

Shinyekwa, Isaac M. B.; Okillong, Philemon; Luwedde, Justine et al.

## Book

# Uganda's market access opportunities under the AfCFTA Agreement : an analysis of export potential and job creation

## Provided in Cooperation with:

Economic Policy Research Centre (EPRC), Kampala

*Reference:* Shinyekwa, Isaac M. B./Okillong, Philemon et. al. (2025). Uganda's market access opportunities under the AfCFTA Agreement : an analysis of export potential and job creation. Kampala, Uganda : Economic Policy Research Centre.  
[https://eprcug.org/publication/ugandas-market-access-opportunities-under-the-afcfta-agreement-an-analysis-of-export-potential-and-job-creation/?ind=1739548421323&filename=Uganda%20E2%80%99s%20Market%20Access%20Opportunities%20Under%20the%20AfCFTA%20Agreement.%20An%20Analysis%20of%20Export%20Potential%20and%20Job%20Creation\\_2.pdf&wpdmdl=17454&refresh=67b6d7fc594ec1740036092](https://eprcug.org/publication/ugandas-market-access-opportunities-under-the-afcfta-agreement-an-analysis-of-export-potential-and-job-creation/?ind=1739548421323&filename=Uganda%20E2%80%99s%20Market%20Access%20Opportunities%20Under%20the%20AfCFTA%20Agreement.%20An%20Analysis%20of%20Export%20Potential%20and%20Job%20Creation_2.pdf&wpdmdl=17454&refresh=67b6d7fc594ec1740036092)  
This version is available at:  
<https://hdl.handle.net/11159/703100>

## Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/>

## Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.  
<https://savearchive.zbw.eu/termsfuse>

## Terms of use:

*This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.*

# UGANDA'S MARKET ACCESS OPPORTUNITIES UNDER THE AFCFTA AGREEMENT:

## AN ANALYSIS OF EXPORT POTENTIAL AND JOB CREATION



Isaac M.B. Shinyekwa, Philemon Okillong, Justine Luwedde,  
Hildah Namuleme, Aida K. Nattabi, Amos Sanday

**RESEARCH  
SERIES  
NO. 165**  
August 2024

**Copyright © Economic Policy Research Centre (EPRC)**

The Economic Policy Research Centre (EPRC) is an autonomous not-for-profit organization established in 1993 with a mission to foster sustainable growth and development in Uganda through advancement of research –based knowledge and policy analysis. Since its inception, the EPRC has made significant contributions to national and regional policy formulation and implementation in the Republic of Uganda and throughout East Africa. The Centre has also contributed to national and international development processes through intellectual policy discourse and capacity strengthening for policy analysis, design and management. The EPRC envisions itself as a Centre of excellence that is capable of maintaining a competitive edge in providing national leadership in intellectual economic policy discourse, through timely research-based contribution to policy processes.

**Disclaimer:** The views expressed in this publication are those of the authors and do not necessarily represent the views of the Economic Policy Research Centre (EPRC) or its management.

Any enquiries can be addressed in writing to the Executive Director on the following address:

Economic Policy Research Centre  
Plot 51, Pool Road, Makerere University Campus  
P.O. Box 7841, Kampala, Uganda  
Tel: +256-414-541023/4  
Fax: +256-414-541022  
Email: [eprc@eprcug.org](mailto:eprc@eprcug.org)  
Web: [www.eprcug.org](http://www.eprcug.org)

# TABLE OF CONTENTS

Abstract .....	3
<b>1. Background</b> .....	4
1.1 Context .....	4
1.2 Purpose and Objectives .....	5
1.3 Policy Implication .....	6
<b>2 Review of Literature</b> .....	6
2.1 Theories of regional integration .....	6
2.1.1 Empirical literature on regional integration .....	6
2.2 Theories of Market Access .....	8
2.2.1 The Innovation-Related Internationalization Models (I-M) .....	8
2.2.2 Markets access and internationalization of firms .....	9
<b>3 Methodology</b> .....	9
3.1 Analytical framework .....	9
3.1.1 The International Trade Centre methodology .....	10
3.1.2 The Haussmann approach .....	10
3.1.3 Revealed Comparative Advantage .....	11
3.2 Data Sources .....	11
3.3 Simulations for jobs created .....	11
<b>4 Findings</b> .....	12
<b>4.1 Uganda's leading export market destinations and share in Africa</b> .....	12
4.1.1 Uganda's leading export products to Africa .....	15
4.2 Analysis of Uganda's Top 15 Export Products .....	15
4.2.1 Coffee (excluding roasted and decaffeinated) .....	15
4.2.2 Portland cement .....	17
4.2.3 Cane sugar and chemically pure sucrose .....	18
4.2.4 Tea (Black fermented tea and partly fermented tea) .....	19
4.2.5 Maize seed for sowing .....	20
4.2.6 Palm Oil (Palm oil and its fractions, whether or not refined) .....	21
4.2.7 Milk and cream, not concentrated nor containing added sugar or other sweetening matter .....	22
4.2.8 Milk and cream, concentrated or containing added sugar or other sweetening matter .....	23
4.2.9 Tobacco .....	24
4.2.10 Beans .....	25
4.2.11 Iron and steel HS code 72 .....	26
4.2.12 Wheat or meslin flour .....	27
4.2.13 Maize flour .....	29
4.2.14 Medicaments .....	30
4.2.15 Beer from malt .....	31
4.3 Export diversification and potential identification .....	31
4.3.1 The Revealed Comparative Advantage .....	32
4.3.2 The Distance Indicator .....	32
4.3.3 Export potential rank .....	34
4.4 Export product diversification analysis using the ITC methodology .....	36
4.5 A comparison of product offers under the AfCFTA and identified potential products .....	36
4.6 Table of products identified .....	37
4.7: Potential jobs created from exploiting unrealized export potential to the AfCFTA .....	37
<b>5.0 Conclusions and policy implications</b> .....	38
References .....	40
Appendix .....	43

## List of Tables

Table 1 An overview of Uganda's trade performance in Africa (USD millions).....	13
Table 2 Uganda's Informal Cross Border Trade in USD millions (2015—2022) .....	14
Table 3 Uganda's top 15 exports products to Africa in USD millions (2015 - 2021) .....	15
Table 4 Leading destination of Uganda's coffee exports to Africa (USD '000) .....	16
Table 5 Leading competitors in the destination market for coffee in Africa (USD '000) .....	16
Table 6 Leading destination for Uganda's portland cement (USD 000) .....	17
Table 7 Leading competitors in the destination market for Portland cement (USD 000) .....	18
Table 8 Leading destination for Uganda's cane sugar (USD '000).....	18
Table 9 Leading competitors in the destination market for cane or beet sugar (USD 000).....	19
Table 10 Leading destination for Uganda's tea (USD 000) .....	19
Table 11 Leading competitors in the destination market for tea (USD 000).....	20
Table 12 Leading destination for Uganda's maize seed for sowing (USD 000) .....	20
Table 13 Leading competitors in the destination maize seed for sowing (USD 000) .....	21
Table 14 Leading destination for Uganda's palm oil and its fractions (USD '000) .....	21
Table 15 Leading competitors in the destination palm oil and its fractions (USD '000) .....	22
Table 16 Leading destination for Uganda's milk and cream – not concentrated (USD 000) .....	22
Table 17 Leading competitors in the destination milk and cream (USD 000) .....	23
Table 18 Leading destination market for Uganda's milk and cream, concentrated (USD '000) .....	23
Table 19 Leading competitors in the destination market for milk and cream, concentrated (USD 000) .....	24
Table 20 Leading destination for Uganda's tobacco and tobacco substitutes (USD 000).....	25
Table 21 Leading competitors in the destination tobacco market (USD '000).....	25
Table 22 Leading destination for Uganda's beans (USD '000) .....	26
Table 23 Leading competitors in the destination bean market (USD 000) .....	26
Table 24 Leading destination for Uganda's HS 72 Iron and steel (USD '000) .....	27
Table 25 Leading competitors in the destination market for iron and steel (USD '000) - average 2011-2020 .....	27
Table 26 Leading destination for Uganda's wheat flour (USD '000) .....	28
Table 27 Leading competitors in the destination wheat (USD '000) .....	28
Table 28 Leading destination for Uganda's maize corn (USD '000).....	29
Table 29 Leading competitors in the destination market for maize corn (USD '000).....	29
Table 30 Leading destination for medicaments (USD '000) .....	30
Table 31 Leading competitors in the destination market for medicaments (USD 000).....	30
Table 32 Leading destination for Uganda's beer made from malt – (USD '000) .....	31
Table 33 Leading competitors in the destination for beer made from malt (USD '000) .....	31
Table 34 Uganda's top 5 products with the highest demand and supply potential in Africa.....	35
Table 35 Top 25 products with prospects for market access to Africa.....	37
Table 36 Simulation results of the likely jobs created from exploitation of unrealised export potential.....	38

## List of Figures

Figure 1 Top 30 products for export diversification according to the RCA .....	32
Figure 2 Average sector performance according to the distance indicator.....	33
Figure 3 Top 30 products for export diversification according to the distance indicator .....	33
Figure 4 Uganda's top 25 products with export potential in Africa .....	34

## ABSTRACT

The paper identifies market access opportunities for Uganda under the AfCFTA, assesses offers and Uganda's capacities to supply products in the identified markets and estimates the jobs that are likely to be generated as a result of exploiting the expanded markets. To achieve this, we use different analytical approaches, including desk review, export trade trend analysis, relevant trade indices, and simulations using a CGE model. We use data from trade-map atlas of economic complexity, the Bank of Uganda and the Uganda Revenue Authority to analyse Uganda's Potential Market Access Opportunities and destinations within the AfCFTA. Furthermore, we use the Ugandan Social Accounting Matrix 2016/17 to simulate the jobs that are likely to be created. We find that globally, the EAC and COMESA are the leading destinations of Uganda's exports, accounting for about 35 and 46 percent of the market share respectively. The top products identified include coffee, cement, sugar, tea, maize, palm oil, milk and cream, and iron and steel products, among others. It is established that exploiting the unrealised export potential under the AfCFTA will generate 217,068 direct jobs and 438,461 indirect jobs.

# 1. BACKGROUND

The African Continental Free Trade Area (AfCFTA) promises broader and deeper economic integration with high potential to attract Foreign Direct Investments (FDI), boost trade, accelerate economic growth and increase shared prosperity in Africa (World Bank, 2020). The projected benefits of the Agreement as articulated by the International Trade Centre<sup>1</sup> (2018); World Bank, (2020); Echandi et al., (2022) and National Planning Authority (NPA, 2022) are significant and immense. It is envisaged that the agreement comes with higher FDI flows through deeper integration. This could raise Africa's exports by as much as 32 percent by 2035, and intra-Africa exports by 109 percent, especially from the manufacturing sector. Income gains from trade facilitation measures alone are expected to reach USD292 billion by 2035, as the World Bank (2020) report estimates. Real income gains from the agreement's full implementation could increase by 7 percent, or nearly USD 450 billion, during the same period. The resulting jobs and income growth are anticipated to lift 50 million people out of extreme poverty by 2035, offsetting some of the losses caused by the COVID-19 pandemic.

Although Uganda has a long history of participation in Regional Integration Arrangements (RIAs)<sup>2</sup>, the AfCFTA is unique as it presents a broader policy and geographical coverage and the engagement of all existing Regional Economic Communities (RECs) under a single normative (Echandi *et al.*, 2022). In this context, the AfCFTA provides more impetus for reforms and opportunities to boost exports, productivity, industrialisation and job creation, further reducing poverty and enhancing structural economic transformation for Uganda. This is partly because the AfCFTA creates a market size of more than 1.3 billion people and a combined gross domestic product (GDP) of USD 3.4 trillion (World Bank, 2020). The Agreement provides for increased access to the continental market for Uganda's goods and services with high potential to enable the country's industry to realize economies of

scale and forge connections that can help companies join regional and global value chains.

Indeed, Uganda's Third National Development Plan (NDP III) and Vision 2040 identify a youthful population, the third largest in the world as a strategic opportunity for positioning the country to harness the AfCFTA market. Other opportunities the Plan identifies include (i) rapid urbanization; (ii) a strong comparative advantage in agriculture and minerals; and (iii) a strategic geographical location on the continent, able to position Uganda as a trade and logistics hub (NPA, 2020). Thus, the NDP III seeks to strengthen Uganda's capacity to competitively produce for the regional and AfCFTA markets. A World Bank (2020) study suggests that Uganda's total exports could rise by 10.4 percent following the full implementation of the agreement. The share of Uganda's intra-AfCFTA exports in her total exports could significantly increase. The increase in exports and employment resulting from the AfCFTA could be boosted further by the FDI flows, which is projected to grow by 5.3 percent in the same period. More succinctly, the AfCFTA is expected to increase the number of jobs by 2 percent (of Uganda's total labour force), driven largely by agriculture.

## 1.1 Context

Intra-regional trade is becoming gradually important in advancing economic transformation. The establishment of the AfCFTA presents a significant opportunity to deepen African economic integration and increase trade within the continent. It is projected to increase intra-African trade due to the elimination of tariffs and Non-Tariff Barriers (Echandi et al., 2022). Several efforts have been made since May 2019 to operationalize the provisions under the AfCFTA to enable gainful trade across the continent. Under the first phase of negotiating protocols, provisions were made for inclusive market access to accommodate youth, women, and Small and Medium Enterprises (SMEs). The second phase includes protocols with provisions for investment, competition policy, and intellectual property rights geared towards strengthening economic

<sup>1</sup> ITC - International Trade Centre

<sup>2</sup> East African Community (EAC), the Common Market for Eastern and Southern Africa (COMESA), and the Tripartite Free Trade Area (TFTA).



integration in Africa.<sup>3</sup> It is anticipated that the AfCFTA will increase intra-African trade through investments and value addition. To this effect, four high-potential investment areas were identified under the AfCFTA, including automotive, agriculture and agro-processing, pharmaceuticals, transport, and logistics (Signé & Munyati, 2023). These sectors have the potential to create value addition, employment, and inclusiveness and ultimately boost production and trade under the AfCFTA.

Notably, trade agreements tend to gradually affect conditions of market access (Fugazza & Nicita, 2011). Market access is a crucial element of the AfCFTA, as it aims to minimise and eliminate trade barriers among the state parties and establish a more open and unified African market. 'Market Access' broadly defines the extent to which a country permits the importation of goods and services and the prerequisites therein, such as the tariff and non-tariff measures that need to be met before the importation of goods and services. Under the AfCFTA agreement, for example, tariffs are expected to be reduced up to 90 percent for 5 (five) years for developing countries and up to 10 (ten) years for least developed countries.<sup>4</sup>

Uganda is a signatory to the AfCFTA, and exports for the country are expected to increase by about 0.8 percent, with reductions in tariffs and about 10.4 percent with decreases in non-tariff barriers and developments in customs procedures (World Bank, 2020; Chien et al., 2022). Literature (not stated) also shows that the sectors with the greatest potential for market access opportunities under the AfCFTA agreement for Uganda can vary based on several factors, including the country's current export structure and the comparative advantages of its industries. However, some of the sectors that Uganda could potentially focus on taking advantage of the AfCFTA agreement include agriculture, manufacturing, services, and energy sectors (UNCTAD, 2020). In addition, Uganda's export-oriented strategy under the NDP III is hinged on promoting exports through

value addition and increased volume of manufactured products. The target is to increase and retain Uganda's market share in the East African Community (EAC), Common Market for Eastern and Southern Africa (COMESA) and AfCFTA, due to Uganda's proximity to the aforementioned markets, share similar market access requisites and preferred access to Uganda's products (NPA, 2020). The products pinpointed for these markets include cement, steel, kitchenware, tiles, plastics, sugar, dairy products, cooking oil, soap, cereals, and grains among others (ibid).

Given the above, it is necessary to identify Uganda's top export commodities and their main destinations within the continent. Uganda can expand its range of export products to cater for the diverse needs of the AfCFTA state parties. This can be achieved by identifying the products that are in high demand in the target markets and developing production capacity to meet the demand. Accordingly, identifying suitable market penetration and entry strategies/ ideal trade promotion is critical for Uganda to increase its market share in the AfCFTA member countries and take advantage of the market access opportunities offered by the agreement. These may include trade fairs, buyer-seller meetings, trade mission and commercial attaches, strategic partnerships, e-commerce, export financing, and market research (AfDB, 2021; UNCTAD, 2020).

## 1.2 Purpose and Objectives

The main purpose of this study is to identify products, sectors, and, consequently, markets within Africa to ensure that Uganda mutually benefits from the AfCFTA agreement. The study further seeks to establish the number of jobs likely to be generated when Uganda mutually exploits the market opportunities created under the AfCFTA. Therefore, the study seeks to:

- a) Identify the market access opportunities (products and destination markets) for Uganda to tap into the AfCFTA agreement effectively;
- b) Assess the market offers<sup>5</sup> made by the AfCFTA in line with what Uganda can offer; and

<sup>3</sup> <https://au.int/en/pressreleases/20230215/powering-trade-through-afcfta-people-drive-wholesome-development-agenda>

<sup>4</sup> <https://www.eac.int/press-releases/157-trade/2270-eac-bloc-inches-closer-to-finalising-afcfta-tariff-offers>

<sup>5</sup> Countries under the AfCFTA negotiations made offers of products at liberalized rates in exchange for partner country offers.



- c) Estimate the number of jobs likely to be created by exploiting the unrealised export potential under the AfCFTA.

### 1.3 Policy Implication

The outcome of this study will significantly contribute to the NDP III programmes that are relevant to trade, specifically, the Agro-Industrialization programme that targets increasing exports of value-added products. Furthermore, this study seeks to provide evidence to support the implementation of strategy 3.3 of the NDP IV<sup>6</sup>. In addition, the study will contribute to strategically positioning Uganda's export sector within the AfCFTA Agreement Framework. This will eventually achieve the overall objective of private sector development. Achieving these goals will lead to the acceleration of sustainable and productive employment for inclusive economic growth in Uganda.

## 2 REVIEW OF LITERATURE

### 2.1 Theories of regional integration

In the context of the AfCFTA, Balassa's (1961) theory of economic integration can be applied when he discusses the different steps of integration<sup>7</sup>. Viner (1950), however, points out that the welfare effect of a Free Trade Area (FTA) or Customs Union is unclear. This seminal research suggests that in such regional initiatives, there are trade creation and trade diversion effects. Trade creation arises when members within the FTA move away from depending on high-cost domestic producers to accessing imports from the low-cost producers within the regional bloc. On the other hand, trade diversion happens when there is a shift from importing from low-cost non-members of the regional bloc to importing from high-cost producers within the regional bloc. Viner (1950) further suggests that members and non-members of a regional bloc can be disadvantaged when tariffs are reduced. Still, trade

diversion is greater than trade creation.

The theory of large-scale economies points out that regional integration creates a big market, allowing firms to increase production to satisfy the demand at a reduced cost. In the same regard, Baldwin & Venables (2005) differentiate the economic effects of Preferential Trade Agreements (PTAs) according to allocation, accumulation, and location. The allocation effect is associated with the allocation of static resources. The accumulation effect focuses on technology spillovers owing to regional integration that leads to an increase in the volume of trade among members and, in turn, impacts capital and investment returns (physical and human capital) and enhances accumulation. Regarding location, regional integration permits the transition to liberalised markets with an agglomeration effect at focal points within the region. A final theory of great relevance is comparative advantage, which is the cornerstone of modern trade theory. This seminal work was developed by David Ricardo (1772-1823) based on the writings of Adam Smith. Put briefly, comparative advantage posits that a nation should concentrate on producing what it can produce most efficiently relative to other trading partners and then trade that item for other goods. This will leave all nations better off than in the case of autarky.

#### 2.1.1 Empirical literature on regional integration

Aligned with the theory of regional integration, some studies have analysed the determinants of market access in the context of individual countries and regional blocs. Seid (2013) examines the factors that determine the low level of intra-regional trade and the role of RECs in promoting intra-regional trade. The study focuses on COMESA, the Economic Community of West African States (ECOWAS), the Intergovernmental Authority on Development (IGAD) and the Southern African Development Community (SADC) using the gravity model. It covers 48 countries in Africa for 17 years (1993 – 2010). The study finds mixed outcomes with two of the RECs (SADC and ECOWAS) having trade creation among the members, yet IGAD and COMESA did not create trade. The study concludes that African

<sup>6</sup> NDP IV Strategy 3.3 aims to Increase market access and competitiveness of Ugandan products to improve terms of trade, create more jobs and increase household incomes as well as drive the industrialization process.

<sup>7</sup> The Free Trade Area, Customs Union, Common Market, Monetary and Political Integration

countries must capitalise on physical infrastructure to create linkages with neighbouring countries, harmonise trade policies, and simplify custom procedures so that current RECs can boost intra-regional trade.

In the same regard, Osuji (2020) examines the impact of intra-African trade indices on the competitiveness of the African continent, using a panel dataset between 2000 and 2016. The study finds that disparities exist in trade performance and competitiveness. SADC recorded the highest level of intra-African imports, whereas SACU registered the highest inter-regional imports. On the other hand, SADC demonstrated the highest intra-African exports, and COMESA had the highest exports inter-region wide. The study concludes that intra-Africa trade is not substantial to the RECs on the African continent which could be due to the very minimal trade among member countries.

Esaku (2019) uses a panel dataset (1991 to 2002) of the manufacturing sector in Ghana, Tanzania, and Kenya, to study the role of export market destinations in the growth of productivity in Sub-Saharan Africa. Results establish that exporting to several markets increased the growth in productivity of the firm by 42.3 percent, more than exporting to a given export market at a point time. The study concludes that much as export market destinations are important for growth in productivity, exporters who sell products in different market destinations experience a higher growth in productivity.

Shinyekwa *et al.* (2021) analyse the sectors and products with the potential for Uganda to intensify and diversify its exports using the Hausmann Atlas of Economic Complexity and the International Trade Centre's Export Potential Assessment approaches. The study reveals that Uganda has a comparative advantage for export intensification and diversification in the agricultural, minerals, light manufacturing, and textile sectors. They conclude that Uganda exploits only 62 percent of its potential export market, implying that there is a 38 percent unutilized export market, which the country should tap into. It is important to note that this study analysed global market access and not the

African continent under the AfCFTA which this study seeks to address.

Fugazza & Nicita (2011), on the other hand, analysed the effect of preferential access on bilateral trade flows. The study employed the gravity model approach to evaluate the shift in the market access conditions and their effect on international trade. It adopts trade data for over 5,000 products in 85 countries, from (2000–2007).<sup>8</sup> The study finds that the structure of preferences offers a relative advantage over competitors, which in turn affects the extent of bilateral trade flows.

In summary, the literature on intra-regional trade in terms of market access is mixed with some RECs having benefitted from the union through trade creation and increased exports, while others indicate minimal trade and in form of imports. In addition, the data used is *ex-ante* in analysing the impact of the AfCFTA and only covers a few countries or blocs. Most studies have used different methods such as the gravity model to gauge trade performance and market access conditions of different countries and RECs. For Uganda, some studies such as Shinyekwa *et al.*, (2021), have tried to forecast export potential and diversification opportunities using ITC's Export Potential and the Atlas (Product space) approaches. Therefore, there is anecdotal empirical literature on the market access opportunities for Uganda in the context of the AfCFTA which makes this study unique in filling this research gap.

Uganda's export strategy is guided by, among others, the National Trade Policy, National Export Development Strategy, and the different trade treaties, protocols, and agreements signed by the country. Domestic trade is seen as a springboard for engagement in international trade; and on product and market diversification, based on regionalism, bilateralism, and multilateralism as key tenets of achieving this. The National Export Development Strategy (MTIC, 2015) identifies twenty

<sup>8</sup> The data is sourced from the United Nations Commodity Trade Statistics Database (UN COMTRADE); the World Integrated Trade Solution (WITS). They also use import demand elasticities from Kee *et al.*, (2008); tariff data is derived from the UNCTAD Trade Analysis and Information System database (TRAIS), and GDP data is accessed from the World Bank World Development Indicators database.

products<sup>9</sup>. However, there has been limited effort to specifically identify products Uganda exports to Africa, especially under the current AfCFTA agreement negotiations.

## 2.2 Theories of Market Access

Market access refers to the freedom to enter a market and sell goods or services. The key success factors in market access include market intelligence, ability to learn and adapt, low entry barriers and a solid business network. Within this context, market access can generally be of two types; trade and investment. Traditionally, studies on market orientation and internationalization show that market-orienting efforts such as providing information and incentives to firms to promote their penetration into global markets are beneficial to market access.

The first theory to gain prominence is the Uppsala model (U-M) of internationalization and market orientation, proposed by Johanson & Wiedersheim, (1975), Johanson & Vahlne, (1977) which describes internationalization as a series of incremental steps along a risk/reward continuum. The Uppsala model first describes a firm's sequence of entry into foreign markets (in terms of the concept of "psychological distance") and then describes the subsequent incremental commitment of a firm to foreign markets (in terms of other factors).

This is explained further from an organisational perspective, where market orientation is a process of continuous learning that allows a firm to surmount the barriers of scarce resources and information to internationalise operations. This cycle typically starts with exporting, and over time the firm moves into more high-risk, high-reward activities such as foreign direct investment (Korhonen et al., 1996; Erramilli & Rao, 1990). According to this model, firms initially expand where the psychological distance is smallest, i.e., they penetrate foreign markets that are most similar to their domestic markets (Johanson & Vahlne, 2009) before attempting to access overseas markets that are less

familiar.

### 2.2.1 The Innovation-Related Internationalization Models (I-M)

The Innovation-based Internationalization (I-M) model was proposed by Bilkey & Tesar, (1977); Cavusgil, (1980). According to this model, the internationalisation decision is considered an innovative process for the firm. The argument is that internationalisation allows firms to gradually acquire, integrate, and gain knowledge of foreign markets. This is, however, conditional on the ease with which firms can adapt to the changing environment, as opposed to internal strategies. The lack of prior experience for the firm and the inability to access sufficient information about markets results in indecision.

Another internationalisation perspective is the famed "eclectic paradigm" of Dunning (1980, 1988). This paradigm is also known as the ownership, location, internalisation (OLI)-"OLI Model," which suggests that the decision to internationalise and the various possible modes of internationalisation rests upon the ownership advantages of firms, the location offered by host nations and the possible internalizing of benefits of firm-owned assets (Dunning, 1980). This implies that firms need to possess assets such as a global brand, technology, or managerial know-how to compete in a foreign market with local players. Second, they must find that local conditions, such as cheap labour supply or market size, augment their ownership advantages or otherwise enable them to profit. Third, the types of assets owned, as well as various competitive and institutional factors, compel firms to choose whether to internalise these assets within their boundaries or exploit them through licensing or franchising arrangements.

A contrasting view of internationalisation to the incremental approach of the Uppsala model is the idea of "born global" (Armario et al., 2008; Rialp & Knight, 2005; This perspective argues that a firm can internationalize from inception; there is no need to proceed in stages. The new firm can do business across borders because it already possesses the necessary resources, such as technology. These firms are typically in high-tech

<sup>9</sup> Coffee, iron and steel products, fish and fish products, cement, tea, hides and skins, tobacco, sugar, cocoa, flowers, sesame seed, maize, plastic products, animal and vegetable oils and fats, rice, beans, soap, cotton and fruits, and vegetables

sectors such as computer software (Armario et al., 2008) and e-commerce. However, most SMEs are not high-tech and their internationalization efforts are limited to trade. They are, therefore, not “born global” at best, or “instant exporters” (McAuley, 1999).

### 2.2.2 Markets access and internationalization of firms

Market orientation is “the organization-wide generation of market intelligence pertaining to current and future customer needs, dissemination of intelligence across departments and the organization-wide responsiveness to it” (Kohli & Jaworski, 1990). The major focus of market orientation is to understand customer needs in both domestic and international markets so that enterprises can develop products and services to meet these requirements. In short, market orientation means the implementation of a firm’s marketing strategies to achieve a greater degree of market access. In this regard, several researchers have demonstrated that there is a combined effect of market orientation and innovation on firms’ positive performance (Verbees & Meulenverg, 2004). The key elements of market orientation include customer orientation, competitor orientation, inter-functional coordination, long-term focus and profitability, intelligence generation, intelligence dissemination, and responsiveness (Kohli & Jaworski, 1990; Narver & Slater, 1990).

In summary there are different strands of literature linked to internationalization and market access. However, much of the effort has been devoted to understanding the challenges faced by firms in penetrating international markets and export development strategies to market access by large firms. With the growing importance of SMEs in the world economy, especially in developing economies, market access is expected to be one of the key success factors for SMEs (Spillan & Parnell, 2006). Accordingly, SMEs need to be encouraged to access international markets to foster their growth and overcome limitations related to domestic demand. As such, market-orienting efforts such as providing information and incentives to promote their penetration into the international markets would prove beneficial. However, SMEs are subject to

greater resource constraints than large firms (Hessels & Terjesen, 2010; Hollenstein, 2005) and therefore the choice of entry mode is a process of cost-benefit analysis (Sharma & Erramilli, 2004).

## 3 METHODOLOGY

### 3.1 Analytical framework

The study adopts different approaches to analyse Uganda’s potential market access destinations and opportunities within the AfCFTA State Parties. First, the study undertakes a desk review of relevant policy frameworks and related literature to inform the study’s conceptual framework. Second, it adopts a trend analysis approach to examine the performance of Uganda’s export products to Africa (at the product and country levels). Third, it uses the export potential assessment methodologies adopted by the International Trade Centre (ITC) and the Harvard University Growth Lab (Atlas of Economic Complexity) to identify market access opportunities (objective 1) for Uganda under the AfCFTA Agreement. Finally, we simulate the likely jobs created (objective 3) following the exploitation of the AfCFTA market access opportunities.

Through the decomposition of a country’s potential export products (based on their supply, demand, and easiness to trade), these methodologies enable countries to identify existing products with high export potential and/or market access opportunities within a target market (For a review, see: Decreux & Spies, 2016; Shinyekwa *et al.*, 2021). Therefore, the study uses the Export Potential Indicator (EPI), Product Diversification Indicator (PDI), and Revealed Comparative Advantage (RCA) indicator to identify the most promising export opportunities by matching Uganda’s export capabilities with the most accessible markets within the African region. Finally, the study analyses the product offers (objective 2) made by AfCFTA State Parties to the EAC in relation to Uganda’s current export products and sectors to establish the degree of readiness to export.

### 3.1.1 The International Trade Centre methodology

#### Export Potential Indicator (EPI)

The Export Potential Indicator (also known as the intensive product margin) enables countries seeking to boost their exports to identify and explore market access opportunities in new or existing target markets. The EPI identifies the globally competitive products of an exporting country that have a higher chance of being exported successfully to a particular destination market(s). Although similar to the gravity model, the EPI focuses on the product level rather than the country level. Notably, the EPI postulates that trade flows may be explained by a combination of the exporter product, importer product, and exporter-importer factors as denoted in equation (1) below:

$$\delta_{ijk} = \alpha_{ik}\beta_{ij}\gamma_{jk} \quad (1)$$

Where  $\delta_{ijk}$  represents the exports from exporter  $i$  (Uganda) of product  $k$  to market  $j$  (other African countries); the parameter  $\alpha_{ik}$  denotes the exporter  $i$ 's performance in exporting product  $k$ ;  $\gamma_{jk}$  market reflects  $j$ 's demand for product  $k$  and  $\beta_{ij}$  reflects the easiness to export any good from  $i$  country to  $j$ .

#### Product Diversification Indicator (PDI)

Similarly, the Product Diversification Indicator (sometimes referred to as an extensive product margin) enables countries that desire to diversify their economies and create new export-oriented industries that may capitalize on favorable demand trends in both new and current destination markets. The PDI identifies products that an exporting country does not competitively export but are based on the country's existing exports and those of similar countries. It considers the country's existing supply capacities to identify products that an exporting country seeks to diversify into (Decreux & Spies, 2016). The PDI is grounded on the notion of product space that posits that the ability to export one product relies on a country's ability to export other products (Hausmann *et al.*, 2007; Hidalgo *et al.*, 2007). It measures the relatedness of the products centered on the view that related products are more probably

to be produced by the same country than unrelated products. Notably, the major underlying assumption of this postulation is that every country has a combination of capabilities specific for the production of exports (Shinyekwa *et al.*, 2021). Decreux and Spies (2016) posits that a high overlay between this combination of capabilities and another combination specific to a new product, increases a country's likelihood to diversify its export' and subsequently widen its market access opportunities.

### 3.1.2 The Hausmann approach

#### Distance

The product distance indicator reveals countries' potential growth opportunities by providing a measure of their ability to enter specific products (on a scale between 0 and 1). It captures a location's current capabilities to make a product measured by the relatedness of a product to its present exports (Hausmann, 2007). A shorter distance implies that the product requires similar capabilities to existing ones, with a higher probability of success in the export markets. The distance indicator postulates that for every two products, the distance between them reflects the relatedness in the know-how and capabilities required to produce them. In particular, while two products that are 'closer' together (with a shorter distance closer to 0) require similar capabilities, two products that are 'far' apart (with longer distance closer to 1) need entirely dissimilar capabilities. Notably, product distance reflects the summation of proximities linking a product to all the products that a country is not presently exporting. Therefore, the distance  $d$  for product  $p$  and country  $c$  is denoted as in equation (2):

$$d_{cp} = \frac{\sum_{p'} (1 - M_{cp'}) \phi_{p,p'}}{\sum_{p'} \phi_{p,p'}} \quad (2)$$

Where;  $M_{cp'}$  represents the matrix summarizing which country makes what and it is used to construct the product space and the measures of economic complexity for countries and products.



### 3.1.3 Revealed Comparative Advantage

The revealed comparative advantage (RCA) postulates that the trade patterns among countries are determined by the relative differences in productivity among them. Under this approach, a country is competitive if it is an effective producer and exporter of a product relative to the share that is at least equal to the share of total world trade that the product represents (i.e.,  $RCA > 1$ ). Therefore, the study denotes the exports ( $X_{cp}$ ) of product (P) and country (C) as in equation (3):

$$RCA_{cp} = \frac{X_{cp} / \sum_c X_{cp}}{\sum_p X_{cp} / \sum_c \sum_p X_{cp}} \quad (3)$$

The study uses this equation to construct a matrix that links each country to the products that it makes. Hence, entries in the matrix are 1 if country **C** exports product **P** with RCA greater than 1, 0 elsewhere. Therefore, this matrix ( $M_{cp}$ ) is used to construct the product space and acts as a measure of economic complexity for products and countries.

## 3.2 Data Sources

The data used in the study was obtained from various sources including: Trade map (International Trade Centre), Atlas of Economic Complexity by Harvard, Bank of Uganda and Uganda Revenue Authority.

### 3.3 Simulations for jobs created

The paper uses the multiplier model based on the Social Accounting Matrix which is blended with the employment data from Uganda National Household Survey (UNHS) and National Labour Force Survey (NLFS) to generate the employment multipliers. This model and approach was selected because it is the best ex-ante simulation model that employs a data-intensive computable general equilibrium, which has been widely used by scholars like Pyatt and Round (2006), Llop (2005) and Bandara and Kelegama (2008). The top 15 export products used in this model were previously identified from the ITC Trademap database. These product's contribution to employment was sourced from the UNHS and NLFS datasets and used to project job creation. To build the mathematical derivations of the model; let us assume that the

amount of sector  $i$ 's input required for the production of sector  $j$ 's output is proportional to sector  $j$ 's output. This assumption allows us to generate the Leontief technical coefficients. The relationship between these coefficients and sector  $j$ 's output is;

$$X_{ij} = a_{ij}X_j \quad i, j = 1, \dots, n \quad (4)$$

We now equate total demand to total supply at equilibrium as follows.

$$X_i = \sum_{j=1}^n X_{ij} + F_i, \quad i = 1, \dots, n \quad (5)$$

$X_{ij}$  Represents intermediate demand

$F_i$  Denotes final demand

We now substitute equation (4) into equation (5) to get equation (6).

$$X_i = \sum_{j=1}^n a_{ij}X_j + F_i, \quad i = 1, \dots, n \quad (6)$$

Equation (6) shows the relationship between final demand and production. This also holds when we consider changes; thus enabling us to assess the impact of an exogenous change to the endogenous variables. This is shown as follows.

$$\Delta X_i = \sum_{j=1}^n a_{ij}\Delta X_j + \Delta F_i, \quad i = 1, \dots, n \quad (7)$$

$\Delta X_j$  Represents change in output of sector  $j$

$\Delta F_i$  Denotes change in final demand

To generate the multiplier model, let's first simplify equation (6) and display it in a matrix format as follows.

$$X = AX + F \quad (8)$$

Thus the multiplier model would be derived as shown by equation (9).

$$(I - A)X = F \rightarrow X = (I - A)^{-1}F \quad (9)$$

Where;

$F$  is a vector of final demands

$X$  is a vector of outputs

$I$  is an identity matrix with ones on the diagonal and

zeros elsewhere.

$(I - A)^{-1}$  is the multiplier matrix we use to calculate the changes in sectoral outputs following changes in final demand. Once we have derived the changes in the endogenous accounts, then we use them to derive other accounts like employment. For example, if  $i$  is the amount of labour required to produce one unit of commodity  $j$ , then change in labour (FTE) due to the shock would be captured by;

$$\Delta L_k = \sum_{j=1}^n b_{kj} \Delta X_j, \quad k = 1, \dots, s \quad (10)$$

## 4 FINDINGS

This section presents the results starting with Uganda's leading exports to different market destinations in Africa. Specifically, it summarizes the trends, distribution and proportions. This is followed by the identification of the different sectors and value chains as prospective investment areas targeting the AfCFTA countries. This is followed by presenting Uganda's export potential to African countries destinations, where we estimate the proportion of untapped markets which should be targeted. We then estimate the potential jobs created if the untapped markets are fully utilized. Furthermore, we present the export diversification possibilities for Uganda using a range of indicators. This process identifies sectors for diversification and those with potential but not necessarily being exported in significant volumes to State Parties. Finally, using the offers under the AfCFTA agreement, we compare the products which Uganda has potential to export under the liberalization bands (90 percent, sensitive (7 percent and those that are not liberalized (3 percent).

### 4.1 Uganda's leading export market destinations and share in Africa

Table 1 gives a summary of trends in Uganda's export value to Africa in comparison to the rest of the world. Uganda increased the value in exports of goods to the world from USD 2.67 billion in 2015 to USD 4.49

billion in 2021. On the other hand, export value to Africa increased from USD1.7 billion in 2015 to USD 2.7 billion in 2022. This analysis suggests that on average, Uganda exports slightly less in value to the rest of the world in comparison to Africa. However, the trends suggest that significant fluctuations occurred during the same period. Notwithstanding, both experienced significant growth during the eight years of analysis. It can be concluded that Uganda's export trade value to Africa is about a half of what is exported by the country.

Table 1 further demonstrates that in the last eight years within Africa, the EAC (excluding DRC) and COMESA are the leading destinations of Uganda's exports, with an average of 35 and 46 percent, respectively. This reveals that the rest of Africa (excluding COMESA and EAC) only accounted for an average of 1.4 percent. Note that, COMESA without EAC has a significantly small proportion on average of about 15.7 percent. Uganda should thus focus on exporting in the two RECs it is doing well and seek to penetrate the rest of the African market currently dimly reached. Therefore, while Uganda is party to the AfCFTA agreement, the country needs to cultivate markets outside the EAC and COMESA region where its export performance is extremely small.



**Table 1** An overview of Uganda's trade performance in Africa (USD millions).

	2015	2016	2017	2018	2019	2020	2021	2022	Average
World	2,667	2,921	3,450	3,636	4,096	4,461	4,494	4,272	3,675
Africa	1,705	1,668	2,037	2,139	1,865	1,731	2,293	2,707	1,920
COMESA	1,518	1,475	1,818	1,956	1,668	1,516	1,963	2,340	1,702
EAC excl. DRC	1,256	1,167	1,402	1,532	1,158	1,111	1,397	1,733	1,289
COMESA excl. EAC	421	461	561	566	671	575	782	878	577
Africa excl. COMESA & EAC	27	40	71	40	35	45	113	96	53
<b>Proportions (%)</b>									
Africa	63.9	57.1	59.0	58.8	45.5	38.8	51.0	63.4	52.2
COMESA	56.9	50.5	52.7	53.8	40.7	34.0	43.7	54.8	46.3
EAC excl. DRC	47.1	40.0	40.6	42.1	28.3	24.9	31.1	40.6	35.1
COMESA excl. EAC	15.8	15.8	16.2	15.6	16.4	12.9	17.4	20.6	15.7
Africa excl. COMESA & EAC	1.0	1.4	2.0	1.1	0.8	1.0	2.5	2.3	1.4
<b>COMESA countries</b>									
Ethiopia	1.7	0.4	6.7	10.8	14.9	15.1	25.0	18.6	11.7
Kenya	427.3	423.0	551.1	580.3	442.7	465.5	523.3	594.2	500.9
Malawi	0.3	0.3	2.4	2.0	0.6	2.0	4.6	3.0	1.9
Namibia	0.0	3.9	0.0	0.0	0.0	0.3	0.0	0.4	0.6
Mauritius	0.5	0.2	1.5	1.1	0.0	0.2	3.2	1.0	1.0
Zambia	0.9	8.1	4.4	15.0	4.6	5.9	12.4	5.8	7.1
Swaziland	0.2	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.1
Burundi	46.1	44.9	42.9	40.7	51.4	58.5	72.3	87.0	55.5
Rwanda	237.6	194.0	180.8	212.1	41.9	1.9	1.5	76.2	118.3
Madagascar	0.4	0.0	3.6	1.5	0.6	0.1	0.5	0.3	0.9
Sudan	77.8	48.5	80.2	54.9	61.2	94.6	52.9	121.6	74.0
Egypt	5.6	0.6	1.3	7.5	10.5	9.4	23.6	21.0	9.9
Congo (D.R.)	152.1	177.7	189.0	204.4	249.1	267.3	339.1	430.7	251.2
South Sudan	265.3	239.3	299.3	355.9	351.5	356.7	482.5	606.5	369.6
Other	0.3	0.3	4.0	0.3	0.7	0.9	0.5	0.5	0.9
<b>Rest of Africa</b>									
Tanzania	89.7	107.6	119.9	106.3	103.3	140.0	222.8	241.3	141.4
South Africa	62.3	68.1	49.2	66.2	68.8	95.1	109.6	145.1	83.1
Nigeria	6.3	17.3	8.1	9.3	9.3	9.4	19.6	21.2	12.6
Others	2.7	1.3	0.9	2.8	1.8	3.5	2.0	6.3	2.6
Others	18.5	21.0	61.6	28.0	23.5	32.0	91.7	68.7	43.1
<b>Informal trade</b>									
Burundi	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
DR Congo	181.4	221.3	270.6	269.8	329.8	179.1	320.9	275.7	256.1
Kenya	96.4	79.1	141.7	150.0	97.5	54.1	99.6	97.0	101.9
Rwanda	21.8	33.5	38.4	49.5	11.0	3.9	1.2	0.5	20.0
South Sudan	79.5	41.6	47.8	50.4	61.6	43.7	82.2	95.9	62.8
Tanzania	18.2	43.8	50.5	26.9	32.0	31.8	24.8	30.2	32.3
<b>Total</b>	399.1	419.2	549.0	546.6	531.9	312.7	528.8	499.2	473.3

Source: Bank of Uganda, Uganda Revenue Authority and Uganda Coffee Development Authority.

Table 2 describes Uganda's Informal Cross Border Trade (ICBT) for selected agricultural and industrial products from 2015 to 2022. The total ICTB trade increased by 24 percent from USD 399 million in 2015 to 528 million in 2021. Informal trade in industrial products has been on an increase since 2015, from USD 248.5 million in 2015 to about USD 348.1 million in 2022. However, it declined sharply to USD 197.1 million in 2020 owing to the outbreak of COVID-19. Informal trade in maize peaked in 2017 at USD 48.5 but decreased sharply in 2021 to USD 7.5 million. Trade in beans fluctuated, reaching a high of USD 45.7 million in 2017 and recovering to USD 39.2 million in 2021. Informal trade in sugar remained stable until 2021 when it increased significantly to USD 13.4 million, continuing to rise in 2022 (USD 14.0 million). Informal trade in other grains increased over

the years, reaching its highest point in 2018 at USD 9.4 million. Similarly, informal trade in bananas remained relatively stable, with a slight increase in 2019 (USD 6.8 million) and a decline in 2021 (USD 3.5 million). "Other agricultural products" also exhibited substantial fluctuations, peaking at USD 83.7 million in 2019 and dropping to USD 46.9 million in 2020. Informal trade in fish fluctuated, with the highest recorded in 2019 at USD 50.5 million and decreasing significantly to 17.8 million in 2022. These data provide valuable insights into the trends and patterns of Uganda's informal trade in agricultural and industrial products over the period 2015 and 2022. Note that the DRC is the leading destination of Uganda's informal exports followed by Kenya and South Sudan in the leading positions, respectively.

**Table 2** Uganda's Informal Cross Border Trade in USD millions (2015—2022)

Product	2015	2016	2017	2018	2019	2020	2021	2022	Average
Maize	22.9	14.8	48.5	11.3	16.3	20.0	7.5	1.2	17.8
Beans	18.6	27.6	45.7	38.5	32.2	15.2	39.2	32.9	31.2
Sugar	3.3	2.0	1.6	2.7	1.7	1.1	13.4	14.0	5.0
Other grains	4.1	3.7	8.2	9.4	5.8	4.7	7.9	9.4	6.7
Bananas	4.4	4.3	5.4	5.7	6.8	3.5	6.8	4.9	5.2
Other Agric.	51.8	43.0	49.2	68.3	83.7	46.9	74.5	70.5	61.0
Fish	44.4	42.1	40.4	39.8	50.5	23.7	29.0	17.8	36.0
Industrial products	248.5	280.5	349.3	370.2	334.2	197.1	349.3	348.1	309.7
Other products	1.2	1.4	0.8	0.8	0.7	0.5	1.3	0.3	0.9
Total ICBT	<b>399.1</b>	<b>419.2</b>	<b>549.0</b>	<b>546.6</b>	<b>531.9</b>	<b>312.7</b>	<b>528.8</b>	<b>499.2</b>	473.3

### Uganda: Direction of informal export trade

Burundi	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DRC	181.4	221.3	270.6	269.8	329.8	179.1	320.9	275.7	266.7
Kenya	96.4	79.1	141.7	150.0	97.5	54.1	99.6	97.0	102.7
Rwanda	21.8	33.5	38.4	49.5	11.0	3.9	1.2	0.5	19.7
S. Sudan	79.5	41.6	47.8	50.4	61.6	43.7	82.2	95.9	60.5
Tanzania	18.2	43.8	50.5	26.9	32.0	31.8	24.8	30.2	34.3

Data Source: Bank of Uganda.

#### 4.1.1 Uganda's leading export products to Africa

Table 3 gives a summary of Uganda's top 15 exports to Africa between 2015-2021 that forms a basis for this analysis and discussion. The top products include coffee, Portland cement, cane, tea, milk and cream, maize seed, palm oil, electrical energy, beans, wheat, tobacco among others. It is observed that coffee is the leading export product to the African continent and details can be viewed in Table A1 in the Appendix. Therefore, Uganda could leverage among these products to increase and achieve its market presence at a continental level to mutually benefit from the AfCFTA.

**Table 3** Uganda's top 15 exports products to Africa in USD millions (2015 - 2021)

		2015	2016	2017	2018	2019	2020	2021	Average
<b>'TOTAL</b>	<b>All products (USDbillions)</b>	<b>1,315</b>	<b>1,246</b>	<b>1,504</b>	<b>1,600</b>	<b>1,341</b>	<b>1,418</b>	<b>1,776</b>	<b>1,457</b>
'090111	Coffee (excluding roasted and decaffeinated)	84.6	74.8	140.4	80.1	85.9	112.3	149.0	103.9
'252329	Portland cement (excluding white, whether or not)	78.6	60.0	41.5	56.2	56.9	69.3	84.9	63.9
'170199	Cane or beet sugar and chemically pure sucrose	51.5	55.8	67.3	73.9	51.9	57.8	85.8	63.4
'090240	Black fermented tea and partly fermented tea	49.0	52.3	67.7	70.8	54.2	52.8	54.8	57.4
100510	Maize seed for sowing	61.0	53.9	75.6	87.1	41.3	44.1	17.3	54.3
'151190	Palm oil and its fractions, whether or not refined	32.1	36.9	41.3	49.1	47.7	45.5	59.8	44.6
'040120	Milk and cream of a fat content by weight of > 1%	5.0	19.7	44.2	46.2	42.2	36.4	40.9	33.5
'271600	Electrical energy	17.0	21.3	56.1	36.4	44.6	20.1	36.5	33.1
'240110	Tobacco, unstemmed or unstripped	49.0	45.4	37.7	57.5	37.2	0.6	2.2	32.8
'071339	"Dried, shelled beans "Vigna and Phaseolus",	44.4	23.0	48.4	63.2	6.7	8.3	24.9	31.3
'721041	"Flat-rolled products of iron or non-alloy steel, of	20.8	25.3	21.9	23.2	22.9	26.2	23.5	23.4
'110100	Wheat or meslin flour	16.2	14.8	15.8	17.2	28.0	29.3	38.8	22.9
'100700	Grain sorghum	34.3	-	49.1	63.2	11.1	0.1	0.0	22.6
'110220	"Maize "corn" flour"	25.2	13.1	13.0	17.3	20.8	26.1	25.7	20.2
'300490	"Medicaments consisting of mixed or unmixed	9.2	23.1	12.9	19.7	11.5	26.4	35.6	19.8

Data Source: Atlas of Economic Complexity

## 4.2 Analysis of Uganda's Top 15 Export Products

The following analysis delves into each of the products identified in Table 3 by looking at the leading market destinations for Uganda in Africa and the form of the product exported. The analysis also summarises the top competitors in the identified market destinations. It further analyses Uganda's position in terms of rank and value of the product imported by these countries. Finally, it provides the average global product imports by the identified destinations to give an idea of the proportions exported by Uganda and its competitors from 2015 to 2021. The identified 15 leading exports constitute a number of products that make up the Public Investment Management for Agro-industry (PIMA) target products. (MoFPED STEPMAN, 2020)

### 4.2.1 Coffee (excluding roasted and decaffeinated)

Coffee is identified as Uganda's leading export product

to both Africa and the rest of the world (table 4). Whereas global exports grew from USD 401 million in 2015 to USD 713 million in 2021, exports to Africa increased from USD 84 million in 2015 to USD 148 million in 2021. On average Uganda exported 20 percent of its coffee to Africa. In terms of specific African country markets, and destinations, Sudan imported the largest proportion of Uganda's coffee than any other African country from 2015 – 2021 followed by Morocco, South Africa, Algeria, Kenya, Egypt, South Sudan, and others.

**Table 4** Leading destination of Uganda's coffee exports to Africa (USD '000)

Importers	2015	2016	2017	2018	2019	2020	2021
World	401,204	371,518	555,149	435,956	437,619	514,191	713,154
Africa	84,572	74,776	140,444	80,148	85,905	112,262	148,963
<b>Proportion (%)</b>	<b>21</b>	<b>20</b>	<b>25</b>	<b>18</b>	<b>20</b>	<b>22</b>	<b>21</b>
Algeria	261	2,244	19,028	3,333	120	1,896	55,281
Sudan	74,634	54,887	75,426	52,537	59,221	87,702	43,119
Morocco	4,668	4,134	22,357	18,127	19,976	16,998	31,856
Egypt	79	380	160	247	1,601	1,487	6,616
South Africa	2,704	3,208	3,573	3,314	3,246	2,644	6,613
Kenya	1,550	201	432	924	436	1,171	4,406
Cabo Verde	222	464	312	152	237	249	331
Madagascar	-	-	3,506	1,225	911	-	196
Libya	-	-	-	289	126	55	115
South Sudan	377	618	390	-	-	27	67

Data Source: Author's computation using Trade map (2023).

Table 5 overviews Uganda's coffee export destinations, highlighting the primary countries and key competitors in these markets. Notably, Sudan stands out as a significant market, with Uganda as the leading exporter, accounting for about USD 38 million out of USD 44 million from the world. This indicates a notable market share for Uganda in Sudan, and a partial opportunity exists for further expansion. Specifically, Sudan is a target market of consolidation and not expansion.

Morocco imports coffee from the world worth USD 94 million, with Uganda ranking as the second-highest exporter after Indonesia, contributing USD 21 million. This suggests untapped potential for Uganda to explore and enhance its market presence in Morocco, signalling an avenue for growth and increased market penetration.

Moreover, Uganda has promising prospects to expand its market share in other countries listed in the table, such as Algeria, South Africa, Egypt, and Kenya. The data reveals a competitive edge in these markets, with opportunities for Uganda to strengthen its foothold and boost coffee exports to these destinations. By strategically exploiting these opportunities, Uganda can further diversify and broaden its presence in the continental coffee market.

The findings indicate that Uganda faces competition from both within Africa and outside the continent. Africa primarily imports processed coffee from Europe, while the major coffee bean producers are in Latin America, Asia, and Africa. This underscores the importance of enhancing value addition for Uganda to strengthen its position in the market.

**Table 5** Leading competitors in the destination market for coffee in Africa (USD '000)

Algeria		Sudan		Morocco		Egypt		S. Africa		Kenya	
World	306,453	World	43,617	World	94,410	World	109,033	World	57,608	World	6,807
Viet Nam	130,853	Uganda	38,005	Indonesia	21,670	Indonesia	59,411	Brazil	13,536	Rwanda	2,452
C.d'Ivoire	108,537	Ethiopia	4,863	Uganda	21,172	Viet Nam	21,948	Viet Nam	10,946	Uganda	1,583
Indonesia	37,805	Kenya	396	Viet Nam	15,206	Brazil	8,963	Indonesia	5,521	Burundi	1,077
Cameroon	8,243	CAR	280	Guinea	10,058	India	7,807	Tanzania	4,228	DRC	890
Brazil	11,954	Egypt	20	Togo	6,162	Colombia	2,466	Uganda	4,206	Brazil	302
Uganda	2,730	UAE	10	Tanzania	5,424	Ethiopia	2,002	Guatemala	3,524	Tanzania	170
India	3,087	Viet Nam	7	India	3,337	Area Nes	1,904	Ethiopia	3,236	Ethiopia	167
Togo	1,111	Chad	6	Brazil	3,002	Uganda	1,784	Colombia	3,092	Nicaragua	56

Data Source: Author's computation using Trade map (2023).

**Table 6** Leading destination for Uganda's portland cement (USD 000)

Importers	2015	2016	2017	2018	2019	2020	2021	Average
World	78,629	60,012	41,499	56,202	56,875	69,292	84,936	63,921
Africa	78,628	60,009	41,498	56,202	56,871	69,292	84,932	63,919
<b>Proportion (%)</b>	100	100	100	100	100	100	100	100
DRC	16,048	21,544	19,335	29,397	34,937	41,714	49,858	30,405
Rwanda	48,244	31,162	18,611	21,205	4,476	-	-	24,740
S. Sudan	13,981	7,250	3,412	5,491	17,230	27,440	34,231	15,576
Tanzania	76	-	-	-	-	-	734	405
Sudan	50	13	7	64	169	95	-	66
Burundi	221	5	13	-	24	36	86	64
CAR	-	35	120	45	4	7	-	42
Kenya	-	-	-	-	31	-	23	27

Data Source: Author's computation using Trade map (2023).

To elaborate on this, the data suggests that the processed coffee market in Africa is likely dominated by European suppliers, implying a need for Uganda to focus on adding value and diversifying its coffee products. Concurrently, as coffee bean production is widespread in Latin America, Asia, and Africa, Uganda can explore opportunities for collaboration or innovation to enhance the quality and appeal of its coffee beans.

To bolster its market penetration efforts, Uganda should prioritise initiatives that add value to its coffee products. This could involve investing in advanced processing techniques, packaging innovation, and quality control measures to produce high-quality, distinct coffee products. By doing so, Uganda can position itself as a competitive player in the global coffee market, meeting the evolving preferences of consumers and creating a compelling value proposition for both domestic and international markets. Ultimately, the focus on value addition presents a strategic avenue for Uganda to not only compete effectively but also to carve out a niche for itself in the dynamic and diverse coffee industry.

#### 4.2.2 Portland cement

Table 6 shows the leading destination for Uganda's portland cement. Whereas global portland cement exports grew from USD 78.6 million in 2015 to USD 84.9 million in 2021, this was solely to African

countries. The DRC was the leading importer with an annual average of USD 30 million, followed by Rwanda, South Sudan, Tanzania, Sudan, Burundi, among others. Apart from the Central African Republic (CAR), currently, the leading portland cement export destinations are countries that are in the East African Community.

Table 7 summarizes the top export destinations for Uganda's portland cement as well as the top competitors in the identified market destinations and Uganda's position in terms of rank and value. In addition, it gives the average global portland imports by the identified destinations to give an idea of the proportions exported by Uganda and its competitors from 2015-2021. Uganda is the leading supplier of portland cement in the DRC and South Sudan markets. Uganda is not competitive in Tanzania and Sudan as the country does not feature among the leading suppliers. The leading competitors in the destination markets are a mixture of African and non-African countries, the majority of which are European countries and a few Latin American countries. Uganda can increase its exports by targeting the Burundi market, where the country currently only exports cement worth USD 0.3 million from Uganda and yet its total value is USD \$12.4 millions.

**Table 7** Leading competitors in the destination market for Portland Cement (USD 000)

DRC		Rwanda		S. Sudan		Tanzania		Sudan		Burundi	
World	56,415	World	53,152	World	21,950	World	7,901	World	948	World	12,360
Uganda	30,257	Tanzania	26,784	Uganda	15,576	Pakistan	3,276	Oman	295	Zambia	6,305
Zambia	11,678	Uganda	23,173	Kenya	8,319	Oman	2,110	UAE	268	Tanzania	5,848
Angola	4,086	Kenya	4,917	UAE	2	Iran	1,524	Egypt	199	Kenya	76
Kenya	3,973	Pakistan	843	China	0	Kenya	399	China	185	Portugal	45
S. Africa	3,898	UAE	507	Pakistan	0	Switzerland	305	S. Arabia	1	China	43
China	3,701	Portugal	27			UAE	274	Sweden	1	Uganda	29
Pakistan	1,629	China	11			Korea	120	Pakistan	-	Rwanda	17
Rwanda	1,579	S. Africa	2			China	115			UAE	16

Data Source: Author's computation using Trade map (2023).

### 4.2.3 Cane sugar and chemically pure sucrose

Table 8 shows the leading destinations of Uganda's cane sugar exports to African markets. Global cane sugar exports grew from USD 51 million in 2015 to USD 85 million in 2021, and this was exported to African countries implying that the product's destination is within the continent. South Sudan is the leading importer with an annual average of USD 36million, which is close to one-third of Uganda's sugar export, followed by DRC, Kenya, Rwanda, DRC, Tanzania, and Burundi among others. Note that these countries are in the EAC and COMESA. Currently, Uganda produces more sugar than the country needs hence a net exporter and has higher potential to increase production further.

**Table 8** Leading destination for Uganda's cane sugar (USD '000)

Importers	2015	2016	2017	2018	2019	2020	2021
World	51,505	55,770	67,303	73,887	51,926	57,780	85,765
Africa	51,483	55,770	67,303	73,888	51,925	57,779	85,766
<b>Proportion (%)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
S. Sudan	35,864	32,754	41,173	50,823	35,408	31,770	36,814
DRC	3,303	10,233	16,232	14,420	12,013	11,892	12,082
Kenya	-	6,131	3,786	416	4,324	13,944	25,987
Rwanda	12,267	6,510	5,170	7,761	70	-	-
Tanzania	-	-	-	-	-	71	7,817
Burundi	8	-	-	-	-	54	2,946
Sudan	41	26	544	444	86	47	-
CAR	-	116	232	24	9	1	-

Data Source: Author's computation using Trade map (2023).

Uganda exports largely brown sugar and results from the table 9 demonstrates the competition the country faces in the leading destination markets, including Sudan, Kenya, South Sudan, DRC, Rwanda, and Tanzania. Most of Uganda's sugar is exported to the EAC and COMESA partner states. Although Rwanda on average, imported the largest quantity of sugar from Uganda, the country does not feature among the leading sources. It is observed that the leading sources of sugar destined to main importers where Uganda has competition are African countries, with a few Asian and Latin American countries. Although European countries do participate in these markets, they are largely at the bottom of the list.

**Table 9** Leading competitors in the destination market for cane or beet sugar (USD 000)

S. Sudan		DRC		Kenya		Rwanda		Tanzania		Burundi	
Uganda	37,801	World	8,249	World	124,130	World	73,226	World	105,405	World	18,327
Total	36,795	Brazil	1,424	Mauritius	29,790	Zambia	17,340	India	21,747	Zambia	7,574
Algeria	6,622	Thailand	1,307	Egypt	22,068	India	14,953	UAE	17,607	Mozambique	3,067
Pakistan	1,194	Guatemala	1,164	S. Arabia	16,902	Malawi	9,638	Thailand	13,889	Uganda	2,170
India	193	S. Africa	984	India	14,836	Thailand	6,056	Egypt	9,909	Brazil	1,692
Kenya	9	Egypt	907	Uganda	11,780	Brazil	5,474	Brazil	9,590	Malawi	1,665
Rwanda	8	S. Arabia	874	Thailand	7,248	Egypt	4,036	S. Arabia	7,567	S. Africa	510
S. Arabia	5	Zambia	721	Swaziland	4,941	Mozambique	3,243	Malawi	5,604	India	496
UAE	2	India	380	S. Africa	3,422	Swaziland	2,903	S. Africa	3,873	UAE	491
Spain	1	UAE	320	Brazil	2,982	Guatemala	2,869	Mozambique	3,033	Swaziland	376
UK	0	Portugal	191	Zimbabwe	2,721	Uganda	2,714	France	2,946	France	359

Data Source: Author's computation using Trade map (2023).

#### 4.2.4 Tea (Black fermented tea and partly fermented tea)

Tea is one of Uganda's traditional exports with a history of turbulence, booms, and resilience. Whereas global tea exports grew from USD 49 million in 2015 to USD 55 million in 2021, exports to Africa increased from USD 48 millions in 2015 to USD 54 million in 2021 suggesting that African countries are the main destinations (Table 10). Kenya is the leading importer of Uganda's tea with almost 95 percent (an average of USD 56 million). This is mainly explained by the auction market in Kenya which records Uganda teas as an export to Kenya. This long-standing anomaly needs to be addressed for Uganda to brand and sell its tea on both the African and global markets. South Sudan comes second with relatively lower average tea imports of USD 0.8 million meaning that Uganda has the potential to increase its market penetration in South Sudan. Other markets include Egypt, DRC, Rwanda Tanzania among others with little contributions or amounts.

**Table 10** Leading destination for Uganda's tea (USD 000)

Importers	2015	2016	2017	2018	2019	2020	2021	Average
World	49,024	52,383	68,046	70,824	54,156	53,446	55,006	57,555
Africa	48,985	52,326	67,654	70,759	54,155	52,841	54,814	57,362
Proportion (%)	100	100	99	100	100	99	100	100
Kenya	48,539	51,478	66,817	69,447	52,949	51,719	53,222	56,310
S. Sudan	445	598	493	1,031	771	839	1,555	819
Egypt	-	-	-	-	397	222	-	310
DRC	1	114	213	77	38	61	37	77
Rwanda	-	102	131	189	-	-	-	141
Tanzania	-	34	-	-	-	-	-	34
CAR	-	-	-	15	-	-	-	15

Data Source: Author's computation using Trade map (2023).

Table 11 summarizes the top country destinations of Uganda's tea as well as the top competitors in the identified market destinations and Uganda's position in terms of rank and value of tea imported by these countries. In addition, it gives the average global tea imports by the identified destinations to give an idea of the proportions exported by Uganda and its competitors from 2015-2021. Although Kenya is the top importer of Uganda's tea amounting to an annual average of USD 57 million, as a destination market an average of USD 6 million out of the total Kenyan total import of USD 13 million is reflected. This arises from the confusion of the auction of tea at Mombasa, suggesting that it is a Kenyan import. This implies Kenya should not be pursued as a market for tea for Uganda but rather as an export route suggesting that more emphasis on market penetration should be put elsewhere other than Kenya.



**Table 11** Leading competitors in the destination market for tea (USD 000)

Kenya		Sudan		Egypt		DRC		Rwanda		Tanzania	
World	13,348	World	53,007	World	251,208	World	190	World	155	World	204
Uganda	6,087	Kenya	49,082	Kenya	230,061	India	137	Uganda	74	Kenya	148
Rwanda	2,541	Uganda	1,745	India	9,121	Viet Nam	32	Tanzania	54	Malawi	30
India	2,202	Rwanda	994	Sri Lanka	5,213	Uganda	11	UAE	17	Uganda	15
Tanzania	1,007	Burundi	614	Area Nes	2,374	UAE	10	Burundi	12	China	14
Malawi	284	Egypt	272	Viet Nam	1,143	Area Nes	6	China	4	S. Africa	2
Burundi	276	UAE	136	Tanzania	943	France	6	Kenya	1	UAE	2
Ethiopia	208	Sri Lanka	52	Malawi	906	Kenya	4	DRC	1	Switzerland	1
Mozambique	138	China	43	Rwanda	411	Sri Lanka	2	India	1	Türkiye	0
Iran	127	S. Arabia	20	UAE	404	China	2	Türkiye	1	UK	0
Sri Lanka	122	Tanzania	17	Uganda	380	Malaysia	1	Brazil	0	Argentina	0

Data Source: Author's computation using Trade map (2023).

Sudan is Uganda's second destination market for Uganda's tea, amounting to USD 1.7 million and taking the second position after Kenya (USD 49 million), whose tea exports are about 95 percent of total tea imports in Sudan. Uganda needs to explore the Egyptian market, which is about USD 251 million, and Kenya is the dominant exporter (USD 230 million). Uganda is currently less prominent in the tea export market since Kenya is marketing and selling its tea. Uganda should systematically and drastically revamp the branding and exporting procedures for tea to considerably boost export income. In addition, processing and value-adding to the product will expand its market reach in other African nations including the DRC, South Sudan, and Rwanda.

#### 4.2.5 Maize seed for sowing

While maize seed for sowing remains a prominent export for Uganda, there has been a noticeable decline in its export value from USD 60 million in 2015 to USD 17 million in 2021, as illustrated in Table 12. Notably, all of Uganda's maize seed exports are directed towards African countries, with Kenya emerging as the primary importer, closely followed by Rwanda, South Sudan, and Tanzania. Recognizing the decline in export value and the potential saturation within the EAC market, Uganda might benefit from exploring other opportunities to diversify its export destinations. Expanding the export reach beyond the borders of the EAC could prove advantageous in boosting market penetration and mitigating the impact of declining values.

**Table 12** Leading destination for Uganda's maize seed for sowing (USD 000)

Importers	2015	2016	2017	2018	2019	2020	2021
World	60,993	53,939	75,681	87,105	41,294	44,051	17,312
Africa	60,993	53,939	75,622	87,106	41,294	44,050	17,312
<b>Proportions (%)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Kenya	43,443	27,332	43,509	62,868	30,047	38,240	12,605
Rwanda	10,586	15,643	10,896	11,638	2,340	13	-
S. Sudan	5,913	7,477	15,194	11,945	3,231	2,769	3,825
Tanzania	469	491	1,754	-	5,107	2,704	-
Burundi	377	2,996	4,111	581	420	247	877
DRC	185	-	89	3	108	77	5
Sudan	20	-	-	-	-	-	-

Data Source: Author's computation using Trade map (2023).

Table 13 summarizes the top destinations of Uganda's maize seed for sowing as well as the top competitors in the identified market. Uganda is the leading supplier of maize seed for sowing in the Kenya South Sudan, and Rwanda markets as well as second in Burundi and Tanzania. The leading competitors in the destination markets are a mixture of African and non-African countries. The significant participation and competition in the market by non-African countries is observed and the game change should be the tariff removal and tariff barrier reduction under the AfCFTA.

**Table 13** Leading competitors in the destination maize seed for sowing (USD 000)

Kenya		Rwanda		S. Sudan		Tanzania		Burundi		DRC	
World	32,765	World	11,524	Total	7,193	World	18,688	World	896	World	5,971
Uganda	18,438	Uganda	7,466	Uganda	6,333	Zambia	12,532	Zambia	395	Argentina	3,228
Zambia	9,375	Kenya	2,468	Tanzania	23	Uganda	3,186	Uganda	215	S. Africa	1,745
Tanzania	3,043	Zambia	1,589	Kenya	17	S. Africa	1,827	S. Africa	147	Zambia	931
S. Africa	1,109	Tanzania	565	UAE	2	Kenya	904	Tanzania	113	USA	365
Zimbabwe	386	S. Africa	562	Canada	-	Zimbabwe	374	Kenya	39	Zimbabwe	189
India	211	DRC	63	Pakistan	-	Malawi	147	Rwanda	7	Uganda	7
Mexico	116	Zimbabwe	15			Thailand	98	DRC	-	China	7
Thailand	48	Belgium	0			India	98	Italy	-	Malawi	7

Data Source: Author's computation using Trade map (2023).

#### 4.2.6 Palm Oil (Palm oil and its fractions, whether or not refined)

Uganda mainly exports refined palm oil and its fractions, (excluding chemically modified and crude) to African countries. The export value increased from USD 32 million in 2015 to USD 60 million in 2021. Table 14 identifies the main importers of Uganda's palm oil including DRC, Sudan, South Sudan, Kenya, Burundi and Tanzania. Furthermore, apart from Sudan, which is a COMESA member state, the rest of the importers are EAC partner states. This implies that Uganda should consider exploring exporting its palm oil beyond the EAC borders to increase its market penetration.

**Table 14** Leading destination for Uganda's palm oil and its fractions (USD '000)

Importers	2015	2016	2017	2018	2019	2020	2021	Average
World	32,091	36,894	41,285	49,107	47,669	45,514	59,772	44,619
Africa	32,090	36,889	41,284	49,067	47,670	45,487	59,772	44,608
<b>Proportion (%)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
DRC	14,795	20,762	18,871	19,895	23,845	24,003	26,583	21,251
S. Sudan	10,321	10,687	16,825	25,492	23,165	18,838	32,353	19,669
Rwanda	5,536	3,438	2,323	1,686	274	-	-	2,651
Tanzania	565	1,010	2,170	1,017	-	-	123	977
Burundi	728	901	658	593	18	70	173	449
Kenya	-	-	90	-	248	2,561	161	765
Sudan	145	58	302	258	6	-	12	130

Data Source: Author's computation using Trade map (2023).

Table 15 summarizes the top country destinations of Uganda's palm oil as well as the top competitors in the identified market destinations. In addition, it gives the average world's palm oil imports by the identified destinations to give an idea of the proportions exported by Uganda and its competitors from 2015-2021.

Although Kenya and Tanzania are the top importers of Uganda's refined palm oil, Uganda's contribution to this is extremely dismal implying that the country can increase its export revenues from palm oil if it increases market

penetration into Tanzania and Kenya. The countries with the largest export value of Uganda's palm oil revenue are South Sudan USD20 million followed by Rwanda, DRC, and Burundi.

**Table 15** Leading competitors in the destination palm oil and its fractions (USD '000)

DRC		S. Sudan		Rwanda		Tanzania		Burundi		Kenya	
World	13,516	Total	20,262	World	61,638	World	145,181	World	6,744	World	62,437
Malaysia	6,541	Uganda	19,669	Indonesia	31,094	Indonesia	81,193	Malaysia	2,844	Malaysia	36,349
Indonesia	3,756	Kenya	2,983	Malaysia	20,770	Malaysia	57,712	Indonesia	2,156	Indonesia	22,925
Uganda	1,045	UAE	77	Kenya	5,556	Kenya	1,654	Kenya	424	USA	1,996
Kenya	509	Spain	1	Singapore	2,210	Singapore	1,448	Uganda	362	Singapore	408
Singapore	406	UK	1	Uganda	1,582	India	999	Togo	260	S. Africa	378
Zambia	348			UAE	160	Uganda	670	Tanzania	238	Italy	322
Angola	182			India	130	UAE	598	Singapore	201	Uganda	317
Italy	174			Thailand	122	Ghana	374	USA	127	Egypt	223
Rwanda	122			Tanzania	103	Italy	281	Italy	101	UAE	105
USA	112			Mauritius	83	USA	150	S. Africa	87	India	88

Data Source: Author's computation using Trade map (2023).

#### 4.2.7 Milk and cream, not concentrated nor containing added sugar or other sweetening matter

Table 16 provides an overview of the primary market destinations for Uganda's milk and cream exports. Notably, Uganda directs its entire milk supply to African countries, with a noteworthy trend indicating a substantial sevenfold increase, experiencing only a minor dip in 2020. The leading importer in this domain is Kenya, accounting for a remarkable 95 percent share of Uganda's milk exports. Following Kenya, other significant importers include South Sudan, DRC, Malawi, and Rwanda, among others.

The analysis illustrates a prevailing concentration on the EAC partner states as key destinations for Uganda's milk exports. This strategic focus on EAC countries has contributed significantly to Uganda's export growth in this sector. However, it also suggests potential opportunities for further diversification beyond the EAC region.

To optimize its market potential and enhance resilience in the face of market fluctuations, Uganda could explore avenues to expand its milk and cream exports to additional African nations or even consider venturing into non-African markets. By diversifying its export destinations, Uganda can mitigate risks associated with dependency on specific countries and tap into emerging markets, ensuring a more robust and dynamic presence in the global dairy trade.

**Table 16** Leading destination for Uganda's milk and cream – not concentrated (USD 000)

Importers	2015	2016	2017	2018	2019	2020	2021
World	4,959	19,840	44,196	46,194	42,238	36,381	40,941
Africa	4,959	19,722	44,195	46,193	42,238	36,380	40,943
Proportion (%)	100	99	100	100	100	100	100
Kenya	3,957	18,826	42,303	44,503	41,376	34,099	38,490
South Sudan	857	561	973	900	783	2,002	2,415
DRC	18	29	18	-	-	-	30
Burundi	30	2	-	14	7	11	7
Malawi	-	-	-	-	-	266	-
Rwanda	14	183	465	527	72	-	-

Data Source: Author's computation using Trade map (2023).

Uganda leads in exporting milk and cream to Kenya, and Rwanda while it ranks third in Burundi as shown in table 17. The Rwandese market seems to have reached the optimal level given that Uganda supplies over 99 percent and the country is the leading importer among the market destinations. The leading competitors in these markets include Kenya, UAE, Netherlands, South Africa, Denmark, Belgium, Rwanda, Slovenia, New Zealand, France, and Germany. The significant participation and competition in the market by European countries is observed. Uganda should leverage the removal of tariffs and elimination of non-tariff barriers to increase market penetration of such markets currently under European country's dominance.

**Table 17** Leading competitors in the destination milk and cream (USD 000)

Kenya		S. Sudan		DRC		Burundi		Rwanda	
World	46,530	Total	1,646	World	1,328	World	65	World	222
Uganda	46,154	Rwanda	1,213	France	275	France	34	Uganda	219
Rwanda	332	Slovenia	336	Ireland	258	Belgium	9	N. Zealand	17
N. Zealand	52	Kenya	170	Netherlands	235	Uganda	8	UAE	4
Malaysia	2	Germany	51	Rwanda	182	Malaysia	6	Burundi	4
Belgium	1	Netherlands	27	Belgium	171	Germany	5	Kenya	2
UK	1	Uganda	1	S. Africa	96	Rwanda	4	Belgium	2
UAE	1			N. Zealand	38	Ireland	3	S. Africa	1

Data Source: Author's computation using Trade map (2023).

#### 4.2.8 Milk and cream, concentrated or containing added sugar or other sweetening matter

On average most of the milk in the classification is exported to African countries. The trends suggest a growth in exports by 13 percent from USD 23 million in 2015 to USD 27 million in 2021 apart from 2019 when there was a significant decline to USD 16 million from USD 20 million in 2018 (table 18). The leading destination is Kenya which imports about 80 percent of the milk, followed by Tanzania, DRC, South Sudan, Oman and Burundi among others. The destinations suggest that Uganda has concentrated on the EAC partner states with limited tendency to reach other African markets like Malawi, Zambia and Ethiopia which can be leveraged under the AfCFTA Agreement.

**Table 18** Leading destination market for Uganda's milk and cream, concentrated (USD '000)

Importers	2015	2016	2017	2018	2019	2020	2021
World	23,925	26,047	28,807	20,676	16,278	24,993	27,579
Kenya	21,736	18,131	19,544	15,629	12,215	19,565	17,253
Proportion (%)	91	70	68	76	75	78	63
Tanzania	266	1,299	1,953	2,602	1,953	1,901	2,678
DRC	151	2,972	3,684	821	834	1,105	2,106
Ethiopia	-	-	-	-	208	453	1,627
Malawi	-	-	89	228	-	620	1,586
South Sudan	858	694	568	186	585	721	1,182
Oman	-	-	-	-	-	300	564
Zambia	-	-	-	-	-	56	240
Burundi	11	74	32	77	147	173	105
Somalia	2	-	-	-	18	-	85

Source: Author computations using International Trade Centre database, 2023

Uganda is the leading exporter of milk and cream concentrated to Kenya, second in Tanzania, fifth in DRC, and seventh in Rwanda as shown in table 19. Apparently, Sudan has the highest potential followed by Kenya and the DRC

given their respective global import values. In terms of prospective markets these countries should be considered to increase Uganda's market access. The leading competitors in these markets include UAE, Netherlands, South Africa, Belgium, New Zealand, UK, Ireland and Germany. There is significant participation and competition by European countries which can be addressed by the actions of lowering and lowering tariffs and eliminating NTBs. Furthermore, trade facilitation should be a policy variable for intervention.

**Table 19** Leading competitors in the destination market for milk and cream, concentrated (USD 000)

Kenya		DRC		Tanzania		Sudan		Zambia		Rwanda	
World	27,545	World	22,882	World	3,796	World	69,275	World	17,149	World	3,514
Uganda	19,937	New Zealand	7,795	S. Africa	1,508	New Zealand	39,154	South Africa	5,133	Netherlands	1,083
Netherlands	2,765	Netherlands	5,886	Uganda	1,342	Netherlands	5,913	New Zealand	1,685	Germany	502
Belgium	1,313	Ireland	4,593	UAE	177	Malaysia	5,306	Netherlands	1,250	N. Zealand	399
New Zealand	1,120	UAE	560	UK	106	UAE	4,110	UAE	1,228	UAE	398
Ireland	1,093	Uganda	544	France	104	Canada	2,542	HK. China	1,136	Belgium	364
Germany	371	Belgium	496	Ireland	93	Argentina	1,565	France	1,030	Australia	219
Uruguay	305	Iceland	424	India	75	France	1,238	Ireland	1,009	Oman	190
Switzerland	96	France	302	Oman	68	Egypt	990	UK	868	Uganda	116
S. Arabia	84	UK	275	Netherlands	62	Germany	881	Tanzania	537	Denmark	41
UK	79	Angola	260	Kenya	61	Belgium	841	Germany	454	Ireland	35
South Africa	52	Singapore	227	Switzerland	46	Singapore	750	Australia	405	France	23
Denmark	49	South Africa	198	Belgium	39	Eswatini	646	Mauritius	320	UK	20
Turkey	46	Germany	193	Denmark	31	Viet Nam	563	Canada	232	DRC	19
Malaysia	43	Malaysia	184	Malaysia	18	Poland	550	Belgium	219	Kenya	16
France	41	Argentina	171	Saudi Arabia	13	Oman	393	Kenya	208	Thailand	15
Italy	26	Kenya	99	Germany	10	India	371	Malaysia	206	Argentina	12
Algeria	23	Peru	87	Singapore	7	Sweden	311	Uganda	194	Egypt	11

Source: Author computations using International Trade Centre database, 2023.

#### 4.2.9 Tobacco

Uganda's export performance in tobacco and tobacco substitutes has demonstrated notable fluctuations over the years. The export value experienced a decline from USD 73 million in 2015 to USD 53 million in 2017, followed by a significant surge to its peak at USD 86 million in 2018. Although there has been a subsequent recovery, it did not reach the pinnacle observed in 2018. Notably, Uganda predominantly exports tobacco and its substitutes to African countries, with the exception of 2021 where Africa's share dropped to its lowest at 74 percent.

Kenya stands out as the primary importer of Ugandan tobacco, accounting for a substantial portion of the country's total exports, as indicated in Table 20. Other notable importers from the EAC partner states include South Sudan, Burundi, Tanzania, Egypt, the DRC, and Angola, among others. Countries beyond the EAC, such as Nigeria, Angola, Egypt, and Mauritania, also feature among the importers.

The imminent impact of the AfCFTA is expected to shape the future landscape of Uganda's tobacco exports. With the removal of tariffs and the reduction of non-tariff barriers, there is anticipation that exports to non-EAC partner states will witness an increase, leading to a surge in demand for Ugandan tobacco products. This presents an opportune moment for Uganda to strategically position itself in the evolving market dynamics, capitalize on the AfCFTA benefits, and further strengthen its foothold in the global tobacco trade.

**Table 20** Leading destination for Uganda's tobacco and tobacco substitutes (USD 000)

Importers	2015	2016	2017	2018	2019	2020	2021
World	72,897	64,061	52,762	86,372	74,877	49,722	71,089
Africa	70,594	61,870	51,562	81,172	62,190	43,942	52,511
<b>Proportion (%)</b>	<b>97</b>	<b>97</b>	<b>98</b>	<b>94</b>	<b>83</b>	<b>88</b>	<b>74</b>
Kenya	44,688	46,082	37,890	50,235	39,657	7,463	12,094
South Sudan	1,510	2,599	6,500	7,785	7,946	11,935	13,723
Burundi	7,597	7,060	3,190	3,318	5,633	12,806	9,295
Tanzania	10,114	3,671	337	9,546	1,473	1,100	1,035
Egypt	9	-	-	3,762	2,068	486	9,368
DRC	652	923	1,395	1,373	2,691	3,762	3,465
Angola	2,642	1,089	1,172	2,576	806	3,883	55
Nigeria	2,367	295	776	1,503	995	2,230	1,318
Mauritania	476	151	265	348	198	51	130

Source: Author's computation using Trade map (2023).

Table 21 shows that Uganda is the leading supplier of tobacco and tobacco substitutes to Kenya, Burundi, South Sudan and Tanzania. It is relatively competitive in DRC, however, in Egypt, it does not feature among the leading suppliers and yet this country has the largest market potential. The leading competitors in the destination markets are a mixture of African and non-African countries, the majority of which are European countries and a few Latin American countries. Uganda can increase its exports by targeting the Egyptian market, which is about USD 348 million where Uganda currently only exports tobacco products worth less than USD 10 million. Thus, under the AfCFTA, Egypt is a potential market for expansion, given that Uganda does not feature among leading exporters and yet Egypt's global imports are high.

**Table 21** Leading competitors in the destination tobacco market (USD '000)

Kenya		South Sudan		Burundi		Tanzania		Egypt		DRC	
World	47,174	World	3,222	World	4,459	World	9,703	World	348,288	World	55,268
Uganda	42,975	Uganda	1,510	Uganda	4,152	Uganda	2,563	Ukraine	52,506	Kenya	27,676
Zimbabwe	1,193	Kenya	1,712	UAE	141	India	1,672	India	45,625	Tanzania	18,044
India	343	Tanzania	-	Nigeria	101	Zimbabwe	1,296	Serbia	31,993	S. Africa	8,047
South Africa	62	UAE	-	Côte d'Ivoire	30	Kenya	713	Russian	23,644	Area Nes	1,123
Pakistan	1	India	-	Senegal	24	Malawi	631	Germany	22,965	DRC	190
Bangladesh	0	Mozambique	-	Tanzania	20	Switzerland	447	Malawi	22,773	UAE	163
Brazil	182	Belgium	-	France	8	Brazil	435	Brazil	20,579	Uganda	147
Türkiye	501	Denmark	-	UAE	7	Belgium	239	Greece	17,894	Viet Nam	40
Tanzania	4	Bulgaria	-	China	7	Zambia	206	Zimbabwe	15,268	Zimbabwe	36
Belgium	0	Poland	-	Togo	6	S. Africa	194	Italy	12,576	Korea,	28
China	124			India	5	China	188	Türkiye	10,755	St. Kitts	28

Data Source: Author's computation using Trade map (2023).

#### 4.2.10 Beans

Uganda's export of beans has exhibited notable fluctuations in recent years. It declined from USD 45 million in 2015 to USD 25 million in 2021, although there was a more significant decline in 2019 and 2020, amounting to USD 6 million and USD 8 million respectively partly attributed to the COVID-19 pandemic. The leading importer is Kenya accounting for about 90 percent of Uganda's total bean exports (Table 22). The other importers from the EAC partner states include South Sudan, Sudan Tanzania, DRC, and Rwanda. With the removal of tariffs and reduction

of non-tariff barriers under the AfCFTA, it is anticipated that exports to the non-EAC partner states will increase.

**Table 22** Leading destination for Uganda's beans (USD '000)

Importers	2015	2016	2017	2018	2019	2020	2021	Average
World	45,277	23,268	48,567	63,252	6,729	8,814	25,763	31,667
Africa	44,422	22,964	48,426	63,169	6,728	8,276	24,921	31,272
<b>Proportion (%)</b>	<b>98</b>	<b>99</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>94</b>	<b>97</b>	<b>98</b>
Kenya	40,877	21,768	48,203	62,683	6,305	6,878	22,400	29,873
DRC	1,951	694	184	34	163	913	2,302	892
S. Sudan	969	501	39	400	55	216	219	343
Sudan	417	-	-	-	-	-	-	417
Tanzania	-	-	-	-	-	269	-	269
Rwanda	73	1	-	52	-	-	-	42

Data Source: Author's computation using Trade map (2023).

Table 23 shows that Uganda is the leading supplier of beans in the Kenyan markets and second in the DRC, South Sudan, and Rwanda markets. In Tanzania, it is relatively competitive as Uganda comes third. However, in Sudan, it does not feature among the leading suppliers. The leading competitors in the destination markets are a mixture of African and non-African countries, the majority of which are European countries and a few Latin American countries. Under the AfCFTA, Sudan can be a potential market for expansion, given that Uganda does not feature among leading exporters and yet their global imports are worth and an average of USD 0.4 million.

**Table 23** Leading competitors in the destination bean market (USD 000)

Kenya		DRC		S. Sudan		Sudan		Tanzania		Rwanda	
Uganda	28,792	World	30	Total	731	World	37	Italy	163	World	1,777
World	22,007	France	9	Kenya	343	India	19	World	152	Tanzania	1,410
China	115	Uganda	7	Uganda	343	N. Zealand	9	Rwanda	5	Uganda	330
Tanzania	82	UAE	5	Rwanda	89	Ethiopia	7	Uganda	5	Burundi	97
Belgium	81	China	4			China	3	Malawi	1	DRC	1
USA	55	Italy	3			UAE	0	UAE	1	Kenya	1
Ethiopia	44	Lebanon	1			Egypt	-	UK	1	USA	1

Data Source: Author's computation using Trade map (2023).

#### 4.2.11 Iron and steel HS code 72

Table 24 shows the leading destinations of iron and steel products under the product code 72. The main products for iron and steel - HS 72 include flat rolled products, angles, bars and rods, iron and non-alloy steel, wires, stainless steel among others. The range of products suggests increased chances of market penetration given that a wide variety is offered. Iron and steel has also a bigger market advantage among African countries given their nature. As indicated, nearly the entire average export worth USD 93.862 million out of USD 93.863 million is exported to African countries. This implies that market penetration for the iron and steel products – HS 72 should target African countries for the start. The leading importers include; DRC, Tanzania, Rwanda, Burundi, Sudan, Kenya, South Sudan, Malawi, Zambia, Central African Republic and Somalia.



**Table 24** Leading destination for Uganda's HS 72 Iron and steel (USD '000)

Importers	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
World	78,209	83,309	94,320	93,129	86,597	70,840	65,954	85,331	65,819	68,467	93,863
Africa	78,208	83,294	94,318	93,087	84,251	70,822	65,943	85,295	65,582	68,443	93,862
<b>Proportion (%)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>97</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
DRC	23,736	25,229	34,568	34,827	16,230	11,981	17,089	14,550	16,944	14,658	19,909
Tanzania	2,136	8,384	8,869	12,525	16,870	19,159	4,393	24,607	17,163	16,828	20,377
Rwanda	17,135	10,438	9,948	13,678	15,124	12,401	14,882	18,620	1,449	-	45
Burundi	8,095	8,923	8,818	9,605	11,982	11,797	15,550	11,053	5,114	4,121	6,444
Sudan	-	25,847	7,127	371	20,411	1,299	5,519	9,196	14,891	-	-
Kenya	5,194	3,271	7,892	5,934	3,626	5,240	6,613	6,147	10,011	11,985	14,817
S. Sudan	-	1,142	17,096	16,145	-	8,940	-	-	-	20,784	32,012
Malawi	-	-	-	-	-	-	1,627	691	-	-	-
Zambia	26	2	-	-	8	-	12	347	-	4	-
CAR	-	-	-	-	-	5	169	81	10	16	62
Somalia	-	1	-	-	-	-	89	-	-	-	63

Data Source: Author's computation using Trade map (2023).

Table 25 shows the competitors in the leading destination markets where Uganda exports iron and steel products – HS 72. The leading importer of the products is Rwanda with an average of USD 11.8 millions followed by Tanzania, Burundi, Kenya and DRC. Uganda should target the Kenyan market as it provides the largest market of an average of USD 800 million and is only exploiting USD 6 million. Similarly, the Tanzanian market is USD 417 million suggesting increasing market penetration in the EAC, has high potential to increase export revenues for the product. The countries that currently dominate the market include, China, South Africa, Japan, India, Turkey and South Korea, Egypt, Ukraine, Russia among others. Note that Uganda not only competes with the EAC partners states but developed and developing countries in these markets for the iron and steel.

**Table 25** Leading competitors in the destination market for iron and steel (USD '000) - average 2011-2020

DRC	USD	Tanzania	USD	Rwanda	USD	Burundi	USD	Sudan	USD	Kenya	USD
World	130,218	World	417,170	World	85,543	World	39,452	World	238,811	World	800,049
China	64,011	China	115,108	China	18,188	China	8,773	China	87,541	S. Africa	184,228
S. Africa	35,649	Japan	94,480	Kenya	13,902	Uganda	7,595	Egypt	24,351	Japan	165,190
Zambia	5,912	S. Africa	92,018	India	13,544	Kenya	6,827	India	23,961	China	159,479
India	3,269	India	37,967	Uganda	11,854	Turkey	3,974	Ukraine	14,306	India	77,106
Angola	2,970	Turkey	18,097	S. Africa	9,287	S. Africa	2,172	Turkey	11,087	Russian	65,821
Turkey	2,865	Kenya	12,685	Tanzania	6,700	UAE	2,013	Italy	6,705	S. Korea	21,646
Sweden	2,276	Uganda	10,502	Turkey	2,739	Tanzania	1,888	Russian	4,915	Taipei	20,722
Uganda	2,169	UAE	5,621	DRC	1,323	Zambia	1,615	Iran	4,779	Ukraine	19,569
Australia	1,998	Italy	4,675	Belgium	1,316	Egypt	947	Taipei,	4,071	Egypt	19,418
Kenya	1,425	Russian	4,395	Singapore	881	India	821	UAE	3,384	Turkey	16,088
Japan	1,176	Taipei,	2,229	France	747	Rwanda	653	S. Arabia	3,083	UAE	6,270
Belgium	1,139	HK China	1,775	Denmark	574	Belgium	462	Viet Nam	2,804	Uganda	6,034
Rwanda	946	S. Korea	1,523	Mauritius	538	Togo	319	Qatar	1,996	Germany	4,887
UAE	892	Singapore	1,519	Italy	505	Ghana	263	Thailand	840	Tanzania	3,407
HK China	420	Belgium	1,474	UAE	495	Switzerland	114	Malaysia	833	Belgium	2,666

Source: Author computations using International Trade Centre database accessed on 09/09/2022.

#### 4.2.12 Wheat or meslin flour

Wheat or meslin flour is a product milled from wheat mainly imported into Uganda. Table 26 shows that wheat flour is only exported to African countries. The product has experienced tremendous growth since 2011 from USD

16 million to USD39 million in 2021. Among the African countries importing this flour, South Sudan emerges as the leader, followed by the DRC, Sudan, Kenya, and Burundi. Notably, South Sudan and DRC have proven to be the most consistent and significant markets for Ugandan wheat or meslin flour exports. The sustained growth in export value underscores the increasing demand for this product on the African market. Diversification into new regions or the exploration of untapped markets could further enhance Uganda's position in the global wheat or meslin flour trade. As Uganda assesses its export strategy for wheat or meslin flour, there is potential to leverage the consistent markets of South Sudan and DRC while concurrently exploring avenues for expansion. By doing so, Uganda can ensure a resilient and diverse export portfolio, reducing dependence on specific markets and fostering sustained growth in this sector.

**Table 26** Leading destination for Uganda's wheat flour (USD '000)

Importers	2015	2016	2017	2018	2019	2020	2021
World	16,210	14,818	15,826	17,197	28,026	29,267	38,771
Africa	16,209	14,819	15,825	17,197	28,024	29,267	38,770
<b>Proportion (%)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
S. Sudan	13,481	10,443	11,792	11,420	20,175	21,609	26,913
DRC	1,124	4,247	3,675	5,390	7,632	7,579	11,545
Sudan	1,204	59	21	341	217	52	286
Burundi	-	34	-	-	-	-	26
Kenya	316	0	0	0	0	1	

Data Source: Author's computation using Trade map (2023).

Table 27 below shows the leading destinations of Uganda's wheat indicating the key competitors in those markets. Uganda is the leading source for South Sudan with an average of almost USD 17 million worth of wheat imports, and fourth in the DRC. Sudan has the largest market potential for Uganda although currently the country is an insignificant source in that market. It is also evident that apart from Kenya, Egypt and Tanzania, the leading competitors in the markets are largely countries outside Africa, specifically European countries, Russia, a few Middle East countries and occasionally America. Although Kenya imports wheat or meslin flour from Uganda, like Sudan, the country does not feature among the leading importers. This suggests that Uganda should explore possibilities of increasing exports to the two countries. Overall, given that wheat is dismally grown in Uganda due to climatic reasons, the country will have to rely on imports from elsewhere, which is also a challenge due to the Russia-Ukraine war.

**Table 27** Leading competitors in the destination wheat (USD '000)

S. Sudan		DRC		Sudan		Burundi		Kenya	
Uganda	16,548	World	11,794	World	147,358	World	2,487	World	4,159
Total	15,376	Belgium	4,255	Türkiye	132,898	Türkiye	1,157	Tanzania	2,841
Kenya	615	Netherlands	2,282	Russia	10,232	Tanzania	1,050	USA	1,391
Ukraine	153	Rwanda	1,178	Tunisia	1,668	France	318	Egypt	371
Netherlands	73	Uganda	1,042	UAE	1,565	Togo	191	Oman	278
Russia	53	Tanzania	635	Area Nes	518	Russia	41	China	48
India	4	Pakistan	575	Canada	371	Senegal	40	India	40
Rwanda	4	India	489	Egypt	85	Netherlands	33	Viet Nam	21
UAE	2	Namibia	274	Netherlands	10	Spain	25	Italy	16
Pakistan	-	Zambia	263	China	5	C.d'Ivoire	22	UK	8

Data Source: Author's computation using Trade map (2023).

#### 4.2.13 Maize flour

Maize is one of the sensitive products under the EAC Common External Tariff and has experienced significant export growth over the years. As depicted in Table 28, there has been a noticeable upward trajectory in export values, rising from USD 25 million in 2015 to USD 26 million in 2021, despite a significant decline between 2016 and 2018. The primary and consistently prominent importer is South Sudan, with additional significant importers including Rwanda, Burundi, Tanzania, the Democratic Republic of Congo (DRC), and Kenya.

The results from table 28 imply that Uganda's export focus for maize/corn flour predominantly centres on the EAC partner states, with a few additional countries falling under the Common Market for Eastern and Southern Africa (COMESA) bloc. The consistency in South Sudan's importation of maize highlights a strong trade relationship, and the presence of Rwanda, Burundi, Tanzania, DRC, and Kenya as substantial importers underscores the significance of the EAC region in Uganda's maize export strategy. While the EAC partner states remain key players, there may be untapped opportunities for Uganda to explore additional markets elsewhere. Strategic efforts to diversify export destinations could potentially contribute to sustained growth and market resilience, providing Uganda with a more diversified and dynamic presence in the global maize export market.

**Table 28** Leading destination for Uganda's maize corn (USD '000)

Importers	2015	2016	2017	2018	2019	2020	2021
World	25,216	13,160	13,022	17,296	20,855	26,155	25,977
Africa	25,207	13,139	13,020	17,280	20,824	26,055	25,740
<b>Proportion (%)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>99</b>
S. Sudan	22,119	9,088	7,526	10,704	17,373	22,576	22,600
Rwanda	1,723	2,858	3,987	4,771	354	-	47
Burundi	731	1,007	525	1,373	1,863	1,335	757
DRC	428	122	761	432	1,079	2,031	2,147
Kenya	-	11	24	-	101	92	175

Data Source: Author's computation using Trade map (2023).

In the South Sudan, Rwanda and Burundi markets, Uganda is the leading source. However, in the Kenyan market, Uganda is the second leading supplier after Tanzania. With the DRC joining the EAC, Uganda can leverage the reduction in import tariffs and increase its supply of maize flour to the country. Most of Uganda's competitors in the maize markets are African countries, with a few exceptions where Latin American countries, the USA, and European countries dominate.

**Table 29** Leading competitors in the destination market for maize corn (USD '000)

S. Sudan		Rwanda		Burundi		DRC		Kenya	
World	15,998	World	3,766	World	1,609	World	11,948	World	1,764
Uganda	14,169	Uganda	3,392	Uganda	761	S. Africa	2,771	Tanzania	1,747
Kenya	166	Kenya	30	Italy	321	Brazil	2,654	Uganda	14
Spain	5	Russia	26	USA	313	Zambia	1,575	Malawi	2
		Tanzania	16	Tanzania	302	Italy	1,224	France	1
		UAE	14	S. Africa	30	Argentina	1,136	Zambia	1
		Burundi	9	Kenya	3	Angola	700	China	1
		Brazil	6	Türkiye	2	USA	493	Italy	1
		Zambia	4	Rwanda	2	Uganda	373	USA	1

Data Source: Author's computation using Trade map (2023).

#### 4.2.14 Medicaments

The pharmaceutical industry in Uganda is nascent and one of the promising sectors for both domestic and export. Table 30 shows the leading destinations of Uganda's medicaments consisting of mixed or unmixed products. It is evident that there was a significant growth from USD 9 million in 2015 to USD 36 million 2021 and almost all the products are destined to Africa. The leading market destinations are Zambia, followed by Tanzania, South Africa, Kenya, Burundi, Rwanda, among others. This growth trajectory suggests a burgeoning demand for Ugandan pharmaceutical products within the African market. Medicament products have potential to increase penetration beyond the EAC partner states to AfCFTA party states and therefore Uganda should exploit the continental market. While the EAC partner states currently constitute the main focus for Uganda's pharmaceutical exports, there is an opportunity for broader market penetration. The AfCFTA provides a platform for Uganda to extend its reach beyond EAC borders to other AfCFTA party states. With the potential to access a continental market, Uganda is encouraged to explore and capitalize on the opportunities presented by the AfCFTA, fostering a more extensive presence in the pharmaceutical sector, and contributing to the growth of the country's export revenue.

**Table 30** Leading destination for medicaments (USD '000)

Importers	2015	2016	2017	2018	2019	2020	2021
World	9,191	23,279	12,868	19,689	12,051	26,419	35,632
Africa	9,170	23,146	12,864	19,687	11,496	26,381	35,633
<b>Proportion (%)</b>	<b>100</b>	<b>99</b>	<b>100</b>	<b>100</b>	<b>95</b>	<b>100</b>	<b>100</b>
Zambia	232	7,267	2,005	12,648	3,161	3,823	8,419
Tanzania	1,665	5,812	4,543	1,386	1,548	2,816	6,002
S. Africa	-	12	-	-	-	6,391	13,205
Kenya	1,525	1,088	2,062	1,912	2,653	5,990	3,913
Burundi	72	909	940	1,227	2,245	1,942	2,151
Rwanda	1,585	1,981	1,288	2,017	457	-	-
S. Sudan	845	1,607	103	316	142	77	148
DRC	190	31	41	175	3	-	853

Data Source: Author's computation using Trade map (2023).

Table 31 shows Uganda's competitors in the identified destination markets for pharmaceutical products. It is evident that Uganda is not anywhere close to the leading sources for these identified markets. Uganda is among the fifth in Zambia and Burundi while it is eighth in Tanzania. For the Kenyan and South African markets, Uganda is relegated to lower ranks. Notwithstanding this, the largest market potential is in these two markets, specifically South Africa (USD 1.4 billion) and Kenya (USD 443 million). Uganda should explore increasing exports in these markets given that currently it dismally exports to them. Note that the leading competitors in these markets are both developing and developed countries.

**Table 31** Leading competitors in the destination market for medicaments (USD 000)

Zambia		Tanzania		S. Africa		Kenya		Burundi		Rwanda	
World	175,281	World	266,520	World	1,414,212	World	443,972	World	41,355	World	76,737
India	89,565	India	168,992	India	469,849	India	243,473	India	15,272	India	37,559
Eq. Guinea	23,700	Kenya	23,925	Germany	150,002	Germany	31,033	France	7,030	Belgium	7,701
S. Africa	22,541	USA	13,777	USA	123,643	USA	30,795	Belgium	4,159	Kenya	6,991
Kenya	7,927	Netherlands	11,012	France	109,659	China	14,875	China	4,125	France	4,165
Uganda	5,718	China	8,243	Italy	69,646	France	14,729	Uganda	2,107	China	3,223
China	5,520	Switzerland	5,107	Ireland	61,672	UK	14,334	Denmark	1,701	Switzerland	2,347
USA	5,211	Germany	3,368	UK	52,727	Pakistan	10,459	Kenya	1,689	USA	2,106
Belgium	4,806	Uganda	3,107	Spain	52,379	Switzerland	9,169	Netherlands	662	Germany	1,754
UK	4,676	UK	2,690	Switzerland	44,017	S. Africa	8,565	Korea	628	UAE	1,050

Data Source: Author's computation using Trade map (2023).

#### 4.2.15 Beer from malt

Uganda's export of beer made from malt portrays a steady growth between 2015 and 2021 as illustrated in Table 32. All the beer is exported to Africa, the leading destination being DRC accounting for about 50 percent of the total exports. The other destinations include Sudan, South Sudan, Burundi Rwanda, Kenya, Central African Republic, Tanzania, Somalia, and South Africa. Except for South Africa, the rest of the leading destination countries are members of the EAC and COMESA. Therefore, efforts to increase export revenue should target expansion in these destinations in addition to exploring territories of African countries.

**Table 32** Leading destination for Uganda's beer made from malt – (USD '000)

Importers	2015	2016	2017	2018	2019	2020	2021
World	10,041	10,977	11,064	13,340	21,810	24,382	30,507
Africa	10,034	10,971	11,064	13,332	21,801	24,382	30,507
<b>Proportion (%)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
DRC	5,536	6,565	6,103	6,586	10,573	12,070	15,663
S. Sudan	3,894	3,580	3,935	6,067	9,608	10,491	11,942
Burundi	39	66	8	3	1,060	1,437	2,340
Sudan	-	60	42	111	478	257	408
Tanzania	-	-	-	-	-	84	121
Kenya	426	291	51	5	-	27	27
Somalia	-	-	-	-	17	16	5
S. Africa	1	-	-	-	1	-	1

Data Source: Author's computation using Trade map (2023).

Although Uganda is not at the top as a source in the identified destinations, at least it appears among the top two in South Sudan and Burundi and top three in DRC. In Sudan, Tanzania and Kenya Uganda does not feature among the five. This suggests that Uganda should explore possibilities of increasing exports to all these countries given that the country still has room to improve. The leading competitors in the markets include South Africa, Netherlands, Kenya, Rwanda, Denmark, Belgium, Tanzania, and China and the rest are a mix of African and European countries.

**Table 33** Leading competitors in the destination for beer made from malt (USD '000)

DRC		S Sudan		Burundi		Sudan		Tanzania		Kenya	
World	5,317	Total	23,456	World	3,224	World	22	World	14,074	World	6,545
Netherlands	3,362	Kenya	14,380	Netherlands	1,724	Botswana	-	Netherlands	6,950	Netherlands	3,393
S. Africa	1,000	Uganda	9,527	Uganda	378	Netherlands	-	Namibia	5,828	Denmark	1,478
Uganda	438	Spain	743	Belgium	295	Aruba	21	S. Africa	898	Russia	436
Kenya	183	Netherlands	467	Rwanda	268	N. Zealand	-	Mexico	174	Tanzania	365
Belgium	135	Belgium	196	Kenya	154	Poland	-	Belgium	75	Belgium	195
Spain	35	Denmark	22	UAE	140	Egypt	1	Uganda	31	Germany	169
China	30	Poland	15	Togo	133			Burundi	26	UAE	121
Türkiye	24	Rwanda	6	Nigeria	45			Germany	25	Namibia	88
Russia	17	Germany	5	Türkiye	36			Portugal	17	Mexico	68

Data Source: Author's computation using Trade map (2023).

### 4.3 Export diversification and potential identification

This subsection provides Uganda's top products with a higher potential for export diversification within the African region. Firstly, the analysis provides products with the highest RCA, which Uganda would consider focusing on for diversification of exports. Second, it uses the distance indicator to reveal Uganda's potential growth opportunities

by providing a measure of the country's ability to start producing certain related products. Lastly, using the export potential Indicator (which considers supply, demand, and easiness of trade conditions), the analysis identifies market access opportunities by exploring the export potential of Uganda's products in new or existing destination targets on the African continent.

#### 4.3.1 The Revealed Comparative Advantage

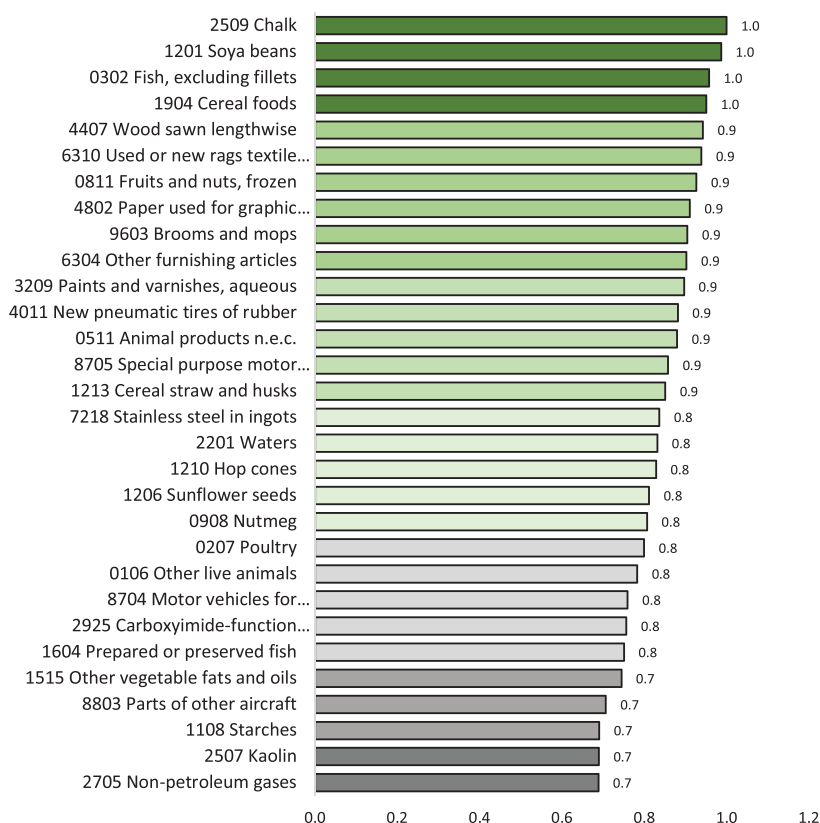
Figure 1 provides Uganda's top 30 products with higher export diversification opportunities in Africa. Products with a higher RCA (greater than 0.7) implies that Uganda can invest in them given that they present substantial comparative advantage. The findings show that Uganda has export potential in agriculture and light-manufactured products including chalk, soya beans, fish (excl fillets), cereal foods, wood (sawn lengthwise), used of new rags of textile scraps, fruits, and nuts (frozen), and paper used for graphics purposes among others.

#### 4.3.2 The Distance Indicator

Similarly, the study uses the distance indicator to identify products for export diversification in Uganda. This indicator provides a measure of a country's ability to begin producing a new product. Ranging from 0 to 1, a product's distance captures the extent to which a country's existing capabilities to enter a new product basing on how closely they are to their current product exports. A shorter distance (nearby product) implies that the production of this new product has related capabilities to the existing products, hence a higher probability of success. Additionally, the distance indicator measures the risk of entering a new product and/or sector, where longer distances portray little relatedness to existing capabilities (know-how) and inputs required to enter production, hence increasing risk.

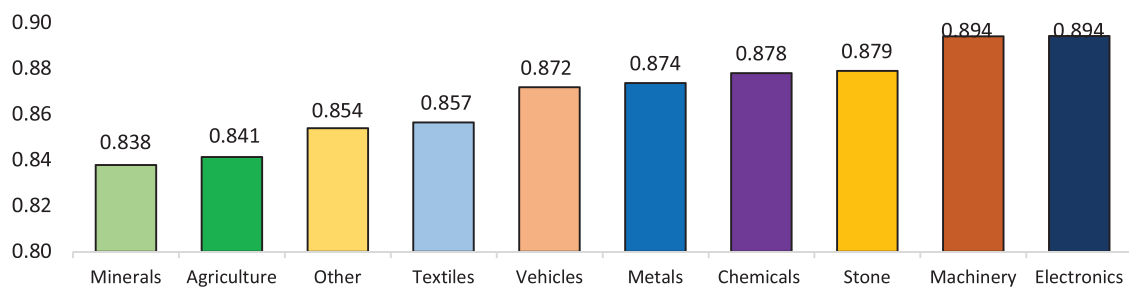
Figure 2 shows the average sector performance according to the distance Indicator in 2021. The findings reveal that products in the mineral and agriculture

**Figure 1** Top 30 products for export diversification according to the RCA



Data Source: Author's Computation using Atlas of Economic Complexity.

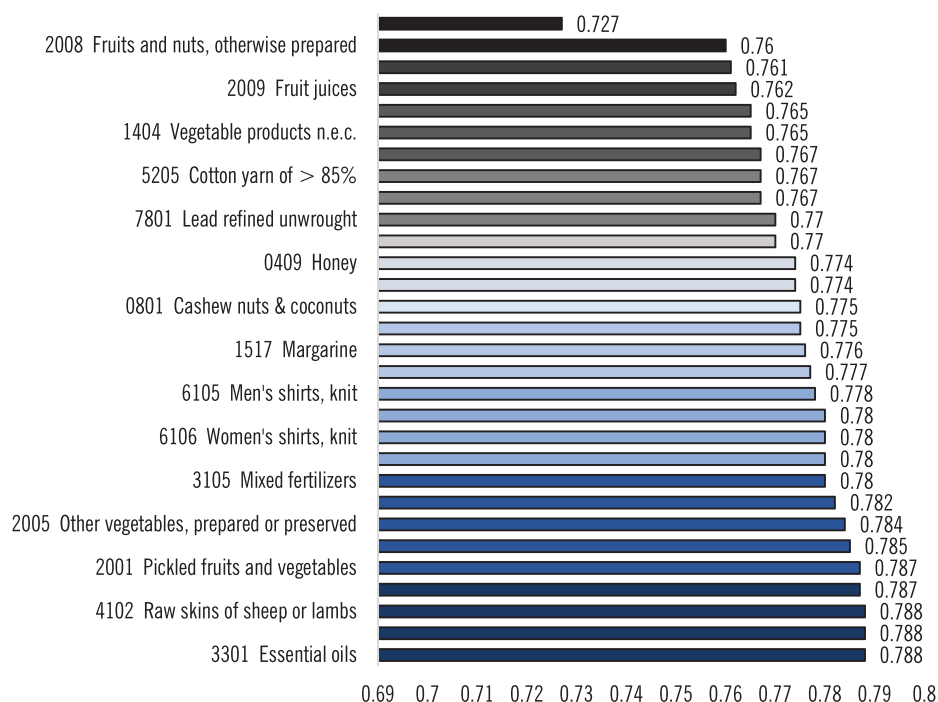


**Figure 2** Average sector performance according to the distance indicator 2021

Source: Author's Computation using Atlas of Economic Complexity.

sectors have a shorter distance of 0.838 and 0.841 respectively. This implies that Uganda could easily diversifying into several products within these sectors as the country possesses the existing capabilities to produce them. On the contrary, the study finds a longer average distance (closer to 1) of the machinery and electronics sectors. This reveals that Uganda would face increasing difficulties in trying to move into production within these sectors.

At a product level, the study provides Figure 3 that shows the top 30 product for export diversification using the distance indicator for Uganda. Similar to the above, the findings show that products within the minerals and agriculture sectors possess the shortest distances, implying a higher probability of success in export diversification. Key among which include manganese > 47% by weight, fruits and nuts, otherwise prepared, other ores, fruit juices, vegetable products, lead refined unwrought, zirconium ore, cotton yarn of > 85%, and honey among others.

**Figure 3** Top 30 products for export diversification according to the distance indicator

Source: Author's Computation using Atlas of Economic Complexity.

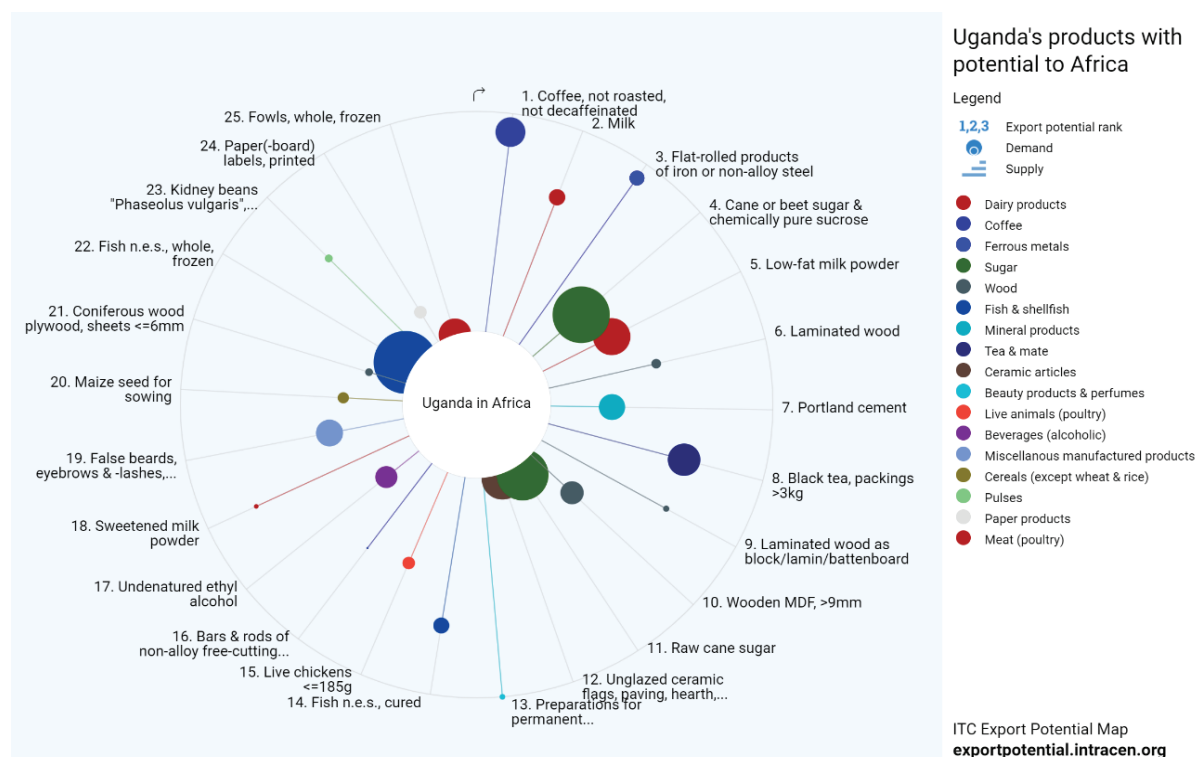
### 4.3.3 Export potential rank

To identify Uganda's products with the highest export potential in Africa, the study uses the export potential assessment which takes into consideration various factors including Uganda's supply capacity, market access conditions, the destination market's demand, and the bilateral relationships between the countries. Figure 4 provides Uganda's top 25 products with export potential to Africa. A disaggregated analysis at the regional level can be viewed in figures A1-A5 in the Appendix). The findings reveal that Uganda has a high export potential in coffee, not roasted, not decaffeinated; milk; flat-rolled products of iron or non-alloy steel; coffee (not roasted and decaffeinated); and laminated wood among others (see Figure A1 in the Appendix). In Northern Africa, Uganda's best product alternatives for export diversification are coffee (not roasted and decaffeinated); black tea (packaging >3kg); sesame seeds; raw cane sugar, bran, and other residues of wheat; low-fat milk powder; and oil seeds (oleaginous fruits) among others (see Figure A2 in the Appendix).

With a regional perspective, the study identifies the major products with market access and diversification opportunities within the different Africa regions (i.e., the Eastern, Northern, Southern, Western, and Central African regions). The Eastern African region offers Uganda a significant potential for export diversification of several products including milk; cane or beet sugar (and chemically pure sucrose); low-fat milk powder; flat-rolled products of iron (or non-alloy steel); coffee (not roasted and decaffeinated); and laminated wood among others (see Figure A1 in the Appendix). In Northern Africa, Uganda's best product alternatives for export diversification are coffee (not roasted and decaffeinated); black tea (packaging >3kg); sesame seeds; raw cane sugar, bran, and other residues of wheat; low-fat milk powder; and oil seeds (oleaginous fruits) among others (see Figure A2 in the Appendix).

Figure A3 (see appendix) shows that potential products with a higher export potential in Southern Africa include coffee (not roasted and decaffeinated); fish, whole, frozen; milk; low-fat milk powder; electrical energy; cane, or beet Sugar (and chemically pure sucrose);

**Figure 4** Uganda's top 25 products with export potential in Africa



beer made from malt; and medicaments among others. In Western Africa, the products include fish (cured); flat-rolled products of iron (or non-alloy steel); cane or beet Sugar (and chemically pure sucrose); low-fat milk powder; fish, whole, frozen; milk; and coffee (not roasted and decaffeinated) among others (see Figure A4 in the appendix). Lastly, figure A5 provides the products with export diversification opportunities in Central Africa include flat-rolled products of iron (or non-alloy steel); fish (cured); portland cement; cane or beet Sugar (and chemically pure sucrose); fish, whole, frozen; tubes of iron or steel; and fowls (whole, frozen) among others.

Furthermore, using the EPI methodology, the study identifies and compares the demand and supply side performance of Uganda's products within the African region. Table 34 provides a summary of the Top 5 products with the highest demand and supply potential rank within the different regions in Africa. In general, the findings show that Uganda's products with the highest supply capacity, tend to face the weakest demand potential in Africa. More succinctly, products like medicaments, raw cane sugar, fish, whole, frozen), palm oil (excl crude), and cane or beet sugar (and chemically pure sucrose) that possess the strongest demand have the lowest supply capacity in Africa.

**Table 34** Uganda's top 5 products with the highest demand and supply potential in Africa.

	Product demand rank		Product supply rank
Eastern Africa			
1	Cane or beet sugar & chemically pure sucrose	1	Preparations for permanent waving/straightening
2	Portland cement	2	Flat-rolled products of iron or non-alloy steel
3	Unglazed ceramic flags, paving, hearth, wall tiles, mosaic cubes and the like	3	Coffee, not roasted, not decaffeinated
4	Raw cane sugar	4	Sweetened milk powder
5	Soap & organic surface-active products	5	Milk
Western Africa			
1	Medicaments consisting of mixed or unmixed	1	Preparations for permanent waving/straightening
2	Fish, whole, frozen	2	Flat-rolled products of iron or non-alloy steel
3	Human & animal blood, blood fractions & immunological products	3	Coffee, not roasted, not decaffeinated
4	Cane or beet sugar & chemically pure sucrose	4	Fish, cured
5	False beards, eyebrows & lashes.	5	Milk
Central Africa			
1	Medicaments consisting of mixed or unmixed	1	Flat-rolled products of iron or non-alloy steel
2	Fish, whole, frozen	2	Coffee, not roasted, not decaffeinated
3	Fowls, whole, frozen	3	Fish, cured
4	Unglazed ceramic flags, paving, hearth.	4	Milk
5	Cane or beet sugar &chemically pure sucrose	5	Black tea, packings>3kg
Northern Africa			
1	Medicaments consisting of mixed or unmixed	1	Preparations for permanent waving/straightening
2	Coniferous wood sawn/chipped lengthwise	2	Coffee, not roasted, not decaffeinated
3	Human & animal blood, blood fractions &...	3	Fish, cured
4	Raw cane sugar	4	Sesamum seeds
5	Oilcake of soya-bean oil	5	Laminated wood as block/lamin/batten board
Southern Africa			
1	Medicaments consisting of mixed or unmixed	1	Unrooted cuttings & slips
2	Electrical energy	2	Flat-rolled products of iron or non-alloy steel
3	Fish, whole, frozen	3	Coffee, not roasted, not decaffeinated
4	Beer made from malt	4	Vermiculite, perlite & chlorites, unexpanded
5	Cane or beet sugar &chemically pure sucrose	5	Milk

Data Source: International Trade Centre's Export Potential Map (2023)

On the other hand, products such as beans “Vigna & phaseolus” (dried & shelled), coffee (not roasted and decaffeinated), milk (including milk powder), fish (cured), preparations for permanent waving/straightening, and flat-rolled products of iron (or non-alloy steel) where Uganda has the highest supply potential, continue to face the lowest demand within the African continent. This demand-supply product mismatch partially explains why Uganda’s export volumes to Africa are low. Therefore, accessing market opportunities in destinations where Uganda’s products face the strongest demand is crucial for the country to increase its export volumes and create jobs for sustainable growth.

#### 4.4 Export product diversification analysis using the ITC methodology

Similarly, the study uses ITC’s product diversification rank to identify products for potential export diversification. Based on supply, demand, and market access conditions, this rank measures the likelihood of successful product diversification of Uganda’s products in the African region. Table A3 in the Appendix provides a list of Uganda’s top 50 products with the potential for diversification on the continent. The findings reveal that Uganda has a high potential for product diversification in Semi-milled or wholly milled rice; crude palm oil; superphosphates; tubes of iron/steel, welded, rectangular cross-section; mixtures of odoriferous substances used in food and drink; mineral or chemical fertilisers; footwear, rubber/plastic soles & uppers; live bovine animals; and wheat (excl durum) and meslin among others. In a nutshell, for Uganda to fully realize benefits from trading under the AfCFTA agreement, it should largely prioritize pursuing product diversification strategies in the minerals, agriculture, and light-manufacturing sectors.

#### 4.5 A comparison of product offers under the AfCFTA and identified potential products

The AfCFTA protocol on trade in goods (phase one), aims to reduce tariffs on non-sensitive goods traded among the State Parties by 90 percent progressively for 5 years for Non-Low Developed Countries and 10 years

for LDCs. The remaining 10 percent of the outstanding tariff lines are divided into products with exemption from liberalisation (3 percent) and the sensitive products (7 percent), which are expected to be liberalized over 10 years and beyond.

Table A4 in the Appendix shows offers under the AfCFTA for top 50 products where Uganda has export potential to Africa. Among the top 5 products, the tariffs for coffee will be eliminated among most of the AfCFTA State parties, except for Madagascar where it is not liberalized. Milk is only liberalized in Economic Community of West African Countries (ECOWAS) and Mauritania, Morocco and Seychelles, implying that market access may be limited. Low-fat milk powder is liberalized except for Southern African Customs Union (SACU) and Madagascar. Flat-rolled products of iron or non-alloy steel are liberalized among state parties except for Central African Economic and Monetary Community (CEMAC) and Madagascar where the markets are restricted. Conversely, cane sugar and chemically pure sucrose is a highly sensitive product among AfCFTA state parties, except for Seychelles, Morocco and ECOWAS and Mauritania. Uganda can therefore leverage the market access opportunities under AfCFTA particularly for products such as milk, and cane sugar and chemically pure sucrose where the country has faced challenges in penetrating regional markets such as Kenya due to issues related to NTBs.

Table A5 in the Appendix highlights the offers for products with potential for diversification for Uganda under the AfCFTA. The findings show that tariffs on the top 5 products; Semi-milled or wholly milled rice, super phosphates, tubes of iron/steel (welded, rectangular cross-section) will be eliminated in all the AfCFTA state parties. For crude palm oil the tariffs will be eliminated in most of the AfCFTA market except for CEMAC and Madagascar. On the other hand, mixtures of odoriferous substances used in food and drink are liberalized among AfCFTA State parties except for CEMAC. However, much as the AfCFTA would provide potential for Uganda to diversify her exports, value addition is critical to benefit from the continental market given that world-wide pressures, such as the COVID-19 pandemic, and the

Russia-Ukraine war have greatly affected exports.

#### 4.6 Table of products identified

In table 35, we provide a summary of the top 25 products with prospects for market access to Africa under the AfCFTA. The products are arrived at using three criteria: export value, those with export potential and those considered for export diversification.

Table 35 Top 25 products with prospects for market access to Africa					
	Code	All products (USD billions)	Top export	Export Potential	Export Diversification
1	'090111	Coffee (excluding roasted and decaffeinated)	✓	✓	×
2	'252329	Portland cement (excluding white, whether or not	✓	✓	×
3	'170199	Cane or beet sugar and chemically pure sucrose	✓	✓	×
4	'090240	Black fermented tea and partly fermented tea,	✓	✓	×
5	100510	Maize seed for sowing	✓	✓	×
6	'151190	Palm oil and its fractions, whether or not refined	✓	✓	×
7	'040120	Milk and cream of a fat content by weight of > 1%	✓	✓	×
8	'071339	Dried, shelled beans "Vigna and Phaseolus",	✓	✓	×
9	'721041	Flat-rolled products of iron or non-alloy steel, of	✓	✓	✓
10	'110220	Maize/corn flour	✓	✓	×
11	'300490	Medicaments consisting of mixed or unmixed	✓	✓	×
12	340119	Soap and organic surface active products	✓	✓	✓
13	'220300	Beer made from malt	✓	✓	×
14	'0303Xa	Fish, whole, frozen	✓	✓	×
15	'151190	Palm oil (excl crude) & fractions	✓	✓	×
16	'40221	Milk powder	✓	✓	×
17	'330210	Mixtures of odoriferous substances used in food & drink	✓	✓	✓
18	'110100	Wheat or meslin flour	✓	✓	×
19	'721430	Bars & rods of non-alloy free-cutting steel	✓	✓	×
20	'210690	Food preparations	✓	×	✓
21	'2202XX	Non-alcoholic beverages	✓	×	✓
22	'020230	Bovine cuts boneless, frozen	✓	×	✓
23	'100630	Semi-milled or wholly milled rice	✓	×	✓
24	'392490	Household/toilet articles, of plastics,	✓	×	✓
25	'640220	Footwear, rubber/plastic soles & uppers	✓	×	✓

#### 4.7: Potential jobs created from exploiting unrealized export potential to the AfCFTA

Uganda can increase exports of the identified leading products to Africa by exploiting existing potential as illustrated in table 36. This is illustrated by conducting simulations as proposed in the methodology. As an example, whereas Uganda has the potential to export coffee (excluding roasted & decaffeinated) worth USD 137 millions to Africa, on average, it exports coffee only worth USD 98 million leaving an unrealised potential of USD 39 million. In terms of percentage, the unrealised potential is 28.5 percent which if exploited is likely to increase both revenue and employment opportunities in the sector. The rest of the products have the same patterns with varying unrealized proportions as shown in Table 36. This implies that holding other factors constant, realizing an export potential close to 100 percent leads to creation of employment opportunities. The last three columns in table 36 illustrate the likely jobs created when full export potential is realised divided into direct and indirect jobs. As expected, there are more indirect jobs that are likely to be created.

**Table 36** Simulation results of the likely jobs created from exploitation of unrealised export potential

		Export potential (A) <sup>10</sup>	Exports (actual) (B)	Unrealised potential		Full-Time Equivalent (FTE) (Additional Potential Jobs)		
				A-B	(%)	Jobs		
'TOTAL	All products (USD billions)	USD Millions				Direct	Indirect	Total
'090111	Coffee (excl. roasted & decaffeinated)	137	98	39	28.5	106,684	56,726	163,410
'252329	Portland cement (excl. white,	44	31	13	29.5	1,022	13,114	14,136
170199	Cane or beet sugar	75	38	37	49.3	11,543	274,777	286,320
090240	Black fermented tea and partly	23.1	5.1	18	77.9	52,050	25,849	77,899
'151190	Palm oil & its fractions, whether	44.8	40	4.8	10.7	509	5,529	6,039
'040120	Milk & cream of fat content > 1%	93	54	39	15.7	3,198	33,520	36,718
'071339	Dried, shelled beans	7	5.9	1.1	41.9	12,395	9,769	22,163
'721041	Flat-rolled products of iron	7.5	6	1.5	20.0	22	1,311	1,332
'100700	Grain sorghum	54	49	5	9.3	10,748	4,043	14,791
'110220	Maize /corn flour	15.1	13	2.1	13.9	18,393	12,082	30,475
'300490	Medicaments	31	25	6	19.4	504	1,741	2,245
	Total					217,068	438,461	655,528

When the top 11 export products have their export potential fully realized, they are likely to create 217,068 direct and 438,461 indirect jobs. The analysis reveals that the coffee industry is likely to create the highest number of direct jobs (106,684), and the sugar industry is likely to create the highest number of indirect jobs (274,777). These two products have the best chances of creating more jobs for Ugandans.

## 5.0 CONCLUSIONS AND POLICY IMPLICATIONS

The study identifies leading export products and their respective destinations within Africa. It can be concluded that there is a significant difference between products exported to Africa and those that are exported to the rest of the world. Whereas light manufactured products and a few commodities are exported to Africa, raws/commodities are exported to the rest of the world. The leading destinations of Uganda's export within Africa are largely the EAC and COMESA partner states. This suggests that Uganda is yet to fully exploit the markets beyond the two RECs within Africa. The specific countries outside COMESA and EAC to explore

for further market penetration include, among others: Algeria, South Africa, Central African Republic and Angola. Given that Uganda largely exports agricultural products and semi-processed products, it implies that value addition is a policy variable.

The export value at product level and the total import market value in the destination markets suggests that there is still significant market potential for exploitation by Uganda. Therefore, liberalization of trade within Africa has chances of increasing Africa's imports from Uganda. Asia and Europe remain significant competitors in the markets where Uganda exports, especially for manufactured products to the extent that technology deficits disadvantage Uganda. Finally, the AfCFTA offers provide a range of products for Uganda to increase its export volumes and values.

The simulations conducted on the potential for job creation arising from utilisation of the unrealized export potential reveal that 217,068 direct and 438,461 indirect jobs will be created. Note that this is from only 11 top exports, implying that more jobs will be created when other export products are considered.

<sup>10</sup> Computed using the International, Trade Centre tool.



- a) There are several products that could be exported to African but are currently either dismal or not on the export list. Therefore, Uganda should seek to diversify its export basket to cover extra products identified. This could focus on sectors and products where the country has capacity to produce and supply regional and continental markets;
- b) To access some AfCFTA markets that are currently dominated by Asia and Europe, there is need for value addition and possibly adoption of high technology manufacturing;
- c) As a country relevant stakeholders should implement systems and mechanisms for aggregation of products to ensure that required volumes are met for exports;
- d) The study has demonstrated that significant levels of indirect jobs are created, implying that deliberate actions should be taken to increase value addition and value chains development of the export products

## REFERENCES

- Andersen, O. (1993). On the internationalization process of firms: A critical analysis. *Journal of international business studies*, 24, 209-231.
- Andersson, S., & Wictor, I. (2003). Innovative internationalisation in new firms: born globals—the Swedish case. *Journal of international Entrepreneurship*, 1, 249-275.
- African Development Bank. (2021). AfCFTA can drive Africa's energy transition. Retrieved from <https://www.afdb.org/en/news-and-events/afcfta-can-drive-africas-energy-transition>.
- Armario, J. M., Ruiz, D. M., & Armario, E. M. (2008). Market orientation and internationalization in small and medium-sized enterprises. *Journal of Small Business Management*, 46(4), 485-511.
- Bilkey, W. J., & Tesar, G. (1977). The export behavior of smaller-sized Wisconsin manufacturing firms. *Journal of international business studies*, 8, 93-98.
- Cavusgil, S. T. (1980). On the internationalization process of the firm. *European research*, 6, 273-281.
- Chien, J. W., Conron, H., Edwards, L., & Kamutando, G. (2022). Trading up: Harnessing the AfCFTA for growth in Uganda.
- Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. *Englewood Cliffs, NJ*, 2(4), 169-187.
- Cyert, R. M., & March, J. G. (1963). A behavioral theory of the firm. *Englewood Cliffs, NJ*, 2(4), 169-187.
- Czinkota, M. R. (1982). Export development strategies: US promotion policy. (No Title)
- Dunning, J. H. (1988). The eclectic paradigm of international production: A restatement and some possible extensions. *Journal of international business studies*, 19(1), 1-31.
- Dunning, J. H. (1980). Toward an eclectic theory of international production: Some empirical tests. *Journal of international business studies*, 11, 9-31.
- Decreux, Y., & Spies, J. (2016). *Export Potential Assessments- a methodology to identify export opportunities for developing countries*. Geneva: International Trade Center.
- Echandi, R., Maliszewska, M., and Steenbergen, V. 2022. *Making the most of the African continental free trade area: Leveraging trade and foreign direct investment to boost growth and reduce poverty*, Washington, DC: The World Bank.
- Echandi, Roberto; Maliszewska, Maryla; Steenbergen, Victor. (2022). Making the Most of the African Continental Free Trade Area : Leveraging Trade and Foreign Direct Investment to Boost Growth and Reduce Poverty. © Washington, DC: World Bank.<https://au.int/en/pressreleases/20230215/powering-trade-through-afcfta-people-driven-wholesome-development-agenda>
- Erramilli, M. K., & Rao, C. P. (1993). Service firms' international entry-mode choice: A modified transaction-cost analysis approach. *Journal of marketing*, 57(3), 19-38.
- Erramilli, M. K., & Rao, C. P. (1990). Choice of foreign market entry modes by service firms: role of market knowledge. *MIR: Management International Review*, 135-150.
- International Trade Centre. 2018. *A Business Guide to the African Continental Free Trade Area Agreement*, Geneva: International Trade Centre (ITC).
- Hausmann, R., Hwang, J., Rodrik, D. 2007. What you export matters, *Journal of Economic Growth*, 12(1): 1-25 (Cambridge, National Bureau of Economic Research).
- Hausmann, R., Klinger, B. 2007. *Structural Transformation and Patterns of Comparative Advantage in the Product Space*, Harvard Centre for International Development Working Paper No. 128
- Hidalgo, C., Klinger, B., Barabasi, A.L., Hausmann, R. 2007. *The product space conditions the development of nations*, *Science* 317, 482-487.
- Fugazza, M., & Nicita, A. (2011). On the importance of

- market access for trade. United Nations.
- Johanson, J., & Vahlne, J. E. (2015). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. In *International business strategy* (pp. 33-59). Routledge.
- Johanson, J., & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9): 1411–1431.
- Johanson, J., & Vahlne, J. E. (1990). The mechanism of internationalisation. *International marketing review*, 7(4).
- Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. In *International business* (pp. 145-154). Routledge.
- Johanson, J., & Wiedersheim-Paul, F. (1975). The internationalization of the firm—four swedish cases 1. In *International Business* (pp. 127-144). Routledge.
- Hessels, J., & Terjesen, S. (2010). Resource dependency and institutional theory perspectives on direct and indirect export choices. *Small business economics*, 34, 203-220.
- Hollenstein, H. (2005). Determinants of international activities: are SMEs different?. *Small Business Economics*, 24, 431-450.
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of international business studies*, 35, 124-141.
- Knight, G., Cavusgil, S. T., & Innovation, O. C. (2004). the Born-global Firm. *Journal of International Business Studies*, 35(2), 124-141.
- Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *Journal of marketing*, 54(2), 1-18.
- Kohli, A. K., & Jaworski, B. J. (1990). Market orientation: the construct, research propositions, and managerial implications. *Journal of marketing*, 54(2), 1-18.
- Kuemmerle, W. (2002). Home base and knowledge management in international ventures. *Journal of Business venturing*, 17(2), 99-122.
- Madsen, T. K., & Servais, P. (2017). The internationalization of born globals: an evolutionary process?. In *International business* (pp. 421-443). Routledge.
- McDougall, P. P., & Oviatt, B. M. (2000). International entrepreneurship: the intersection of two research paths. *Academy of management Journal*, 43(5), 902-906.
- McDougall, P. P., Oviatt, B. M., & Shrader, R. C. (2003). A comparison of international and domestic new ventures. *Journal of international entrepreneurship*, 1, 59-82.
- McDougall, P. P., Shane, S., & Oviatt, B. M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of business venturing*, 9(6), 469-487.
- McDougall, P. P., Shane, S., & Oviatt, B. M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of business venturing*, 9(6), 469-487.
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of marketing*, 54(4), 20-35.
- National Planning Authority (NPA). (2022). “Towards a market-oriented industrialization for Uganda: prospects, issues and proposals — a Profile of Uganda’s external market opportunities”, Kampala: National Planning Authority.
- National Planning Authority (NPA). (2020). Third national development plan (NDP III) 2020/21 – 2024/25. Kampala, Uganda: Government of Uganda.
- Reid, S. D. (1981). The decision-maker and export entry and expansion. *Journal of international business studies*, 12, 101-112.
- Rialp, A., Rialp, J., & Knight, G. A. (2005). The phenomenon of early internationalizing firms: what do we know after a decade (1993–2003)

- of scientific inquiry?. *International business review*, 14(2), 147-166.
- Rogers, E. M., Singhal, A., & Quinlan, M. M. (1962). Diffusion of innovations. In *An integrated approach to communication theory and research* (pp. 432-448). Routledge.
- Sharma, V. M., & Erramilli, M. K. (2004). Resource-based explanation of entry mode choice. *Journal of Marketing theory and Practice*, 12(1), 1-18.
- Shinyekwa, Isaac M. B./Bulime, Enock Nsubuga Will Bulime et. al. (2021). Potential products for Uganda's export expansion and diversification. Kampala, Uganda : Economic Policy Research Centre.
- Signé & Munyati. (2023). AfCFTA: A New Era for Global Business and Investment in Africa. WEF: World Economic Forum.
- Spillan, J., & Parnell, J. (2006). Marketing resources and firm performance among SMEs. *European management journal*, 24(2-3), 236-245.
- United Nations Conference on Trade and Development. (2020). Uganda: AfCFTA to boost manufacturing, but also risks. Retrieved from <https://unctad.org/news/uganda-afcfta-boost-manufacturing-also-risks>
- Vernon, R. (1966). International investment and international trade in the product cycle. In *International economic policies and their theoretical foundations* (pp. 415-435). Academic Press.
- Wind, Y., Douglas, S. P., & Perlmutter, H. V. (1973). Guidelines for developing international marketing strategies. *Journal of Marketing*, 37(2), 14-23.
- World Bank. (2020). The African Continental Free Trade Area: Economic and Distributional Effects. Washington DC: World Bank. DOI: 10.1596/978-1-4648-1559-1.

## APPENDIX

**Table A1: Uganda's top exports to Africa in USD millions (2015 - 2021)**

		2015	2016	2017	2018	2019	2020	2021	Average
<b>'TOTAL</b>	<b>All products (USDbillions)</b>	<b>1.315</b>	<b>1.246</b>	<b>1.504</b>	<b>1.600</b>	<b>1.341</b>	<b>1.418</b>	<b>1.776</b>	<b>1.457</b>
'090111	Coffee (excluding roasted and decaffeinated)	84.6	74.8	140.4	80.1	85.9	112.3	149.0	103.9
'252329	Portland cement (excluding white, whether or not	78.6	60.0	41.5	56.2	56.9	69.3	84.9	63.9
'170199	Cane or beet sugar and chemically pure sucrose	51.5	55.8	67.3	73.9	51.9	57.8	85.8	63.4
'090240	Black fermented tea and partly fermented tea,	49.0	52.3	67.7	70.8	54.2	52.8	54.8	57.4
100510	Maize seed for sowing	61.0	53.9	75.6	87.1	41.3	44.1	17.3	54.3
'151190	Palm oil and its fractions, whether or not refined	32.1	36.9	41.3	49.1	47.7	45.5	59.8	44.6
'040120	Milk and cream of a fat content by weight of > 1%	5.0	19.7	44.2	46.2	42.2	36.4	40.9	33.5
'271600	Electrical energy	17.0	21.3	56.1	36.4	44.6	20.1	36.5	33.1
'240110	Tobacco, unstemmed or unstripped	49.0	45.4	37.7	57.5	37.2	0.6	2.2	32.8
'071339	"Dried, shelled beans "Vigna and Phaseolus",	44.4	23.0	48.4	63.2	6.7	8.3	24.9	31.3
'721041	"Flat-rolled products of iron or non-alloy steel, of	20.8	25.3	21.9	23.2	22.9	26.2	23.5	23.4
'110100	Wheat or meslin flour	16.2	14.8	15.8	17.2	28.0	29.3	38.8	22.9
'100700	Grain sorghum	34.3	-	49.1	63.2	11.1	0.1	0.0	22.6
'110220	"Maize ""corn"" flour"	25.2	13.1	13.0	17.3	20.8	26.1	25.7	20.2
'300490	"Medicaments consisting of mixed or unmixed	9.2	23.1	12.9	19.7	11.5	26.4	35.6	19.8
'721420	Bars and rods, of iron or non-alloy steel	22.1	16.3	18.4	14.3	11.5	20.3	35.2	19.7
'090230	Black fermented tea and partly fermented tea	15.2	14.6	10.0	16.5	22.8	24.6	28.6	18.9
'151620	Vegetable fats and oils and their fractions	35.8	17.2	15.9	14.1	8.1	13.2	23.4	18.2
'220300	Beer made from malt	10.0	11.0	11.1	13.3	21.8	24.4	30.5	17.4
'730690	"Tubes, pipes and hollow profiles	9.5	6.9	14.0	18.9	17.3	18.0	28.3	16.1
'340119	Soap and organic surface-active products and	16.5	16.0	16.1	21.0	11.5	12.0	14.2	15.3
'230230	Bran, sharps, and other residues of wheat	6.5	8.2	28.7	20.2	15.3	17.2	10.9	15.3
'100640	Broken rice	16.9	16.2	20.1	24.1	15.7	7.4	0.7	14.5
'071331	"Dried, shelled beans of species ""Vigna mungo	6.3	3.2	7.5	7.2	15.1	19.8	36.9	13.7
'870323	Motor cars and other motor vehicles principally	12.8	7.7	10.3	14.2	16.3	14.8	11.6	12.5
'170111	Raw cane sugar (excluding added flavoring or	10.1	-	19.8	30.4	26.2	0.0	-	12.4
'220210	Waters, incl. mineral and aerated, with added	5.7	3.5	4.9	10.2	14.3	19.0	25.5	11.9
'240120	Tobacco, partly or wholly stemmed or stripped	8.7	9.3	5.7	10.4	10.7	11.5	24.9	11.6
'999999	Commodities not elsewhere specified	0.0	81.0	-	0.0	-	-	-	11.6
'040210	Milk and cream in solid forms, of a fat content	14.2	7.6	13.0	7.7	6.1	15.5	14.6	11.2
'721049	"Flat-rolled products of iron or non-alloy steel, of	19.7	10.5	8.2	23.1	8.5	3.6	5.2	11.2
'230990	Preparations of a kind used in animal feeding	0.2	1.2	26.8	45.0	0.5	1.3	0.7	10.8
'230400	Oilcake and other solid residues, whether or not	3.1	12.0	10.0	7.0	3.0	16.1	15.5	9.5
'271012	"Light oils and preparations, of petroleum or	0.5	0.1	0.1	0.0	28.5	16.3	20.6	9.5
'190531	Sweet biscuits	12.6	7.9	9.6	9.4	8.4	8.1	9.4	9.3
'330499	Beauty or make-up preparations and preparations	10.3	13.0	5.6	5.4	5.0	10.6	13.8	9.1
'100790	Grain sorghum (excluding for sowing)	1.5	3.5	0.2	3.3	24.4	10.7	16.7	8.6
'441114	"Medium density fiberboard ""MDF"" of wood, of	0.4	6.0	9.1	15.0	12.3	8.8	7.5	8.4
'100590	Maize (excluding seed for sowing)	2.1	2.7	7.3	2.4	11.4	22.2	8.7	8.1
'871120	Motorcycles, incl. mopeds, with reciprocating	2.3	2.1	2.6	3.6	6.0	14.1	25.3	8.0
'110290	Cereal flours (excluding wheat, meslin and maize)	0.2	0.8	11.7	25.5	9.8	5.5	0.3	7.7
'340120	Soap in the form of flakes, granules, powder,	9.3	8.4	8.1	6.4	4.3	3.8	5.1	6.5
'100630	Semi-milled or wholly milled rice, whether or not	7.1	4.0	6.8	2.8	9.9	11.1	3.7	6.5
'271019	Medium oils and preparations, of petroleum or	6.7	6.1	8.3	7.6	5.6	5.0	6.1	6.5
'441299	Laminated wood with both outer plies of	0.9	3.0	2.3	5.8	6.2	15.5	11.2	6.4
'240220	Cigarettes, containing tobacco	0.7	1.7	6.1	7.3	6.9	10.4	11.1	6.3
'271011	"Light oils and preparations, of petroleum or	-	-	20.9	22.6	-	-	-	6.2
'040229	Milk and cream in solid forms, of a fat content by	8.2	6.5	6.9	8.5	6.8	3.4	3.0	6.2
'481910	Cartons, boxes, and cases, of corrugated paper or	5.7	4.8	5.2	7.8	5.2	5.3	7.5	5.9

		2015	2016	2017	2018	2019	2020	2021	Average
'731700	Nails, tacks, drawing pins, corrugated nails, staples	2.1	2.9	4.3	6.2	7.0	7.3	10.6	5.8
'240311	Water-pipe tobacco (excluding tobacco-free)	12.2	5.2	2.0	2.9	3.9	8.1	3.9	5.5
'040221	Milk and cream in solid forms, of a fat content by	0.8	8.5	5.7	3.5	2.9	5.1	8.1	4.9
'441294	Laminated wood as blockboard, laminboard or	0.0	0.1	0.5	2.7	8.0	13.7	9.3	4.9
'320890	Paints and varnishes based, incl. enamels and	6.2	5.1	4.0	4.1	5.6	4.0	5.1	4.9
'220710	Undenatured ethyl alcohol, of actual alcoholic	0.7	0.6	1.5	1.2	2.5	11.2	16.2	4.8
'071333	"Dried, shelled kidney beans ""Phaseolus	0.3	1.8	8.5	10.8	8.8	0.4	2.0	4.6
'392330	Carboys, bottles, flasks, and similar articles for the	4.0	2.9	5.0	4.0	4.0	4.5	7.7	4.6
'880330	Parts of aero planes or helicopters, n.e.s.	4.3	15.5	5.6	2.3	1.2	1.5	1.7	4.6
'441239	Plywood consisting solely of sheets of wood <= 6	0.3	6.6	5.5	6.4	4.5	4.0	3.9	4.4
'940421	Mattresses of cellular rubber or plastics, whether	3.9	3.6	4.1	4.1	2.5	3.3	8.3	4.3
'100890	Cereals (excluding wheat and meslin, rye, barley,	12.1	8.3	3.4	0.1	2.2	2.1	1.6	4.3
'870423	"Motor vehicles for the transport of goods, with	1.7	4.7	3.2	3.2	1.8	6.0	9.1	4.2
'200290	Tomatoes, prepared or preserved otherwise than	1.7	4.0	2.9	4.4	5.4	4.9	6.2	4.2
'701090	Carboys, bottles, flasks, jars, pots, phials and other	16.1	0.3	0.5	0.1	0.3	0.1	12.1	4.2
'100820	Millet (excluding grain sorghum)	3.4	-	18.3	7.5	-	0.0	0.0	4.2
'220890	Ethyl alcohol of an alcoholic strength of < 80% vol,	3.1	2.4	2.7	4.5	2.7	5.1	8.7	4.2
'842959	Self-propelled mechanical shovels, excavators and	2.0	2.9	2.3	1.9	5.3	6.7	7.8	4.1
'482110	Paper or paperboard labels of all kinds, printed	2.5	3.8	4.0	5.4	5.1	3.2	4.1	4.0
'401140	New pneumatic tires, of rubber, of a kind used for	0.5	1.8	1.9	2.9	4.0	9.6	5.8	3.8
'070200	Tomatoes, fresh or chilled	0.7	2.6	4.0	3.3	3.1	8.2	3.9	3.7
'860900	Containers, incl. containers for the transport of	0.2	2.7	20.9	1.2	0.4	0.0	0.2	3.7
'240399	"Chewing tobacco, snuff and other manufactured	0.0	0.1	-	0.0	3.0	12.8	9.7	3.7
'040590	Fats and oils derived from milk, and dehydrated	0.4	0.5	1.9	1.8	3.6	7.4	9.9	3.6
'670490	Wigs, false beards, eyebrows, and eyelashes,	-	0.3	1.4	5.1	6.8	4.8	6.9	3.6
'170114	Raw cane sugar, in solid form, not containing	1.8	2.8	0.0	0.4	1.4	12.4	5.8	3.5
'870422	"Motor vehicles for the transport of goods, with	4.0	2.2	2.4	2.1	5.0	3.8	4.8	3.5
'250100	Salts, incl. table salt and denatured salt, and pure	3.8	3.7	3.7	1.7	1.5	3.0	7.0	3.5
'721720	Wire of iron or non-alloy steel, in coils, plated or	0.5	1.0	3.7	4.5	7.0	3.9	3.3	3.4
'151219	Sunflower-seed or safflower oil and their fraction	4.0	1.5	4.5	6.1	2.7	1.5	3.5	3.4
'110430	Germ of cereals, whole, rolled, flaked, or ground	-	-	0.0	-	3.1	6.9	13.3	3.3
'220720	Denatured ethyl alcohol and other spirits of any	0.6	1.8	1.9	1.9	3.2	5.0	7.9	3.2
'040110	Milk and cream of a fat content by weight of <=	6.0	2.8	2.1	2.1	2.5	2.3	4.0	3.1
'630533	Sacks and bags, for the packing of goods, of poly	1.2	2.0	2.3	3.9	2.2	3.6	6.5	3.1
'721650	Sections of iron or non-alloy steel, not further	3.2	4.1	2.4	3.5	1.0	1.4	5.3	3.0
'330520	Preparations for permanent waving or	0.2	0.7	1.2	1.6	3.2	6.7	6.9	2.9
'940600	Prefabricated buildings, whether or not complete	4.7	5.9	7.1	1.7	0.3	0.4	0.1	2.9
'170113	Raw cane sugar, in solid form, not containing	0.5	13.5	2.6	0.3	0.0	0.8	1.9	2.8
'070820	"Fresh or chilled beans ""Vigna spp., Phaseolus	0.4	2.3	8.1	1.3	0.6	3.4	3.6	2.8
'870421	"Motor vehicles for the transport of goods, with	2.9	3.8	3.6	2.0	2.3	1.7	3.0	2.8
'330590	Preparations for use on the hair	1.9	1.5	3.0	2.8	2.8	3.4	3.4	2.7
'392310	Boxes, cases, crates, and similar articles for the	12.1	0.4	0.2	0.3	0.7	0.8	3.9	2.6
'071390	Dried, shelled leguminous vegetables, whether or	1.7	2.3	0.1	5.2	1.0	4.5	3.5	2.6
'070190	Fresh or chilled potatoes (excluding seed)	1.2	6.1	5.2	4.8	0.2	0.1	0.1	2.5
'690740	Finishing ceramics (excl. refractory)	-	-	-	0.0	0.0	5.1	12.4	2.5
'520300	Cotton, carded or combed	3.1	2.0	3.7	4.0	2.7	0.4	1.4	2.5
'392350	Stoppers, lids, caps, and other closures, of plastics	0.1	1.6	2.2	3.3	3.1	2.9	4.1	2.5
'230630	Oilcake and other solid residues, whether or not	1.4	1.6	4.3	4.3	1.3	2.5	1.1	2.4
'071410	"Fresh, chilled, frozen or dried roots and tubers of	1.7	1.7	3.4	5.2	2.8	1.1	0.6	2.4
'120110	Soya bean seed, for sowing	1.7	3.3	3.3	0.7	2.2	3.1	1.8	2.3
'870333	"Motor cars and other motor vehicles principally	1.8	2.0	1.7	2.0	3.5	2.2	3.0	2.3
'220850	Gin and Geneva	0.2	1.3	1.0	2.2	3.8	4.7	2.9	2.3
'843049	Boring or sinking machinery for boring earth or	14.5	0.1	0.3	0.4	0.6	0.0	-	2.3
'090220	Green tea in immediate packings of > 3 kg	5.8	4.3	1.5	1.4	0.9	0.6	1.3	2.3
'220290	Non-alcoholic beverages (excluding water, fruit or	5.1	3.4	3.4	3.3	0.4	-	-	2.3
'391723	Rigid tubes, pipes, and hoses, of polymers of vinyl	2.5	1.7	1.8	3.7	2.3	1.4	2.4	2.3



		2015	2016	2017	2018	2019	2020	2021	Average
'721070	"Flat products of iron or non-alloy steel, of a width	1.7	0.9	1.9	1.0	2.3	3.6	4.3	2.2
'010229	Live cattle (excluding pure-bred for breeding)	-	0.0	0.3	0.1	0.1	5.7	8.8	2.2
'210390	Preparations for sauces and prepared sauces;	1.1	1.6	1.8	2.5	2.7	1.8	3.4	2.1
'392390	Articles for the conveyance or packaging of goods,	3.8	3.2	1.0	1.4	1.1	2.2	2.1	2.1
'721430	Bars and rods, of non-alloy free-cutting steel, not	0.3	0.5	1.0	3.7	6.1	1.5	1.2	2.0
'260111	Non-agglomerated iron ores and concentrates	0.9	0.4	0.4	0.4	-	-	12.0	2.0
'340220	Surface-active preparations, washing preparations	4.7	2.2	1.3	1.7	1.2	1.2	1.9	2.0

Data Source: Atlas of Economic Complexity

**Table A2: Uganda's top 50 products with export potential in Africa (USD Millions)**

Code	Product	Export potential	Actual exports	Unrealized potential	Africa's imports	Uganda's exports	Uganda's African Market share
090111	Coffee, not roasted, not decaffeinated	100	98	39	632	659	15.5
040120	Milk	92	54	39	227	54	23.8
721041	Flat-rolled products of iron or non-alloy steel	78	33	45	429	33	7.7
170199	Cane or beet sugar & chemically pure sucrose	69	38	37	3,000	38	1.3
040210	Low-fat milk powder	67	25	43	1,200	25	2.1
4412Xb	Laminated wood	26	13	13	76	13	17.1
252329	Portland cement	23	31	13	957	31	3.2
090240	Black tea, packings >3kg	23	5.1	18	377	29	1.4
4412Xc	Laminated wood as block/lamin/batten board	21	10	11	33	10	30.3
441114	Wooden MDF, > 9mm	19	9.4	9.5	416	9.4	2.3
1701XX	Raw cane sugar	17	14	7.5	2,800	14	0.5
6907	Unglazed ceramic flags, paving, hearth, wall tiles, mosaic cubes	17	16	6.1	1,600	16	1.0
330520	Preparations for permanent waving/straightening	15	6.7	8.3	37	6.7	18.1
0305Xb	Fish, cured	15	3.2	13	218	57	1.5
010511	Live chickens < = 185g	12	5.5	6.6	152	5.5	3.6
721430	Bars & rods of non-alloy free-cutting steel	11	1.3	9.6	16	1.3	8.1
220710	Undenatured ethyl alcohol	11	17	1.3	375	17	4.5
040229	Sweetened milk powder	9.7	5.5	4.2	53	5.5	10.4
670490	False beards, eyebrows & -lashes,	9.1	4	5.1	723	4	0.6
100510	Maize seed for sowing	8.9	6.5	2.7	139	6.5	4.7
441239	Coniferous wood plywood, sheets < = 6mm	8.8	4.5	4.6	62	4.6	7.3
0303Xa	Fish n.e.s., whole, frozen	8.6	0.249	8.4	1700	7	0.0
071333	Kidney beans "Phaseolus vulgaris", dried & shelled	8	1.6	6.8	150	14	1.1
482110	Paper(-board) labels, printed	7.5	5.4	4.4	177	5.4	3.1
020712	Fowls, whole, frozen	7.4	3.1	4.3	573	3.2	0.5
721650	Sections, of iron/steel,	7.2	3.1	4.1	99	3.1	3.1
340119	Soap & organic surface-active products	7.2	4.7	2.9	327	4.7	1.4
30XXXX	Medicaments for retail sale	7	27	1.3	9,600	27	0.3
830910	Crown corks of base metal	6.6	3.3	4.4	97	3.3	3.4
230230	Bran, sharps & other residues of wheat	6.4	3.6	3.7	115	8.7	3.1
730690	Tubes of iron/steel	5.8	5.6	2.1	136	5.6	4.1
0713Xa	Beans Vigna & Phaseolus, dried & shelled	5.7	5.9	1.1	47	6.5	12.6
230400	Oilcake of soya-bean oil	4.8	4.6	2.1	1100	6.6	0.4
360200	Prepared explosives	4.5	2.3	3.6	145	2.3	1.6
120740	Sesamum seeds	4.4	0.403	4.2	141	35	0.3
721420	Bars & rods of iron or non-alloy steel	4.4	6	1.5	923	6	0.7
060210	Unrooted cuttings & slips	4.3	1.7	2.8	9.9	41	17.2
252390	Cement	4.2	1.6	2.6	31	1.6	5.2
220300	Beer made from malt	3.9	11	2.2	523	11	2.1
151211	Crude sunflower-seed or safflower oil	3.4	1.2	2.8	604	12	0.2
040590	Dairy fats & oils	3.4	4.7	1.2	124	5.2	3.8
482190	Paper(-board) labels, non-printed	3.3	2.2	1.5	60	2.2	3.7

Code	Product	Export potential	Actual exports	Unrealized potential	Africa's imports	Uganda's exports	Uganda's African Market share
4407Xa	Coniferous wood, sawn/chipped lengthwise, > 6 mm	3.2	2.3	0.841	1,500	2.7	0.2
731700	Nails of iron or steel	3.2	3.7	1.1	373	3.7	1.0
401140	Rubber pneumatic tyres for motorcycles, new	3	4.9	0.625	203	4.9	2.4
0304Xd	Frozen fish fillets, n.e.s.	2.7	0.704	2.1	96	26	0.7
150790	Soya-bean oil (excl crude) & fractions	2.7	2.7	0.823	308	2.7	0.9
691090	Ceramic sanitary fixtures, n.e.s.	2.6	2.7	0.703	90	2.7	3.0
330590	Preparations for use on the hair, n.e.s.	2.5	3.8	0.893	238	3.8	1.6
3002XX	Human & animal blood, blood fractions & immunological	2.5	0.172	2.4	5,100	15	0.0

Data Source: International Trade Centre's Export Potential Map (2023)

**Table A3: Uganda's top 50 products for Potential Diversification in Africa (USD Millions)**

Rank	Product Code	Produce Description	Africa's Imports
1	100630	Semi-milled or wholly milled rice	5,600
2	151110	Crude palm oil	1,200
3	3103XX	Superphosphates	90
4	730661	Tubes of iron/steel, welded, rectangular cross-section	417
5	330210	Mixtures of odoriferous substances used in food & drink	1,700
6	310520	Mineral or chemical fertilisers	819
7	640220	Footwear, rubber/plastic soles & uppers	393
8	0102	Live bovine animals	775
9	1001Xb	Wheat (excl durum) & meslin	11,000
10	701090	Carboys & other glass containers	570
11	020230	Bovine cuts boneless, frozen	1,300
12	392490	Household/toilet articles, of plastics, n.e.s.	448
13	721061	Flat-rolled products of iron or non-alloy steel	363
14	360500	Matches	69
15	482020	Exercise books of paper(-board)	162
16	170490	Sugar confectionery not containing cocoa	483
17	310590	Mineral or chemical fertilisers	263
18	151710	Margarine (excl liquid)	283
19	071310	Peas, dried & shelled	177
20	2202XX	Non-alcoholic beverages	439
21	0907	Cloves	26
22	100640	Broken rice	979
23	690100	Ceramic construction goods, of siliceous metals	24
24	230610	Oilcake of cotton seeds	29
25	170410	Chewing gum	180
26	310230	Ammonium nitrate	473
27	110620	Flour, meal & powder of sago, roots, or tubers	16
28	720260	Ferronickel	79
29	2009XX	Juice of fruit or vegetables, unfermented	96
30	03XXXX	Aquatic invertebrates & edible meals, n.e.s.	161
31	690490	Ceramic flooring blocks	377
32	760120	Aluminium alloys, unwrought	553
33	732119	Appliances for cooking with solid fuel	38
34	210690	Food preparations	1,900
35	210390	Preparations for sauces & prepared sauces	629
36	340250	Surface-active & washing preparations, for retail	533
37	382319	Fatty acids, industrial, monocarboxylic; acid oils from refining	206
38	480411	Unbleached kraftliner, uncoated, in rolls > 36cm	269
39	220890	Ethyl alcohol of an alcoholic strength of < 80% vo	151

Rank	Product Code	Produce Description	Africa's Imports
40	530500	Coconut, abaca Manila hemp, ramie, agave & other vegetable fibres	59
41	010420	Live goats	9
42	340111	Soap & organic surface-active products, for toilet use	332
43	1001Xa	Durum wheat	3,100
44	230240	Bran, sharps & other residues of cereals	8.3
45	392410	Table/kitchenware, of plastics	582
46	390210	Polypropylene, in primary forms	2,200
47	190219	Uncooked pasta, not containing eggs	660
48	640192	Waterproof footwear, covering the ankle, rubber/plastic soles &	37
49	854449	Electric conductors $\leq 1.000V$ , not fitted with connectors	1,800
50	630510	Sacks & bags of jute & bast fibres for packing	113

Data Source: International Trade Centre's Export Potential Map (2023)

**Table A4: Analysis of the offers under the AfCFTA and the top 50 products with export potential in Africa**

Code	Product	SACU	CEMAC	ECOWAS & Mauritania	Seychelles	Morocco	Malawi	Algeria	Mauritius	Madagascar
090111	Coffee, not roasted, not decaffeinated	✓	✓	✓	✓	✓	✓	✓	✓	×
040120	Milk	×	×	✓	✓	✓	×	×	×	✓
721041	Flat-rolled products of iron or non-alloy steel	✓	×	✓	✓	✓	✓	✓	✓	×
170199	Cane or beet sugar & chemically pure sucrose	×	×	✓	✓	✓	×	×	×	×
040210	Low-fat milk powder	×	✓	✓	✓	✓	✓	✓	✓	×
4412Xb	Laminated wood	✓	✓	✓	✓	✓	✓	✓	✓	✓
252329	Portland cement	✓	×	✓	✓	✓	✓	✓	✓	×
090240	Black tea, packings > 3kg	✓	✓	✓	✓	✓	✓	✓	✓	×
4412Xc	Laminated wood as block/lamin/batten board	✓	✓	✓	✓	✓	✓	✓	✓	✓
441114	Wooden MDF, > 9mm	✓	✓	✓	✓	✓	✓	✓	✓	✓
1701XX	Raw cane sugar	×	×	✓	✓	✓	✓	✓	✓	✓
6907	Unglazed ceramic flags, paving, hearth, wall tiles, mosaic	✓	✓	✓	✓	✓	✓	✓	✓	×
330520	Preparations for permanent waving/straightening	✓	×	✓	✓	✓	✓	✓	✓	✓
0305Xb	Fish n.e.s., cured	✓	✓	✓	✓	✓	✓	✓	✓	✓
010511	Live chickens $\leq 185g$	✓	✓	✓	✓	✓	×	×	×	✓
721430	Bars & rods of non-alloy free-cutting steel	✓	✓	✓	✓	✓	✓	✓	✓	×
220710	Undenatured ethyl alcohol	×	×	✓	✓	✓	✓	✓	✓	✓
040229	Sweetened milk powder	✓	✓	✓	✓	✓	×	×	×	×
670490	False beards, eyebrows & -lashes, n.e.s.	✓	✓	✓	✓	✓	✓	✓	✓	✓
100510	Maize seed for sowing	×	✓	✓	✓	✓	×	×	×	✓
441239	Coniferous wood plywood, sheets $\leq 6mm$	✓	×	✓	✓	✓	✓	✓	✓	✓
0303Xa	Fish n.e.s., whole, frozen	✓	✓	✓	✓	✓	✓	✓	✓	✓
071333	Kidney beans "Phaseolus vulgaris", dried & shelled	✓	✓	✓	✓	✓	✓	✓	✓	×
482110	Paper(-board) labels, printed	✓	✓	✓	✓	✓	✓	✓	✓	✓
020712	Fowls, whole, frozen	✓	×	✓	×	✓	✓	×	×	✓
721650	Sections, of iron/steel, n.e.s.	✓	✓	✓	✓	✓	✓	✓	✓	✓
340119	Soap & organic surface-active products	×	×	✓	✓	✓	✓	✓	✓	✓
30XXXX	Medicaments for retail sale, n.e.s.	✓	✓	✓	✓	✓	✓	✓	✓	✓
830910	Crown corks of base metal	✓	✓	✓	✓	✓	✓	✓	✓	✓
230230	Bran, sharps & other residues of wheat	✓	✓	✓	✓	✓	✓	✓	✓	✓
730690	Tubes of iron/steel, n.e.s.	✓	✓	✓	✓	✓	✓	✓	✓	✓
0713Xa	Beans "Vigna & Phaseolus" n.e.s., dried & shelled	✓	✓	✓	✓	✓	✓	✓	✓	×
230400	Oilcake of soya-bean oil	✓	✓	✓	✓	✓	×	×	×	✓
360200	Prepared explosives	✓	✓	✓	✓	✓	✓	✓	✓	✓

Code	Product	SACU	CEMAC	ECOWAS & Mauritania	Seychelles	Morocco	Malawi	Algeria	Mauritius	Madagascar
120740	Sesamum seeds	✓	✓	✓	✓	✓	✓	✓	✓	✓
721420	Bars & rods of iron or non-alloy steel	✓	×	✓	✓	✓	✓	✓	✓	✓
060210	Unrooted cuttings & slips	✓	✓	✓	✓	✓	✓	✓	✓	✓
252390	Cement	✓	✓	✓	✓	✓	✓	✓	✓	×
220300	Beer made from malt	✓	×	✓	✓	✓		✓	✓	×
151211	Crude sunflower-seed or safflower oil	✓	×	✓	✓	✓	✓	✓	✓	×
040590	Dairy fats & oils	✓	×	✓	✓	✓	✓	×	×	✓
482190	Paper(-board) labels, non-printed	✓	✓	✓	✓	✓	✓	✓	✓	✓
4407Xa	Coniferous wood, sawn/chipped lengthwise, >6 mm	✓	✓	✓	✓	✓	✓	✓	✓	✓
731700	Nails of iron or steel	✓	✓	✓	✓	✓	✓	✓	✓	✓
401140	Rubber pneumatic tyres for motorcycles, new	✓	✓	✓	✓	✓		✓	✓	×
0304Xd	Frozen fish fillets, n.e.s.	✓	✓	✓	✓	✓	✓	✓	✓	✓
150790	Soya-bean oil (excl crude) & fractions	×	×	✓	✓	✓		×	×	×
691090	Ceramic sanitary fixtures, n.e.s.	✓	✓	✓	✓	✓	✓	×	×	✓
330590	Preparations for use on the hair, n.e.s.	×	×	✓	✓	✓	✓	✓	✓	✓
3002XX	Human & animal blood, blood fractions & immunological products	✓	✓	✓	✓	✓	✓	✓	✓	✓

Data Source: International Trade Centre's Export Potential Map (2023)

\*\*✓ for liberalized products; × for not liberalized, sensitive or excluded\*\*

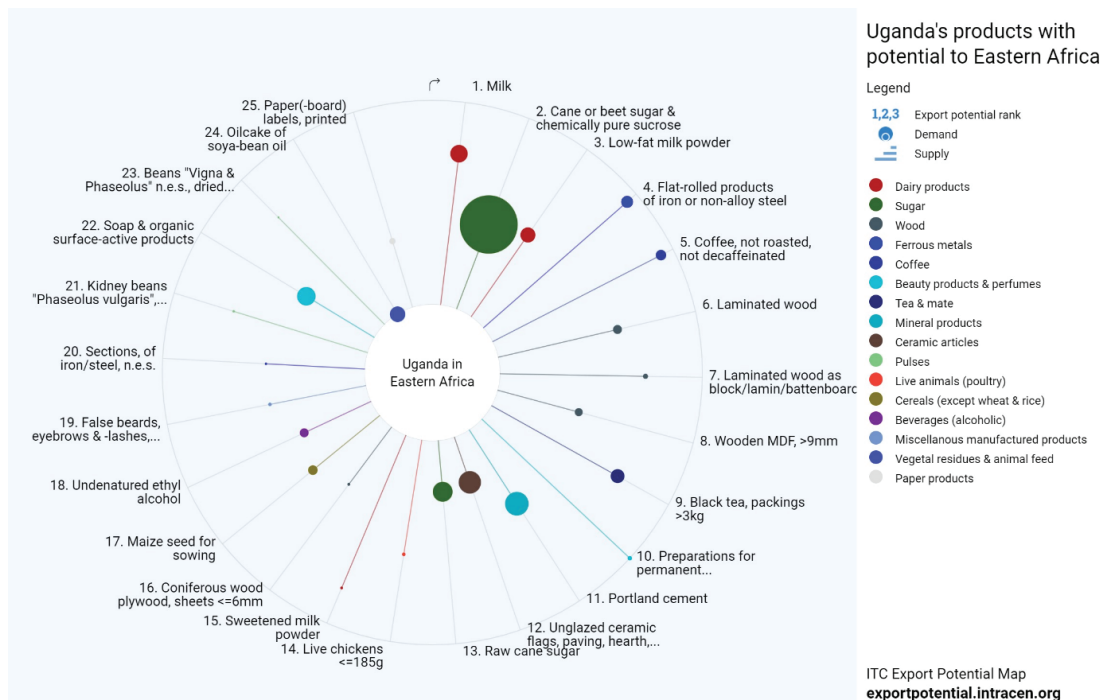
**Table A5: Analysis of the offers under the AfCFTA and the top 50 products for diversification in Africa**

Rank	Code	Produce Description	SACU	CEMAC	ECOWAS & Mauritania	Seychelles	Morocco	Malawi	Algeria	Mauritius	Madagascar
1	100630	Semi-milled or wholly milled rice	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	151110	Crude palm oil	✓	×	✓	✓	✓	✓	✓	✓	×
3	3103XX	Superphosphates	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	730661	Tubes of iron/steel, welded, rectangular cross-section	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	330210	Mixtures of odoriferous substances used in food & drink	✓	×	✓	✓	✓	✓	✓	✓	✓
6	310520	Mineral or chemical fertilisers	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	640220	Footwear, rubber/plastic soles & uppers	×	✓	✓	✓	✓	✓	✓	✓	✓
8	0102	Live bovine animals	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	1001Xb	Wheat (excl durum) & meslin	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	701090	Carboys & other glass containers	✓	✓	✓	✓	✓	✓	✓	✓	✓
11	020230	Bovine cuts boneless, frozen	×	×	✓	✓	✓	×	✓	✓	✓
12	392490	Household/toilet articles, of plastics, n.e.s.	×	×	✓	✓	✓	✓	✓	✓	✓
13	721061	Flat-rolled products of iron or non-alloy steel	✓	✓	✓	✓	✓	✓	✓	✓	×
14	360500	Matches	✓	×	✓	✓	✓	✓	✓	✓	✓
15	482020	Exercise books of paper(-board)	✓	×	✓	✓	✓		✓	✓	✓
16	170490	Sugar confectionery not containing cocoa	×	×	✓	✓	✓		×	✓	✓
17	310590	Mineral or chemical fertilisers	✓	✓	✓	✓	✓	✓	✓	✓	✓
18	151710	Margarine (excl liquid)	✓	×	✓	✓	✓	×	✓	✓	✓
19	071310	Peas, dried & shelled	✓	✓	✓	✓	✓	✓	✓	✓	×
20	2202XX	Non-alcoholic beverages	✓	×	✓	×	✓	✓	✓	✓	×
21	0907	Cloves	✓	✓	✓	✓	✓	✓	✓	✓	×
22	100640	Broken rice	✓	✓	✓	✓	✓		✓	✓	✓
23	690100	Ceramic construction goods, of siliceous metals	✓	✓	✓	✓	✓		✓	✓	✓
24	230610	Oilcake of cotton seeds	✓	✓	✓	×	✓		✓	✓	✓
25	170410	Chewing gum	×	×	✓	✓	✓		✓	✓	✓

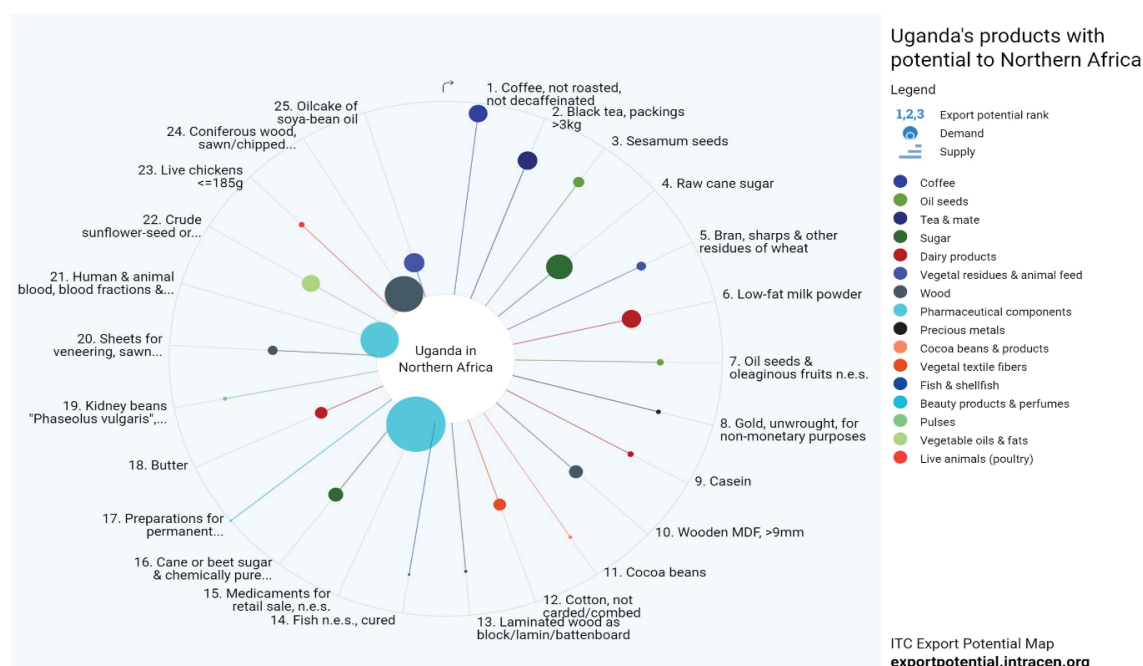
Rank	Code	Produce Description	SACU	CEMAC	ECOWAS & Mauritania	Seychelles	Morocco	Malawi	Algeria	Mauritius	Madagascar
26	310230	Ammonium nitrate	✓	✓	✓	✓	✓	✓	✓	✓	✓
27	110620	Flour, meal & powder of sago, roots or tubers	✓	✓	✓	✓	✓	✓	✓	✓	✓
28	720260	Ferro-nickel	✓	✓	✓	✓	✓	✓	✓	✓	✓
29	2009XX	Juice of fruit or vegetables, unfermented	×	×	✓	✓	✓	×	✓	✓	✓
30	03XXX	Aquatic invertebrates & edible meals, n.e.s.	✓	✓	✓	✓	✓	✓	✓	✓	✓
31	690490	Ceramic flooring blocks	✓	✓	✓	✓	✓	✓	✓	✓	×
32	760120	Aluminium alloys, unwrought	✓	✓	✓	✓	✓	✓	✓	✓	✓
33	732119	Appliances for cooking with solid fuel	✓	✓	✓	✓	✓	✓	✓	✓	✓
34	210690	Food preparations	✓	×	✓	✓	✓	✓	✓	✓	✓
35	210390	Preparations for sauces & prepared sauces	✓	×	✓	✓	✓	✓	✓	✓	✓
36	340250	Surface-active & washing preparations, for retail	×	×	✓	✓	✓	×	✓	✓	✓
37	382319	Fatty acids, industrial, monocarboxylic; acid oils from refining	✓	✓	✓	✓	✓	✓	✓	✓	✓
38	480411	Unbleached kraftliner, uncoated, in rolls >36cm	✓	✓	✓	✓	✓	✓	✓	✓	✓
39	220890	Ethyl alcohol of an alcoholic strength of <80% vo	✓	×	✓	×	✓	✓	✓	✓	×
40	530500	Coconut, abaca Manila hemp, ramie, agave & other vegetable fibres	✓	✓	✓	✓	✓	✓	✓	✓	×
41	010420	Live goats	✓	✓	✓	✓	✓	✓	✓	✓	✓
42	340111	Soap & organic surface-active products, for toilet use	×	×	✓	✓	✓	✓	✓	✓	×
43	1001Xa	Durum wheat	✓	✓	✓	✓	✓	✓	✓	✓	✓
44	230240	Bran, sharps & other residues of cereals	✓	✓	✓	✓	✓	✓	✓	✓	✓
45	392410	Table/kitchenware, of plastics	×	×	✓	✓	✓	✓	✓	✓	✓
46	390210	Polypropylene, in primary forms	✓	✓	✓	✓	✓	✓	✓	✓	✓
47	190219	Uncooked pasta, not containing eggs	×	×	✓	✓	✓	✓	✓	✓	✓
48	640192	Waterproof footwear, covering the ankle, rubber/plastic soles &	×	✓	✓	✓	✓	✓	✓	✓	✓
49	854449	Electric conductors <= 1.000V, not fitted with connectors	✓	✓	✓	✓	✓	✓	✓	✓	✓
50	630510	Sacks & bags of jute & bast fibres for packing	✓	✓	✓	✓	✓	✓	×	✓	×

Data Source: International Trade Centre's Export Potential Map (2023)

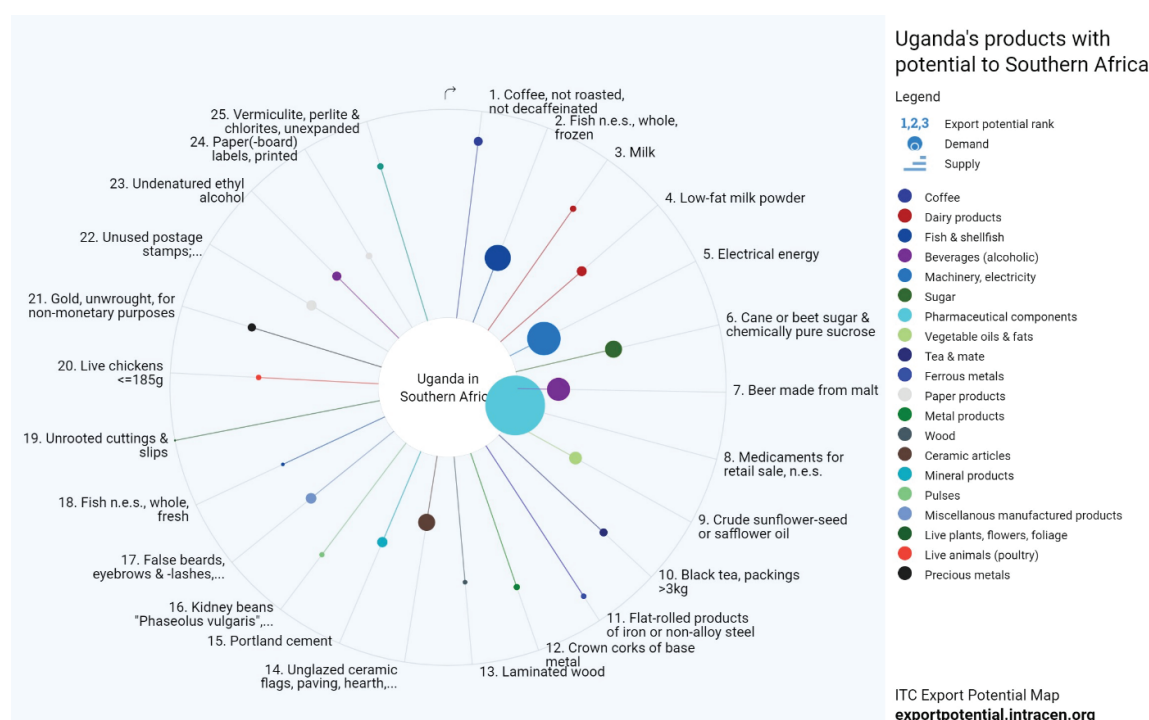
Figure A1: Uganda's Top 25 Potential Products for Export Diversification in Eastern Africa



**Figure A2: Uganda's Top 25 Potential Products for Export Diversification in Northern Africa**

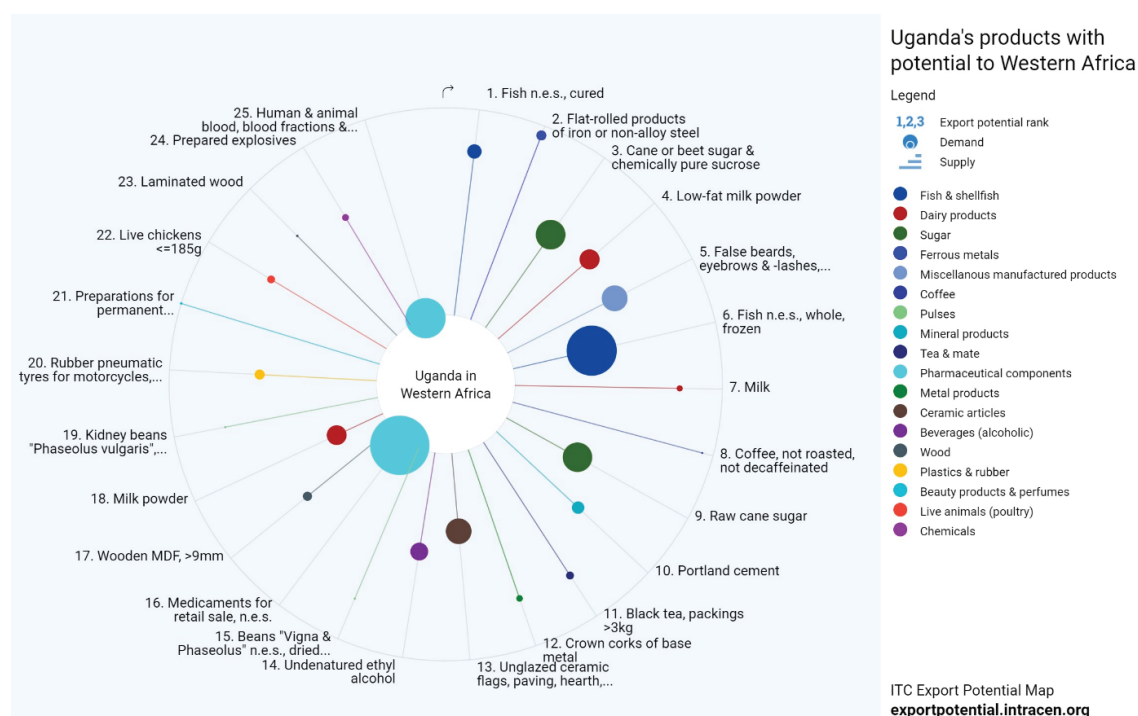


**Figure A3: Uganda's Top 25 Potential Products for Export Diversification in Southern Africa**

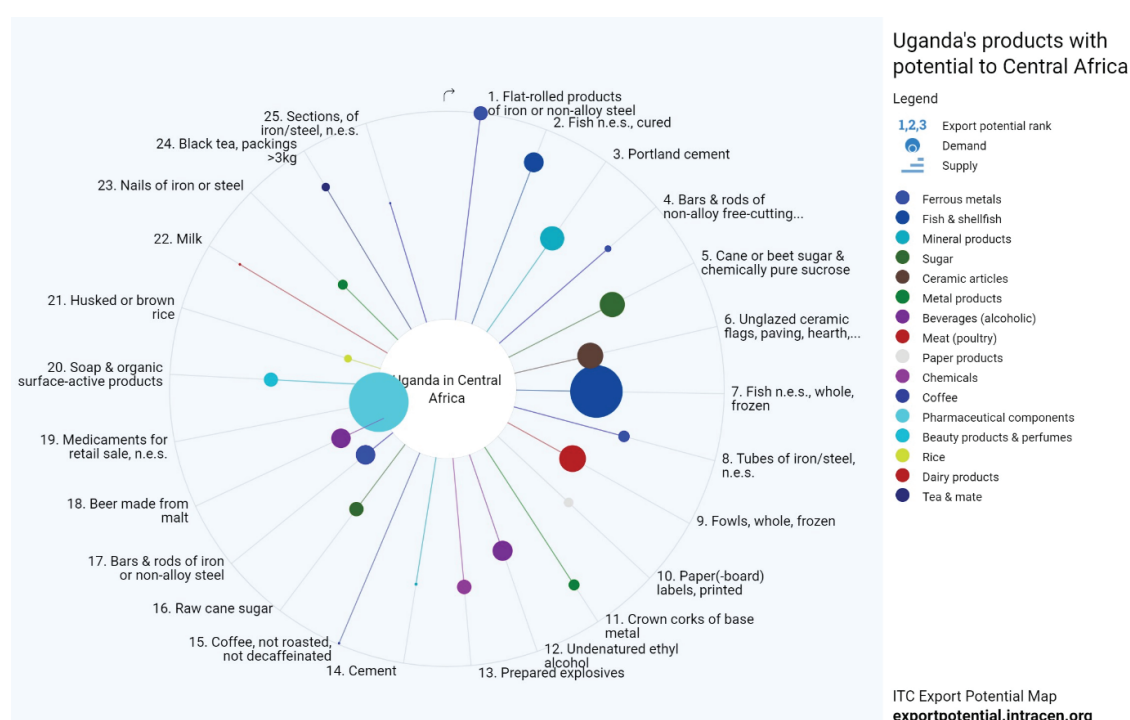




**Figure A4: Uganda's Top 25 Potential Products for Export Diversification in Western Africa**



**Figure A5: Uganda's Top 25 Potential Products for Export Diversification in Central Africa**









**Economic Policy Research Centre**

Plot 51, Pool Road, Makerere University Campus  
P.O. Box 7841, Kampala, Uganda

Tel: +256-414-541023/4, Fax: +256-414-541022

Email: [eprc@eprcug.org](mailto:eprc@eprcug.org), Web: [www.eprcug.org](http://www.eprcug.org)