Evaluating Tanzania's Overlapping Regionalism: A Comparative Analysis of Trade Relations between SADC and EAC.

Aaron Ecel*, Racheal Nakigudde† and Rubanga E. Udhec‡

Abstract

This study evaluates Tanzania's overlapping regionalism in the EAC and SADC by analyzing its Export Intensity Index, Revealed Comparative Advantage, and Trade Complementarity Index for the period 2013–2022. The findings reveal that Tanzania enjoys stronger trade ties and a broader comparative advantage in the EAC, particularly in key exports such as fertilizers and rice, compared to a narrower focus on gold within SADC. Gold dominates exports to both blocs but highlights a critical need for diversification. The analysis identifies milled rice as holding the greatest potential for export growth in both regions. These results inform policy recommendations emphasizing diversification beyond gold and leveraging Tanzania's comparative advantage in high-potential products to align with AfCFTA objectives. Strengthening EAC-based strategies is proposed as a model for AfCFTA harmonization due to existing robust trade relations. This study underscores the importance of targeted export promotion to enhance Tanzania's trade competitiveness within Africa.

***Keywords**: Overlapping Regionalism, SADC, EAC, Tanzania*
JEL Classification: F14, F15, F53.

1. Introduction

In addition to multilateral trade liberalisation through the World Trade Organization (WTO), regional integration offers another path towards trade liberalization. The General Agreement on Tariffs and Trade (GATT) specifically allows for this through Article XXIV, which permits the formation of customs unions and free-trade areas. Additionally, the Enabling Clause provides further flexibility for developing countries to establish preferential trade arrangements (Mutasi, 2021; Saurombe, 2011; Linden, 1992). Despite the advantages of Regional Integration Agreements (RIAs), they often involve multiple memberships for member countries. In Africa, a staggering 88.6% of countries belong to more than one RTA, creating a phenomenon known as

* Department of International Business & Trade, Makerere University Business School, Kampala-Uganda, ORCID: 0000-0002-4651-6139, ecelaaron@gmail.com, eaaron@mubs.ac.ug
† Department of International Business & Trade, Makerere University Business School, Kampala-Uganda, ORCID: 0000-0002-9015-9116, rnakigudde@mubs.ac.ug
‡ Department of Marketing & Media Studies, Makerere University Business School, Kampala-Uganda, ORCID: 009-0005-3928-3392, erubanga@mubs.ac.ug

 ◆ *https://doi.org/10.56279/ter. v14i2.209*

'overlapping RTA membership' (Ngepah & Udeagha, 2019; Afesorgbor & Van Bergeijk, 2014). Notably, Eastern and Southern Africa exhibits the most complex web of overlapping RIAs compared to any other region globally (Nwankwo & Ajibo, 2020; Jakobeit, Hartzenberg, & Charalambides, 2005).

Overlapping memberships occur when countries participate in more than one Regional Trade Agreement, all of which seek to increase trade and loosen economic restrictions. The challenges of overlapping RTAs are well documented (Panke, Stapel, 2023; Panke and Stapel, 2018; Mengistu, 2015 and Chacha, 2014) notably; multiple obligations and conflicting liberalization commitments and mutually exclusive trade rules concerning rules of origin. In the context of Tanzania, Walkenhorst (2005) asserts that membership in both EAC and SADC, while Kenya and Uganda belong to COMESA, creates complexities for policymakers, and that such 'asymmetric configuration' (uneven membership) could lead to confusion and conflicts.

In Tanzania, overlapping memberships in regional trade agreements (RTAs) have created complex trade policy landscapes significantly affecting its policymaking. Tanzania belongs to three regional economic communities: the EAC, which operates as a customs union with a common external tariff, and both SADC and AfCFTA, which function as free trade areas (Mutasi, 2021). The coexistence of these RECs requires careful alignment of trade facilitation protocols, as differing standards and procedures between the EAC, SADC, and AfCFTA could delay further integration. In addition, the dual participation in the EAC and the SADC pose challenges such as conflicting trade rules, particularly regarding rules of origin, and duplicative compliance requirements. These inconsistencies can stifle trade efficiency and delay policy implementation (ElGanainy et al, 2023). For instance, Tanzania's policymakers face challenges in prioritizing investments, negotiating market access, and aligning trade facilitation protocols with both blocs. As a result, overlapping memberships have disrupted Tanzania's trade strategies, often shifting focus from long-term regional goals to addressing immediate compliance demands.

Whereas previous studies such as Mtana and Rutaihwa (2014), Ngepah and Udeagha (2019), Afesorgbor and Van Bergeijk (2014),Dyegula and Lwesya (2018), Kweka and Mboya (2017), Achy and Sekkat (2006), Nwankwo and Ajibo (2020), Jakobeit,Hartzenberg and Charalambides (2005), Mgangaluma, Mgonya, Fimbo, Siriwa, Tesha and Mpango (2023), Leyaro and Hongoli (2022), Wassie, Kornher and von Braun (2022) among others, have investigated the concept of overlapping RTA membership, there is a dearth of empirical studies examining the effectiveness of overlapping RTAs by comparing a country's export performance between two different RTAs. Significantly, it remains unclear if Tanzania's export structure

complements the import demands of the EAC and SADC, its principal trading partners.

The motivation for this paper is fivefold; firstly, when developing countries are members of several RTAs, trade between countries within those individual agreements seems to be lower and also significantly delays the implementation of integration efforts of initiatives such as the AfCFTA (Chacha, 2014). Secondly, this study aimed to compare Tanzania's trade complementarity with the EAC and SADC to identify its more natural trading partner. In essence, it sought to determine whether Tanzania's primary exports align with the major imports of either bloc. Thirdly, this study is policy-oriented in that it offers valuable insights to guide Tanzania's strategic choices regarding trade agreements in the context of AfCFTA harmonization. Thus, by analyzing Tanzania's existing trade relations with both the EAC and SADC, the study helps policymakers prioritize which regional integration efforts to align most effectively with the Tripartite Free Trade Area (TFTA) and AfCFTA framework. Fourthly, evaluating the comparative advantages of exports and export intensity within the two trading blocs can inform the development of targeted export promotion initiatives. Lastly, insights from the analysis of EAC-SADC trade relations provide a clear guide for aligning Tanzania's trade strategies with broader TFTA and AfCFTA objectives, enabling the country to fully leverage expanded trade opportunities across Africa.

Against this background, the main aim of this paper is to examine Tanzania's overlapping RTA membership by comparing its trade flows to SADC and the EAC. This study answers six research questions: What is the structure of Tanzania's merchandise with the EAC and SADC? What are the main export destinations and growth trends within these blocs (concentration)? Which trading bloc does Tanzania enjoy stronger trade relations? To what extent is Tanzania's trade complementary with that of SADC and the EAC? specifically, in which specific exports does Tanzania exhibit the greatest trade complementarity with either bloc? What is the competitiveness of Tanzania's exports within the EAC and SADC markets and lastly, what is Tanzania' existing potential for trade in these blocs?

The rest of the paper is structured as follows. Section 1.1 covers the study context; section 2 is a review of existing literature. Section 3 explains the methods used in the study. Section 4 presents. Finally, section 5 summarises the findings and presents policy implications.

1.1 Study context

Recognizing the shortcomings of its previous economic approach in the 1970s and 80s, Tanzania moved from an inward, socialist focused country towards trade liberalisation (Kanaan, 2000), becoming a member of the General

Agreement on Tariffs and Trade (GATT) in 1986 and actively participated in the trade negotiations following the establishment of the World Trade Organization (WTO) in 1995.

In addition to membership to the multilateral trading system, Tanzania trade liberalisation is also in the form of regionalism and participated in the establishment of the EAC customs Union, and houses its headquarters in the city of Arusha. In addition, Tanzania has been a member of the Southern African Development Community (SADC) since 1994. Tanzania was also a founding member of the Common Market for Eastern and Southern Africa (COMESA) in 1994, although it later withdrew its membership in 2000 because 'the government perceived fewer benefits in it compared with EAC and SADC' (Kweka and Mboya, 2017). The establishment of the African Continental Free Trade Area (AfCFTA) is a significant leap to Tanzania's trade liberalisation. In 2021, Tanzania ratified the AfCFTA agreement and thus agreed to adhere to its obligations of seeking to eliminate tariffs and trade barriers across Africa. The AfCFTA is predicted to have a positive effect on Tanzania's economic growth, 'mainly because of the reduction in trade barriers' (Maskaeva, Mgeni, Msafiri, Kinyondo, Msemo, Nechifor and Simola, 2024).

More recently, on July 25, 2024, the COMESA-EAC-SADC Tripartite Free Trade Area (TFTA) Agreement came into force after ratification by 14 of the 29 partner states within the three regional economic communities. The TFTA encompasses 29 countries, representing 53% of the African Union membership, with a combined population of 800 million. This agreement offers a lucrative market, accounting for over 60% of continental GDP ($1.88 trillion in 2019). Masiya, Kalizinje, and Chisuwo Banda (2023) highlight that the TFTA's GDP constitutes more than 50% of the world's total when Egypt and South Africa, the two largest economies, are combined.

Currently, Tanzania has yet to ratify the TFTA, citing concerns and hopes among its business community. These concerns are evident in statements such as, "In those markets, there is a lot of competition. If you enter unprepared, you may find yourself struggling" (Lamtey, 2024). However, there is hope that Tanzania will soon deposit its instrument of ratification after completing domestic procedures as per constitutional requirements. Additionally, Tanzania has prioritized sensitizing small and medium enterprises to help them seize opportunities in economic integration markets. This initiative is in response to reports of underutilization of the African Growth and Opportunity Act (AGOA) due to

2. Review of empirical literature

This section provides a brief overview of recent studies examining Tanzania's involvement in overlapping regional economic communities, its export performance, and trade complementarity.

Numerous African countries frequently find themselves as members of multiple regional economic communities, resulting in overlapping memberships often referred to as the 'Spaghetti bowl.' This situation poses numerous challenges for all parties involved. Just like the rest of the EAC partner states, Tanzania belongs to multiple regional economic communities namely the East African Community (EAC) and the Southern African Development Community (SADC). Walkenhorst (2005) studied overlapping RTA membership by investigating Tanzania's challenge of global and regional integration and noted that in 2000, Tanzania withdrew its membership from COMESA because it was 'too resource-consuming'. It was also observed that in the future, Tanzania could be forced to pick a single RTA in the future due to conflicting rules between them. Similarly, in their review of the likely impacts and challenges of implementing the African Continental Free Trade Agreement (AfCFTA), Wassie, Kornher and von Braun (2022) point out that overlapping membership in different Regional Economic Communities may pose implementation difficulties at different levels of integration by complicating the policy coordination.

In his study of regional integration and the challenge of overlapping membership on trade, Chacha (2014) revealed that being in multiple RTAs makes it harder for a country to fully commit to and follow the rules of any one agreement, and that without strong commitment from member states, an RTA will struggle to progress beyond basic economic cooperation. Similarly, Khandelwal (2004) study of the prospects and challenges for trade expansion in COMESA and SADC shows that african countries belonging to multiple Regional Trade Agreements (RTAs) face a major hurdle in achieving regional integration, because overlapping memberships often lead to conflicting goals between the different RTAs, hindering progress in all of them. Afesorgbor and Van Bergeijk (2014) studied the trade impact of overlapping RTA membership, using the case of ECOWAS and SADC, in the period 1980-2006. Their findings reveal that multiple RTA membership has a "positive impact if an additional membership complements the integration process of the original regional integration initiative"

Dyegula and Lwesya (2018) looked at Trade liberalisation in SADC specifically looking at the economic benefits of Tanzania belonging to an RTA. The study employed a qualitative analysis and also used trade indices. This study concluded that intra-regional trade within the bloc is still very low and that SADC has not met its timelines of transforming into a Customs Union. The study also concluded that Tanzania does not suffer any adverse effects as

a result of overlapping membership in EAC and SADC. Although multiple memberships bring a delay in policy implementations, this study concluded that Tanzania does not have to withdraw from either of the RTAs since a tripartite agreement between COMESA-EAC-SADC was established to overcome such challenges.

Mtana and Rutaihwa (2014) looked at the implications of Tanzania`s multiple memberships in trade performance with its two major trading blocs of SADC and the EAC. The study employed the Revealed Comparative Advantage Index to assess the capability of the country's exports. The findings indicate that Tanzania has a strong RCA in traditional cash crops such as coffee, tea, cotton and sugar. Additionally, the study recommends more effort to strengthen the EAC through strengthening the institutional framework as there is a greater market opportunity for manufactured products. More recently, Leyaro and Hongoli (2022) assessed the potential impact of AfCFTA on Tanzania's exports and overall well-being, using the General Equilibrium Poisson Pseudo Maximum Likelihood (GEPPML) model using data from 157 countries, and their findings suggests AfCFTA could boost Tanzania's exports by up to 75%. The study also predicts a shift in trade patterns, with Tanzania potentially exporting more to African nations within EAC and SADC, and slightly less to countries outside Africa.

Leyaro and Hongoli (2022) sought to assess the potential benefits of the AfCFTA for Tanzania, and their findings suggest that Tanzania could significantly increase its exports, potentially by up to 75%, as a result of the AfCFTA. Additionally, the study predicts a shift in Tanzania's export destinations, with increased trade within Africa, particularly within the EAC and SADC regions, and a slight decrease in exports to non-African countries. Similarly, Mgangaluma et al. (2023) investigated the economic impact of Tanzania's regional integration within the EAC and SADC. Using the gravity model, they found that Tanzania's participation in these blocs has led to increased trade, indicating trade creation. A simulation analysis using the WITS-SMART model further supports these findings, showing a growing trend of trade creation within the region.

Recent studies have examined Tanzania's trade complementarity with various partners. For instance, Yussuf and Albiman (2022) analyzed trade complementarities between Tanzania and European countries, finding consistent complementarity in food products throughout the study period. While their study appropriately categorized products based on technology and product type, it has limitations. Key export commodities for Tanzania, such as gold, cereals, and fertilizers, were excluded from the analysis. Additionally, the study's focus on Tanzania-Europe trade complementarity overlooks important trade relationships such as that with SADC & the EAC. Similar research by Chakraborty and Sahu (2016) examined India's trade relations

with the East African Community under the Duty-Free Tariff Preference scheme. Tanzania, as a beneficiary of this scheme, saw increased exports to India following its implementation. Moreover, a high Trade Complementarity Index (TCI) value of 34.40 for Tanzania-India trade indicates a growing alignment between Tanzania's export offerings and India's import demands. However, just like Yussuf and Albiman (2022), their scope excluded the EAC and SADC.

While previous research has offered valuable insights into Tanzania's overlapping RTA membership, it has not comprehensively examined Tanzania's trade intensity within different blocs. Consequently, existing literature provides limited guidance for the ongoing harmonization of the Tripartite Free Trade Area (TFTA) and the African Continental Free Trade Area (AfCFTA). For example, Dyegula and Lwesya (2018), conclude that overlapping memberships do not adversely affect Tanzania, owing to the Tripartite Agreement, yet their qualitative approach and reliance on trade indices may overlook the significant policy implementation challenges revealed by other studies. Similarly, Leyaro and Hongoli (2022) present optimistic projections regarding the AfCFTA's potential to boost Tanzania's exports by up to 75%, but their use of the General Equilibrium Poisson Pseudo Maximum Likelihood (GEPPML) model assumes static trade dynamics that may not fully capture evolving market conditions such as the recent operationalization of the TFTA, which Tanzania has yet to ratify. Furthermore, studies on trade complementarity, such as those by Yussuf and Albiman (2022), fail to encompass Tanzania's intra-African trade relationships, especially within the EAC and SADC, which are critical for assessing harmonization under broader frameworks like the AfCFTA and TFTA. Furthermore, there is a paucity of research on Tanzania's trade complementarity within these blocs, which is crucial for enhancing export performance. This study aims to address these gaps in the literature.

3. Methodology and Data Sources

The research mainly relied on existing trade data, specifically import and export information. This data came from the UN Comtrade database, which is accessible through the Trademap Portal (www.trademap.org) run by the International Trade Centre. The data in this portal is standardized internationally.

The study uses a combination of three analytical approaches: Export Intensity Index (EII), the Revealed Comparative Advantage (RCA) and the Trade Complementarity Index (TCI) to examine the extent, competitiveness and complementarity of trade relations between Tanzania with SADC & the EAC as trading blocs. In addition, the study uses the variance between actual and potential exports to establish the existing potential for trade. Yearly time series data for the period 2013-2023 was considered for the analysis. TCI

computations were based on Tanzania's primary merchandise exports to the EAC and SADC regions in 2022. These exports represent the most significant contributors to Tanzania's trade performance, capturing the sectors where the country holds the strongest comparative advantages and trade complementarities. The research mainly relied on existing trade data, specifically import and export information. This data came from the UN Comtrade database, which is accessible through the Trademap Portal (www.trademap.org) run by the International Trade Centre. The data in this portal is standardized internationally. As a methodological limitation, the study does not account for the role of non-tariff barriers, which often significantly impact trade within the EAC and SADC.

3.1 Model specification

3.1.1 Export Intensity Index (EII). The Export intensity measurement is the proportion of a country/region's export share to the world's export share going to a partner nation. Barteczko and Tchorek (2016) defines it as 'the share of one country's exports going to a partner divided by the share of world exports going to the partner'. EII is calculated as follows;

$EI_{ij} = (Xij / Xi) / (Mj / Mwj - Mw)$

Where EI_{ij} is the export intensity index of country i with the country/ region j. X_{ij} and X_{wj} are the values of country i's exports and world's exports to country / region j, and where Mj are total imports from country i, M_{wj} are total world imports and M_w are country i total world imports. When the value of the index is greater than I (EII>I), inference is made that closer trade relationships exist (intense trade relationships) and additional increases in the value of the index implies increased importance of country/ region i as an export market.

3.1.2 Revealed Comparative Advantage (RCA) Balassa (1965). This measurement of comparative advantage is widely accepted as an analytical tool in trade analysis (Maryam, Banday and Mittal, 2018; Suwannarat, 2017; Supongpan Kuldilok, Dawson and Lingard, 2013). To analyze Tanzania's trade performance within two trading blocs, this study modifies the RCA index to focus on Tanzania's exports to these blocs (SADC & the EAC) relative to imports into the blocs (Supongpan, Kuldilok, Dawson and Lingard (2013). The modified RCA is expressed calculated as follows;

$$RCA_{imj} = (X_{ij} / X_i) \; / \; (X_{mj} / X_m)$$

Where RCA_{imj} is the Revealed Comparative Advantage of country i with country country / region m in exporting a specific product j. X_{mj} represents the total import value of product j in country m. X_m signifies the total import value of all products entering country / region m. Based on the RCA_{imj} index, a value

above 1 indicates that country *i* enjoys a comparative advantage for exporting product *j* to market *m*. Conversely, a value below 1 suggests a comparative disadvantage for country *i* in exporting product *j* to market *m*.

3.1.3 Trade Complementarity Index (TCI) Drysdale (1969). TCI measures how much the export profile of one country and the import profile of another country (region) match. It shows how 'natural trading partners' two countries are, meaning that one country's exports are similar to what the other country imports. The idea is that if the main export products of one country are the same as the main imports of another country, then trade between the two countries will be complementary. The TCI is calculated as follows.

$$TCI_{ij} = RCA_{xik} \, X \, RCA_{mjk}$$

Where TCI_{ij} is the trade complementarity index between country *i* and country *j* for commodity *k*. RCA_{xik} denotes the comparative advantage of country *i* in commodity k by way of exports, while RCA_{mjk} denotes the disadvantage of country j in commodity k by way of imports (Wani, 2020). A higher TCI value indicates a stronger match between the export and import profiles of two countries. This means that one country's exports closely align with the other country's imports, making them more natural trading partners.

4. Results

4.1 The structure of Tanzania's Merchandise exports to the EAC & SADC

The results in table I below show that the value of Tanzania's total merchandise exports to the world grew by 54.6% from US$ 4.4 Billion in 2013, to $6.8 billion in 2022. Exports to the EAC grew higher (167%) than those to SADC (12%) in the period 2013-2022, and figure 1 below shows that Tanzania's exports to the EAC grew significantly in the period 2016 to 2022.Table 2 shows that on average, most of the exports (>50%) were destined for two export markets i.e., South Africa and Kenya. As a proportion of total exports to both trading blocs, the results reveal that Tanzania's exports to the Democratic Republic of the Congo (DRC) have declined from 14% in 2013 to 11% in 2022, while those to Uganda and Rwanda have risen significantly, from 4% and 5% in 2013 to 10% respectively in 2022.

Table 1: showing Tanzania's exports to the EAC & SADC (excluding exports to the DRC)

Importers	Exported value in US Dollar million									
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
World	4,412	5,704	5,854	4,399	4,094	3,797	4,932	5,984	6,390	6,824
1. SADC	1,013	954	833	746	865	895	1,140	1,291	1,089	1,136
2. EAC	424	602	925	282	358	500	663	798	1,161	1,134
3. DRC	237	281	198	157	114	144	162	142	207	280

***Source** : International Trade Centre / UN COMTRADE Data*

2. Exports to DRC were excluded because is belongs to both trading blocs

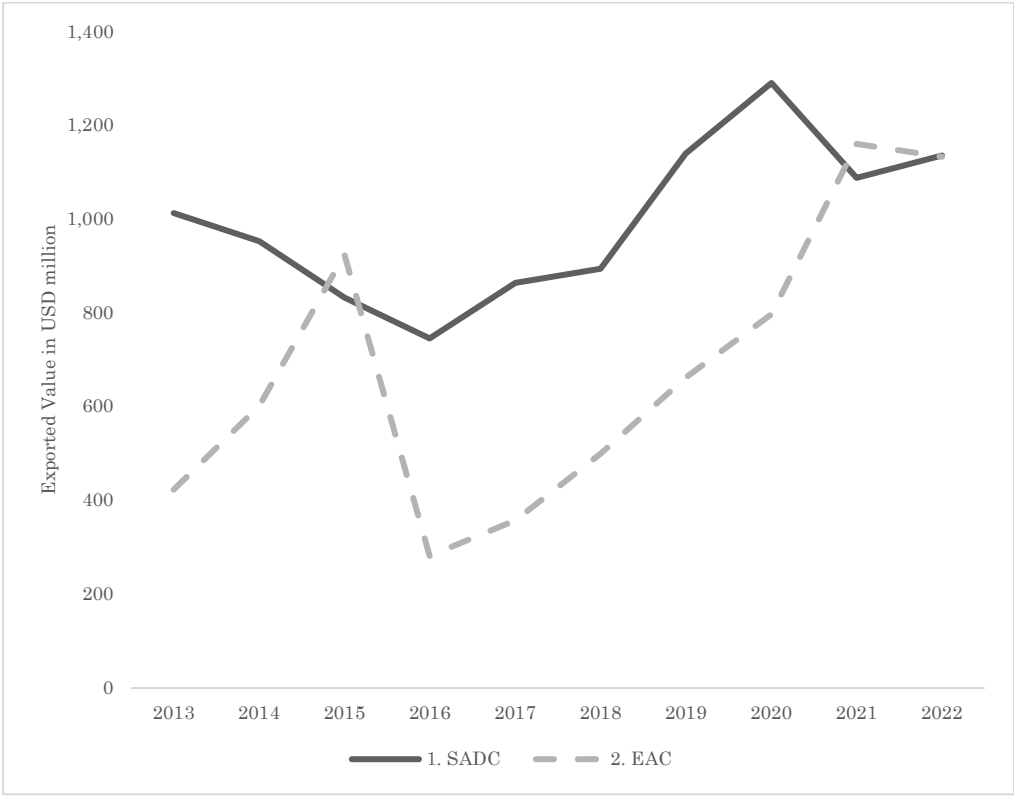

Figure 1: *showing Tanzania's exports to SADC & EAC (DRC excluded)*
Source: *International Trade Centre / UN COMTRADE Data*

Table 2: showing Distribution of Tanzania's export to SADC & EAC partner states (Percentage share)

	Distribution of Tanzania's export to SADC & EAC partner states (Percentage share)									
Importers	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
World (Value in USD Thousand)	**4,412,549**	**5,704,654**	**5,854,231**	**4,399,810**	**4,094,291**	**3,797,407**	**4,932,713**	**5,984,824**	**6,390,863**	**6,824,846**
SADC & EAC Aggregation (Value in USD Thousand)	**1,675,169**	**1,838,631**	**1,956,402**	**1,173,632**	**1,329,603**	**1,541,246**	**1,967,276**	**2,232,287**	**2,457,991**	**2,550,997**
1. South Africa	46	37	35	53	53	48	49	51	37	36
2. Kenya	14	24	41	16	15	14	14	10	16	15
3. DRC	14	15	10	13	9	9	8	6	8	11
4. Uganda	4	4	3	2	2	8	6	8	13	10
5. Rwanda	5	2	2	1	5	8	10	9	11	10
6. Burundi	5	2	2	4	4	4	4	8	7	8
7. Zambia	5	7	2	3	5	4	3	2	3	3
8. Malawi	2	2	3	3	3	3	3	2	3	2
9. Mozambique	4	4	1	1	1	3	2	1	1	1
10. Zimbabwe	0.39	0.38	0.32	1	1	1	1	1	1	1
11. South Sudan	0.15	0.24	0.01	-	-	-	-	-	0.36	1
12. Madagascar	0.12	0.12	0.17	0.08	0.39	0.4	0.29	0	0.10	0
13. Mauritius	0.13	0.13	0.06	0.14	0.19	0.2	0.07	0	0.01	0.17
14. Angola	1.73	0.13	0.19	1.44	0.84	0.2	0.18	0.02	0.17	0.11
15. Botswana	0.02	0.23	0.01	0.00	0.10	0.1	0.03	0.00	0.02	0.03
16. Namibia	0.30	0.04	0.04	0.02	0.02	0.2	0.04	0.01	0.09	0.03
17. Seychelles	0.02	0.01	0.72	0.03	0.02	0.0	0.00	0.01	0.01	0.02
18. Eswatini	0.24	0.06	0.47	0.01	0.04	0.1	0.30	-	0.01	0.01
19. Lesotho	-	-	-	-	-	-	-	-	-	-

Source: *Authors' computations from UNCOMTRADE & ITC Statistics*

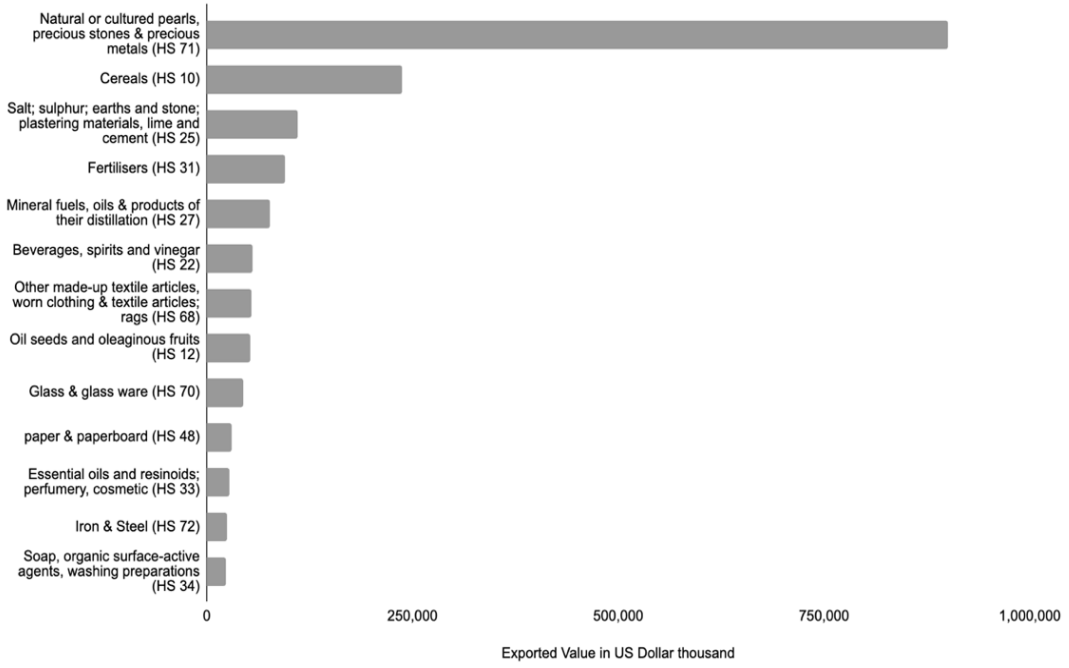

Figure 2: *Showing the distribution of Tanzania's top exports (2 -digit level HS) in the year 2022.*

The results in figure 2 Shows that Tanzania's exports are concentrated in one product category (i.e., Natural, or cultured pearls, precious stones & metals HS.71) comprising 35.2 per cent of total export to both trading blocs, specifically 'Gold, incl. gold plated with platinum, unwrought, for non-monetary purposes (HS 71.081.2)'. In 2022, Tanzania gold exports were valued at $ 900 million reflecting a growth rate of 946.6 per cent since 2013 and a peak of $ 1.1.6 Billion in 2020. Gold is a critical export for Tanzania's economy, serving as the main product used to stabilize its balance of payments (The Chanzo, 2023).

After gold, rice is the dominant export from Tanzania to the two trading blocs. Rice exports experienced a growth of 2,309 per cent between 2013 and 2022, reaching a peak of $280 million in 2021 before settling at $169 million in 2022. Fertilizers (superphosphates) and maize followed rice in export value, reaching $70.3 million and $68 million respectively (Table xxx3a). Notably, superphosphates (HS 31.03.11) have emerged as a major export for Tanzania to these trading blocs. The data reveals that Tanzania only began exporting superphosphates in 2019, with a value of just $2 million. This figure then soared to $70.3 million in 2022.

Table 3: showing Tanzania's top merchandise exports to the EAC & SADC blocs.

	Product label	Tanzania's Primary exports to SADC & the EAC combined									
		Value in US Dollar million									
		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
All products		1,675	1,838	1,956	1,173	1,329	1,541	1,967	2,232	2,457	2,550
1.	Gold (HS 71.08.12)	86	163	658	604	669	700	957.3	1,163	886	900.4
2.	Milled rice (HS 10.06.30)	7	2.5	0.330	0.284	0.073	7.5	30.9	128	280	169.8
3.	Superphosphates (HS 31.03.11)	-	-	-	-	-	-	2	55.6	28.7	70.3
4.	Maize (HS 10.05.90)	8.5	31.1	4.7	8.1	3.7	40.7	28.5	20.5	57.5	68
5.	Portland cement (HS 25.23.29)	27.5	30	25	7.6	13.5	18.2	38	41.2	39	56.9
6.	Fused magnesia (HS 25.19.90)	-	-	-	0.698	5	9.1	14.6	23.8	31.4	53.5
7.	Carboys (HS 70.10.90)	24.5	24	30	18	22	20	36	33	41	44
8.	Waters (HS 22.02.10)	4.9	7.1	3.4	1.1	2.7	4	8.3	9.7	17.8	30.6
9.	Unbleached kraftliner (HS 48.04.11)	13.8	14	18.5	18.2	18.6	26.5	21.3	20.2	37.4	29.9
10.	Gaseous hydrocarbons (HS 27.11.19)	0.221	0.084	0.941	0.062	2.9	1.3	2.4	3.2	9.3	29.2

Source: *International Trade Centre / UN COMTRADE Data*

4.2 RCA Results

An analysis of Tanzania's top five exports to the EAC in 2022 reveals a comparative advantage for all products, with fertilizers boasting the highest comparative advantage (RCA_{imj} = 111). This advantage in fertilizers hasn't always been consistent and moved from a comparative disadvantage to advantage with a sharp rise in the period 2020-202. Notably, rice and fused magnesia transitioned from a comparative disadvantage to an advantage, experiencing a significant rise in recent years. Meanwhile, maize and cement have maintained a moderately consistent comparative advantage throughout the study period.

An analysis of Tanzania's trade within the SADC region from 2013 to 2022 reveals that gold exports consistently held a comparative advantage throughout the period, solidifying Tanzania's position as a leading African gold producer (RCA_{imj} = 8.2). This aligns with Magai and Márquez-Velázquez (2013), who argue that Tanzania's gold boom since 2000 fueled economic growth and cemented its status as a top producer. Exports of glassware also enjoyed a comparative advantage. Additionally, exports of fused Magnesia showed a sharp rise in comparative advantage between 2016 and 2022, suggesting a potential new area of export strength. However, exports of fertilizers and cigarettes faced a consistent disadvantage throughout the period.

The RCA results point to implications for Tanzania's trade strategy, particularly the need to address barriers hindering the scaling up of high-

potential exports like milled rice. To capitalize on these opportunities, trade policies should prioritize enhancing production capacity. As Tumbo et al. (2017) reveal, Tanzania's rice production is primarily driven by small-scale farmers, who account for 90% of output with an average farm size of 1.3 hectares, producing 900,000 metric tonnes annually. This demonstrates the need to enhance production capacity to meet growing domestic and regional market demand. Furthermore, the consistent comparative advantage in fertilizers, alongside the transition of rice and fused magnesia from a disadvantage to an advantage, highlights opportunities for targeted interventions. However, the dominance of gold in the SADC region reflects Tanzania's heavy reliance on a single commodity, emphasizing the urgent need for diversification.

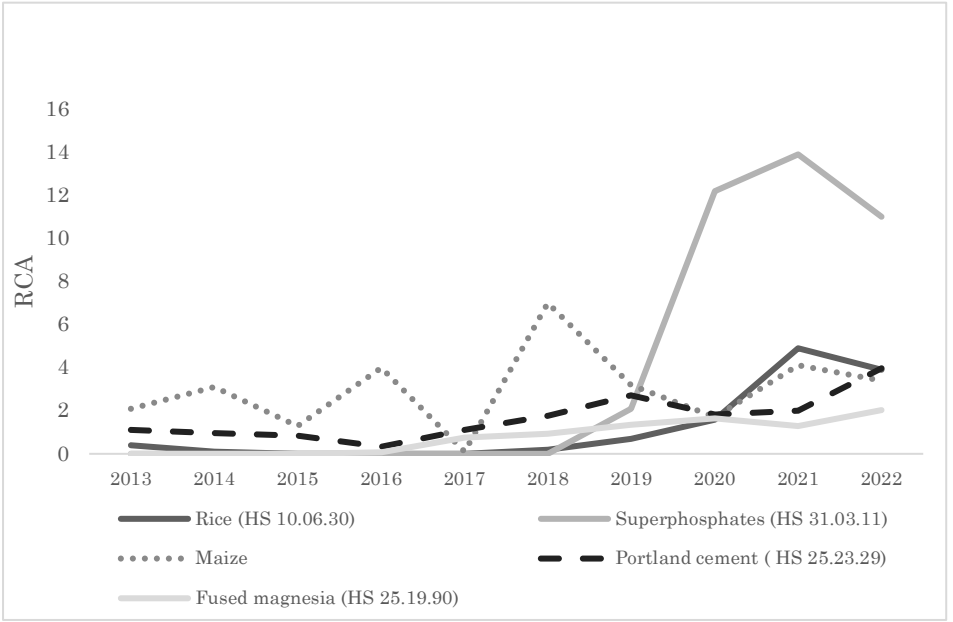

Figure 3: *showing RCA of Tanzania's top five exports to SADC at HS-6 digits*
Source: *Authors' computations based on UN COMTRADE & ITC's Statistics*

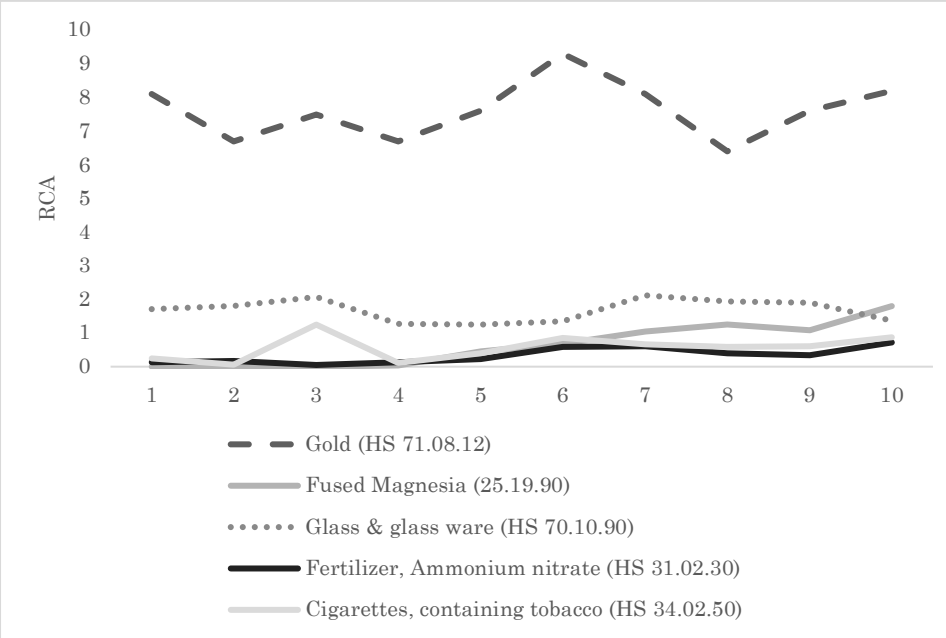

Figure 4: *showing RCA of Tanzania's top five exports to the EAC at HS-6 digits*

Table 4: showing RCA of Tanzania's top five exports to the EAC and SADC at HS-6 digits

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
A. RCA indicies for Tanzani's top five export to the EAC											
1. Rice (HS 10.06.30)	0.4	0.1	0.0	0.0	0.0	0.2	0.7	1.6	4.9	3.9	Disadvantage to advantage & sharp rise
2. Superphosphates (HS 31.03.11)	-	-	-	-	-	-	2.1	12.2	13.9	11.0	Advantage throughout-sharp rise
3. Maize (HS 10.05.90)	2.1	3.1	1.3	4.0	0.1	7.0	3.2	1.7	4.1	3.4	Consistent advantage-moderate rise
4. Cement (HS 25.23.29)	1.10	0.95	0.83	0.33	1.10	1.77	2.72	1.82	2.01	3.97	Consistent advantage-moderate rise
5. Fused Magnesia (HS 25.19.90)	0.00	0.00	0.00	0.08	0.74	0.94	1.36	1.64	1.29	2.03	Disadvantage to advantage & sharp rise

B. RCA indicies for Tanzani's top five export to the SADC											
1. Gold (HS 71.08.12)	8.1	6.7	7.5	6.7	7.6	9.3	8.1	6.4	7.6	8.2	Advantage throughout, Moderate rise
2. Fused Magnesia (25.19.90)	-	-	-	0.04	0.46	0.69	1.04	1.26	1.09	1.80	Disadvantage to advantage & sharp rise
3. Glass & glass ware (HS 70.10.90)	1.71	1.81	2.08	1.27	1.25	1.35	2.12	1.94	1.90	1.37	Advantage throughout
4. Fertilizer, Ammonium nitrate (HS 31.02.30)	0.13	0.17	0.05	0.14	0.23	0.59	0.60	0.39	0.34	0.72	Consistent Disadvantage-moderate rise
5. Cigarettes, containing tobacco (HS 34.02.50)	0.24	0.06	1.25	0.11	0.39	0.85	0.66	0.58	0.61	0.87	Consistent disadvantage

Source: *Authors' computations based on UN COMTRADE & ITC's Statistics*

4.3 Export Intensity

The results in table 5 above reveal that Tanzania has strong trade relations with both trading blocs (EII >1), implying that Tanzania's exports to both trading blocs are as expected given the importance of their trade relations, however on average, Tanzania's EII with the EAC is significantly higher than with SADC. This result is in tandem with Dyegula and Lwesya (2018) findings that revealed that Tanzania's participation in SADC has not yielded the expected benefits, and non-tariff barriers have hindered its access to markets in the bloc.similarly, According to Sudi (n.d.), Tanzania's limited exports to the SADC region can be attributed to two key factors: inconsistencies in regulations for agricultural and livestock health (sanitary and phytosanitary measures) across member states, and delays at customs, particularly when processing permits for exports and transit goods. Tanzania's trade relations with the EAC fluctuated significantly throughout 2013-2022, with a sharp increase in 2015 (EII=1227.8) followed by a substantial decrease in 2016 (EII=668.5). On the other hand, the strength of Tanzania's trade relations with SADC showed a generally increasing trend, reaching its peak in 2020 (EII=30.7) with minimal fluctuations.

The gradual upward trend in SADC trade intensity, peaking in 2020, indicates potential for growth if regulatory and procedural bottlenecks are addressed. Policymakers should prioritize harmonizing trade facilitation measures, reducing non-tariff barriers, and strengthening logistical infrastructure to improve Tanzania's competitive positioning in the SADC market. Moreover, leveraging lessons from the EAC's relatively successful integration model could enhance Tanzania's trade outcomes in SADC and inform broader regional integration strategies under frameworks like the AfCFTA.

Table 5: showing Tanzania's Export Intensity Index with SADC & The EAC

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EII (Tz-SADC)	26.6	20.5	16.8	22.3	26.6	29.6	29.4	30.7	24.8	22.0
EII (Tz-EAC)	874.4	754.0	1227.8	668.5	746.2	1033.4	861.4	636.2	891.8	934.6

Source: *Authors' computations based on UN COMTRADE & ITC statistics*

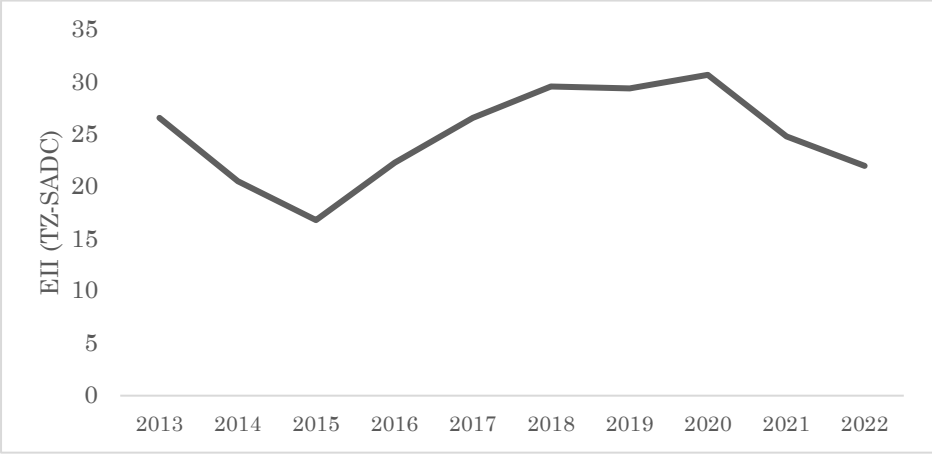

Figure 5: *showing Export Intensity index of Tanzania with SADC (2013-2022)*

Source: *Authors' computations based on UN COMTRADE & ITC statistics*

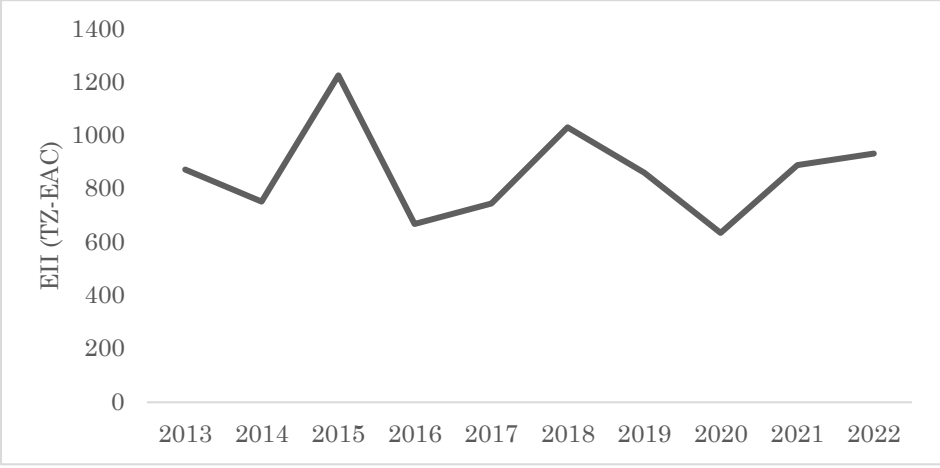

Figure 6: *showing Export Intensity index of Tanzania with EAC (2013-2022)*

Source: *Authors' computations based on UN COMTRADE & ITC statistics*

4.4 Trade Complementarity

TCI analysis of Tanzania's exports to SADC indicates complete alignment with SADC's import basket (table 6 & figure &). The strongest complementarity is observed in salt, sulphur, and stone merchandise (HS 25), with a peak TCI of 51.8 in 2022. Conversely, the least complementary product category is precious stones and metals (HS 71). Notably, Tanzania's cereal exports (HS 10) demonstrated significant growth in complementarity, increasing from a TCI of 3.3 in 2016 to 10.1 in 2023.

Table 6: showing the Trade Complementarity Index between Tz and SADC in 2016-2023

		2016	2017	2018	2019	2020	2021	2022	2023
1.	Precious Stones & Metals (HS 71)	4.6	5.2	8.1	7.8	7.0	8.2	5.6	4.1
2.	Cereals (HS 10)	3.3	0.8	7.3	8.2	17.2	29.0	15.6	10.1
3.	Salt, Sulphur, Earths & Stone (HS 25)	10.1	15.2	23.5	30.5	31.6	37.9	51.8	34.6
4.	Fertilisers (HS 31)	7.7	18.4	12.4	12.8	22.8	10.4	9.3	13.8

Source: *Authors' computations based on UN COMTRADE & ITC statistics*

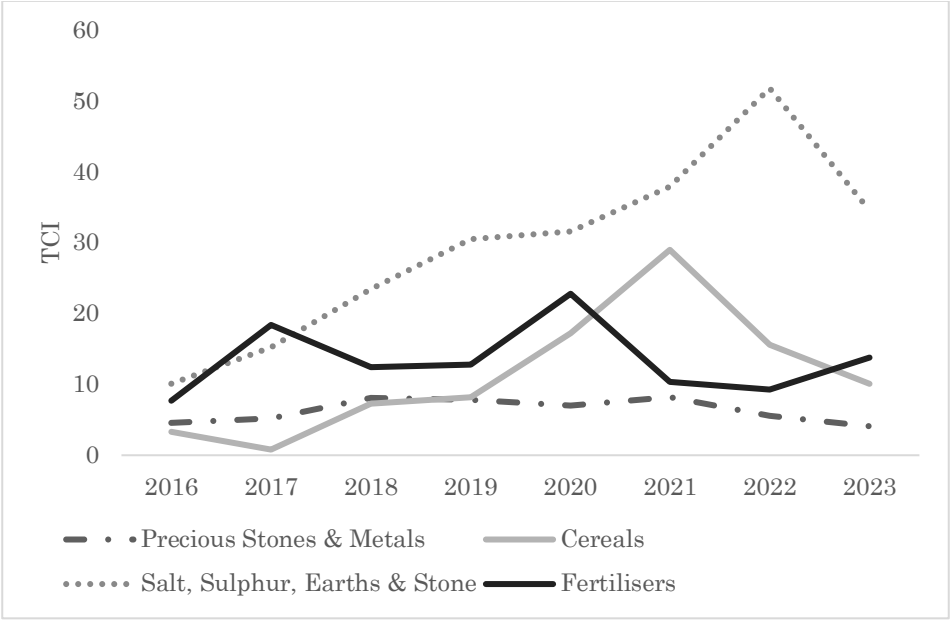

Figure 7: *showing the TCI between & SADC (2016-2027)*

Source: *Authors' computations based on UN COMTRADE & ITC statistics*

TCI analysis of Tanzania's exports to the East African Community (EAC) demonstrates trade complementarity across all top export categories, except for mineral fuels and oil (HS 27). Salt, sulphur, earths, and stone (HS 25)

exhibited the highest complementarity with a peak TCI of 102 in 2022. Cereals experienced the most substantial growth in complementarity, increasing from a TCI of 5.4 in 2016 to 51.1 in 2021. (Table 7). The Trade Complementarity Index (TCI) results highlight Tanzania's alignment with the import needs of both SADC and the EAC, providing key insights for trade policy and export strategy. In SADC, the high complementarity in salt, sulfur, and stone merchandise indicates the strong match between Tanzania's export profile and SADC's import demands. However, the low complementarity of precious stones and metals, despite being a significant export, points to limited diversification within this category. The significant growth in complementarity for cereals indicates emerging potential in agricultural exports, driven by increasing regional demand and Tanzania's production capacity. In the EAC, trade complementarity is robust across most top export categories, reflecting strong alignment between Tanzania's exports and the EAC's import needs. The substantial growth in complementarity for cereals highlights the growing importance of agricultural exports in the region. These results suggest that Tanzania can leverage its comparative advantage in complementary sectors to strengthen its trade position.

Table 7: showing the Trade Complementarity Index between Tz and EAC in 2016-2023

		2016	2017	2018	2019	2020	2021	2022	2023
1.	Mineral Fuels, Oils (HS 27)	0.04	0.05	0.05	0.08	0.04	0.04	0.14	0.19
2.	Cereals (HS 10)	5.4	2.4	15.8	16.2	24.3	51.1	26.6	17.6
3.	Salt, Sulphur, Earths & Stone (HS 25)	25.7	31.7	52.9	63.7	67.7	77.5	102.0	73.4
4.	Fertilisers (HS 31)	10.0	20.8	13.6	14.1	21.9	8.0	8.3	14.1

Source: *Authors' computations based on UN COMTRADE & ITC statistics*

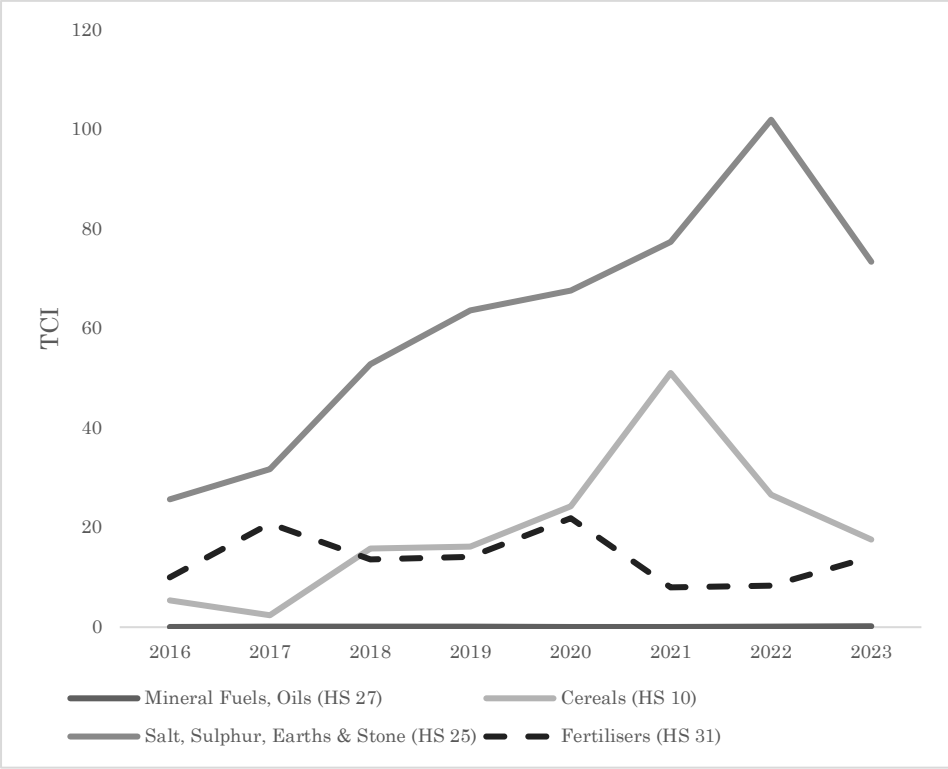

Figure 8: *showing TCI Tanzania & the EAC (2016-2022)*

Source: *Authors' computations based on UN COMTRADE & ITC statistics*

4.5 Export Potential

Figures 9 and 10 reveal milled rice (HS code 10.06.30) as Tanzania's product with the greatest potential for export growth within Eastern and Southern Africa. The unmet potential in these regions is estimated at a significant US$99 million and US$62 million respectively. This potential is particularly exciting considering rice is Tanzania's second most produced crop (Nkwabi et al., 2019) and boasts unique aromatic qualities that could qualify for protection under geographical indicators (John, 2022; Luhwago et al., 2023). However, despite rising domestic production, achieving a surplus for export remains a challenge due to rapidly increasing domestic demand, as noted by Wilson and Lewis (2015).

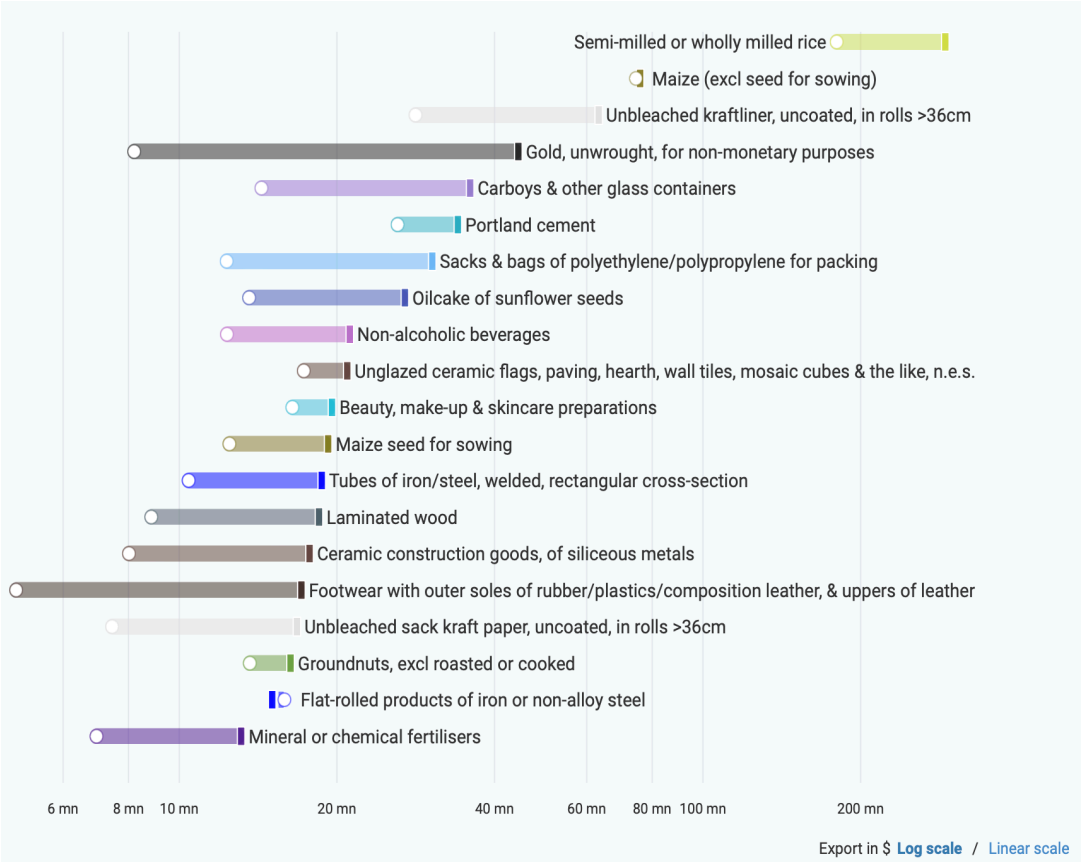

Figure 9: showing Tanzania's export potential in Eastern Africa

Source: *Export potential map (www.exportpotential.intracen.org) accessed on March 25th, 2024)*

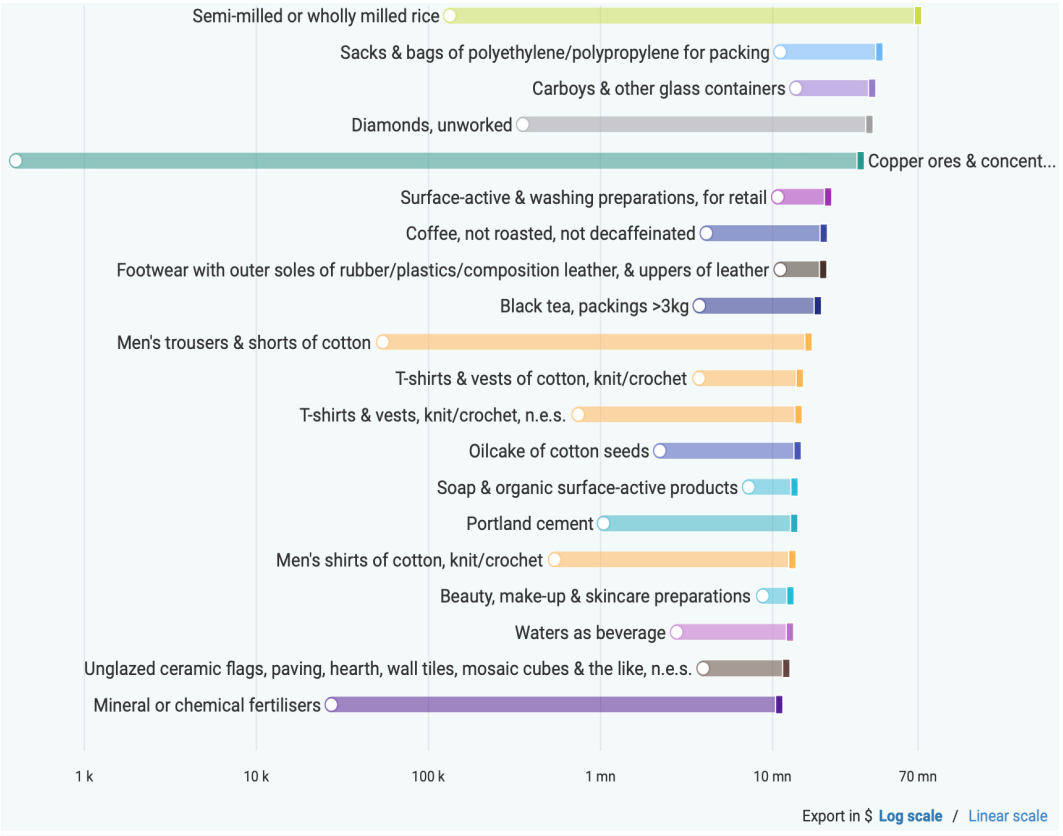

Figure 10: *showing Tanzania's export potential in Southern Africa*

Source: *Export potential map (www.exportpotential.intracen.org) accessed on March 25th, 2024)*

5.0 Conclusion and Policy Implications

This paper set out to evaluate Tanzania's overlapping regionalism in SADC and the EAC as trading blocs in the period 2013-2022. The findings reveal that exports to the EAC grew higher than those to SADC, and were heavily concentrated (>50 per cent) in just two markets (South Africa and Kenya). Tanzania's exports to these blocs were dominated by one product category i.e, Gold, and the trade intensity analysis highlights strong trade ties for Tanzania with both the EAC and SADC, although the EAC appears to be the more significant trading partner. This is further supported by the Revealed Comparative Advantage (RCA) results. We also found out that Tanzania enjoys a comparative advantage for all its top five exports when trading with the EAC, but only for three within SADC. In addition, the TCI analysis revealed that Tanzania's primary exports align with the import demands of

both SADC and EAC, except for mineral fuels, oils, and products of their distillation (HS 27) within the EAC market. Salt, sulphur, earths, and stone (HS 25) demonstrated the strongest complementarity with both trading blocs. The results show that Tanzania's primary exports generally match the import needs of both SADC and EAC, suggesting potential for increased trade within these regions, and Secondly, the presence of complementarity across various product categories suggests a diversified export profile for Tanzania, offering alternatives to the country's heavy reliance on gold (HS 71.08.12) as its primary export earner.The potential for trade analysis points towards milled rice (semi or wholly milled) as holding the greatest potential for increased exports to both regional blocs.

Three main policy implications emerge from study for Tanzania to boost its intra-African exports under the broader AfCFTA. First, diversification beyond a single export commodity (gold - HS 71.08.12) and two markets (South Africa and Kenya) is critical. The AfCFTA offers an opportunity to explore new markets within Africa, particularly those where Tanzania holds a Revealed Comparative Advantage (RCA) in sectors beyond gold. Second, Tanzania ought to leverage its trade complementarity with SADC and EAC, by prioritizing export diversification beyond gold, focusing on high-complementarity products such as salt, sulphur, and stone. Finally, concerted efforts should be placed on increasing exports of milled rice (HS 10.06.30) to both regional blocs. Rice exports transitioned from a comparative disadvantage (2013-2019) to an advantage (2020-2022), an advantage that should be harnessed and maintained.

Limitations of the study

The study's limitations are multifaceted. Firstly, the RCA analysis concentrated on only Tanzania's top five exports, potentially overlooking emerging sectors that hadn't yet reached the top rankings by 2022. Secondly, the analysis focuses on data from 2013-2022 (10 years), yet a longer time period could reveal greater insights/trends. Additionally, the study relied on official trade data from the UN Comtrade database, which excludes significant informal trade flows that are particularly relevant in African regional trade contexts. Furthermore, this analysis is limited to merchandise trade, overlooking the significant and expanding services sector. UN Comtrade (2024) data reveals that Tanzania's services exports surged by 125% between 2012 and 2023, reaching a value of USD 6.2 billion in 2023. Lastly, while non-tariff barriers such as regulatory inconsistencies and customs delays are mentioned, the study does not comprehensively analyze their impact on trade flows within the EAC and SADC regions, leaving a critical gap in understanding the challenges to regional trade integration.

References

Achy, L. and Sekkat, K., 2006. Overlapping trade agreements: status and challenges for Morocco. In *Research report series/Economic Research Forum; no. 0427. Economic Research Forum, Cairo, EG.*

Afesorgbor, S.K. and Van Bergeijk, P.A., 2014. Measuring multi-membership in economic integration and its trade impact: a comparative study of ECOWAS and SADC. *South African Journal of Economics*, *82*(4), pp.518-530.

Barteczko, K. and Tchorek, G., 2016. Has the Euro Led to the Trade Creation Effect? *Unia Europejska. pl*, (6 (241)), pp.7-21.

Bwana, J. (2024) *Africa free trade deal a game-changer*. *Business Daily*, 20 August. Available at: https://www.businessdailyafrica.com/bd/opinion-analysis/columnists/africa-free-trade-deal-a-game-changer-4732144 (Accessed: 28 August 2024).

Chacha, M., 2014. Regional integration and the challenge of overlapping memberships on trade. *Journal of international Relations and Development*, *17*, pp.522-544.

Dyegula, N. and Lwesya, F., 2018. Trade Liberalisation in SADC and the Economic Benefits of Belonging to an RTA: The Case of Tanzania. *Studies and Scientific Researches. Economics Edition*, *27*, pp.56-74.

ElGanainy, A.A., Hakobyan, S., Liu, F., Weisfeld, H., Allard, C., Balima, H.W., Bteish, C., Giri, R., Kanda, D.S., Meleshchuk, S. and Ramirez, G., 2023. Trade Integration in Africa: Unleashing the Continent's Potential in a Changing World (No. 2023/003). *International Monetary Fund* [online]

John, I., 2022. Consumer Perceptions, Preferences and Awareness Towards Potential Geographical Indication of Products in Tanzania. *UDSM Online Journal Testing*, *12*(2), pp.43-56.

Kanaan, O., 2000. Tanzania's experience with trade liberalization. *Finance and Development*, *37*(2), pp.30-33.

Khandelwal, P., 2004. Comesa and Sadc: Prospects and Challenges for Regional Trade Integration. *IMF Working Papers*, (2004/227).

Kweka, J. and Mboya, P.G., 2017. Regional Integration and Poverty: the case of Tanzania. In *Regional Integration and Poverty* (pp. 213-279). Routledge.

Lamtey, G. (2024*) Hope, fears as tripartite free trade area takes off*. The Citizen, 25 July. Available at: https://www.thecitizen.co.tz/tanzania/news/national/hope-fears-as-tripartite-free-trade-area-takes-off-4701396 (Accessed: 21 August 2024).

Lamtey, G. (2024b) *Tanzania explains reasons for delay in tripartite free trade area ratification*. The Citizen, 26 July. Available at: https://www.thecitizen.co.tz/tanzania/news/business/tanzania-

explains-reasons-for-delay-in-tripartite-free-trade-area-ratification-4702794 (Accessed: 21 August 2024).

Leyaro, V., 2021. Trade effects of the East African Customs Union in Tanzania: Application of a structural gravity model (No. 2021/55). *WIDER Working Paper*.

Luhwago, W., Philip, D., Kadigi, R., Mgeni, C. and Kangile, R., 2023. The Determinants and Competitiveness of Rice Export in Tanzania: A Vector Error Correction Model. *East African Journal of Science, Technology and Innovation*, *4*.

Magai, P.S. and Márquez-Velázquez, A., 2013. Taxation in the Tanzanian gold sector: Overview of impacts and possible solutions. *Development Southern Africa*, *30*(2), pp.279-292.

Maryam, J., Banday, U.J. and Mittal, A., 2018. Trade intensity and revealed comparative advantage: an analysis of Intra-BRICS trade. *International Journal of Emerging Markets*, *13*(5), pp.1182-1195.

Masiya, M., Kalizinje, F. and Chisuwo Banda, M., 2023. Trade Trajectories of the East African Community (EAC) within the African Continental Free Trade Area (AfCFTA): Opportunities, Challenges and Future Prospects. *Challenges and Future Prospects (May 26, 2023)*.

Maskaeva, A., Mgeni, C., Msafiri, M., Kinyondo, G., Msemo, E., Nechifor, V., El Meligi, A., Ferreira, V., Boysen, O. and Simola, A., 2024. The impact of the African Continental Free Trade Area on the Tanzanian economy. *Publications Office of the European Union, Luxembourg, JRC136637*.

Mengistu, M.M., 2015. Multiplicity of African regional economic communities and overlapping memberships: A challenge for African integration. *International Journal of Economics, Finance and Management Sciences*, *7*(1), pp.417-425.

Mgangaluma, E., Mgonya, B., Fimbo, M.J., Siriwa, N., Tesha, V. and Mpango, H. 2023. *Assessment of the Economic Effects of Regional Integration: Multisectoral Approach for Tanzania. Working Paper No. 33: 2023. Bank of Tanzania.*

Mtana, D. and Rutaihwa, J., 2014. Implication of Tanzania's Multiple Memberships in Trade Performances: Focus of EAC and SADC Market. *International Journal of Academic Research in Economics and Management Sciences*, *3*(3), p.83.

Mutasi, V., 2021. World Trade Organisation members' compliance with article XXIV of the General Agreement on Tariffs and Trade: The case of Tanzania *(Master's thesis, University of Pretoria (South Africa))*.

Ngepah, N. and Udeagha, M.C., 2019. Supplementary trade benefits of multi-memberships in African regional trade agreements. *Journal of African Business*, *20*(4), pp.505-524.

Nkwabi, J., Mboya, L., Nkwabi, J. and Nkwabi, J., 2019. A review of the challenges affecting the agroprocessing sector in Tanzania. *Asian Journal of Sustainable Business Research*, *1*(2), pp.68-77.

Nwankwo, C.M. and Ajibo, C.C., 2020. Liberalizing regional trade regimes through AfCFTA: challenges and opportunities. *Journal of African Law*, *64*(3), pp.297-318.

Panke, D. and Stapel, S., 2018. Exploring overlapping regionalism. *Journal of International Relations and Development*, *21*, pp.635-662.

Panke, D. and Stapel, S., 2023. Overlapping regionalism around the world: Introducing the overlapping regionalism dataset. *International Area Studies Review*, *26*(4), pp.449-463.

Sudi, M. (n.d.) Tanzania can do more to boost SADC trade opportunities. PwC. Available at: https://www.pwc.co.tz/press-room/tanzania-can-do-more-to-boost-sadc-trade-opportunities.html (Accessed: 28 March 2024).

Supongpan Kuldilok, K., Dawson, P.J. and Lingard, J., 2013. The export competitiveness of the tuna industry in Thailand. *British Food Journal*, *115*(3), pp.328-341.

Suwannarat, P., 2017. Ascertaining the competitiveness of Thai exports to PRC. *Competitiveness Review: An International Business Journal*, *27*(3), pp.275-299.

The Chanzo (2023, June 29). Tanzania's gold production in 2022 has reduced by 4 percent compared to the year 2021. [Online]. Available at: https://thechanzo.com/2023/06/29/infographic-tanzanias-gold-production-and-export-trends/(Accessed: 28 March 2024).

Tumbo, S.D., Mahoo, H.F., Mutabazi, K.D., Kahimba, F.C., Kadigi, I.L. and Mnimbo, T., 2017. An Assessment of Tanzania's Agricultural Production, Climate Change, Agricultural Trade and Food Security. *Kenya Institute for Public Policy Research and Analysis.*

Walkenhorst, P., 2005. Trade Policy Developments in Tanzania: The Challenge of Global and Regional Integration. *MPRA Paper*, (23399).

Wani, N.U.H., 2020. Latency and Economic Concert of India's Trade with Russia: An Empirical Investigation (No. 104716). *University Library of Munich, Germany.*

Wassie, M.A., Kornher, L. and von Braun, J., 2022. African Continental Free Trade Agreement: A review of analyses of likely impacts and challenges of implementation. *ZEF Working Paper Series, ISSN 1864-6638*

Wilson, R.T. and Lewis, I., 2015. The rice value chain in Tanzania. *A Report from the Southern Highlands Food Systems Programme, FAO*, *9.*