in almost all sectors of the economy, cooperatives face a lot of challenges. According to (Wedig and Wiegratz, 2018: 364) the "revival of cooperatives is a contested process that is characterized by conflicting interests and struggles over political power and economic support". The authors identify barriers that undermine the revival of the sector including poor infrastructure, lower access to finance, transportation and storage cost, and lack of significant investment because of price volatility among others. Indeed, agricultural cooperatives in Uganda like in other African countries suffer from bad trading conditions that come along with the political and economic climate of the country while retaining considerable political power over some cooperative activities in order to preserve the status quo benefits of large capital and government privileged people (Wedig and Wiegratz, 2018: 364)

Another study by (Enzama, 2013) suggests that cooperatives' potential and strength to harmonize economic activities, is limited by bad governance, weak solidarity among members, and insufficient revenues generated. This has also been aggravated by the bad image provided by failed cooperatives and the lack of sufficient technical assistance from the state. The author suggests that addressing the economic conditions and providing technical assistance to cooperatives will help to develop cooperative competence, rebuild their picture, and revive people's trust in the cooperative movement.

Therefore, it can be concluded that poor governance and management of cooperative societies, the interference of the state in cooperative's internal affairs, lower participation of members in cooperatives activities associated with insufficient knowledge and skills are challenges that undermine the development of cooperatives. In addition, cooperatives as organizations found in every area of the economy, lack strong coordination of stakeholders and partners, which makes them vulnerable to external influence and this destroys their autonomy and independence. It is also important to point out the insufficient empirical studies in research and development that show the contribution of cooperatives to society to inform policy-based evidence in order to recognize their role on the international stage.

Likewise, the sector is still lacking efforts to take advantage of regional and internal markets opportunities that are available. According to Ingabire et al. (2017), farmers who are members of cooperatives or other self-help groups are able to collaborate between them which provides a good opportunity to get market information and knowledge and facilitate agricultural trade as well as increase active participation of producers in the market. However, there is a need for policymakers to increase better infrastructures linking producers to the local market and to encourage cross-border trade of agricultural products and market information to lower the transaction cost (Ingabire et al., 2017).

2.6 Cross-border cooperatives

Cross-border Cooperatives are emerging organizations in cross-border communities that provide services across borders and link producers and traders to the regional markets. They also play important role in accelerating regional integration. According to a recent study by (Lloyd-Ellis and Nordstrom, 2021) in East Africa, regional integration can help countries to specialize in producing services and commodities to enjoy the advantage of economies of scale that can be increased with the facilitation of effortless crossing of people on the border. The authors point out the role cooperatives can play to achieve economies of scale, adoption, and use of ICT to reduce asymmetric information on the market and link producers to the regional market. However, the challenge is that few findings are available to prove their impact and connection with trade (Lloyd-Ellis and Nordstrom, 2021:23). One of the reasons there is limited evidence on the impact of cross-border cooperatives is that most of those cooperatives and other self-groups involved in cross-border trade are made with small-scale cross-border traders. The economic contribution of small-scale cross-border trade is often underrated and as a result, actors involved in such trade do not get the attention they deserve.

Cooperatives involved in cross-border trade may differ depending on whether they are legally registered or not, or whether they are the modern form of cooperation or informal. However, they all have similarities of being organized groups created, owned, and controlled by members that have the same problems and challenges, doing the same economic activity while they strive to improve their living conditions. According to Develtere et al. (2008: 41) “being a cooperative in the name is less important than being an open and democratically structured group of people who jointly carry out economic activities to the benefit of all members of the group and, by extension, the whole society” For the purpose of this study, the cross-border cooperative name is used to refer to all collective action groups involved in cross border trade.

2.7. Why small-scale cross-border trade?

While cross-border trade has been an outstanding factor for economic growth in other regions such as East Asia, and Western Europe, African countries are yet to take full advantage of this trade (Brenton and Isik, 2012). In 2017, the proportion of exports between African countries to overall Africa exports increased to 17% from 10% in 1995, which is much lower compared with the equivalent in Europe (69 %), Asia (59 %), and North America (31 %) (Songwe, 2019). This indicated the gap that exists in Intra African trade and why African nations need to find a solution to increase trade flows between them to accelerate their economic growth. Among challenges that undermine cross-border trade include domestic and foreign policies on security, inadequate infrastructure, political instability, and change in government policies (Titeca, 2009). Also, there is an increasing much of African trade that takes place in Informal cross-border trade (ICBT). ICBT accounts for a major share of regional cross border trade and contributed to food security, poverty reduction and employment for impoverished families in the medium and short run (Lesser and Moisé-Leeman, 2009)

It is important to distinguish between “informal” and “small-scale” terminologies used in cross-border trade. Calling cross border trade informal is different from Illegal trade as (Brenton and Soprano, 2018) make a clear distinction for two main reasons. First, Informal is often mistaken with illegal which provides a negative perception of the trade, second, it misrepresents the nature of the business on the field, as traders may cross borders through both formal and informal routes interchangeably based on a range of circumstances. Additionally due to the trade policies and political intention what is considered informal or illegal in one country can be recognized, recorded, and charged with taxes as legal in another country (Little, et al., 2015:405). Also, traders are considered as small scale in EAC, if the value of traded goods is under US\$ 2,000. Through Simplified Trade Regime (STR) agreement that aims to facilitate small-scale traders, products that do not exceed that threshold are not subjected to customs duties, once they are produced within member countries and have a Simplified Certificate of Origin (SCO) (Mwanabiningo, 2015:22). Implemented policies that facilitate small-scale traders at borders reflect the importance of small-scale trade in East Africa. According to Brenton, et al. (2011:1)

small-scale cross-border trade plays the most important role in connecting producers to markets in the Great Lakes region of Africa. Traders with limited capital view this business as a vital opportunity for them to earn an income and create jobs and they are often connected through social networks to avoid the high cost of the transaction (Nakanjako et al., 2021).

2.8 Cross border cooperatives and small-scale traders

Cooperatives and other self-help organizations play a major role in East Africa to help small-scale traders overcome constraints that come along with trading across borders and serve as intermediaries between traders, government officials, and other stakeholders in cross-border trade. For instance, civil societies organizations and NGOs helped women cross-border traders organized in cooperatives to access the finance and reliable markets as well as improve their business skills and formal trading knowledge in Rwanda and Uganda (Parshotam and Balongo, 2020:12; Bugingo, 2018:11). Similarly, experimental evidence from the training provided to cross border traders (members and non-members of cooperatives) in Rwanda and DRC, reduced the incidence of corruption and violence among small scale traders (Croke et al., 2020) while in livestock cross border trade between Kenya and Ethiopia (Pavanello, 2010:30) suggest that involving cooperatives in the livestock trade value chain, play a major role in reducing asymmetric information and increase the bargaining power of producers as well as traders' power to claim better conditions of trading. In addition, (Titeca and Kimanuka, 2012), find that cooperatives were essential to facilitate traders to grow their capital through large-scale purchases of goods at affordable prices. Meanwhile, Mbo'o-Tchouawou, et al. (2016:1) suggest that being a member of trading networks provides higher chances of trading more across borders. This implies advantages of being a member of trading networks that individual traders would not qualify for.

Meanwhile, Nakanjako et al. (2021) claim that traders' participation in SSCBT is influenced by migrants' social networks to avoid the high cost of the transaction and to access necessities, opportunities across borders as well as the poor implementation of SSCBT directives. Social relationships and kin ties played an important role for traders in cross-border trade to establish trading networks. Most of these networks are

informal and not officially registered but their collective activities are not far from those of formally registered cooperatives and associations. For instance, the study by Golub (2015) revealed how kinship networks are more important for traders to access market information, access finance, meet contract requirements, and promote global trade since they assist to minimize the transaction costs. They also increase trust and stability by honoring contracts signed with buyers. According to Eaton et al. (2007:16), the collective contract helps to avoid risk concerning quality and quantity to meet purchase order requirements, while it incurs lower transaction cost between exporter and producers' organization than an individual producer.

Despite, the role played by cross-border cooperatives for small-scale traders, their leaders face issues of insufficient skills and knowledge and lack of authority to safeguard and strengthen traders' working conditions (Titeca and Kimanuka, 2012). Also, cooperatives involved in illegal activities across borders end up creating conflict with government officials and become a threat to the formal economy (Little et al., 2015: 410), while those with historically poor management could influence people for not joining cooperatives (Fulanda et al. 2009). For cross-border cooperatives to improve effectively the social-economic condition of small-scale traders, it is important to graduate associations and other informal trading networks, particularly those that are not registered, into formally registered cooperatives to increase their power (Akaezuwa et al., 2020). Registered cooperatives are recognized by the law and state institutions, and they are able to take legal action once their rights are violated. The same is applied when they are not complying with the law. There is also the need for governments and partners to acknowledge their roles and provide support for their capacity building. This will help them to scale up the SSCBT towards a more formalized trade and make them more resilient to economic shocks such as the Covid-19 Pandemic.

2.9 Covid-19 and cross border cooperatives

Like many other social-economic activities worldwide, cooperatives have been affected by the Covid-19 pandemic that emerged in late 2019 from Wuhan Province in China. According to (ICA, 2020), in Europe, most of the cooperatives experienced a decline in turnover than usual and as a result, employees had to work temporarily.

Similarly in the Asian Pacific region cooperatives that requested loans faced a decline of services provided and products sold which reduced their cash inflow because of the limited movement of the people and this negatively affected their income (Dongre et al., 2020). This situation in cross-border trade was worse due to the closure of borders. For instance, (UNDP, 2020) reported that due to the fragility of small-scale traders in supply chains, Covid-19 restriction measures resulted in a near-complete trade halt between Uganda and DRC. The restrictions further worsened previous fragility and trade disparities, in particular women's profitability and income, and traders were subjected to excessive force used to enforce measures, while they also experienced price volatility and insufficiency of food supply (UNDP, 2020). Similarly, in DRC, Participants in cross-border trade lost their source of income as a result of the closure of the Goma Gisenyi border, a major cross-border hot spot between Rwanda and the Democratic Republic of Congo, throwing additional strain on an economy that already is suffering from the armed conflict (Gorpudolo and Akello, 2021:19)

Despite the devastating effects of the Covid-19 pandemic mentioned, cooperatives emerged to be resilient and creative in the face of the virus outbreak. For instance, Dave (2021) argued that due to their unique characteristics, and values of democracy, solidarity, as well as the cooperative principles of cooperation among cooperatives and concern for the community, Cooperatives, and mutual Enterprises are especially resilient in responding to the Covid-19. Indeed, beyond the major role associations play in traders' everyday lives and protection of their members' benefits, during the pandemic, trade associations played a crucial role by supporting their members with small credit or other financial support, and they were useful in lobbying the government officials to let them continue with trading activities across borders (UNDP, 2020). Also, the pandemic changed the way of trading in East Africa, and, through a bilateral agreement, some countries adopt a new approach of trading in clusters to keep small scale cross border traders in the business at the same time by limiting the number of people who cross the borders, to contain the pandemic. (Mvunga and Kunaka, 2021).

The resilience of cross-border cooperatives during the pandemic crisis proved once again their particular importance for their members in the face of economic shocks. While the majority of traditional enterprises closed their doors and others laid off their employees, cooperatives were in solidarity with their members offering them support in kind and money. However, it is also important to point that some cooperatives collapsed as a result of covid-19 negative effects associated with weak management (Francesconi et al., 2021)

Chapter 3. Methodology

3.1. Introduction

To explore cross-border cooperatives and small scale-traders in Eastern Africa, a structured review was conducted following PRISMA (The Preferred Reporting Items for Systematic Reviews and Meta-Analyses) 2009 to retrieve, integrate, and report the evidence based on the utilized exclusion and inclusion criteria (Moher et al., 2009). The protocol was utilized during the determination of factors that influence small-scale traders to participate in cross-border cooperatives in East Africa, evaluation of the effect of participation in cross-border cooperatives on small-scale traders in East Africa, and analysis of how cross-border Cooperatives responded to Covid 19 pandemic during border closure. (The completed checklist is attached below as Appendix 2). The study also draws on 8 semi-structured interviews with key informants to fill the gap identified in the structured review. Overall data collection took 3 months (June – August 2021)

3.2 Search strategy

To conduct the systematic review, we utilized a systematic web search to locate and review past studies on cross-border cooperatives and small-scale traders in Eastern Africa. Our strategy mainly used the Google Scholar database since it gives users access to a large collection of grey and academic literature. We categorized our research into 2 components with different keywords based on the database. In the first category, our search focused on membership participation and cooperatives' socio-economic effect on small-scale traders while the second category focused more on Covid-19 pandemic and cross-border cooperatives (details in table 3.1). Based on practical arguments the search strategy was limited to papers published from 2000 to August 31, 2021, papers published before 2000 were excluded. After searching for published studies on Google Scholar, the list was exported to excel for the removal of duplicates screening and further process.

Database	category	Keywords	Results
Google Scholar	Socio-economic effects and participation	"Cross-border trade*" (cooperatives OR co-operatives OR coops OR networks OR associations) AND "small scale traders" members* participation (income OR revenues) AND ("East* Africa" OR Kenya OR Uganda OR Tanzania OR Rwanda OR Burundi OR "south Soudan")	362
	Covid-19	"Cross-border trade" (cooperatives OR co-operatives OR coops OR networks OR associations) AND "small scale" AND traders AND (coping OR dealing) AND (Covid-19 OR Coronavirus OR Covid-2019) AND impact AND "East Africa"	61

Table 3.1: Search strategy, keywords, and obtained papers

3.3 Selection criteria

The selection of studies was done based on original papers published and electronically available. These include books, book chapters, articles, review papers, working papers, and policy briefs. At this stage a total of 423 potential papers were available.

3.4 Exclusion criteria

For this study, the exclusion criteria included: the study of cross-border cooperatives and small-scale trade outside Eastern Africa; studies with unreliably extracted data, overlapping data, and duplicates; newspaper articles, opinion papers, master's thesis, abstract only papers, conferences, and editorials; and articles with incomplete texts. Articles written in non-English languages were also excluded. Finally, studies published earlier than 2000 were also excluded for practical reasons.

3.5 Inclusion criteria

The inclusion criteria for the topic selected included: articles on cross border cooperatives and small-scale trade in Eastern Africa; articles that were published between 2000 and August 2021 and written in English; and articles framed within any, some, or all the East African countries with a focus on self-help groups involved in regional trade.

3.6 Quality Assessment

This systematic review draws information and results from diverse studies, disciplines, and methodologies, therefore, a single criterion for quality could not be established. The resources and articles utilized were appraised individually and selected for inclusion based on applicability and credibility.

3.7 Limitations

Our systematic review has two main limitations. One of the limitations is associated with the exclusion criteria utilized when compiling studies. Studies done in languages other than English were excluded. Notably, some countries in East Africa use other languages which might have brought in a holistic exploration into the cross-border cooperatives and small-scale trade in East Africa. We were not able to run a meta-analysis on our study because the studies selected were largely heterogeneous. The study utilized varied study designs, timelines, and outcome measures making it difficult to run a meta-analysis.

Chapter 4. Results and discussion

4.1. Introduction

The results and findings section of this study will present the systematic review results. These shall be divided into three main parts: article selection and data extraction, studies and article characteristics, and the general assessment of factors that influence small-scale traders to participate in cross-border cooperatives and the socio-economic effect of cross-border cooperatives participation on small-scale traders. The study utilizes frequency analysis to investigate and examine 18 studies and articles selected in this systematic review.

4.2 Article selection and data extraction

The selection and extraction of studies followed a two-step process. The first step entailed an inclusive query electronic search on Google scholar which identified 423 studies. All the duplicates with the same author, year, and titles, those with the same author, title, and published in the same journal were removed. After removing duplicates Using title screening, 327 articles were excluded since they were not relevant to this specific study or region under study (for example because they discuss small-scale trade or cooperatives at the local level or in other regions other than EAC). The second step entailed reviewing and screening abstracts and where necessary full texts on the remaining 61 studies as shown in figure 4.1 below.

After a careful assessment and screening of texts, 44 other studies were dropped (see Appendix 3). Among them 21 studies were dropped based on the unavailability of full texts and relevance to the study while one was dropped since the year of publication was 1997 and fell under the exclusion criteria, 22 articles framed outside East Africa were also dropped. Additional manual search on Google scholar identified 1 additional article after a citation tracking process because the abstract and full-text screening and review showed that it matched the inclusion criteria. The selection and extraction process ended with a final 18 studies sample (see Appendix 4) as shown on the flowchart figure 4.1 below.

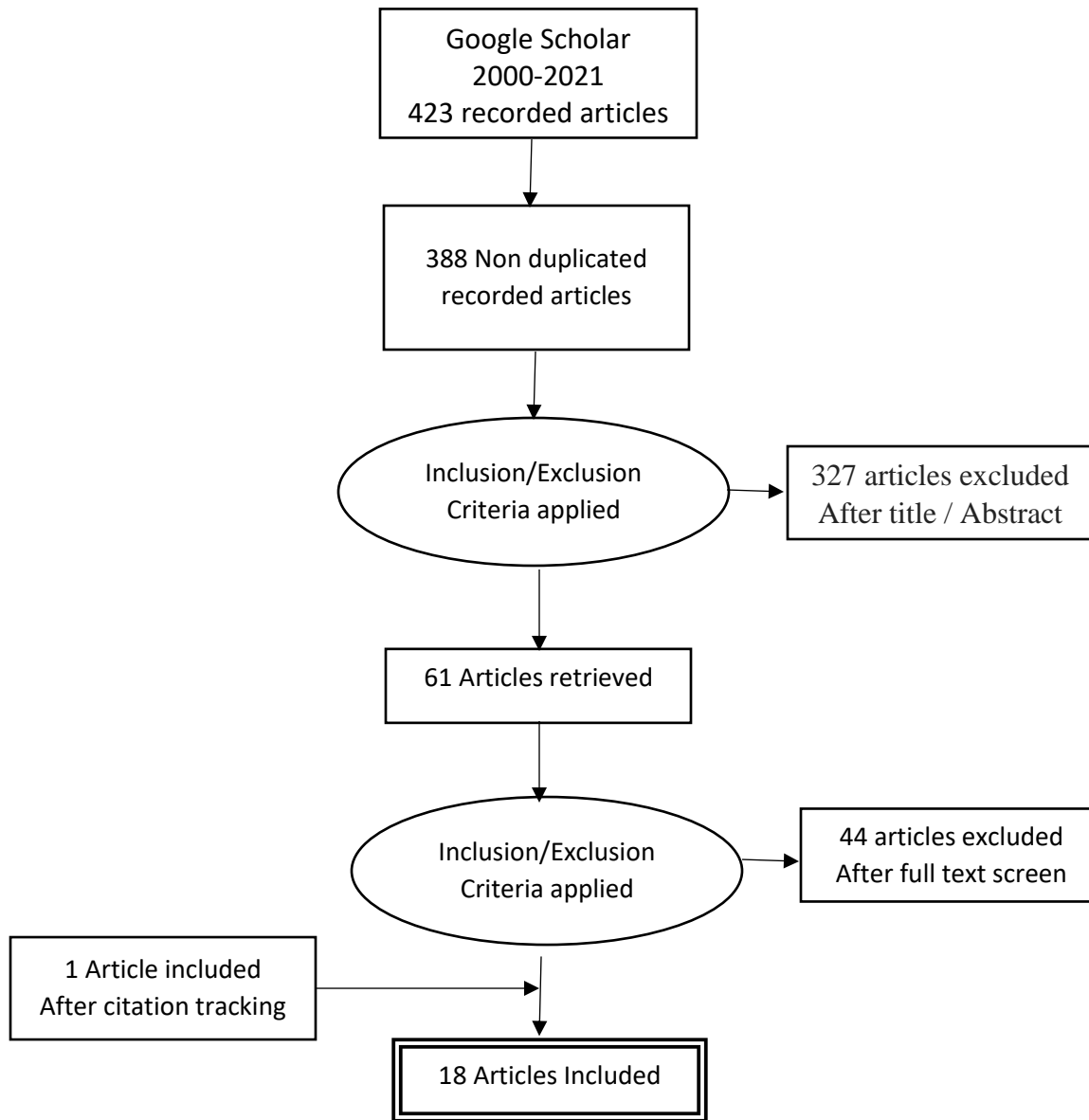


Figure 4-1: The selection process flowchart

4.3 Descriptive studies characteristics

This study's scope entailed 18 studies completed and that was undertaken in East Africa. The articles on borders between Kenya and Uganda as well as East Africa as a whole had the highest percentage 22% accounting for 4 studies each (see figure 4.2). Studies focusing on borders between DRC, Rwanda, Uganda, and Burundi, as well as borders between DRC and Rwanda had the second-highest share with 2 studies

accounting for 11% for each. DRC shares borders with five East African countries, therefore, cross-border small-scale trade is common thus forming one of the reasons several studies came from this region. In terms of single nations, Rwanda and Tanzania had 1 study each. Meanwhile, no specific national studies from South Sudan and Burundi were reviewed, however, these two nations were studied under the overall East African community. Among the research design used, 44% (n=8) of the total studies investigated used the qualitative approach, 39% adopted mixed methods design and the remaining 17% (n=3) used the quantitative approach to investigate the role played by cooperatives in cross border trade.

The common issues investigated by the articles reviewed included the role of cooperatives on the socio-economic condition of small-scale traders, the impact of small-scale trade on women, and how cooperatives responded to the spread of Covid-19. Almost 55 % of the studies reviewed investigated the socio-economic effect of participation in cross-border cooperatives on small-scale traders. 28% of the articles investigated the factors influencing small-scale traders to join cooperatives while only three articles (17%) investigated cross-border cooperatives' response to the effects of the Covid-19 pandemic.

The majority of studies focused on cross-border trade of agriculture and livestock products in general, two studies focused on agricultural cross-border trade while the livestock cross-border trade accounted for 2 articles. There is also one study that focused on fish trading.

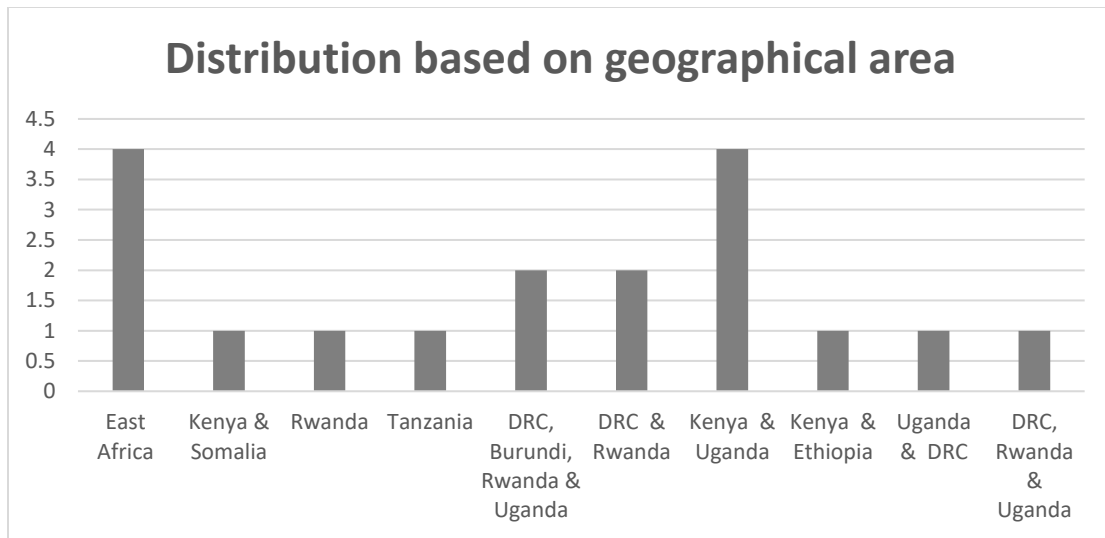


Figure 4-2: Distribution of article based on geographical location

The findings from the analysis and assessment displayed variability in the number of study participants, the data collection, and evaluation methods, however, the specific characteristics of the participants showed some similarity with the majority being small scale traders, women in trade, and farmers who engaged in small scale cross border trade in the region. The largest study had more than 900 participants, however, more than 44% ($n=8$) of the articles had less than 300 participants. About 28% of the articles investigated used narration modeling, literature, and systematic reviews.

The systematic review also investigated the publication dates of the articles selected, the studies extracted were those published from 2000 to 2021. The year that accounted for the largest number of articles was 2020, it accounted for 33% ($n=6$) of the articles selected for review. The year 2021 had the second-highest publication at 22% ($n=4$). The three studies on Covid-19 response and interventions were conducted one in 2020 and two in 2021 (see figure 4.3). The highest number of studies in the recent past is explained by included studies on the effect of the pandemic on cross-border cooperatives in addition to the increasing research being conducted in small-scale cross-border trade.

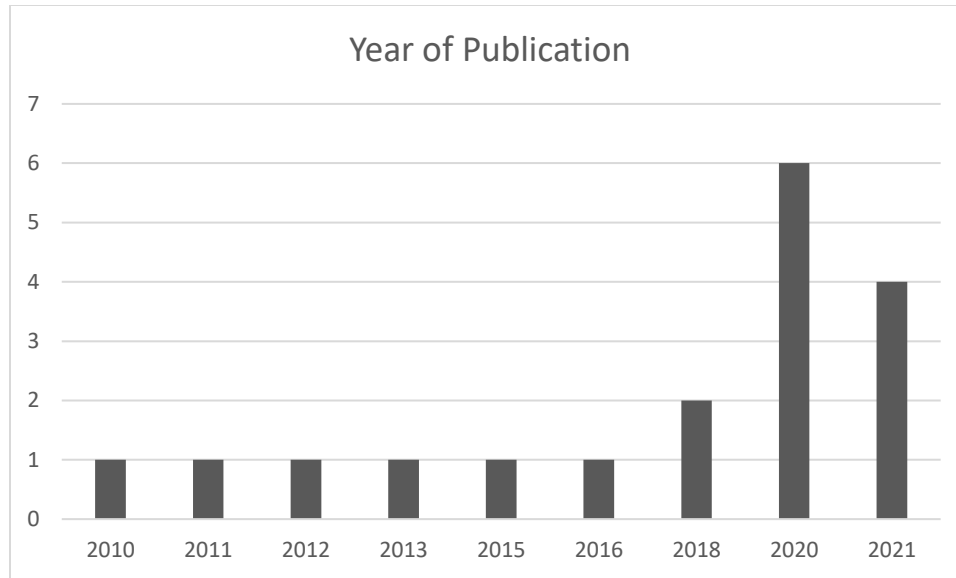


Figure 4-3: Distribution of articles based on year of publication

4.4. Factors influencing small-scale traders' participation in cooperatives.

In our systematic review, 28% (n=5) of the studies out of the 18 selected articles investigated the participation of small-scale traders in cooperatives. Three studies (16%) revealed lower participation of small-scale traders in cooperatives while one study indicates equal participation of traders in trading networks. The lower level of participation of traders in cooperatives is explained by lack of proper organization of traders, lack of awareness of those enterprises, and poor management of those members organizations that influence non-members from joining cooperatives (García Mora and Roshan 2013).

Likewise, cooperatives facilitate traders to grow their capital through large-scale purchases and increase their bargaining power which helps their members to influence prices on the market (Titeca and Kimanuka, 2012). As a result, members of cooperatives are likely to increase their income based on their high capital and ability to direct price at the market and play an important role to attract non-members. meanwhile, the training of small-scale traders might not influence traders to join cooperatives as revealed by one study in this review (Croke et al., 2020).

4.5 The Socio-economic effect of participation in cooperatives

Among 18 studies, 55% (n=10) discuss the socio-economic effect of cooperative and other self-help groups' membership on small-scale traders. Among them, 22% of studies (n=4) discuss economic effects such as reduction of transaction cost, access to finance and market information as well as the increase of capital through pooling resources. The study by Golub (2015) found that kinship networks are essential in ICBT to access information and finance, meet contract requirements, reducing transaction costs while they promote the integration of the regional market. Meanwhile, 11% of studies (n=2) discuss the role played by cross-border cooperatives in helping traders to cross borders through official routes and to move from informal to formal trading. The study by (Kawala et al., 2018) suggests that membership in fish marketing organizations is associated with formal or informal trading routes. In other words, cross-border cooperatives can play important role in formalizing informal cross-border trade.

Furthermore, 17% of studies (n=3) discussed the social effects of participating in cross-border cooperatives such as representing traders in the decision-making space, protecting traders' interests, and helping them to increase their knowledge and skills. The study by Akaezuwa et al., 2021 suggests that participation in cooperatives and other social associations empowered small-scale traders especially women who were low-income earners thus enabling them to deal with the challenges they face in cross-border trade. This resonates with the findings from past studies in this systematic review and other studies done on the impact of cooperatives in society in general. Cooperatives also improved the living conditions of small and medium traders by reducing their vulnerability in the livestock cross-border trade in East Africa (Ng'asike et al., 2020). Despite the importance of social capital in traders' organizations which is essential for traders to move from informal to formal trading, one study (5%) indicates that informal cross-border trade is influenced by "migrants' social networks". This indicates how social networks instead of leading small-scale traders to more organized trade can rather be an opportunity to attract other traders in Informal cross-border trade.

4.6 The role of cooperatives in the response to Covid-19

The articles investigating the role of cooperatives in the response to Covid-19 found out that cooperatives offered significant economic and social support to small-scale cross-border traders. In general, only 3 articles (17%) were able to achieve the objectives of showing the specific roles and impact of cooperatives on cross-border traders. Women were significantly affected by the spread of Covid-19, the containment measures including lockdowns, travel restrictions, and curfew affected small-scale traders who are majorly women (UNDP, 2020). The study also found out that law enforcers harassed and abused women in a bid to implement the Covid-19 containment measures (UNDP, 2020). In Tanzania, exports of rice decreased due to Covid 19 pandemic having a detrimental effect on the lives of rice value chain players, especially small producers and women in general. Nonetheless, social networks, community associations, and cooperatives played a significant role in educating and empowering women and small-scale traders. Trading in clusters or through traders' associations or cooperatives was used to mitigate the virus effect at the same time without stopping cross-border trade (Mvunga and Kunaka, 2021). Cooperatives supported their members with small credit or other financial support and were useful in lobbying some government officials to continue trading (UNDP, 2020)

4.7. Findings from interviews with key informants

To supplement reviewed studies on cross-border cooperatives, the researcher relied on semi-structured interviews with key informants in cross-border trade with a reference to Rwanda as one of the 6 countries of EAC. Interviews were conducted with key actors deliberately selected based on their roles and responsibilities in cross-border trade. Data collected through semi-structured interviews were essential since they helped us to get the detailed information regarding the contribution of cross-border cooperatives in small-scale cross-border trade and provided the chance to identify new queries and recommendations suggested not only by key actors in the government but also by cooperative leaders and civil society organizations.

4.7.1 Main Characteristics of interviewed informers

Our sample consisted of 8 key informants from the Ministry of Trade and Industry (1), Rwanda Agency in charge of Cooperatives (1), Civil society organization (1), local government authority (1), border officials (1), COMESA information Desk (1) and cooperative leaders (2)(See Appendix 5). Seven Interviews (87.5%) were conducted face to face except for one interview that was conducted using the phone call due to the last-minute change of the program. Before the start of the interview, every participant has explained the purpose of the study to provide individual consent to participate in the study. Interviews involved making audio recordings or taking notes to keep and transcribe participants' answers to avoid misinterpretation. Overall, 5 participants (62.5%) agreed to be recorded and the researcher took notes for the remaining (35.5%).

4.7.2 Results and discussion from interviews

While Rwanda is bordered by 3 countries from East Africa (Burundi, Uganda, and Tanzania), DRC is the major cross-border trade partner of Rwanda in the region. Seeking to know why the Goma-Gisenyi border is the hot spot for small-scale cross-border traders, all participants point out that the City of Goma in DRC is overpopulated compared to Gisenyi town in Rwanda, and their population has the high purchasing power compared to those in Rwanda, make it a good market opportunity for small scale traders from Rwanda, while those from Congo benefit cheaper prices from agricultural and livestock products from Rwanda to make a significant profit in Congo. In an interview, one local government official summed up these views.

Before the Covid_19 pandemic, between 45,000 and 50,000 people crossed the border every day for business activities.... All of them have different opportunities in Goma because once they get a job or market opportunity there, the pay is higher than In Rwanda. So, they choose to go there to seek those opportunities they do not have here. But the other thing is that Goma is very a good consumer market. So, it is easy for small-scale traders to

do business there because the market is very big. (Interview with Local government official, 27 August 2021).

The findings from the structured review revealed lower participation of small-scale traders in cooperatives compared to the number of traders involved in cross border trade, the participants were asked if traders are reluctant to join cooperatives and the reasons behind that, as well as the factors that influence those who become members of cross border cooperatives. Participants provided mixed answers. In most cases, the lower level of knowledge for small scale traders is the reason why they do not want to join cooperatives² similarly, those traders are not aware of benefits cooperatives can bring to them, or simply they are involved in smuggling activities and knows that their behavior cannot be supported by cooperatives fearing to be reported for doing such illegal activities³. On the other hand, small scale traders do not trust cooperatives as revealed by One COMESA information desk officer that operates at the Gisenyi-Goma border who offered the following summary:

When we discuss with traders, some of them said to have lost trust in cooperatives based on their previous experience and from what they see in other cooperatives, and this influence them not to join cross-border cooperatives⁴.

On the contrary, small-scale traders are not reluctant to join cooperatives rather, they do not have enough information about cooperatives and sometimes the membership fees required are beyond their capacity.

I think the main thing for small-scale traders is to have information.... The resistance is inevitable for some of them but when they are well explained the majority understand it. This is explained by how their numbers are going up when you look at the trend. Last year we had 21 cross border Cooperatives but now we have 49, and the numbers are still going up⁵

² Interview, RRA official, Gisenyi Goma border, 27 August 2021

³ Interview, Government Official in the Ministry of Trade and Industry, Kigali, 26 August 2021

⁴ Interview, COMESA official in charge of information desk, Gisenyi-Goma Border, 27 August 2021

⁵ Interview, Local government official, Rubavu District, 27 August 2021

The majority of these traders have a lower level of education and rely only on cross-border trade of small products from their farms or purchased at the local market to earn income for their household consumption. This explains financial challenges faced by those who wish to join cooperatives but are unable to pay the share capital as explained by one dairy cooperative leader interviewed.

I wouldn't call them reluctant. Because they may have that will, but they can't pay the share capital required to become members. For example, if the Cooperative has reached the share capital of 400,000 (US\$ 400) per member and someone comes with 200,000 (\$200) while the by-law of the cooperative requires a person to pay the total share before joining the cooperative, then this becomes a barrier⁶.

These views support the findings suggested by (Titeca and Kimanuka, 2012) in the context of great lakes regions, where most small-scale traders expressed their intention to join cross-border cooperatives but find their requirements to be out of their reach.

Despite most of the small-scale traders who are not members of cross-border cooperatives, those who become members are better informed of their obligations and rights, as well as how to protect them (Mwanabiningo, 2015: 9). According to one representative from the civil society organization interviewed, cross-border cooperatives have become a dialogue platform for less privileged people such as women where they meet government authorities, stakeholders, and partners to discuss their challenges and to connect with other local or regional producers and traders⁷.

Similarly, through cooperative small-scale traders get financial support through the Business and Development Fund (BDF), they are linked with financial institutions and get training from different stakeholders and partners to increase their knowledge and develop their business ideas while any support from the government starts

⁶ Interview, TWISUNGANE dairy cooperative leader, Rubavu District, 27 August 2021

⁷ interview, with one staff from Pro-femme Twese Hamwe, Kigali, 26 August 2021

through cooperatives.⁸ These views were also supported by one government Official from Rwanda Cooperative Agency (RCA) in the following way:

In sum, we can divide that into three categories, the first is that they want to grow their business and go beyond the regional market, the second is the advocacy they get through cooperatives, the third is the financial support they receive from public, private, and financial institutions⁹

Seeking to understand whether membership is associated with an increase of income for members and whether those cooperatives have special opportunities for their members compared to nonmembers and other formal companies, one Rwanda Revenue Authority (RRA) official, with an example a cross border cooperative of people with Disability (COTTRARU) involved in Transport using customized tricycles, remarked in an interview that, once transported goods are from any cross border cooperatives, they are facilitated to clear them with only small amount of money paid in the custom¹⁰. He added that, while these customized tricycles can transport up to 3 tons, it is not surprising to pay only 3,000 Rwf (US\$ 3) in customs, a favor that even formal companies cannot get.

This is due to the policies and regulations implemented at borders that aim to facilitate cross-border trade especially for small-scale traders, and when it comes to cooperatives benefits are even much bigger.

Before joining the cooperative, everyone used to have his/her Tax Identification Number (TIN) to pay taxes in RRA, but after forming a cooperative, we now use the cooperative TIN. This has helped us a lot. While for a single trader, goods with values that is less than 500\$, are exempted with taxes, for us we can go up to 50 tons of goods without paying any single money or pay a small amount because they are from cooperative¹¹.

The threshold of 500\$ for goods exempted with tax was introduced in COMESA through Simplified Trade Regime (STR) protocol and increased to US\$

⁸ Interview, Government Official in the Ministry of Trade and Industry, Kigali, 26 August 2021

⁹ Phone interview, government official in Rwanda Cooperative Agency (RCA), Kigali, 26 August 2021

¹⁰ Interview, RRA official, Gisenyi Goma border, 27 August 2021

¹¹ Interview, KOTIHEZA cooperative Leader, Rubavu, 27 august 2021

2,000 in 2015, but the latter has on many occasions been contested with traders for not being implemented (Mwanabiningo, 2015). For cooperatives, this has reduced the transaction cost and generated more profit due to the bulk purchase. This also raises the question of whether cooperative members earn more income than nonmembers.

I do not think so, based on the experience of our border and discussions we had with traders. whether you are an individual trader or a member of a cooperative, they all work the same way and earn money. Perhaps something different is the benefits that members of Cooperative can get based on their savings and contributions, which come back to them in one way or another. But in practice or on the field, they tend all to be involved in the business the same way, because here no one is prevented from doing business whether he/she is a member of a cooperative or not. It is free trade¹².

Next, we explored the role that cross-border cooperatives can play to address the challenges that small-scale traders face. Some interviewed informants believe that cooperatives are key to reducing smuggling and increasing awareness of cross-border regulations.

Existing Cooperatives are also important to help traders to comply with rules and regulations at borders because they do have information and work closely with border officials. As a result, members of cooperatives cannot cross through illegal routes or be involved in smuggling because they are aware of facilities they are given and sanctions that may be applied to them once they have violated any regulations¹³

The above idea reflects Nugent and Soi (2020) findings. They suggest that traders have been encouraged to be organized into associations for two reasons: one, to increase awareness among small-scale traders to cross through official border routes and the second is to represent traders' interests. Likewise, members of cooperatives behave properly at borders and develop self-confidence through training and

¹² Interview, COMESA official in charge of information desk, Gisenyi, 27 August 2021

¹³ Phone interview, government official in Rwanda Cooperative Agency, Kigali, 26 August 2021

interaction with stakeholders and border officials which increase their capacity to claim their rights as revealed by one representative from a civil society organization¹⁴.

Meanwhile, Siu (2020) argued that facilitations implemented at borders such as the One-Stop border (OSBP) has decreased informal trading as a result of traders joining and quitting the market or varying the quantities of good traded rather than traders converting from informal to formal cross border trade. seeking to understand the position of informers regarding the role of their institutions to improve cross border trade, one government official at the Ministry of trade and industry noted that:

Small-scale cross-border trade is essential for our country because it brings a lot of revenues from exports. Rwanda's target is to scale up and support small-scale cross-border trade to formalize gradually. But a lot still needs to be done.... for instance, Rubavu cross-border market has 200 places while the border is used by more than 45,000 traders. More traders haven't yet joined cooperatives and others are still lacking financial support...¹⁵

With the current situation of the Covid-19 pandemic, this research also took a step forward to explore the impact the pandemic had on cross-border cooperatives and the response of these organizations to mitigate the virus effect. The findings from informers indicate a severe negative impact of Covid-19 on cross-border cooperatives and small-scale traders in general. One cooperative leader summarized these feelings in an interview.

Taking an example of our Cooperative, Covid-19 caused us a huge loss and our business went down compared to our initial level. in general, we have changed the way we work. If members who used to go in the Congolese market were about 50 or 60 people, each one going to the store and bring something to the Cooperative, this has changed now and only 3 or 5 people are allowed to go. you can understand that the products they bring cannot match those of 50 people¹⁶.

¹⁴ interview, with one staff from Pro-femme Twese Hamwe, Kigali, 26 August 2021

¹⁵ Interview, Government Official in the Ministry of Trade and Industry, Kigali, 26 August 2021

¹⁶ Interview, KOTIHEZA cooperative Leader, Rubavu, 27 august 2021

Despite challenges brought by the pandemic, cooperatives helped traders to stay in the business. Even though the volume of products decreased significantly but they provided a solution for cross border trading operations as one cooperative leader noted:

...Thanks to the government, the district has helped us to continue to trade our milk in DRC during Covid-19 while other individuals' traders were not allowed. Before Covid-19, we used to send a lot of cooperative members in DRC to follow their business but now we only send the driver or a maximum of two people to sell our milk. However, it is difficult to give one person between 14,000 and 30,000 liters of milk every day and manage to do distribution to our clients, receive payment from them, pay taxes and at the same time monitor our truck..., but at least cooperative activities did not stop...¹⁷

Through a bilateral arrangement between Rwanda and DRC, traders were facilitated to continue operating but only for one condition that urged only goods to be coming from cooperatives or other traders' organizations. Cooperatives received support also from the government and other stakeholders. This was supported by one local government official who offered the following note.

Despite Covid-19 restriction measures, we did our best to keep goods going in the city of Goma to prevent them from being damaged here in Rwanda...While many cooperatives used their savings to support their members during the lockdown, in collaboration with the state and its partners, cooperatives were given support to help them recover their businesses. I remember recently in partnership with Pro-femme Twese Hamwe, we provided 90 million Rwf (US\$90,000) to 49 cooperatives to get their business come back to life like before the pandemic¹⁸

To sum up, cooperatives are particularly important in cross-border trade especially for traders in small-scale cross-border trade. The interviews with key informers revealed how these organizations are essential to address market challenges

¹⁷ Interview, TWISUNGANE dairy cooperative leader, Rubavu District, 27 August 2021

¹⁸ Interview, Local government official, Rubavu District, 27 August 2021

even in difficult circumstances when the community is facing an economic shock such as Covid-19. However, the conditions for participation in cross-border cooperatives present some barriers for small-scale traders, the majority of whom lack enough capital. Also, the management and governance of these member-owned groups and other self-help groups need to reflect their identity if they are to be successful and meet expectations in cross-border trade.

Chapter 5: Conclusions and suggestion for future research

5.1. Conclusions

This study answers three research questions by means of a systematic review on the role of cross-border cooperatives on small-scale trade in Eastern Africa and 8 background interviews with key stakeholders in Rwanda which is one of the six countries in EAC. In general, there is an increase in studies that explore cross-border cooperatives and small-scale traders in Eastern Africa. However, it is still focusing on a qualitative approach and a variety of outcomes at the same time covering East Africa as a whole or Kenya and Uganda depending on considerable accessibility, as well as historical economic significance of the border area. There are also significant studies conducted between DRC and other East African countries. This points to the necessity to extend more research on the specific roles and effects of cross-border cooperatives to other borders and countries with less if not any study in the region as well as the use of different methodologies such as quantitative methods.

While gender represents an important aspect of small-scale cross-border trade, it is important to point out increasing research with a gender perspective that explores the role played by cross-border cooperatives in helping women small scale traders to access the finance and the market information (Bugingo, 2018). This highlights the role played by cross-border cooperatives to promote women who are under-represented in other cooperatives and require more support and initiatives to improve women's status in society.

The findings of our study suggest that challenges associated with small-scale cross-border trade proved to be the reasons traders participate in cooperatives as revealed by 28% of total studies reviewed. The study findings also supported the fact that on one hand lower level of knowledge about cooperatives, poor management of existing cooperatives associated with high membership fees are among barriers to not joining cross-border cooperatives. On the other hand, challenges faced by traders to access the finance, increase of bargaining power, and representation of traders' interest influence small scale traders to join cooperatives. However, the training of small-scale traders who are not members of cooperatives does not affect traders' participation in associations or cooperatives. The interview with key informant revealed that small-

scale traders are not reluctant to join cross-border cooperatives rather they lack information regarding benefits that comes along with cooperative membership as well as proper sensitization and mobilization from government authorities and existing cooperative members.

Additionally, most of the small-scale traders have challenges of lower capital according to reviewed studies which constraint traders from paying the membership fees required to join cross-border cooperatives in addition to the cooperative regulations that do not offer the flexibility of paying shares in installment for traders without enough capital. Some key informants stressed the importance of facilitating traders to get financial support and linking them to financial institutions. This will allow small-scale traders to increase their capital and provide them with an opportunity to join different traders' organizations. However, this must go along with acknowledgment and recognition of small-scale cross-border trade as well as improving the working environment at borders. It is also important to improve the management and leadership of existing cooperatives to restore trust and accountability among members and attract new members.

Meanwhile, 55% of studies reviewed discussed the effect of participation in cross-border cooperatives on small-scale traders. Our results displayed multiple effects ranging from social to economic effects. Starting with the latter, cross-border cooperatives proved to be essential for their members to increase their income through pooling resources and bulk purchases. Two reviewed studies showed how through cooperatives, traders received support that helped them to access the capital and market information which improved traders living conditions and reduce their vulnerability. Likewise, self-help groups in cross-border trade played an important role to reduce the transaction cost for small-scale traders as revealed by 2 studies reviewed (see Golub, 2015; Pavanello, 2010). The interview with key informants revealed how members of cooperatives are facilitated to pay taxes using a single Tax Identification Number which in return reduces the time spend at borders by traders in tax declaration. Members of cooperatives also have the advantage of negotiating higher prices at the market and building networks easily with other cooperatives or associations which help members to locate markets for their products across the

national borders. However, some key informants interviewed indicated that there is a slight difference in earned income for members of cooperatives and non-members. The big difference is that cooperative members receive money from contributions and savings from their respective cooperatives in terms of dividends and bonuses as well as the financial support from their partners and stakeholders. Since cooperative members can increase their income through various ways, more mobilization and sensitization are needed for all small-scale cross-border traders to access these benefits.

Looking at social effects, 3 studies discussed the role played by cross-border cooperatives in representing traders in public policy space (see Akaezuwa et al., 2021; Nugent and Soi et al. 2020; Klopp and Trimble, 2020). Small scale traders are often vulnerable to cross-border policies, regulations, and reforms, more specifically women who make the majority in small-scale cross-border trade. However, cross-border cooperatives are increasingly helping to address those problems by representing traders in the decision-making space at the same time by empowering traders to raise their concerns and protect their interests. This study also indicates that participation in cooperatives improved women's participation in trade and helped them to deal with gender-based violence. As revealed by two reviewed studies, cooperatives increased awareness of crossing borders through official routes and help traders to gradually move from informal to formal trading (Kawala et al. 2018). Moreover, since some traders benefited from smuggling, their chance to join cooperatives is zero or less as indicated by one key informant. Therefore, much more effort would be needed to approach and mobilize these traders.

Since this study was conducted during the period where the world is facing the Covid-19 pandemic, this review explored articles that discuss the roles played by cooperatives to mitigate the pandemic negative effects. Among all reviewed studies, 17% (n-3) articles investigated the role of cooperatives in the response to Covid-19. Despite fewer articles conducted on the impact of Covid-19 on cross-border cooperatives, the findings from the review indicate that cooperatives provided low-income earners with loans and financial support during a period riddled with income loss, travel restrictions, and lockdowns. More specifically in East Africa, cooperatives and other traders' groups helped cross-border traders to stay in the business during

the lockdown by adopting trading in clusters (Mvunga and Kunaka, 2021). The interviews with key informants in Rwanda suggest that in collaboration with government authorities and bilateral arrangements between countries, traders were allowed to continue trading but only if they belong to any trading association or cooperative. Although individual traders became vulnerable to that arrangement, cooperatives provided a solution that seems to be effective in difficult times. More effort and research are needed to build upon this approach to prepare for the next economic shock.

To sum up, this study systematically reviewed studies that explored cross-border cooperatives and small-scale trade in East Africa published in English between 2000 and August 2021. The evidence consolidated in our systematic review and interviews with key informants showed that challenges associated with informal trade and small-scale cross-border trade were the main influence on the cooperative's participation. After a consolidated assessment, it was also evident that participation in cooperatives helped in improving the socio-economic condition of women, farmers, and small-scale traders who are engaged in cross-border trade. Cross-border cooperatives also provided loans and facilitated the movement of goods across borders aiding in the Covid-19 response and mitigation. Cross-border cooperatives also play a critical role in alleviating poverty in the region, promoting socio-economic growth and regional integration. More interventions and support that target cross-border cooperatives and small-scale traders are needed to improve cross-border trade and maximize trading benefits and opportunities available across borders.

5.2 Suggestions for future research

The findings from our systematic review show the roles of cooperatives and the significance of small-scale cross-border trade in East Africa. This information is critical in policy formulation by governments, business leaders, and small-scale traders. However, the compiled evidence indicated ambiguous outcomes with regards to specific roles of cross-border cooperatives. The study also did not indicate the role of cooperatives in specific countries in East Africa. Therefore, future research should focus on the specific roles and effects of cross-border cooperatives on trade in specific East African countries.

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Appendices

Appendix 1: Interview with key informants

This questionnaire is intended to facilitate the study on **“Exploring cross border cooperatives and small scale-traders in Eastern Africa with a focus on Rwanda: what matter and why?”**. The study is for academic purposes and is carried out as partial fulfillment for the award of Master of Arts in Development Studies at the International Institute of Social studies in the Hague, the Netherlands. I am grateful for answering the questions asked and the information given will be confidential and will not be passed on to other parties or used for any other purpose.

- 1. The Goma -Gisenyi border between Rwanda and DRC is among the busiest border in the region especially for small-scale cross-border trade, what might be the reason for that?

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- 2. Some of the small-scale cross-border traders are members of cooperatives or traders Associations but the majority of them do not belong to any cooperative or association what might be the factors for small-scale traders to join CBT cooperatives?

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- 3. Based on your observation do small-scale traders involved in cross-border trade are reluctant to join cooperatives? If so, why?

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- 4. Do you think that cross-border cooperatives have a significant contribution to the income of their members when compared to non-members? If yes, how?

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- 5. Are there any special opportunities that cross-border Cooperatives have in place to improve the well-being of their members compared to other private companies or individual traders? if yes what is it?

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6. What can be done for small-scale cross-border traders who are not members of cooperatives or Associations to join those organizations?

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7. Among reported challenges faced by small-scale cross-border traders include lower access to finance, corruption, harassment, lack of market information, delays at borders, seizure of products, etc. How can cross-border traders' cooperatives help to solve those problems?

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8. Small-scale cross-border trade is often regarded as illegal for the fact that some of its operators go through illegal routes and for those who pass through official borders, their goods are sometimes not declared and cause the government to lose taxes and information regarding imported or exported products. What is the role of cross-border Cooperatives to help to solve those problems?

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9. What role do you/ your institution play in helping cross-border cooperatives work better and help their members improve their welfare?

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10. In your opinion, what changes are needed in cross-border trade to help members of cross-border cooperatives improve their life and contribute to the economic development of the country?

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11. How did the Covid 19 pandemic affect Cross border cooperatives?

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12. What has been the role of the government and stakeholders to help those cooperatives to cope with the pandemic?

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13. Any other comments?

Thank you for your cooperation

Appendix 2: PRISMA checklist (Moher et al. 2009)

Item No.	Section/topic	Checklist Item	Reported in Page
1	TITLE	Identify the report as a systematic review, meta-analysis, or both.	NA
2	ABSTRACT	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number	viii
3	INTRODUCTION Rationale	Describe the rationale for the review in the context of what is already known	1
4	Objectives	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design	6
5	METHODS Protocol and registration	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number	Not Exist
6	Eligibility criteria	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	27
7	Information sources	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched	26
8	Search	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated	27
9	Study selection	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	27
10	Data collection process	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	29
11	Data items	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	29
12	Risk of bias in individual studies	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	N/A

13	Summary measures	State the principal summary measures (e.g., risk ratio, difference in means).	N/A
14	Synthesis of results	Describe the methods of handling data and combining results of studies, if done, including measures of consistency	N/A
15	Risk of bias across studies	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies)	N/A
16	Additional analyses	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	N/A
17	RESULTS Study selection	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram	30
18	Study characteristics	For each study, present characteristics for which data were extracted	31
19	Risk of bias within studies	Present data on risk of bias of each study and, if available, any outcome level assessment	N/A
20	Results of individual studies	For all outcomes considered	TAB 4.1
21	Synthesis of results	Present results of each meta-analysis done, including confidence intervals and measures of consistency	N/A
22	Risk of bias across studies	Present results of any assessment of risk of bias across studies	N/A
23	Additional analysis	Give results of additional analyses	33
24	DISCUSSION Summary of evidence	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups	33
25	Limitations	Discuss limitations at study and outcome level	28
26	CONCLUSIONS Future research implications	Provide a general interpretation of the results in the context of other evidence, and implications for future research	44

Appendix 3: Reports of excluded studies with justification

Author(s), title, journal/publisher and publication year	Source	Justification for Exclusion
Ackello-Ogutu, C. and Echessah, P., (1997) "Unrecorded cross-border trade between Kenya and Uganda". Technical paper, 59.	Google Scholar	Published earlier than 2000
Titeca, K., (2012). "Tycoons and contraband: informal cross-border trade in West Nile, north-western Uganda". Journal of Eastern African Studies, 6(1), pp.47-63.	Google Scholar	Membership participation in cooperatives is not included
Van den Boogaard, V., Prichard, W. and Jibao, S. (2021) "Norms, Networks, Power and Control: Understanding Informal Payments and Brokerage in Cross-Border Trade in Sierra Leone," Journal of Borderlands Studies, 36(1), pp. 77–97. doi: 10.1080/08865655.2018.1510333.	Google Scholar	Framed outside East Africa
Ogalo, V., (2010) "Informal cross-border trade in EAC: Implications for regional integration and development". Research Paper: CUTS Geneva Resource Centre.	Google Scholar	The study does not include findings on cross border cooperatives
Little, P., (2005) "Unofficial trade when states are weak: The case of cross-border commerce in the Horn of Africa". United Nations University (UNU).	Google Scholar	Effect of Cooperatives on livestock traders is missing
Little, P.D., Tiki, W. and Debsu, D.N., (2015) "Formal or informal, legal or illegal: The ambiguous nature of cross-border livestock trade in the Horn of Africa". Journal of Borderlands Studies, 30(3), pp.405-421.	Google Scholar	Effect of Cooperatives on livestock traders is missing
Siu, J., (2020) "Formalizing Informal Cross-Border Trade: Evidence from One-Stop-Border-Posts in Uganda". Available at SSRN 3854156.	Google Scholar	The study does not include findings on cross border cooperatives
Peberdy, S. and Box, P., (2007) "Monitoring small scale cross border trade in Southern Africa". Cell, 82, pp.406-1911.	Google Scholar	Framed outside East Africa
Lesser, C. and Moisé-Leeman, E., (2009)." Informal cross-border trade and trade facilitation reform in Sub-Saharan Africa". OECD trade policy working paper no. 86. OECD report	Google Scholar	Framed beyond East Africa
Livani, T. and Solotaroff, J.,(2019) "Promoting Women's Participation in Cross-border Trade in South Asia". ANTYAJAA: Indian Journal of Women and Social Change, 4(1), pp.9-32.	Google Scholar	Framed outside East Africa
Schomerus, M. and Titeca, K., (2012) "Deals and dealings: inconclusive peace and treacherous trade along the South Sudan-Uganda border". Africa Spectrum, 47(2-3), pp.5-31.	Google Scholar	Study does not include findings of cross border cooperatives
Titeca, K. and Flynn, R., (2014) "Hybrid Governance," Legitimacy, and (II) legality in the Informal Cross-Border Trade in Panyimur, Northwest Uganda. African Studies Review, 57(1), pp.71-91.	Google Scholar	Study does not include findings of cross border cooperatives
Gallien, M., (2020) "Informal institutions and the regulation of smuggling in North Africa". Perspectives on Politics, 18(2), pp.492-508.	Google Scholar	Framed outside East Africa

Author(s), title, journal/publisher and publication year	Source	Justification for Exclusion
Dzawanda, B., Nicolau, M.D., Matsa, M. and Kusena, W.,(2021) „Livelihood outcomes of informal cross border traders prior to the rise of the virtual cash economy in Gweru, Zimbabwe”. <i>Journal of Borderlands Studies</i> , pp.1-20.	Google Scholar	Framed outside East Africa
Oduol, J.B.A., Mithöfer, D., Place, F., Nang'ole, E., Olwande, J., Kirimi, L. and Mathenge, M., (2017) “Women's participation in high value agricultural commodity chains in Kenya: Strategies for closing the gender gap”. <i>Journal of rural studies</i> , 50, pp.228-239.	Google Scholar	Not relevant
Olusola, O. and Lere, A., (2020) “Exploring the effect of Women Cross-Border Trade (WCBT) on food security in the border towns of the south western Nigeria”. <i>Gender & Behaviour</i> , 18(2), pp.15892-15900.	Google Scholar	Framed outside East Africa
Kodero, C.U., (2020) “Development Without Borders? Informal Cross-Border Trade in Africa. In <i>The Palgrave Handbook of African Political Economy</i> ” (pp. 1051-1067). Palgrave Macmillan, Cham.	Google Scholar	Framed beyond East Africa
Dhliwayo, S., (2017) “Export experience and key success factors in cross-border trade: evidence from Southern Africa”. <i>Acta Commercii</i> , 17(1), pp.1-9.	Google Scholar	Framed outside East Africa
Peberdy, S. and Crush, J., (2001) “Invisible trade, invisible travellers: The Maputo Corridor spatial development initiative and informal cross-border trading”. <i>South African Geographical Journal</i> , 83(2), pp.115-123.	Google Scholar	Framed outside East Africa
Tuluy, H., (2016) “Regional economic integration in Africa”. <i>Global Journal of Emerging Market Economies</i> , 8(3), pp.334-354.	Google Scholar	Framed beyond East Africa
Robinson, A.L., (2016) “Internal Borders: Ethnic-based market segmentation in Malawi”. <i>World Development</i> , 87, pp.371-384.	Google Scholar	Framed outside East Africa
Sitko, N.J., Burke, W.J. and Jayne, T.S., (2018) “The quiet rise of large-scale trading firms in East and Southern Africa”. <i>The Journal of Development Studies</i> , 54(5), pp.895-914.	Google Scholar	Not relevant
Little, P.D., Debsu, D.N. and Tiki, W., (2014) “How pastoralists perceive and respond to market opportunities: The case of the Horn of Africa”. <i>Food policy</i> , 49, pp.389-397.	Google Scholar	Participation in cooperatives and effect of cooperatives on traders is not included
Gilles, A., 2015. The social construction of Guangzhou as a trans local trading place. <i>Journal of Current Chinese Affairs</i> , 44(4), pp.17-47.	Google Scholar	Framed outside East Africa
Lyon, F. and Porter, G., (2009) “Market institutions, trust and norms: exploring moral economies in Nigerian food systems”. <i>Cambridge Journal of Economics</i> , 33(5), pp.903-920.	Google Scholar	Framed outside East Africa
Asche, H., (2021) “The Reality of African Trade Integration—Challenges of Implementation. In <i>Regional Integration, Trade and Industry in Africa</i> ” (pp. 35-56). Springer, Cham.	Google Scholar	Framed beyond East Africa

Author(s), title, journal/publisher and publication year	Source	Justification for Exclusion
Govere, J., Chapoto, A. and Jayne, T.S., (2010) "Assessment of alternative maize trade and market policy interventions in Zambia". In Food Security in Africa. Edward Elgar Publishing.	Google Scholar	Framed outside East Africa
Sitko, N.J., Chisanga, B., Tschirley, D. and Jayne, T.S., (2018) "An evolution in the middle: examining the rise of multinational investment in smallholder grain trading in Zambia". Food security, 10(2), pp.473-488.	Google Scholar	Framed outside East Africa
Khondoker, R., (2021) "Regulation and Contraband Trade in the Bangladeshi Borderland: Whose Weapons"? Journal of Borderlands Studies, 36(4), pp.617-636.	Google Scholar	Framed outside East Africa
Poulton, C., Kydd, J. and Dorward, A., (2006) "Overcoming market constraints on pro-poor agricultural growth in Sub-Saharan Africa". Development policy review, 24(3), pp.243-277.	Google Scholar	Framed beyond East Africa and not conducted in cross border trade
Zeller, W., (2009) "Danger and opportunity in Katima Mulilo: a Namibian border boomtown at transnational crossroads". Journal of Southern African Studies, 35(1), pp.133-154.	Google Scholar	Framed outside East Africa
Mutopo, P., (2011) "Women's struggles to access and control land and livelihoods after fast-track land reform in Mwenezi District, Zimbabwe". Journal of Peasant Studies, 38(5), pp.1021-1046.	Google Scholar	Framed outside East Africa
Pedersen, P.O., (2005) "The development of the informal small-enterprise sector in Eastern and Southern Africa: From import substitution to structural adjustment" (No. 2005: 11). DIIS Working Paper.	Google Scholar	Participation in cooperatives and effect of cooperatives on traders is not included
Verweijen, J. and Marijnen, E., (2018) "The counterinsurgency/conservation nexus: guerrilla livelihoods and the dynamics of conflict and violence in the Virunga National Park, Democratic Republic of the Congo". The Journal of Peasant Studies, 45(2), pp.300-320.	Google Scholar	Not relevant
Lam, Y., Fry, J.P. and Nachman, K.E., (2019) "Applying an environmental public health lens to the industrialization of food animal production in ten low- and middle-income countries". Globalization and health, 15(1), pp.1-20.	Google Scholar	Not relevant
Kuhanen, J., (2010) "Challenging power and meaning outlining the popular epidemiology of HIV and AIDS in Rakai, Uganda", c. 1975–1990. African Journal of AIDS Research, 9(1), pp.81-94.	Google Scholar	Not relevant
Eriksson Baaz, M., Olsson, O. and Verweijen, J., (2018) „Navigating 'taxation' on the Congo River: the interplay of legitimation and 'officialisation'". Review of African Political Economy, 45(156), pp.250-266.	Google Scholar	Famed outside East Africa and not relevant
Lind, J., Sabates-Wheeler, R., Caravani, M., Kuol, L.B.D. and Nightingale, D.M., (2020) "Newly evolving pastoral and post-pastoral rangelands of Eastern Africa". Pastoralism, 10(1), pp.1-14.	Google Scholar	No cross-border cooperatives
Wang, Y., Han, J.H. and Beynon-Davies, P., (2019) "Understanding blockchain technology for future supply chains: a systematic literature review and research agenda". Supply Chain Management: An International Journal.	Google Scholar	Does not fulfill inclusion criteria

Author(s), title, journal/publisher and publication year	Source	Justification for Exclusion
de Bruin, S., Dengerink, J. and van Vliet, J., (2021) “Urbanisation as driver of food system transformation and opportunities for rural livelihoods”. <i>Food Security</i> , 13(4), pp.781-798.	Google Scholar	Not relevant
Arthur, R.I., Skerritt, D.J., Schuhbauer, A., Ebrahim, N., Friend, R.M. and Sumaila, U.R., (2021) “Small-scale fisheries and local food systems: Transformations, threats and opportunities”. <i>Fish and Fisheries</i> .	Google Scholar	Does no focus on the East Africa
Fusacchia, I., Balié, J. and Salvatici, L., (2021) “The AfCFTA impact on agricultural and food trade: a value added perspective”. <i>European Review of Agricultural Economics</i> .	Google Scholar	Framed outside the East Africa
Onditi, F., Ben-Nun, G., Were, E.M. and Nyadera, I.N., (2021) “Regional Security Community Arrangement in Africa”. In <i>Reimagining Security Communities</i> (pp. 81-125). Palgrave Macmillan, Cham.	Google Scholar	Not relevant
Leonardi, C., (2020) ”Patchwork States: The Localization of State Territoriality on the South Sudan–Uganda Border”, 1914–2014. <i>Past & Present</i> , 248(1), pp.209-258.	Google Scholar	Participation in cooperatives and effect of cooperatives on traders is not included

Appendix 4: Characteristics of the included studies

#	First author and year	Journal	Location	Sample characteristics	Design	Outcome	Key findings
1	Titeca and Kimanuka, 2012	<i>International Alert</i>	DRC, Burundi, Rwanda and Uganda	900 traders in each site and 6 focus groups	Quantitative and qualitative research design	Participation	traders lack proper organisations. Small number of traders are members of cooperatives. Majority of nonmembers would like to become members but lack the capacity
2	Mbo'o-Tchouawou et al. 2016	Regional Strategic Analysis and Knowledge Support System (ReSAKSS)	East Africa (Kenya, Tanzania, and Uganda)	363 traders, 4 borders	Mixed methods (qualitative and quantitative)	Participation	Almost equal participation of men and women in trading networks in agricultural cross border trade
3	García Mora and Roshan, 2013	World Bank	Democratic Republic of Congo (DRC) and Rwanda	628 traders and 66 border officials, 2 borders	Qualitative and Quantitative (2 moths of survey and one month of interview and focus group.	Participation and Membership	20% of traders are members of associations and average membership fees in Rwanda is US\$ 18 and US\$ 8 for Congolese traders
4	Parshotam and Balongo, 2020	South African Institute of International Affairs (SAIIA)	Kenya and Uganda	9 interviews (traders and government officials)	Qualitative	Representation	Cross border traders' associations raised women profile and provided them with an important chance to raise their voices and have their problems solved.
5	Nakanjako et al. (2021)	Eastern Africa Social Science Research Review	Kenya and Uganda	70 local and migrant traders and government officials	Qualitative (12 months of ethnographic field research)	Participation in ICBT	Engagement in cross border trade is influenced by migrant social networks, survival needs, prospects in the border and weak enforcement of cross border trade guidelines.
6	Croke et al. 2020	World Bank (working paper)	Rwanda and DRC	314 cross border traders	Randomized control trial	Membership	Training has no effect on traders' membership in associations
7	Brenton, et al. 2011	<i>World bank</i>	Rwanda and Burundi	181 cross border trades, 58 border stakeholders	Quantitative	Participation	Lower participation of women in cross border traders' cooperatives. Representation of traders in public arena is essential for the poor to move in formal economy.

8	Nugent and Soi et al. 2020	Journal of Eastern African Studies	East Africa	15 OSBPS	Qualitative	Representation of traders	cooperatives increase awareness of crossing borders through official routes and represent their members interests.
9	Ng'asike et al. 2020	Springer	Kenya & Somalia	Secondary data from livestock department	Qualitative and quantitative research design	Income	supporting traders' associations and the introduction of reforms can improve small and medium traders' living conditions and reduce their vulnerability in livestock cross border trade
10	Bugingo, 2018	BRIDGES AFRICA	Rwanda	63 cooperatives, over 3,000 members	Qualitative	Access capital and the market	cooperative members improved their knowledge and abilities, as well as had access to capital and markets in nine major border areas
11	Pavanello, 2010	Overseas Development Institute (Working paper)	Kenya and Ethiopia	Review of the literature and secondary quantitative data	Quantitative and Structure-Conduct-Performance Framework	Reduction of transaction cost	cooperatives provide a significant potential to lower transaction costs and add value to weak value chain of livestock cross border trade
12	Akaezuwa et al., 2021	<i>Columbia School of International and Public Affairs (SIPA)</i>	Kenya and Uganda	11 stakeholders, women traders and government officials	Literature reviews and qualitative interviews	Representation of traders	Associations play a critical role in empowering women in cross border trade
13	Golub, 2015	<i>Handbook on Trade and Development</i>	West and East Africa	case studies from East African and West Africa	Qualitative and quantitative analysis, case studies	Reduction of transaction cost	The role of kinship networks to access information and finance, meet contract requirements, reducing transaction cost and integration of regional market is of great importance in ICBT
	Kawala et al. 2018	<i>Journal of Agricultural Science</i>	Uganda and Kenya	115 fish traders, 4 key informants and 2 focus groups	Quantitative and qualitative	Formalization	membership in fish marketing organization is associated with formal or informal trading routes
15	Klopp and Trimble, 2020	<i>Global integrity anti-corruption evidence project (working paper)</i>	East Africa	165 articles and 314 cross border traders	Systematic review and ethnographic field research	representation of traders	Traders' associations and civil societies organisations help traders to communicate and interact between them and with

							government authorities to improve cross border trade
16	UNDP, 2020	<i>UNDP (Borderland Policy briefing Series)</i>	Uganda and DRC	Secondary data and border points	Quantitative and qualitative research	Financial support and lobbying	Women are disproportionately by Covid-19 containment measures, they form the highest percentage of cross-border traders associated with low income
17	Mvunga and Kunaka, 2021	<i>World Bank (policy note)</i>	Great lakes region (Rwanda, DRC and Uganda)	Secondary data on cross border trade in East Africa	Qualitative design	Adoption of trading in clusters	Covid -19 has significantly affected small-scale cross border trade in East Africa
18	Mdoe and Mlay, 2021	<i>Agricultural Policy Research in Africa (APRA) Working paper</i>	Tanzania	24 key Informants	KIIs and literature review	Income and Covid-19	Inconsistent cross border trade policies negatively impact productivity and income the covid 19 pandemic, exports of rice fell down, having a detrimental effect on the lives of rice value chain players, especially small producers and women in general

Appendix 5: List of key informants interviewed

No	Interviewee	Gender	In-Person/ Phone	Duration (Min)
1	Government Official from the Ministry of Trade and Industry (MINICOM)	M	In-person	60
2	Government official from Rwanda Cooperative Agency (RCA)	M	Phone call	45
3	Government official From Rwanda Revenue Authority (RRA) at Gisenyi-Goma Border	M	In-person	45
4	Official from Pro-Femme Twese Hamwe Organization	M	In-person	60
5	Government official from Rubavu District	M	In-person	45
6	COMESA Information Desk officer at Gisenyi-Goma border	F	In-person	45
7	Twisungane dairy coop leader	M	In-person	45
8	KOTIHEZA coop leader	M	In-person	45

Field Pictures



Small-scale traders carrying their products



Interview with COMESA Information Desk Officer



Interview with Twisungane Coop Leader



Small-Scale traders with their products



Cross border market at Gisenyi-Goma Border

