

## Upgrading Ugandan Exports: Opportunities for Value-added Diversification







# UPGRADING UGANDAN EXPORTS

## OPPORTUNITIES FOR VALUE-ADDED DIVERSIFICATION



International  
Trade  
Centre



UN-OHRLS

# About the paper

This diagnostic study was prepared as part of the project titled “Strengthening the capacity of LDCs to formulate policies on trade diversification for resilient recovery from the COVID-19 pandemic and implementation of the Doha Programme of Action through South-South cooperation and multi-stakeholder partnerships”. The project aims to enhance the capacity of participating LDCs to formulate policies on export diversification and achieve trade related goals and targets of the Doha Programme of Action for the LDCs (DPoA).

Funded by the UN Peace and Development Fund, the project identifies three pilot countries, Bangladesh, Rwanda, and Uganda, to conduct diagnostic studies on export diversification. LDCs face significant challenges in achieving sustained and resilient economic development. While a few LDCs have succeeded in making some progress in economic structural transformation, the majority of them urgently need to build productive sectors with high export potential and increase export diversification in order to achieve sustained and resilient development and withstand external shocks. The DPoA addresses these needs by setting ambitious targets in the decade of action for LDCs to increase their trade competitiveness and export diversification.

Despite significant export growth over the past two decades, Uganda remains dependent on a limited range of minimally processed commodities. This report explores Uganda's potential to diversify its exports and enhance value addition through targeted development of high-potential value chains. The analysis identifies key value chains—processed foods, animal feed, and beauty and personal care products—that offer opportunities for value-added growth. To address the barriers that hinder the realization of this potential, the report recommends policy actions focusing on infrastructure development, enhancing financial inclusion, strengthening quality and compliance systems, and fostering capacity building. Additionally, climate resilience, digital trade, public-private dialogue, and regional integration, particularly through AfCFTA, are highlighted as critical to sustainable export diversification. The strategies put forward by the diagnostic study aim to promote long-term economic growth, address external vulnerabilities, and achieve greater resilience in Uganda in a dynamic global trade landscape.

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# Acronyms

AfCFTA	African Continental Free Trade Area
AGR	African Gold Refinery
AGOA	African Growth and Opportunity Act
AU	African Union
BSOs	Business Support Organizations
CDP	Committee for Development Policy
COMESA	Common Market of Eastern and Southern Africa
DDA	Dairy Development Authority
DCM	Digital Conformity Marking
DPoA	Doha Programme of Action
DTIS	Diagnostic Trade Integration Study
DCM	Digital Conformity Marking
EAC	East African Community
EAMU	East African Monetary Union
EBA Scheme	Everything But Arms Scheme
EVI	Economic and Environmental Vulnerability Index
EU	European Union
EUDR	European Union Deforestation Regulation
FDI	Foreign Direct Investment
GSP	Global System of Preferences
GDP	Gross Domestic Product
GNI	Gross National Income
HS	Harmonized System
HHI	Herfindahl-Hirschman Index
HAI	Human Assets Index
ICT	Information and Communications Technologies
IPR	Intellectual Property Rights
ITC	International Trade Centre
KCCA	Kampala Capital City Authority



LDC	Least Developed Country
LLDC	Landlocked Developing Country
LPI	Logistics Performance Index
MTIC	Ministry of Trade, Industry, and Cooperatives
NEMA	National Environmental Management Authority
NIRS	Near-Infrared Reflectance Spectrophotometry
NTMs	Non-Tariff Measures
QMark	Quality Mark
PSFU	Private Sector Foundation Uganda
R&D	Research and development
RoO	Rules of Origin
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MFN	Most-Favoured Nation
MTNC	Multilateral Trade Negotiation Categories
NDPIII	National Development Plan
SADC	Southern African Development Community
SITC	Standard International Trade Classification
SMEs	Small and Medium Enterprises
SPS	Sanitary and Phytosanitary Standards
UAFMA	Uganda Animal Feeds Manufacturers Association
UDB	Uganda Development Bank
UIRI	Uganda Industrial Research Institute
UNBS	Uganda National Bureau of Standards
URA	Uganda Revenue Authority
USB	Uganda Registration Services Bureau
WTO	World Trade Organization

# Executive summary

Diversification through the promotion of value-added exports and structural transformation is critical for countries to reduce vulnerability to external shocks, enhance resilience, and foster sustainable growth. This is particularly important for least developed countries (LDCs) and landlocked developing countries (LLDCs), which despite progress in expanding their export baskets over the past two decades, often remain heavily dependent on commodity exports.

Recognizing this, the Doha Programme of Action (DPoA) highlights structural transformation and integration into international markets to empower LDCs to transition from resource-dependent economies to diversified, value-added, and competitive participants in global trade. Similarly, the Programme of Action for Landlocked Developing Countries (2024–2034) complements these efforts by focusing on fostering economic diversification and enhancing trade through industrialization, innovation, and technology adoption. This program of action prioritizes regional integration to overcome geographic challenges and unlock new trade opportunities for LLDCs.

As both an LDC and an LLDC, Uganda faces unique challenges related to its geography and structural development that underscore the urgency of diversification. This is a crucial moment for Uganda to intensify its diversification efforts. The renewed support reflected in the DPoA and the Programme of Action for Landlocked Developing Countries (2024–2034) provides a strong foundation in this regard. Furthermore, the ongoing implementation of the African Continental Free Trade Area (AfCFTA) offers a timely opportunity for Uganda to integrate into a larger market, boosting its competitiveness and potentially expanding its export base. Additionally, Uganda's progress towards LDC graduation—having met the criteria for the first time in March 2024—highlights the importance of developing diversified exports that can navigate potential changes in trade preferences and maintain economic momentum.

This study, *“Upgrading Ugandan Exports: Opportunities for value-added diversification”*, outlines key pathways for Uganda to enhance value-added exports in high-potential sectors, with a focus on three primary areas: animal feed, beauty and personal care products, and processed foods and beverages. Through targeted policy measures and strategic investment, Uganda can reduce its dependence on commodity exports, minimize exposure to global price fluctuations, generate employment opportunities, capitalize on emerging global markets, and foster long-term sustainable economic growth.

## *Uganda's export diversification trends*

Over the past two decades, trade has played an increasingly significant role in Uganda's economy, with its share in GDP growing from 14% in 2001 to 21% in 2022. During this period, exports grew more than tenfold, accompanied by an increase in both the variety of distinct products exported and the number of markets reached. However, exports have remained concentrated in a limited range of products, with minimal processing, and directed to a few key markets. This trend has been driven by a surge in gold exports, particularly to the Middle East, and the continued prominence of coffee, unprocessed vegetal products, and horticulture in exports to Europe and Asia. In contrast, exports to neighbouring countries in Eastern and Central Africa have shown greater diversification and a higher proportion of processed goods. These regional exports grew to account for over a third of Uganda's exports between 2018 and 2022, stand out for their diversification and higher share of processed goods. This shift highlights the growing significance of intra-regional trade as a vital avenue to foster structural transformation through value-added exports.

## *Opportunities and challenges in promising value chains: a data-driven approach*

The International Trade Centre (ITC) employed a comprehensive data-driven methodology to pinpoint high-potential value chains in Uganda that hold promise for increasing exports and fostering domestic value addition. This involved assessing their feasibility and desirability based on the local input availability, transformation capabilities, and demand prospects. The key value chains identified were processed foods and animal feed, leveraging Uganda's agricultural base, and beauty and personal care products, capitalizing on natural ingredients and addressing the growing demand for health- and environmental-conscious products.

This strategic focus aligns with Uganda's need to diversify its exports and move up the value chain, potentially reducing its reliance on raw commodity exports and enhancing its economic resilience.

To better understand any existing impediments to realising the potential of the three selected value chains, ITC conducted surveys and workshop consultations with businesses along them. These engagements revealed both sector-specific issues and cross-cutting challenges. Inadequate road networks and unreliable electricity drive up

production costs and erode competitiveness, as do high input costs and burdensome local regulation, while restricted access to affordable credit and stringent collateral requirements hinder investment and growth. Compliance with international standards remains a significant obstacle, especially in agriculture-based food sectors, due to high certification costs and insufficient market intelligence. Skill gaps in areas like product development and marketing limit businesses' capacity to diversify and scale. Addressing these challenges is crucial to enhance competitiveness and unlock the full potential of Uganda's value chains. Concerted efforts are essential to overcome these challenges, to enhance competitiveness and unlock the full potential of Uganda's value chains.

#### *Policy areas to unlock Uganda's value-added export potential*

Building on the analysis of key value chains and the challenges identified, the following policy actions are proposed to address critical bottlenecks and foster export diversification and value addition in Uganda:

- *Developing infrastructure for value chain growth:* addressing infrastructure deficits in transportation, energy, and logistics is critical for reducing production costs and enhancing competitiveness. Key actions include upgrading road networks, expanding reliable electricity supply, and developing affordable storage facilities to minimize post-harvest losses. Expanding ICT infrastructure to boost digital inclusion and integrating climate resilience into infrastructure planning are also essential.
- *Improving access to affordable finance:* establishing dedicated low-interest credit facilities, offering tax incentives to financial institutions, and promoting digital financial services such as mobile banking and crowdfunding can enhance financial inclusion.
- *Strengthening quality and compliance:* expanding access to testing facilities, simplifying certification processes, and supporting the adoption of green practices can enhance export competitiveness. Promoting traceability and transparency in product origins can unlock new market opportunities and ensure higher-quality exports.
- *Building skills and SME capacity:* strengthening capacity through specialized training programs and export readiness initiatives is essential for improving competitiveness. Expanding mentorship programs, fostering partnerships between large firms and SMEs, and supporting marketing and branding skills will enable businesses to better access international markets and diversify their products.
- *Leveraging e-commerce and digital solutions:* e-commerce offers significant potential for Uganda to overcome geographic barriers and access regional and global markets. Key priorities include expanding broadband access, developing local e-commerce marketplaces, and training businesses in digital marketing and online content management. Ensuring consumer protection and enhancing enforcement of intellectual property rights will further strengthen Uganda's digital trade ecosystem.
- *Mainstreaming climate adaptation and mitigation:* climate resilience is vital for Uganda's agriculture-based value chains. Integrating climate adaptation and mitigation strategies into infrastructure, finance, and capacity-building initiatives can safeguard investments and enhance competitiveness.
- *Fostering public-private dialogue and partnerships:* robust public-private dialogue is crucial for aligning policies with business needs and addressing export barriers. Establishing sector-specific working groups, holding regular roundtables, and developing digital platforms for real-time feedback can strengthen collaboration and drive better policy implementation.
- *Advancing regional integration and South-South trade:* intra-regional trade within Africa offers significant opportunities for Uganda to scale up production and diversify exports. Streamlining export procedures and harmonizing regional trade policies will reduce trade barriers and enhance connectivity. Expanding South-South trade partnerships can unlock new markets, facilitate technological transfer, and foster greater value addition, helping Uganda build a more resilient and interconnected trade framework.

#### *Embracing opportunities for sustainable growth*

While persistent challenges related to infrastructure, financing, skills, and regulatory compliance need to be addressed, the opportunities for value-added growth are substantial. The proposed policy actions aim to address these obstacles while integrating broader critical priorities, including climate action, e-commerce, and leveraging intraregional and South-South trade opportunities. As Uganda advances towards LDC graduation, these actions provide a strategic roadmap for enhanced public-private collaboration that fosters evidence-based policymaking, and targeted investments and technical assistance that can support ongoing efforts to promote export diversification and value addition—key drivers for achieving long-term economic growth and enhancing Uganda's resilience in the global marketplace.





## CHAPTER 1

# THE EXPORT DIVERSIFICATION LANDSCAPE IN UGANDA

# CHAPTER 1

## THE EXPORT DIVERSIFICATION LANDSCAPE IN UGANDA

While the efficiency benefits of specialization cannot be overlooked, diversification is critical for countries to enhance their resilience, foster sustainable growth, and reduce vulnerability to external shocks. This is particularly important for least developed countries (LDCs) and landlocked developing countries (LLDCs) like Uganda, which often rely heavily on commodity exports.

Heavy reliance on a narrow export base exposes economies to significant risks, including fluctuations in export earnings due to price volatility, the imposition of unexpected trade barriers, and the emergence of more cost-effective foreign suppliers. Since commodity prices and their global demands are generally more volatile than those of other goods, the reliance on commodity exports intensifies the vulnerability to shocks brought on by the concentration of exports.<sup>1</sup> Additionally, the concentration on commodity exports can make countries more prone to Dutch disease phenomena, and the limited linkages of commodities with other sectors of the economy make their potential for beneficial spillovers, value-addition and generalized growth, limited.<sup>2</sup>

Diversification, on the other hand, spreads these risks, making economies more resilient to external shocks and fostering more stable terms of trade, export and government revenues, and gross domestic product (GDP). This stability is crucial to sustain economic growth, boost employment rates, and manage macroeconomic challenges such as investment planning, foreign exchange reserves, inflation, and debt repayment. In line with this, export diversification has been shown to mitigate the possible adverse effects of economic openness, and to be positively correlated with economic growth, particularly in developing economies. Export diversification is also closely linked to structural transformation and long-term economic development.<sup>3</sup> Shifting towards higher value-added or more processed goods can significantly increase export revenues, driving economic development and raising per capita income, especially in LDCs. This shift also encourages investments in technological advancements and skill development, strengthens economic linkages, fosters knowledge spillovers, and improves productivity and efficiency and ultimately higher long-term growth.

Over the last two decades, LDCs have made progress in expanding their export baskets, yet they remain highly concentrated in exports with limited processing, and increasingly in less markets as well. Diversification through the promotion of higher value-added exports, structural transformation and broader market reach is crucial to reduce the risks they face and support their long-term economic development.<sup>4</sup> In line with this, the *Doha Programme of Action* (DPoA) highlights the importance of empowering LDCs to transition from resource-dependent economies to diversified, value-added, and competitive participants in global trade, emphasizing structural transformation and integration into international markets. Similarly, the *Programme of Action for Landlocked Developing Countries (2024–2034)* complements these efforts by focusing on fostering economic diversification and enhancing trade through industrialization, innovation, and technology adoption. Its goals include doubling manufacturing value-added

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<sup>1</sup> The theoretical foundations and empirical evidence supporting these links have been extensively examined in the literature. See, for example, Samen (2010) for an overview of the theoretical underpinnings of export diversification, UNDP (2011) for an analysis on the risks of export concentration in commodities, UNCTAD (2022) for an overview of diversification in Africa, McIntyre, Li, et al. (2018) for the benefits of diversification in small states, Haddad, Lim, and Saborowski (2010) for the link between diversification and volatility from openness, and Agosin (2009), Al-Marhubi, F. (2000), and Calen, Cherif, et al. (2014) for evidence on the link between diversification and growth in emerging economies.

<sup>2</sup> Dutch disease is an economic phenomenon that occurs when a country experiences a large influx of foreign currency, typically due to the discovery of natural resources like oil or gas, but also applicable to other sectors. This influx causes the domestic currency to appreciate, making the country's other exports more expensive and less competitive in global markets. As a result, other sectors suffer, leading to a decline in other industries and potential long-term economic stagnation or instability.

<sup>3</sup> For empirical evidence on these links, see for example Lederman and Maloney (2009) and Pineros and Ferrantino (2000).

<sup>4</sup> Events of recent years, in particular the COVID-19 pandemic and the conflict in Ukraine, have come to highlight additionally the importance of the diversification of import suppliers.

to GDP, expanding medium- and high-tech industries, improving agricultural value chains, and increasing service and digital trade. Regional integration is also prioritized to mitigate geographic challenges and unlock trade opportunities.

Uganda, as both an LDC and an LLDC, faces unique challenges, such as high transport costs and limited integration into regional and global value chains, that underscore the urgency of diversification. With commodities dominating its exports, diversification and value addition are not just important but essential. Uganda's Ministry of Trade, Industry, and Cooperatives (MTIC) has long recognized this need, holding a mandate to formulate and support 'policies, strategies, plans and programs that promote and ensure expansion and diversification of trade...'.<sup>5</sup>

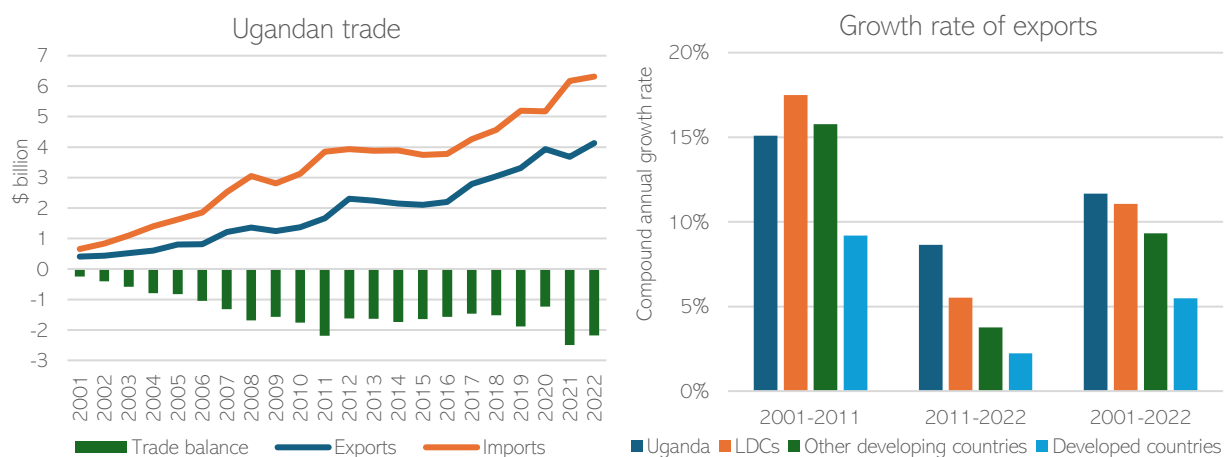
Despite remaining challenges related to its geography and structural development, it is now a momentous time for Uganda to reinforce its diversification efforts and leverage existing and emerging opportunities. In addition to the renewed vigour and support for these efforts reflected in the *DPoA* and the *Programme of Action for Landlocked Developing Countries (2024-2034)*, the ongoing implementation of the African Continental Free Trade Area (AfCFTA) presents a timely opportunity for Uganda to integrate into a larger market, boosting its competitiveness and possibly expanding its export base. Moreover, Uganda's recent progress toward graduating from LDC status—having met the criteria for the first time in March 2024—highlights the urgency of developing a diversified export strategy to navigate potential changes in trade preferences and maintain economic momentum.

In this context, this report begins with an overview of the export diversification landscape in Uganda (Chapter 1). It then presents a selection of value chains that offer opportunities for more processed and higher value-added exports, identified through a dedicated ITC methodology (Chapter 2). The subsequent chapters (3-6) explore the specific challenges faced by businesses within some of these value chains to realize their potential. Chapter 7 discusses policy options to address those challenges and support Uganda's continued diversification efforts.

## Overview of Uganda's export diversification landscape

Over the past two decades, trade has played an increasingly significant role in Uganda's economy. The share of trade in GDP has grown from 14% in 2001 to 21% in 2022, reflecting the country's greater openness to global markets. During this period, Uganda experienced a positive trend in both exports and imports, as illustrated in Figure 1, left.

**Figure 1** Evolution of Ugandan trade in the last two decades



**Source:** Authors' calculations based on ITC Trade Map (2023).

Between 2001 and 2011, exports from Uganda grew at an average annual rate of 15%. However, this was outpaced by imports, which increased by 19% annually. This disparity resulted in a growing trade deficit, which expanded from \$248 million in 2001 to \$2.2 billion in 2011.<sup>5</sup>

From 2011 onwards, the dynamics of Uganda's trade began to shift. The growth rates for both exports and imports slowed considerably, with exports growing at 9% per year and imports at 5% per year. This deceleration led to a

<sup>5</sup> Growth rates refer to compound annual growth rates.



stabilization of the trade deficit, which fluctuated between \$1.2 billion and \$1.8 billion during this period. However, the trade deficit widened sharply again in 2021 and 2022, clearly surpassing the \$2 billion mark.

The evolution of Ugandan trade between 2001 and 2022, as shown in Figure 1 (left), generally mirrors the pattern of accelerated growth followed by a slowdown experienced globally over the past two decades. This is widely understood to have been driven by commodity price cycles and the emergence of China in international markets. However, Uganda's export performance during that period stands out, with exports multiplying more than tenfold—significantly surpassing the growth in LDCs (9.1 times), other developing countries (6.5 times), and developed countries (3.1 times). This difference is driven by a less pronounced slowdown of Uganda's export growth between 2011 and 2021 compared to other groups (Figure 1, right).

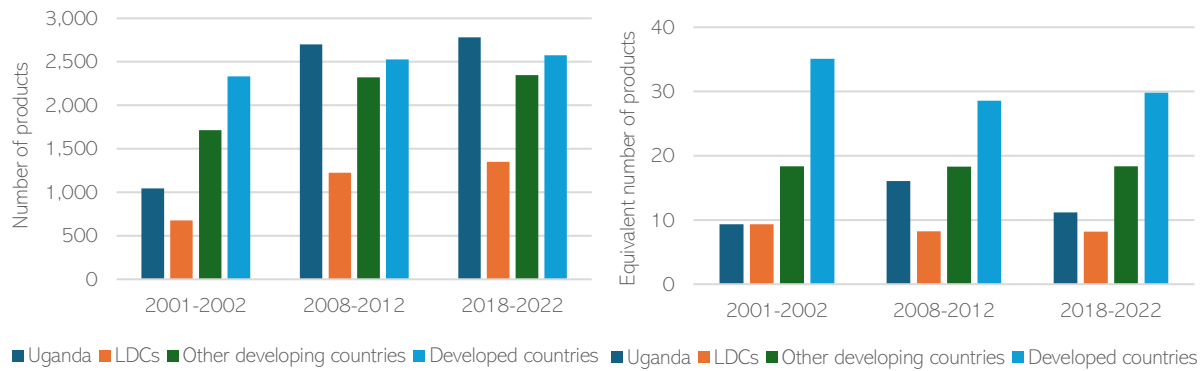
While Ugandan exports have been shown remarkable resilience in maintaining their growth momentum, much of this success has been driven by a surge in gold exports in recent years (Box 1), which has also heightened the country's vulnerability to commodity price volatility and reliance on a narrower range of markets, as discussed later.

Ugandan exports have gained variety, but concentration remains an issue

When considering the number of products exported as an indicator of export diversification (Figure 2, left), we observe that over the past two decades, LDCs have significantly expanded their export baskets—from an average of 675 distinct products in the early 2000s to 1,224 a decade later and 1,351 more recently.<sup>6</sup> However, a substantial gap remains compared to other developing and developed countries, which exported an average of 2,347 and 2,575 products, respectively, between 2018 and 2022.

Uganda's export diversification lagged behind that of other developing and developed countries in the early 2000s. However, Uganda has seen a significant increase in the number of products it exports, from approximately 1,000 in 2001-2002 to around 2,800 in 2018-2022 (Figure 2, left). This variety is comparable to that of other developing and developed countries, and above the figures for LDCs, which have, on average, exported a narrower range of products.

Figure 2 Product diversification of exports of Uganda and other country groups



**Note:** Products are counted at the 6-digit level of the Harmonised System. The equivalent number of products is computed as the reciprocal of the Herfindahl-Hirschman index (HHI) that measures the concentration of the export basket with respect to products. The higher the concentration in a few products, the lower the equivalent number of products, and consequently the lower the diversification.

**Source:** Authors' calculations based on ITC Trade Map (2023).

More importantly, the sheer number of products cannot fully capture export concentration, which is more accurately reflected by the equivalent number of products exported (Figure 2, right).<sup>7</sup> According to this measure, LDC exports

<sup>6</sup> Throughout this chapter, the evolution of various indicators from 2001 to 2022 will be analysed using three key data points: the averages for the periods 2001-2002, 2008-2012, and 2018-2022, representing the starting, midpoint, and endpoint of the two decades under consideration. Note that the starting point average includes only two years due to data availability, while the midpoint and endpoint averages cover five years each.

<sup>7</sup> The equivalent number of products is computed as the reciprocal of the Herfindahl-Hirschman index (HHI) that measures the concentration of the export basket with respect to products. It is interpreted as a normalized number of products, i.e. the number of products that would generate the current concentration of exports, if they all had the same share in exports.

are not only more concentrated on average than those of other developing and developed countries, but they have also remained as concentrated—or even slightly more so—than they were two decades ago.

For Uganda, while the number of products exported has increased, the equivalent number of products, which accounts for export concentration, tells a different story. Uganda's equivalent number of products increased from around 9 in 2001-2002 to 16 in 2008-2012, only to decline back to 11 in 2018-2022—a count similar to that of LDCs on average. This suggests that, while Uganda has diversified its exports, its export basket remains relatively concentrated compared to other developing and developed countries, which maintain a higher equivalent number of products, indicating less concentration. It is noteworthy that, Uganda's diversification gains have stabilized or even declined in the last decade, as seen by the reduction in the equivalent number of exported products from 2008-2012 to 2018-2022.

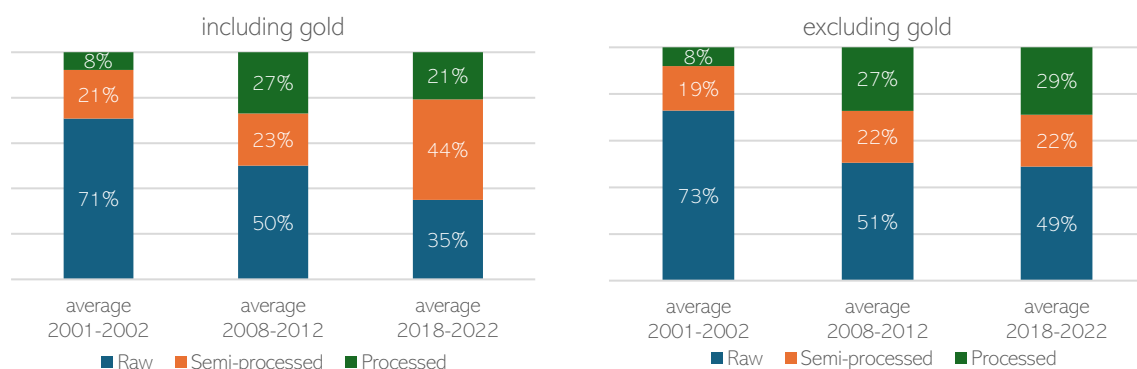
### Persistent commodity dependence despite a shifting export basket

In addition to being more concentrated, exports from LDCs are more often predominantly commodities. From 2018 to 2022, commodities represented on average 63% of LDC exports.<sup>8</sup> In contrast, commodities were on average 35% and 27% of exports from other developing countries and developed countries in the same period, respectively.<sup>9</sup>

As is the case for other LDCs, not only are Uganda's exports concentrated in a limited range of products, but they are also heavily dependent on commodities, which accounted on average for 90% of the country's exports from 2018 to 2022.

When examining the level of processing within Uganda's exports, we observe a notable shift over the past two decades (Figure 3, left). The share of raw materials in exports has declined significantly, from 71% in 2001-2002 to 35% in 2018-2022. This reduction aligns with trends observed in other LDCs, though Uganda's raw material exports still remain higher than those of other developing and developed countries (Figure 3).

**Figure 3** Ugandan exports by processing stage



**Note:** 'Gold' corresponds to HS heading 7108.

**Source:** Authors' calculations based on ITC Trade Map (2023).

This change in composition was counterbalanced by a marked increase in semi-processed exports, from 21% to 44%, and to a lesser extent in processed ones, from 8% to 21%.<sup>10</sup> However, this shift towards semi-processed exports is largely attributable to a surge in the export of semi-manufactured gold in recent years. When gold is excluded from the analysis, the share of raw exports stabilizes at around 50% in recent years (Figure 3, right), highlighting the

<sup>8</sup> ITC Trade Tracker (2024), Commodities are defined as sections 0,1,2,3,4 division 68 and groups 667 and 971 of the SITC Revision 4 classification. The average share of commodities in LDC exports stood consistently close to 75% for many years before 2014 but has stabilised closer to 60% ever since.

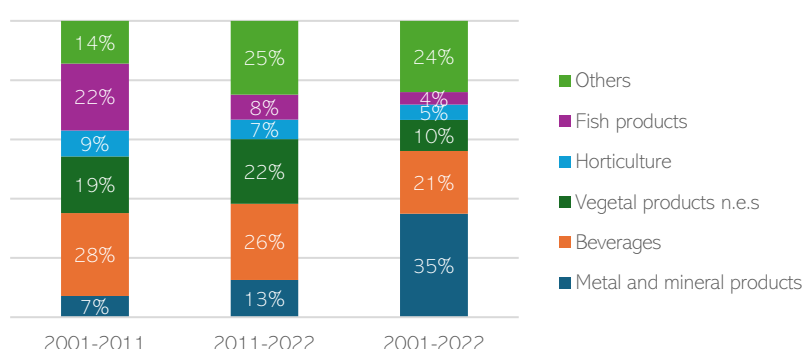
<sup>9</sup> Additionally, over the past two decades exports of raw and semi-processed products have represented between 58% and 75% of LDC exports, while never surpassing 45% for other developing countries or 30% for other developed countries (Figure A. 2), signalling limited domestic value addition.

<sup>10</sup> The increase in the share of processed exports was not driven by a single product, but rather by the dynamic export growth of a number of processed products, among them refined palm oil, wood articles, pharmaceuticals, refined petroleum oils, beer, some dairy products, flavoured waters, etc.

continuing reliance on unprocessed goods in Uganda's export basket.<sup>11</sup> For additional analysis on Uganda's gold exports, see Box 1.

To better understand the evolving composition of Ugandan exports, Figure 4 breaks down exports by sector. The most notable change over the past decades is the significant increase in the share of mineral products, which has risen from 7% to 40% of total exports, primarily driven by a surge in gold exports (Box 1). Despite a decreasing share, the continued importance of beverages in Uganda's export portfolio underscores the ongoing significance of coffee exports. Similarly, although the share of vegetal products has declined from around 20% to 10%, these products—comprising mainly cocoa beans, cane sugar, unprocessed cotton, sesame seeds, palm oil, soybeans, and cotton seeds and linters—remain key contributors to the export basket. Horticultural exports, led by fresh cut flowers, dried beans, unrooted cuttings, and vanilla, also continue to play a substantial role, despite their share shrinking from 9% to 5%. Meanwhile, the share of fish products in Uganda's exports has seen a sharp decline, from 22% in 2001-2002 to 4% in 2018-2022. Although fish exports have remained above \$100 million in the last decade, the sector has struggled to match the dynamism of others, facing challenges such as overfishing and illegal fishing practices.

**Figure 4** Ugandan exports, top 5 sectors



**Note:** 'Others' includes sectors that have not held more than 5% of exports between 2001 and 2022. N.e.s. stands for 'not elsewhere specified'.

**Source:** Authors' calculations based on ITC Trade Map (2023).

Two key points emerge from Figure 4. First, while exports remain heavily concentrated in five sectors, the 'Others' category—which includes sectors that have not surpassed a 5% share over the past two decades—has grown significantly, from 14% in 2001-2002 to 24% in 2018-2022. This suggests a broadening of Uganda's export base into previously less prominent or emerging sectors, indicating some degree of diversification within the export portfolio. Second, it is also noteworthy that the five dominant export sectors are all based on agriculture or minerals, highlighting limited opportunities for value addition or processing, as already indicated in Figure 3.

### Mixed trends in market diversification

Importantly, the exposure to terms-of-trade shocks through exports need not stem only from the concentration on commodity exports but may also be affected by the concentration in few trading partners. If a significant partner is affected by a country-specific shock, exports may in time be redirected to other partners, but this may be costly and take time. Geographical diversification of exports is therefore also important to minimize exposure to external shocks.<sup>12</sup>

Data indicates that over the past two decades, LDCs have expanded their reach to an increasing number of markets, now approaching the range served by other developing and developed countries (Figure 5, left). However, their exports remain slightly more concentrated (Figure 5, right), and notably, this concentration has increased over the same period, indicating that certain trade partners capture increasing shares of LDC exports.

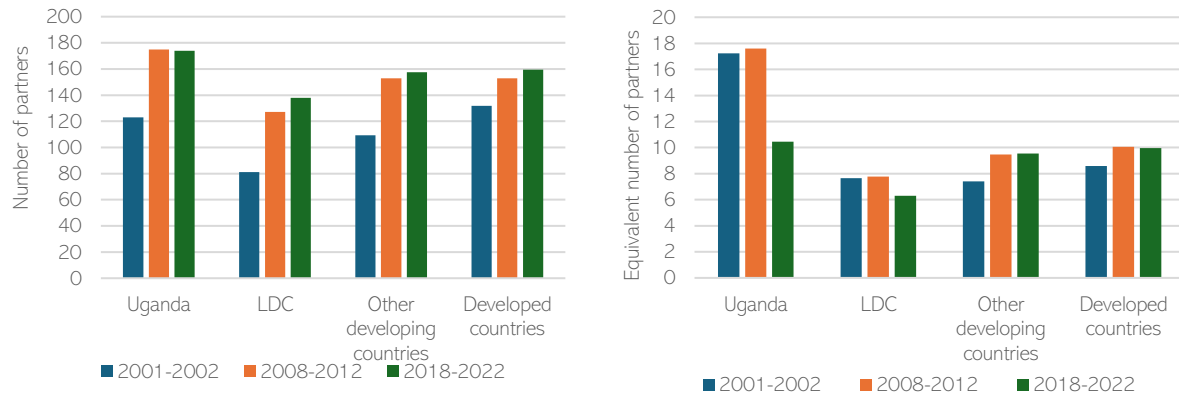
Uganda performs seemingly well in this regard: over the past two decades, the country has expanded its reach to more markets, amply surpassing the average number of export destinations of other country groups (Figure 5, left). Additionally, the market concentration of Uganda's exports, as reflected by the equivalent number of markets (Figure 5, right), is lower than the average for other economies. However, there is cause for emerging concern in the sharp

<sup>11</sup> Analysing the evolution of the composition by technology level, following the categories suggested in Lall (2000), leads to similar observations, as can be seen in Figure A.2.

<sup>12</sup> Bacchetta, et. al (2009).

decline in the equivalent number of markets in recent years, from approximately 17 to close to 10. This drop is linked to the dramatic increase in gold exports to the United Arab Emirates, which has skewed Uganda's export market distribution.

**Figure 5** Partner diversification of exports of Uganda and other country groups



**Note:** The equivalent number of partners is computed as the reciprocal of the Herfindahl-Hirschman index (HHI) that measures the concentration of the export basket with respect to markets. The higher the concentration in a few markets, the lower the equivalent number of markets, and consequently the lower the diversification.

**Source:** Authors' calculations based on ITC Trade Map (2023).

The trends in market diversification and concentration of the past two decades captured in Figure 5 reflect significant changes in the geographical distribution of Uganda's export destinations (Figure 7), which occurred alongside shifts in its export basket during this period.

In the early 2000s, Uganda's export landscape was heavily dominated by trade with Europe, which accounted for 64% of the country's exports. This reflected the historical ties between Uganda and Europe, as well as the demand in European markets for Ugandan agricultural products like fish, tobacco, coffee, and flowers. Asian markets, primarily Hong Kong, Japan and Singapore, received 12% of Uganda's exports, with key products including fish, coffee, tobacco, and raw hides. Within the region, Eastern Africa and Central Africa accounted for 6%-7% of exports each. Uganda's exports to Eastern Africa were mainly tea, electricity, coffee, tobacco, maize, and fish, while exports to Central Africa consisted of cereal flours, soaps, maize, and dried legumes. Other regions, including the Middle East, held minimal shares of Uganda's exports during this period.

A decade later, exports to Europe, still primarily consisting of coffee, fish, flowers, cocoa, and tobacco, had come to represent less than 34% of Uganda's total exports. In contrast, the share of exports to Eastern Africa increased to 30%. While tea, coffee, cane sugar, fats, maize, and tobacco continued to be a large part of export to the neighbouring region, the export basket also began to include a growing proportion of more processed goods, such as cement, soaps, and palm oils. Similarly, the share of exports to Central Africa rose to 14%, featuring not only traditional commodities but also processed products like cement, iron and steel bars, and tubes.

It was also during this period that Ugandan exports to the Middle East, in particular to the United Arab Emirates, started to take off, with gold and fish making up the bulk of these exports. Meanwhile, exports to other Asian countries remained focused on coffee, fish, hides, vegetables, cotton, and tobacco. However, as Uganda expanded its reach in fast-growing Asian markets, significant exports were now also being sent to China, India, and Viet Nam, in addition to long-standing partners like Singapore and Hong Kong.

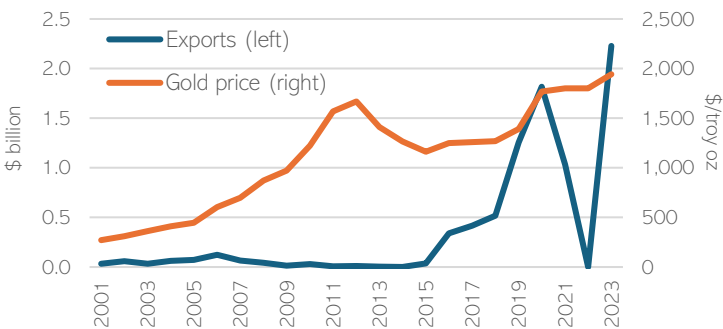
Box 1

The rise of Uganda's gold exports

Gold mining in Uganda has a long history, initially driven by small-scale artisanal miners. While this sector supported local livelihoods, it was often associated with illegal activities and environmental degradation due to inadequate regulatory oversight. Over the years, the lack of a robust legal framework, including periods when mining was banned, limited the potential benefits for both local communities and international investors.

Significant reforms began in the early 2000s, aimed at creating a more liberalized and stable environment for mining. A key turning point came in 2014 with the establishment of the African Gold Refinery (AGR) in Entebbe, which greatly enhanced Uganda's capacity to refine gold domestically. This development led to a dramatic surge in gold exports, propelling the commodity to the forefront of Uganda's export basket (Figure 6). By 2020, gold accounted for over 46% of Uganda's export revenues, far outstripping other commodities. Momentarily interrupted in 2022 due to sanctions on AGR's trade and the suspension of licenses issuance, the gold export boom resumed, supported by the launch of operations at the Busia Gold Mine in 2021, and the upcoming launch of the Wagagai Gold Mine in 2024.

Figure 6 Ugandan exports of gold and gold prices



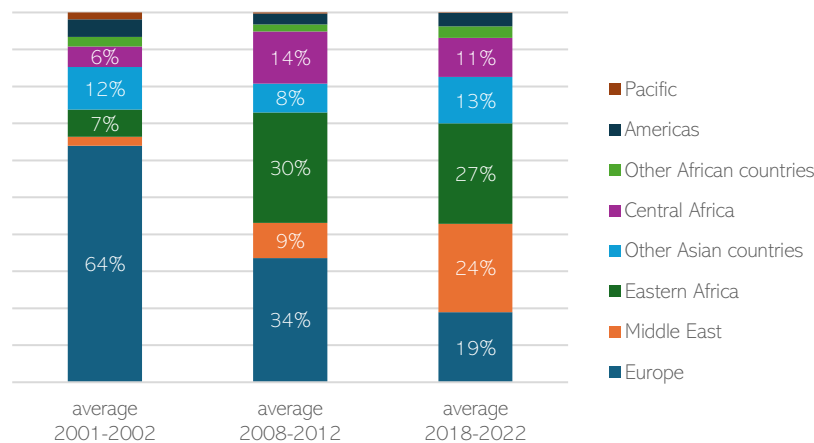
Source: ITC Trade Map (2023) and World Bank Pink Sheet Data (August 2024).

The rapid growth of gold exports after 2015 has become a cornerstone of Uganda's economy, significantly boosting foreign exchange earnings and attracting substantial foreign investment. This influx has spurred infrastructure development and job creation. Moreover, the introduction of modern refineries and mining facilities has enhanced the quality and competitiveness of Uganda's gold in the global market. In tandem, the Ugandan government has taken steps to formalize the gold mining sector, aiming to improve regulatory oversight and ensure that mining contributes effectively to the national economy.

However, the expansion of gold mining activities has led to significant environmental challenges, including deforestation, soil erosion, and water contamination. These activities can adversely impact local agriculture and biodiversity, raising concerns about the long-term sustainability of mining practices. Large-scale mining operations have also displaced communities, particularly affecting small-scale miners and marginalized groups, including women who play a significant role in artisanal mining. Despite efforts to mitigate these impacts, the shift to industrial mining has exacerbated inequalities and disrupted traditional livelihoods. Additionally, the sector has been marred by governance issues, including corruption allegations, illicit trade, and the smuggling of conflict gold from neighbouring countries. Importantly, Uganda's heavy reliance on gold exports exposes its economy to global price fluctuations, risking economic instability.

The surge of Uganda's gold mining industry has undoubtedly brought economic benefits. However, these gains have been accompanied by significant challenges. As Uganda continues to develop its gold sector, it will be crucial to balance the economic advantages with the need for sustainable and inclusive growth, ensuring that the benefits are widely shared and that the environmental impacts are minimized.



**Figure 7** Partner composition of Ugandan exports

**Note:** For a definition of the partner regions, see Appendix III.

**Source:** Authors' calculations based on ITC Trade Map (2023).

In recent years, the European market's share of Uganda's exports continued to decline, settling at 19%. Europe remained an important destination for traditional exports such as coffee, fish, flowers, and cocoa beans. However, during this same period, the Middle East emerged as one of Uganda's dominant export partners, accounting for 24% of total exports, primarily driven by the booming gold trade (Box 1), particularly to the United Arab Emirates.

Eastern Africa also remained a critical market for Uganda, with a 27% share of total exports. The products exported to neighbouring countries in this region included a mix of traditional and processed goods such as coffee, tea, maize, cane sugar, milk and cream, plywood, dried legumes, cereal flours and brans, cement, flat-rolled products of iron or steel, and refined palm oil. Meanwhile, exports to Central Africa accounted for 11% of Uganda's total exports, also featuring a range of processed products such as cement, palm oil, beer, flat-rolled products of iron or steel, and tubes, alongside the more traditional tobacco, rice, and cane sugar.

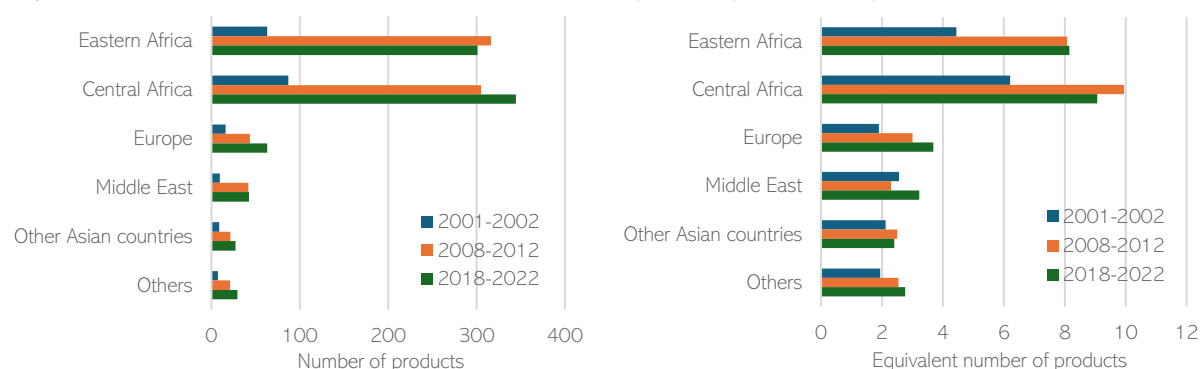
Other Asian markets, which now represent 13% of Uganda's total exports, continued to focus on less processed products like cocoa beans, fish, coffee, cotton, and oilseeds.

Overall, the evolution of Uganda's export market composition reflects diversification in terms of markets, with the country reaching an increasing number of destinations, for example in Asia. Despite this positive trend, there are still regions, in particular certain parts of Africa, that remain largely unexplored and could present opportunities for further market diversification. Additionally, the growing reliance on a few key regions, the United Arab Emirates specifically, poses potential risks. This concentration, especially in gold exports, makes Uganda vulnerable to fluctuations in commodity prices and unexpected changes in the demand of that market.

### The importance of intra-regional trade for diversification

Notably, as part of the shifting patterns described alongside Figure 7, Uganda's trade with neighbouring countries, in particular countries in Eastern and Central Africa, stands out for its product diversification (Figure 8) and the inclusion of more processed goods (Figure 9)—in contrast with the more commodity-focused exports to other regions.

Figure 8 illustrates the diversification of Uganda's exports by partner region. Exports to both Eastern and Central Africa have consistently included a higher number of products, (left), with greater diversification over the last decade, and significantly less concentrated than to other regions (right). For Europe, the Middle East, and other Asian countries, while the number of products exported there has increased over time, the equivalent number of products remains lower, suggesting that exports to these regions continue to be concentrated in few products.

**Figure 8** Product diversification of exports of Uganda, by partner region

**Note:** Products are counted at the 6-digit level of the Harmonised System. The equivalent number of products is computed as the reciprocal of the Herfindahl-Hirschman index (HHI) that measures the concentration of the export basket with respect to products. The higher the concentration in a few products, the lower the equivalent number of products, and consequently the lower the diversification.

**Source:** Authors' calculations based on ITC Trade Map (2023).

Figure 9 shows the breakdown of Uganda's exports by stage of processing. The share of processed exports to Eastern Africa and Central Africa has remained high over the past decades, over 40% for Eastern Africa and fluctuating around 50% for Central Africa. The share of raw materials exported to these regions has also shrunk consistently over time, reaching 24% and 8% of total exports, respectively.

Conversely, exports to Europe are predominantly of raw goods. This trend has strengthened over time, with 94% of raw goods in the latest period. For the Middle East, there has been a substantial shift towards semi-processed exports, reaching 92% of total exports, driven by exports of refined gold to the United Arab Emirates. Exports to other Asian countries show a mix, with fluctuating shares of raw and semi-processed exports, and almost no processed exports.

**Figure 9** Product diversification of exports of Uganda, by partner

**Note:** The classification of products into raw, semi-processed and processed is based on the [Multilateral Trade Negotiation Categories \(MTNC\) of the World Trade Organization \(WTO\)](#).

**Source:** Authors' calculations based on ITC Trade Map (2023).

In total, Uganda's export diversification efforts have seen mixed success across different regions. There has been an increase in the number of products exported to neighbouring regions, in particular Eastern and Central Africa, accompanied by an increasing share of processed goods exported. However, the concentration of exports remains a challenge, particularly in Europe and the Middle East, with a limited number of products exported and a high reliance on raw materials in Europe.

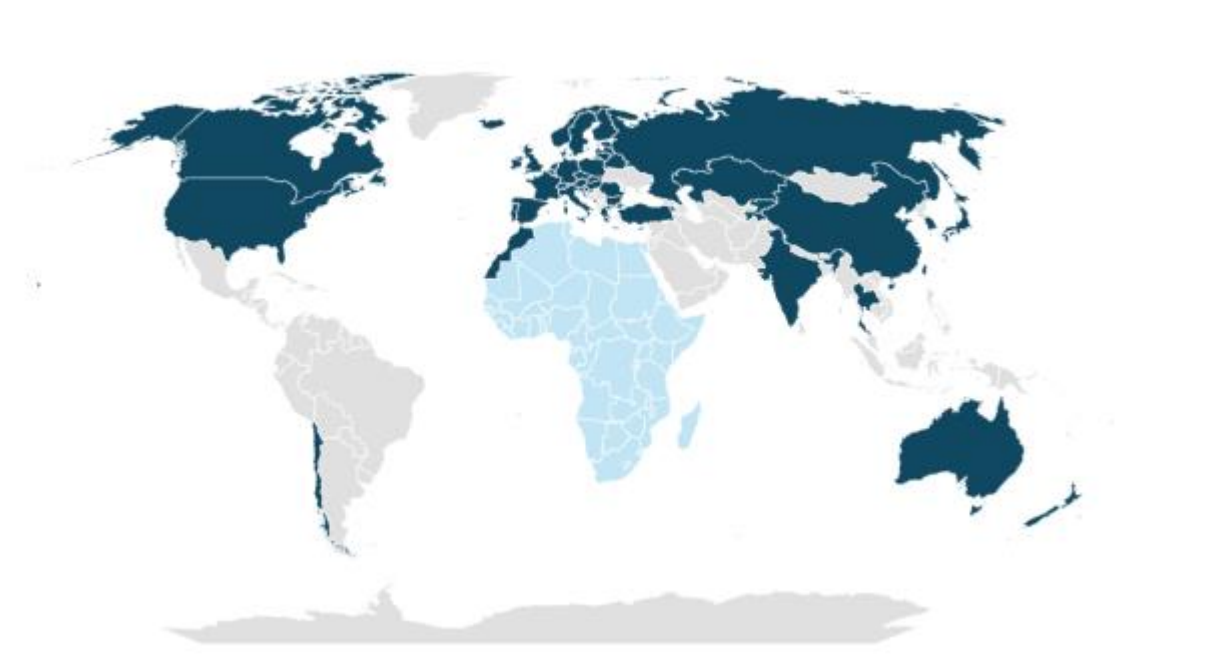
This highlights the importance of intra-regional trade to foster structural transformation through the export of value-added products, and the need for targeted strategies to promote value addition in exports across all regions.

## Uganda's market access conditions

To better understand Uganda's export diversification, it is key to explore the market access conditions it faces. Uganda has been a member of the World Trade Organization (WTO) since its establishment in 1995. As a WTO member, Uganda is granted Most-Favoured Nation (MFN) tariffs by all other members of the organization. In addition, Uganda enjoys preferential access to multiple markets, as a result of unilateral schemes for LDCs and regional agreements (Figure 10).

Given its LDC status, some developed and developing countries unilaterally grant Uganda duty-free or reduced-tariff access. These markets are Armenia, Australia, Belarus, Canada, Chile, China, the European Union, Iceland, India, Japan, Kazakhstan, Kyrgyzstan, New Zealand, Montenegro, Morocco, Norway, Republic of Korea, the Russian Federation, Switzerland, Tajikistan, Thailand, Türkiye, the United Kingdom and the United States.<sup>13</sup> Should Uganda graduate out of the LDC category, these preferences would eventually revert to the next best tariff regime, among them tariffs under the Global System of Preferences (GSP), tariffs under alternative agreements, or MFN tariffs. For additional information on LDC graduation, see Box 2.

**Figure 10** Markets with preferential access for Ugandan exports



**Note:** Dark blue indicates LDC preferences, while light blue represents other agreements.

**Source:** Authors' calculations based on ITC Trade Map (2023).

Besides MFN tariffs and unilateral preferences, Uganda enjoys preferential access to many African markets through regional economic communities: the Common Market of Eastern and Southern Africa (COMESA) and the East African Community (EAC).<sup>14</sup> In addition to trade preferences, the regional economic communities cover other aspects of regional integration, such as infrastructure development, industrialization, or agriculture. Notably, the East African Monetary Union (EAMU), planned to implement a single currency by 2024 under the umbrella of the EAC, has been postponed, as the prerequisites for its establishment were not attained.

Importantly, Uganda is also part of the African Continental Free Trade Area (AfCFTA), which came into force officially on May 30, 2019, with trading under the AfCFTA starting on January 1, 2021. The AfCFTA aims to create a single

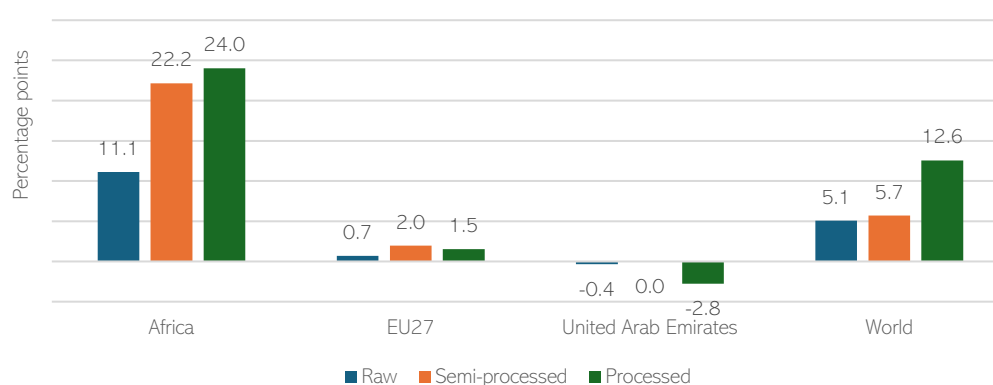
<sup>13</sup> Until recently, Uganda was also a beneficiary of the African Growth and Opportunity Act (AGOA), a preference scheme for sub-Saharan African countries instated in 2000 that does not depend on LDC status. Preferences under this scheme were suspended on January 1<sup>st</sup>, 2024.

<sup>14</sup> Members of COMESA: Burundi, Comoros, Democratic Republic of the Congo, Djibouti, Egypt, Eswatini, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Somalia, Sudan, Tunisia, Uganda, Zambia, Zimbabwe. Members EAC: Burundi, Democratic Republic of the Congo, Kenya, Rwanda, Somalia, South Sudan, United Republic of Tanzania, and Uganda.

continental market for goods and services, with free movement of businesspersons and investments. This ambitious economic integration agenda involves all 55 member states of the African Union (AU), making it the largest free trade area in the world in terms of the number of participating countries. The implementation of the AfCFTA is ongoing, with member states continuing to negotiate specific aspects like tariff schedules, rules of origin, and various protocols to ensure smooth and comprehensive integration across the continent.

As a result of the variety of regimes Ugandan trade is subject to, exports face a mix of duty free, preferential and MFN tariffs around the world that grants them a tariff advantage in many instances (Figure 11). Notably, the tariff advantage within Africa is significantly higher compared to other key trading partners and is particularly pronounced for non-raw exports. Conversely, Ugandan exporters face a tariff disadvantage in the United Arab Emirates, except for semi-processed goods, like refined gold.

**Figure 11** Average advantage in tariffs faced by Uganda, by processing level for selected partners



**Note:** The tariff advantage is the percentage point difference between the average tariff faced by Ugandan exporters and the one faced by exporters from other countries. Averages are simple across countries and weighted by Ugandan exports across products.

**Source:** Authors' calculations based on ITC Trade Map (2023) and ITC Market Access Map (2023).

In addition to agreements already in force, a number of additional plurilateral agreements are in negotiation or consultation stages: China-EAC, COMESA-EAC-SADC, COMESA-India, EAC-EU, and EAC-Türkiye.

## Transportation and logistics costs

Similarly to tariffs, transportation and logistics costs can play a key role in driving export diversification. These costs are widely acknowledged as a crucial factor influencing trade flows, often posing a greater burden than tariffs, and impacting trade competitiveness. Several elements can determine differences in transportation and logistics costs across regions, including the distance to trading partners, the modes of transport employed, the nature of the goods being traded, economies of scale, infrastructure availability and quality, the market structure and regulation of logistics services, and the efficiency of customs procedures.

For landlocked developing countries (LLDCs), such as Uganda, transportation and logistics costs are even more critical. Without direct access to seaports, LLDCs rely on their neighbouring coastal countries for import and export routes, leading to higher transportation and logistics expenses and longer transit times. These increased costs hinder the ability of LLDCs to participate fully in global markets, making their goods less competitive due to higher final prices and delays. Additionally, the reliance on overland transport through often inadequate infrastructure and sometimes complex border procedures exacerbates delays and costs.

Historically, African LLDCs have faced significant challenges in this area. Traditionally low volumes of trade in some regions have contributed to higher transportation and logistics costs through several mechanisms. Smaller trade volumes beget higher freight and port charges, imbalances in cargo occupancy and lower incentives to investment in infrastructure. Port efficiency and equipment, port security and customs procedures and delays have also been at times identified as hurdles for trade on the continent. However, for African LLDCs shortcomings in land freight take centre stage. Despite the need to transport goods over vast distances to reach ports, the rail network has hardly developed away from the extractive model linking mines to ports. Most cargo is transported by road, but roads are scarce, they are not strategically located, and road rehabilitation and maintenance are under-funded.

## Box 2

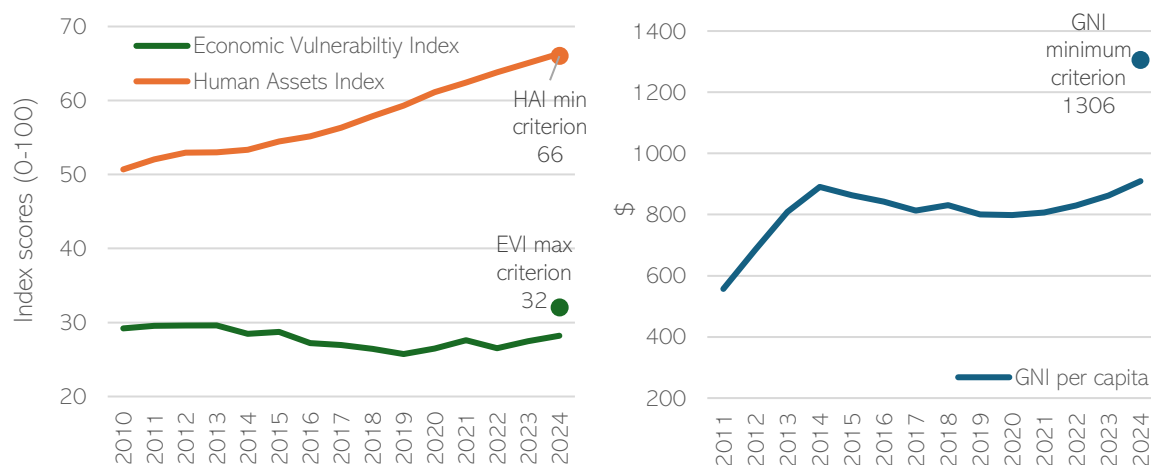
## Uganda's path to LDC graduation

The Least Developed Countries (LDC) category was established by the United Nations General Assembly in 1971 to provide targeted support to countries facing severe structural impediments to sustainable development. These countries benefit from special international support measures (ISMs) to aid their development efforts, such as preferential trade access, development financing, technical assistance, capacity building initiatives, and support for participation in international forums.

The process of inclusion in and graduation from the LDC category involves meeting specific criteria across three dimensions: Gross National Income (GNI) per capita, the Human Assets Index (HAI), and the Economic and Environmental Vulnerability Index (EVI). To be classified as an LDC, a country must satisfy all three criteria and agree to the classification. To be eligible for graduation, a country must meet the threshold for at least two of these criteria in two consecutive triennial reviews by the Committee for Development Policy (CDP). Alternatively, a country may graduate based on the income-only criterion. However, the process of graduation is not automatic: it depends on several elements, among them a thorough assessment of the potential impact of graduation and of the country's vulnerabilities, and the presentations and statements of the country itself. Together with the recommendation to graduate, a preparatory period is suggested, between three and six years or more. This period is for the country to prepare for graduation and establish a smooth transition strategy out of the LDC category.

Uganda has been part of the LDC category since its creation, benefiting from various support measures, including duty-free and quota-free, or preferential access to several markets (Figure 10). Uganda met the LDC graduation criteria for the first time in March 2024 (Figure 12), marking a significant milestone in its development journey. This achievement triggers the start of a graduation timeline, which, if all steps are realized, could lead to Uganda's graduation from the LDC category in six years (eight under a five-year transition period).

**Figure 12** Uganda's progress towards the LDC graduation



**Note:** Dots are graduation thresholds for 2024 (32 or below for EVI, 66 or above for HAI and \$1,306 or above for GNI per capita).

**Source:** Based on United Nations Committee for Development Policy Secretariat (2024).

Upon graduation, Uganda will gradually lose the benefits associated with LDC status. This includes the phasing out of LDC trade preferences, and reduction in trade-related capacity building and technical assistance, which could have an impact on the country's exports of some products to the markets currently granting LDC preferences.

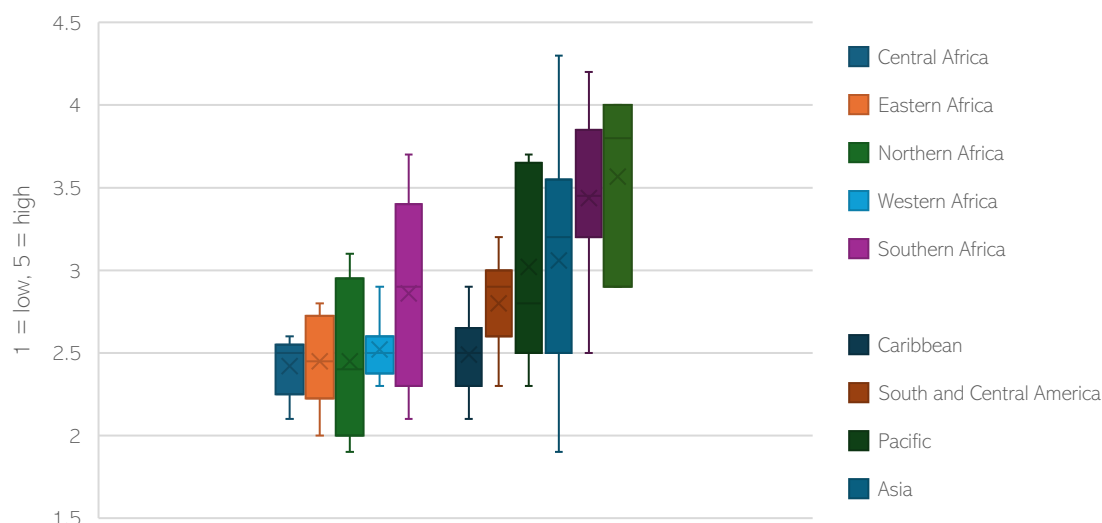
To ensure a smooth transition and continued progress post-graduation, it is crucial for Uganda to develop a comprehensive transition strategy. This strategy should focus on diversifying the economy, building resilience to external shocks, and ensuring that the gains made during Uganda's time as an LDC are sustained. Engaging with development partners and leveraging international support will be key to navigating the challenges ahead of graduation and in turn securing a stable post-graduation development path for Uganda.

For resources and information on LDC graduation, see the LDC portal, <http://www.un.org/ldcportal>.



The combination of shortcomings and hurdles in transportation for African LLDCs briefly described above is well reflected in the World Bank Logistics Performance Index (LPI) presented in Figure 13.<sup>15</sup> The LPI captures different aspects of trade logistics, among them the quality of trade- and transport-related infrastructure, the quality of logistics services, the ease of arranging competitively priced shipments, the efficiency of customs, and timeliness. While data for Uganda itself is not available, we can see in Figure 13 that, with the exception of the Caribbean, the African sub-regions that are the necessary transit ground for Ugandan exports are the ones with the lowest average scores. While some countries in Africa perform on par with other regions in terms of logistics, they are the exception rather than the norm.

**Figure 13** Logistics performance index 2023, by region



**Note:** The middle line of the box represents the median index score in a region, the x in the box represents the mean. The bottom line of the box represents the first quartile. The top line of the box represents the third quartile. The vertical lines extend from the ends of the box to the minimum and maximum values.

**Source:** Authors' calculations based on the Logistics Performance Index of the World Bank ([lpi.worldbank.org](https://lpi.worldbank.org)).

High transportation and logistics costs, delays and inadequate infrastructure have far-reaching implications for economic diversification and value addition in LLDCs like Uganda. Elevated costs can reinforce export concentration by limiting the range of products that can be competitively traded and discourage investments in processing and value addition, which are crucial for economic development and integration into global value chains. Addressing these challenges requires continued concerted efforts to improve infrastructure, streamline logistics, and reduce inefficiencies, which are vital for enhancing the competitiveness and resilience of LLDCs.

## Overview of selected policy instruments and existing analysis

### Development policy and planning

Uganda's Vision 2040 is a long-term policy planning document, published in 2012, establishing the country's ambition to transform from an LDC into an upper middle-income country and outlining targets and pathways to achieve that goal.<sup>16</sup> It is operationalized through six five-year rolling National Development Plans, which refine strategic objectives, set out development strategies and detail specific programs and interventions. Uganda is currently on its third National Development Plan (NDPIII), which covers the period from fiscal year (FY) 2020/21 to FY 2024/25. The NDPIII sets out targets that include increases in the share of trade in GDP, the share of manufacturing in exports, and the share of high-technology exports, among others.<sup>17</sup>

<sup>15</sup> The LPI is an index developed and published by the World Bank, available at [lpi.worldbank.org](https://lpi.worldbank.org)

<sup>16</sup> Uganda Vision 2040, January 2012, <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC155949>.

<sup>17</sup> Third National Development Plan (NDPIII) 2020/21-2024/25, July 2020, National Planning Authority, Republic of Uganda.

The NDP III also outlines programmes for agro-industrialization, mineral development, and manufacturing, among others, each with specific export targets—as well as digitalization and e-commerce objectives (see Box 3). The agro-industrialization programme focuses on increasing commercialization and competitiveness of agricultural production and agroprocessing, with the aim of tripling agricultural commodity exports by 2025. Ten commodities—coffee, tea, fish, dairy, meat, maize, cocoa, cotton, vegetable oil and cassava—are prioritized, primarily for their export potential.<sup>18</sup> The mineral development programme aims to increase mineral exploitation and value addition, with a target to more than double refined gold exports by 2025. Similarly, the manufacturing programme seeks to ‘increase the range and scale of locally manufactured products for import substitution and increased exports.’<sup>19</sup> In addition, it also targets the reduction of imported pharmaceuticals and the increase of the contribution of the industrial sector to the GDP.

In addition, the NDP III also set out an export promotion strategy aimed at increasing exports of processed food and beverages, textiles, cement, steel, and processed minerals and oil, focusing on four key markets, namely Africa, the Middle East, China, and the European Union.

**Table 1** Priority products and markets in Uganda's export promotion strategy

Market	Motivation	Priority products	Identified challenges
Africa	<ul style="list-style-type: none"> <li>Proximity</li> <li>Similar market access requirements (SPS)</li> <li>Preferential access (EAC, COMESA, AfCFTA)</li> </ul>	<ul style="list-style-type: none"> <li>building materials (cement, steel, tiles, plastics),</li> <li>consumer goods (sugar, dairy products, cooking oil, soap, kitchenware),</li> <li>cereals and grains</li> </ul>	
Middle East	<ul style="list-style-type: none"> <li>Proximity</li> <li>Less stringent market access requirements than the EU's</li> </ul>	<ul style="list-style-type: none"> <li>livestock and associated products (beef, goat, dairy, poultry)</li> <li>fruits and vegetables (pineapples, apple, bananas, avocado)</li> </ul>	Ugandan exporters have not been able to consistently supply goods in the required quantities to the region
China	<ul style="list-style-type: none"> <li>Size</li> <li>Growth prospects</li> </ul>	poultry, beef, dairy, fish, hides and skins (wet blue), cow horns, processed coffee, semi-processed cotton, sesame, and cocoa.	Ugandan exporters are not able to benefit from the duty-free and quota-free access granted by China because of technical barriers to trade such as quality standards.
European Union	<ul style="list-style-type: none"> <li>Stable</li> <li>High-income</li> <li>Established destination</li> </ul>	fish, coffee, cocoa, and flowers	compliance with sanitary and phytosanitary measures and quality standards

Source: Based on NDP III.

## The Diagnostic Trade Integration Study

A Diagnostic Trade Integration Study (DTIS) is a comprehensive analysis conducted under the Enhanced Integrated Framework (EIF) for trade-related assistance for LDCs. The DTIS assesses the country's trade policies, infrastructure, institutional capacities, and other factors that influence its ability to participate effectively in the global trading system. The study provides a detailed understanding of the country's trade environment and offers recommendations for policy reforms, capacity building, and investments that can enhance trade performance and integration into the global economy. The findings from the DTIS are used to develop an Action Matrix, which outlines priority areas for intervention and guides donor support and national policy initiatives.

Uganda had a full DTIS in 2006, supplemented in 2013 and 2021 by a DTIS update. In addition to the target products and markets identified by the NDP III, Uganda's DTIS update provided recommendations to tap into opportunities in specific trade agreements and agricultural commodities.

Under the AfCFTA, the DTIS update suggests that Uganda has the potential to scale up its market share of tea, dairy and dairy products, maize, sugar, fruits, vegetables, soya beans, and plastics without much new investment. The DTIS update emphasizes that these opportunities exist beyond COMESA, in the African market more broadly, and suggests

<sup>18</sup> Cassava was prioritized for its contribution to food security and nutrition, and because it can be produced at scale, it is drought resistant and can be used in other industries.

<sup>19</sup> NDP III, p.123.

that Uganda should promote the adoption of quality standards and work to reduce the cost of quality certification for agricultural and manufactured exports. The DTIS Action Matrix further recommends the development and implementation of a national AfCFTA strategy.

As an LDC, all of Uganda's exports (except arms and armaments) automatically qualify for preferential access to the EU under the Everything But Arms (EBA) Scheme. Some of Uganda's agricultural exports are likely to be impacted by the EU's new regulation on deforestation-free products (EUDR) which entered into force on 29 June 2023. Intended to address the role of trade in climate change, the EUDR requires EU exports and imports of specific commodities and derived products to be accompanied by documentation proving that the goods are not associated with deforestation or forest degradation. While operators have an 18-month transition period (or 24 months for small operators), the onus will be on exporting countries to prove that their products comply with the regulation. Uganda's coffee and cocoa exports are likely to be impacted by the EUDR. Coffee, and to a much lesser extent cocoa, exports to the EU constitute an important part of Uganda's export earnings.

With respect to coffee and cocoa, the DTIS update suggests that Uganda could increase its world market share by improving production and productivity, and by adding value through the adoption of voluntary certification schemes. The DTIS update also recommends investing more in branding Uganda Arabica coffee in order to achieve higher prices and margins for farmers.

For fish, flowers, fruits, and vegetables, which are mainly destined to the EU and the Middle East, the DTIS update states that improved capacity to comply with sanitary and phytosanitary measures is key to expanding access.

The DTIS update also highlights that a number of supply-side factors constrain firms' ability to ensure consistency and reliability of their exports including manufacturing characterized by basic technology, high costs of electricity and finance, and infrastructure deficiencies in road, rail, irrigation, electrical power, storage, and refrigeration.

Importantly, Uganda's 2021 Diagnostic Trade Integration Study (DTIS) update recognized that the contribution of gold exports to the local economy was limited because they do not generate many local jobs or contribute to value addition. For this reason, the DTIS update recommended implementing initiatives that support growth in non-gold exports which are more associated with economy-wide benefits such as job creation and value addition.

## Box 3

**E-commerce initiatives in Uganda**

Uganda's landlocked status underscores the critical role of e-commerce in mitigating the challenges posed by geographical constraints. This has prompted the country to prioritize information and communications technologies (ICT) and e-commerce in its sectoral strategies and national development plans. Uganda Vision 2040 acknowledges that 'ICT provides an opportunity to improve national productivity by making Government and business enterprises more efficient, effective and globally competitive.' Building on this vision, Uganda's Second National Development Plan (NDP II) prioritized ICT and e-commerce, resulting in the creation of the Digital Uganda Vision, which harmonized and integrated all ICT-related initiatives. The subsequent NDP III continued to mainstream ICT as a driver of development, outlining a digital transformation programme, with the goal of increasing the use of ICT services for social and economic development. The NDP III includes targets for increased ICT penetration (measured by internet penetration and broadband coverage) and decreased cost of ICT devices and services (measured by the monthly cost of internet, and the cost of smartphones and computers).

In addition to development plans, Uganda has established a National ICT Policy and a National E-Commerce Strategy. To leverage e-commerce for international market access, the strategy proposes two flagship projects: an e-commerce business facilitation centre and a national e-commerce marketplace. The business facilitation centre will provide advisory services, training, and an online portal with relevant information on how to use e-commerce effectively. Based on China's Alibaba, the national e-commerce marketplace will focus on selling locally produced products domestically, regionally, and internationally. This initiative addresses one of the recommended actions of the DTIS update which encouraged the development of a national e-commerce platform to enable local producers to export internationally.

In line with supportive policies, progress has been observed. Mobile telecommunications access has expanded: as of Q3 2024, there are over nine mobile phone devices per 10 inhabitants in the country, compared to eight devices five years earlier. Similarly, mobile subscriptions have risen from three per five inhabitants to four in the same period. The composition of mobile phone types has also shifted favourably. While smartphones accounted for 29% of mobile devices in Q3 2019, this figure rose to 38% by 2024, accompanied by a decline in basic phones from 11% to 5%. This is key, since smart and feature phones are the main channel for internet access, and they facilitate mobile payments—the most common payment method in the country. Internet subscriptions increased from 15.3 million in Q3 2019 to 17.2 million in Q3 2024, though this has lagged behind population growth. Importantly, active mobile money subscriptions doubled from 15.7 million to 30.4 million over the same period. Although from a low base, direct purchases from websites are increasing, facilitated by improved interoperability between mobile money platforms and bank accounts, and banks that offer credit cards enabling online transactions. Infrastructure improvements, including reduced clearance times for expedited shipments and enhanced last-mile delivery, have further supported e-commerce growth.

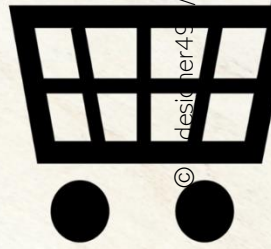
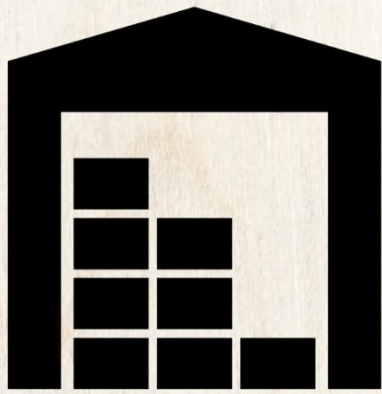
Despite these improvements, several challenges persist. Coverage, access, and the affordability of devices and subscriptions still show room for improvement. Lack of access to the internet and electricity in rural areas, and the high costs of broadband access, software and hardware, also exclude large segments of the population from the potential benefits of e-commerce. Additionally, e-commerce awareness among consumers and businesses is low, and many Ugandan firms lack essential business skills in areas necessary to take full advantage of e-commerce platforms, such as online content management, digital marketing, compliance with payment systems and logistics for parcel delivery. Although Uganda has attracted large foreign e-commerce firms, their presence has largely enabled the purchase of foreign products rather than boosting exports of locally produced goods.

Remaining regulatory gaps also impede further expansion of e-commerce. While Uganda has some regulations governing ICT and consumer protection, e-commerce platforms are loosely regulated which has enabled the proliferation of unregulated platforms. In addition, although Ugandan law protects intellectual property rights (IPR), enforcement is weak, particularly with regard to piracy and counterfeit goods, making IPR infringements common and widespread. Lack of trust in online transactions is a key challenge for the continued development of e-commerce in Uganda.

Given Uganda's landlocked status and the potential of e-commerce to mitigate geographical disadvantages, addressing challenges is essential. Bridging gaps in coverage, affordability, regulatory oversight, and skills development will enable Uganda to unlock the full potential of e-commerce for sustainable growth.

**Sources:** ITA (2023), Uganda National E-Commerce Strategy, 2021, UNCTAD (2018), DTIS (2021), UNDP (2022), UCC (2024), UCC (2019) and Uganda Vision 2040.





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## CHAPTER 2

# IDENTIFYING KEY EXPORT VALUE CHAINS

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## IDENTIFYING KEY EXPORT VALUE CHAINS

To inform the design of trade support measures, avoid interventions driven by path dependencies, and channel limited aid-for-trade resources to sectors or value chains with the greatest impact potential, ITC has developed a data-driven approach to sector and value chain selection. The following section outlines this approach and presents the results of its application to the case of Uganda, identifying key opportunities to diversify exports and enhance domestic value addition through the development of local value chains.

### Selecting high-potential value chains

The ITC value chain selection methodology begins by defining the value chain behind each of the over 5,300 products of the Harmonized System (HS).<sup>20</sup>

This process starts with the use of sector-level input-output tables, which represent the trade across industries and indicate the value of inputs required to produce an output at the sector level. Since the input-output tables only exist at the sector level, they must first be 'transformed' to the product level. This transformation involves several steps, including word matching techniques, insights from rules of origin in trade agreements, and expert assessments for various sectors. The resulting product-level input-output table identifies the relative importance of each input directly used in the production of any given product. By tracing the production of inputs through the table, the methodology can also uncover the relative importance of indirect inputs—those that contribute to the production of inputs further up the value chain.

The value chains defined through this process are then evaluated based on two criteria central to the ITC value chain selection approach, the feasibility and desirability of each value chain. Further details on these two assessments are provided below.

### Feasibility assessment

The feasibility assessment aims to identify which value chains have export potential, based on current exports, existing capabilities, and the availability of necessary inputs. This assessment distinguishes between value chains where products are already being exported and those that are not yet part of the export basket.

#### Which sectors or value chains already exporting have potential for growth?

For value chains where products are already being exported, the TMI export potential methodology is applied. This methodology identifies the potential for export growth for each value chain based on an economic model that considers multiple factors, including:

- historical trade data for each product, market, and competitor,
- tariffs faced by all suppliers and imposed by all possible markets,
- projections for growth in all suppliers and markets, and
- the ease of trade between exporters and markets.

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<sup>20</sup> For more details on the methodology, see Annex I.

Using these data, the methodology estimates a potential level of trade by 2027 for each exporter-product-market combination, assuming no trade frictions and that investments are channelled to growing sectors.<sup>21</sup> The gap between the potential and current trade levels highlights opportunities for export growth, i.e., the unrealized export potential.

Which sectors or value chains not yet exporting can be developed?

For value chains where products are not yet being exported, the methodology follows three analytical steps to assess their feasibility:

#### a. Availability of inputs

Using trade data and information from the product-level input-output table, this step evaluates whether sufficient inputs are available within the country to produce a specific value chain output. For instance, if an input is projected to be exported in larger quantities than those of a relevant comparison group of countries, it is considered available. When a significant share of the required inputs is available domestically, it is assumed that the desired value chain output can be produced using locally sourced inputs.

#### b. Required capabilities

The second step assesses whether the country has the necessary capabilities to convert the available inputs into the desired output. This involves comparing the country's export basket to global trade patterns to determine if the country is already exporting products that are typically exported alongside the new value chain output under consideration. If this is the case, the country is deemed to have the capabilities needed to develop the value chain.

#### c. Demand prospects

If the inputs are sufficiently available and the country has the capability to transform them into the output, the next step involves evaluating the demand prospects for the new value chain. This analysis uses ease-of-trade and demand-side indicators to assess market prospects for the output being considered.

### Desirability assessment

The feasibility assessment can produce a long list of value chains that show promise for export expansion or development. Yet not all sectors or value chains that are feasible are necessarily also desirable, or some are more so than others. To assess the desirability of expanding or developing feasible value chains, a wide array of indicators can be considered, amongst them their ability to:

- create jobs, including for marginalized groups,
- raise the share of SMEs in the economy,
- foster food security,
- stimulate economic transformation and diversification,
- achieve environmental sustainability,
- leverage regional trade agreements,
- increase resilience to shocks.

### Value chain selection in Uganda

In this case, the methodology outlined above is applied to Uganda's exports. When evaluating *the availability of inputs* for a product, several criteria are considered.<sup>22</sup> If none of the criteria are met, it is concluded that Uganda lacks sufficient input availability to produce the product through local sourcing. Conversely, if all criteria are met, the input

<sup>21</sup> The export potential is estimated to reflect the *future* level exports could reach. This is to take into account expected growth trends, and to allow for any support measures that could be put in place to take effect. The results discussed here are for the year 2027 because that was the latest year for which forward-looking variables used in the methodology— such as GDP growth projections from the IMF World Economic Outlook— were available at the time of estimation. Additional details on the methodology can be found in Decreux and Spies (2023).

<sup>22</sup> For more details on the specific availability criteria applied, see Annex I.

availability is deemed 'very strong'. Cases where only the minimum criteria are met are classified as having 'weak' input availability.

To assess Uganda's *required capabilities* for a given product, the evaluation considers whether the product is already being exported or, if not, whether it is 'similar' to other products that Uganda currently exports.<sup>23</sup>

For *desirability*, the focus is initially on selecting processed products, as these hold the greatest potential to add value to Uganda's exports and diversify its export structure away from raw commodities.

The selected products are, therefore, processed items—some already being exported, others new—for which Uganda can supply a significant portion of the necessary inputs, and for which it has the capacity to transform the inputs into the output. These products are grouped into value chains and listed in Table 2 and Table 3. For each value chain, the tables indicate whether the input availability is, on average, weak, medium, strong, or very strong. The results also detail which products within each value chain offer opportunities to expand existing exports and which products show promise as potential new exports. It is important to note, however, that the results presented in Table 2 and Table 3 do not necessarily include value chains or products that currently have a strong export performance, but rather those with the greatest potential for export growth.

Table 2 presents agriculture-based manufactures identified as both *feasible* and *desirable* for export expansion or development, showcasing several value chains within the processed foods, animal feed, and beverages sectors. These results align with Uganda's tradition of competitive local agricultural resources.

**Table 2** Selected processed products in new and existing agriculture-based exports

	Value chain	Average input availability	Opportunities to expand existing exports	Opportunities for new exports
Processed food & animal feed	Animal feed	strong	Preparations of a kind used in animal feeding	
	Cereal-based products	medium	Bread, pastries	Pasta, tapioca
	Vegetable oils	very strong	Soybean oil, sunflower seed oil and fractions	Edible mixtures of fats, oil & fractions
	Protein concentrates and food preparations	medium	Protein concentrates and other food preparations	
	Processed fruits and nuts	medium	Fruits and fruit peels preserved in sugar (e.g. pineapples, mangoes, bananas); prepared groundnuts	Fruit jams or pastes; prepared peaches, fruits, citrus fruits; prepared nuts of other types (e.g. cashew and shea nuts)
	Dried fruits	weak		Dried grapes, prunes, pears, peaches and tropical fruits
	Processed vegetables and legumes	medium		Prepared tomatoes, asparagus, and other vegetables; prepared beans
	Sauces and soups	medium	Preparations for sauces	Soups and broths
	Confectionery	medium	Sugar confectionery not containing cocoa	Chewing gum
	Fish products	weak		Prepared sardines ("Mukene")
	Coffee and tea products	strong		Coffee and tea extracts and preparations
Beverages	Alcoholic beverages	medium	Beer, spirits, ethyl alcohol	Rum and other sugarcane-based spirits
	Non-alcoholic	medium	Non-alcoholic beverages (excl. water, fruit or vegetable juices and milk)	
	Fruit juices	medium		Single citrus, orange, apple, and pineapple juice, mixtures of juices

**Note:** N.e.s. stands for 'not elsewhere specified'. These results highlight products with the most potential to start being exported or, among those already exported, those with the highest potential for export growth. This may not include all products currently being exported.

**Source:** Authors' calculations based on ITC Export Potential Map (2023).

<sup>23</sup> The concept of 'similarity' relies on the notion of *product space*, as developed in Hidalgo, et al. (2007). For more details on how this concept is used in the selection criteria, see Annex I.

For example, Uganda's animal feed production is supported by the abundant availability of maize, soybeans, cottonseed cake, and sunflower seed cake. These locally sourced ingredients form the backbone of the feed industry. Similarly, the availability of maize, sorghum, millet, and rice facilitates the expansion of cereal-based product exports. With sunflower seeds, soybeans, palm oil, and groundnuts extensively cultivated across various regions, Uganda has a reliable supply of inputs for oil extraction and further processing into vegetable oils. Additionally, the local availability of high-protein crops like soybeans and groundnuts, along with fish and beans, enables the production of protein concentrates and various processed food preparations.

Pineapples, mangoes, bananas, and passion fruit are grown in large quantities across Uganda, then processed or dried for export, with potential for further expansion in the processed categories. Although less widely cultivated, grapes, plums, pears, and peaches are also produced and could be processed or dried, with potential to become new additions to Uganda's processed export basket. Likewise, while Uganda currently processes and exports groundnuts, it could also expand into exporting processed cashew and shea nuts, which are so far produced in smaller quantities.

Vegetables such as tomatoes, green beans, and carrots, and legumes such as beans and lentils, are widely cultivated, providing a steady supply for Uganda to process and export a range of prepared or preserves vegetables and legumes. The abundant supply of tomatoes, onions, garlic, ginger, beans, and pulses in Uganda also supports the production and exports of sauces and soups.

Uganda's confectionery industry can lean on the domestic production of sugarcane, honey, and groundnuts, among others, for inputs to a variety of sweet products, many of which are already being exported.

As for processed fish exports, Uganda, despite its landlocked status, is a major inland fishery producer, with access to lakes that supply a variety of fish products that are processed and exported. Key fish species include Nile perch and tilapia, which are already processed into fillets and other value-added products for export markets, and Mukene, also known as Lake Victoria sardines. While the latter is also already processed and traded in the Great Lakes region, evidence suggests that this trade is not systematically recorded.<sup>24</sup> Importantly, overfishing, the capture of immature fish and pollution have stifled production and exports in the sector in the past, contributing to the perceived 'weak' input availability listed in Table 2. While these unsustainable practices have since been addressed through improved policies and practices, it is crucial to remain mindful of these challenges if export expansion in the sector is to be supported.

Lastly, the coffee and tea sectors are well established, with Uganda being a leading coffee and tea producer in Africa and beyond. Coffee has long been a major export, as beans, but also in various processed forms, such as roasted beans, ground coffee, and instant coffee, with exports reaching markets around the globe. Similarly, the country's tea plantations produce high-quality tea leaves, which are processed into black, green, and specialty teas, that are exported to various international markets. Options for new value-added exports in the sector include coffee and tea extracts and preparations.<sup>25</sup>

Among beverages, inputs are also readily available particularly for those based on sugarcane, grains, and local fruits, like pineapples—including some spirits, soft drinks, and juices.

Capitalizing on the availability of inputs—ranging from vegetables and fish to coffee, tea, legumes, and fruits—Uganda is well-positioned to strengthen its agroprocessing exports. Conversely, one feature immediately apparent in the results for manufacturing, presented in Table 3, is the near absence of value chains that show a strong or very strong presence of the inputs required to produce the processed good, with the exception of beauty and personal care products. Despite this, the analysis of Uganda's manufacturing value chains also reveals a range of processed products that are feasible for export, based on the availability of local inputs and existing capabilities.

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<sup>24</sup> UNCTAD (2017b).

<sup>25</sup> One well-known strategy to upgrade the coffee and tea value chains is through differentiation, such as enhancing quality or obtaining certifications like organic or fair trade. However, these forms of value addition are not easily captured in statistical data and, as a result, are not captured by the methodology used in this section.



**Table 3** Opportunities for processed products in new and existing manufacturing exports

	Value chain	Average input availability	Opportunities to expand existing exports	Opportunities for new exports
Chemicals	Beauty and personal care products	strong	Beauty, make-up and skincare preparations, preparations for use on the hair	
	Pesticides	weak	Insecticides, rodenticides, fungicides, herbicides, etc.	
Leather products and footwear	Leather & fur skin articles	medium	Leather handbags	
	Footwear	medium		Footwear with different combinations of leather, rubber, plastic, and non-traditional materials
Textiles (fabrics)	Fabrics made of synthetic fibres	weak	Cordage & cables of textile materials	
	Fabrics made of natural fibres	medium		Textile fabrics and tapestries of natural fibres
Apparel and textile products	Textile products made of cotton	medium	Textile products made of cotton	Textile products made of cotton
	Textile products made of textile materials	medium	Home furnishings of textile materials	Textile garments and camping goods, tents, awnings, and sleeping bags
	Textile products made of synthetic fibres	weak		Floor coverings, tarpaulins, apparel with plastics
	Textile products made of wool/fine animal hair	medium		Woven carpets, floor coverings, blankets and travel rugs from animal fibres or fine animal hair
Wood, paper, rubber, plastics	Wood products	medium	Wood pallets, basketwork, wickerwork	Ornaments of wood, mats, matting and screens, basketwork, wickerwork, plaiting materials,
	Plastic household articles	weak	Plastic tableware and kitchenware, plastic household and toilet articles, plastic furniture	
Mineral and metal products	Jewellery	medium	Imitation jewellery	Articles of precious or semi-precious stones
	Stone products	medium	Insulating materials made of stones	Tiles and setts of stones, grinding balls and articles for mills
	Tubes, pipes and fittings of metals	weak	Tubes/pipes of iron/steel	Oil/gas pipes, tubes/pipes of iron/steel
	Household articles of metal products	weak		Household articles of iron or steel, of aluminium, of base metal
	Hand-operated tools and mechanical tools	weak		Spades and shovels, mattocks, picks, hoes and rakes
	Wires	weak		Barbed wire of iron or steel, wires of base metal
Machinery and electronic equipment	Refrigerators, freezing equipment	weak		Refrigerators, freezing equipment
	Household appliances	weak		Laundry-type washing machines
	Electricity generators, transformers and capacitors	weak		Manganese dioxide cells and batteries
	Construction and extraction machinery	weak		Boring or sinking machines for mineral extraction
Manufactured products n.e.s	Ceramic articles	weak	Ceramic tiles and mosaics	Ceramic ornaments
	Cargo containers	medium	Containers, incl. containers for the transport of fluids	
	Wigs and false hairs, of synthetics or human hair	weak		False beards, eyebrows and eyelashes, of synthetic textile materials

**Note:** N.e.s. stands for 'not elsewhere specified'.

**Source:** Authors' calculations based on ITC Export Potential Map (2023).

In the chemicals sector, Uganda shows potential to expand existing exports of beauty products and pesticides, supported by the local availability of natural oils, among them shea butter, coconut oil and neem oil, and herbs and botanical extracts, such as aloe vera and pyrethrum, among others. However, for many chemical ingredients, such as synthetic components and preservatives, Uganda still relies on imports, resulting in the availability of inputs being ranked as weak for pesticides.

In the leather and footwear sector, Uganda has the raw materials needed to produce processed leather goods. The country already produces shoes and, in a smaller scale, footballs, belts, and leather handbags—the latter with potential to expand its exports. The production of footwear, which uses locally available leather, could be expanded to include more complex designs and combinations with other materials like rubber and synthetic textiles. One key point to keep in mind is that a large share of the country's hides and skins are exported raw, or with limited processing, meaning that manufacturers of leather products can only count on limited local supplies.<sup>26</sup>

For textiles and apparel, Uganda produces natural fibres, with a tradition of competitive exports of cotton, and it has an existing value chain of ginneries and textile mills, even if reduced.<sup>27</sup> This, together with the favourable market access conditions afforded by LDC preferences, signals the capacity to expand exports of cotton textiles and garments. However, the textile industry in Uganda has been gravely impacted by multiple challenges in past decades, among them the high cost of production and import competition, in particular of second-hand clothes.<sup>28</sup> Additionally, the production of synthetic fibres is less developed, limiting the potential to expand exports from this sector.

Wood products are another area where Uganda has clear export potential, thanks to its abundant forest resources, including species like mahogany, pine, and eucalyptus, facilities to produce plywood and veneer, and a tradition of woodworking. Among other wood products already exported, the country could increase its exports of wood pallets and basketwork, and could expand into the production of wooden ornaments, mats, and screens. These products require similar skills and inputs, making them a natural extension of Uganda's current exports. It is important to note that the newly instated EUDR will also impact Uganda's exports of wood products. The EUDR requires proof that wood products imported into the EU are not sourced from deforested land or contributed to forest degradation. Compliance with this regulation will be critical to maintain and expand Uganda's wood product exports, necessitating sustainable forest management practices and transparent and traceable supply chains.

In contrast, the plastics sector in Uganda faces more significant challenges due to weak input availability. The production and exports of plastic household articles, including tableware, kitchenware, and furniture, could be expanded but can be limited by the need to import raw materials such as plastic resins. While Uganda can produce some plastic goods, the sector is not fully self-sufficient and relies heavily on imports for key inputs.

Among mineral products, it is feasible to expand and diversify the exports of jewellery and stone products. The country's mining sector provides access to a variety of minerals that can be used in crafting imitation jewellery, which is already part of its export portfolio. Additionally, Uganda is rich in garnet and other gemstones, which can be leveraged to start exports of higher value jewellery products. For stone products, Uganda's natural stone reserves of basalt and vermiculite, among others, provide a solid foundation for the export of insulating materials and other processed stone goods. The country could further diversify its stone exports by moving into more specialized products like grinding balls and mill articles, which require similar production processes.

The sector of metal products, which includes tubes and pipes, household articles of metal, hand-operated tools and mechanical tools, and wires, relies heavily on imported raw materials like steel. While Uganda has some metalworking capabilities, the shortage of locally produced steel means that expanding exports in these areas may first require significant large investments in upstream production or continued reliance on imports.

In the case of machinery and electronic equipment, while some options to start exporting goods are identified, among them different types of household appliances, generators, and construction machinery, none are identified to expand existing exports, and the availability of inputs weak in all the cases.

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<sup>26</sup> Additional details on the leather and footwear sector in Uganda can be found in Uganda Investment Authority (2011) and COMESA-LLPI (2012).

<sup>27</sup> For a comprehensive overview of the history of cotton and its by-products in Uganda, see UNCTAD (2017a).

<sup>28</sup> Uganda's efforts to ban the import of second-hand clothing have been ongoing for several years. However, concerns over economic impacts and potential retaliation from trading partners have delayed the fully enforced of this ban.

Lastly, among assorted manufactured products, there are some for which Uganda shows potential to expand exports. In the manufacturing of ceramic articles, Uganda has some of the raw materials necessary to produce ceramics tiles, which are already part of its export portfolio. The extension to ceramic ornaments could be a logical next step, although high quality clays and glazes are necessary to compete effectively in this market. For cargo containers, the country already produces and exports containers, including those designed for the transport of fluids—although the limited availability of steel locally limits the types of containers produced and exported. The production of items like false beards, eyebrows, and eyelashes, which require similar materials and production techniques as wigs, could be explored as new export opportunities. Although there is some potential for producing and exporting these products, the lack of local production of synthetic fibres and the limited availability of human hair can constrain growth in this value chain.

All the value chains identified through the methodology and presented in [Table 2](#) and [Table 3](#) are considered feasible for Uganda, both in terms of input availability and existing capabilities. The feasibility is underpinned by Uganda's ability to source key inputs locally, particularly in agroprocessing, where the country enjoys a competitive advantage due to its rich agricultural resources. Although the manufacturing sector in Uganda has fewer robust local inputs compared to agroprocessing, there are still promising opportunities for growth. Additionally, these value chains are preliminarily deemed desirable, as they can contribute to diversifying Uganda's export portfolio and enhancing value addition by increasing the share of processed goods in its exports.

## Beyond the feasibility and desirability of value chains

This chapter has presented the findings of a statistical analysis aimed at identifying opportunities for Uganda to expand its exports of processed goods. The analysis is based on a model that assessed the feasibility and desirability of various value chains by examining past trade data, trends, and patterns. While this approach provides valuable insights, it is important to recognize that such an exercise cannot fully capture the complexities of each value chain.

To validate the opportunities identified, accurately pinpoint the challenges that faced by Ugandan businesses, and to inform the design of matching support measures, the subsequent chapters will incorporate the experiences and perspectives of key stakeholders within these value chains. To facilitate this exercise, the selected value chains are furthered narrowed down following additional desirability criteria, in alignment with Uganda's broader economic, social, and environmental goals, as follows.

Given the strong availability of agricultural inputs, and the objectives of diversification and value addition, it seems natural to focus on agroprocessing value chains, i.e. processed foods, animal feed, and beverages.<sup>29</sup> In addition, these value chains play a crucial role in enhancing food security and employing a significant portion of the population, particularly women. Concerns over the upstream environmental impact of these value chains can be addressed with the adoption of a host of well-established green practices that enhance the sustainability of the agroprocessing value chains. Lastly, the development of these value chains is aligned with local priorities, as reflected in the NDPIII.<sup>30</sup>

For the manufacturing value chains identified in [Table 3](#), certain environmental and structural constraints guide the selection. Value chains associated with minerals and wood, while feasible, pose environmental challenges that require sustainable practices for long-term viability, an issue that requires a detailed analysis beyond the scope of this report. For example, the EUDR introduces additional complexities for wood products, necessitating compliance strategies that ensure continued market access. Additionally, as noted in the latest DTIS revision, the limited linkages of the mining sector to the broader economy suggest that the value chains of mineral products will not generate positive spillovers.

The value chains of metal products, machinery, and electronic equipment, although strictly feasible in terms of input availability, face challenges due to the underdeveloped local steel supply, among other critical input shortages. The NDPIII has already flagged the need to strengthen local steel production, which is essential for the future development of these value chains. Once this foundational issue is addressed, the potential for expanding into more complex manufacturing sectors can be revisited.

The value chains in the textiles, apparel, and footwear sectors present a mixed case. Uganda has a strong tradition of competitive cotton production, which supports the potential for growth in this sector. As a labour-intensive industry, it holds the promise of generating significant employment, particularly for women, if properly supported and expanded.

<sup>29</sup> However, the value chain of alcoholic beverages is not considered further in the analysis due to its potential impacts on consumers.

<sup>30</sup> The NDPIII promotes agroprocessing to increase the value and volume of food products and soft drinks.

However, the sector faces substantial challenges, including the lack of intermediate steps in the value chain between cotton production and apparel manufacturing, the need for large investments to modernize the industry, the difficulty of competing with global apparel producers and second-hand imports, and the potential loss of trade preferences upon graduation from LDC status. While these value chains remain viable, it is more strategic to focus on more up and coming value chains in the short term, while continuing to explore ways to revitalize this industry in the future.

Lastly, the chemicals sector, particularly the beauty and personal care products value chain, emerges as a strong candidate for further focus. This sector benefits from Uganda's agricultural competitiveness, as some key inputs, such as essential oils, can be locally sourced. Although some inputs still need to be imported, the sector has shown a positive trend in recent decades. The significant presence of MSMEs and female entrepreneurs in this sector further justifies its prioritization.

In conclusion, the value chains selected for further analysis are animal feed, beauty and personal care products, and processed foods and beverages. These value chains not only align with Uganda's economic and social goals but also offer significant opportunities for diversification and value addition.







## CHAPTER 3

# UNDERSTANDING BUSINESS PERSPECTIVES

# CHAPTER 3

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### Business Insights

Unlocking value chains and diversifying exports in Uganda requires a thorough understanding of the business perspectives and the challenges they face in connecting and operating within these chains. The ITC value chain diagnostic utilizes two key survey initiatives to provide a grounded and practical assessment.

The first initiative is a large-scale national business survey focused on non-tariff measures (NTMs) in Uganda. The second involves a dedicated survey and consultation effort specifically designed for three pilot value chains. The documented views and experiences of Ugandan businesses and other stakeholders have significantly contributed to this diagnostic.

To further refine the findings and identify priority issues and potential solutions, dedicated consultative stakeholder workshops were organized for each of the value chains in Uganda. These workshops played a crucial role in charting the way forward for enhancing value chains and export diversification in the country.

### NTM Business Survey to understand trade challenges

In 2016, the International Trade Centre (ITC) conducted a comprehensive business survey on non-tariff measures (NTMs) in Uganda, engaging close to 500 exporters and importers. This survey aimed to document the experiences of trading firms with regulatory and procedural trade obstacles at the product level (HS6) and the partner country level, encompassing both intraregional and international trade. The survey covered a representative sample of companies from 13 predefined sectors, excluding minerals and arms, to ensure a broad and accurate depiction of the trade landscape.<sup>31</sup>

The insights gained from these surveys provide unique and comprehensive evidence on barriers to trade, contributing significantly to the diagnostic of the three priority value chains presented in this report. Detailed information about the characteristics of the surveyed businesses and specific findings on trade obstacles related to NTMs in Uganda can be accessed in the country report for Uganda.<sup>32</sup>

### Consultations with economic actors from pilot value chains

To gain insights into the challenges of value chain development and export diversification beyond trade obstacles, the ITC, with support from national sector experts, conducted interviews with participants across three selected pilot value chains. These interviews, carried out between March 2024 and May 2024, addressed a wide range of topics.

The discussions encompassed detailed company characteristics, production details (including inputs, outputs, sourcing origins, and sales markets), production capacity and constraints, sourcing constraints, access to finance, investment needs, access to technology, and environmental concerns. Additionally, the interviews explored the interest in and ease of doing business with other African countries and identified key factors necessary for enabling change.

Consultations with business support organizations (BSOs), including chambers of commerce and sector associations, provided further context and complemented the responses from individual businesses. These consultations also offered additional information on existing projects, strategies, and lessons learned within the sectors, thereby enriching the overall analysis.

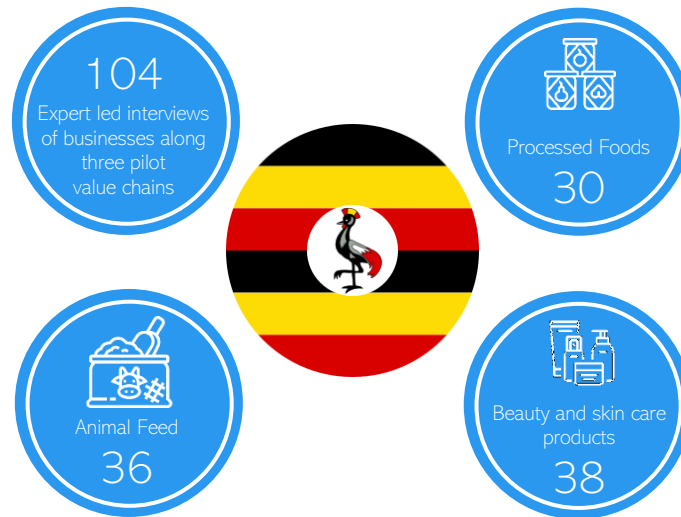
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<sup>31</sup> For detailed methodology refer to ITC (2015).

<sup>32</sup> See ITC (2018).

Complementing the survey, ITC also organized national workshops for each of the three value chains in Kampala, Uganda on 25 and 26 April 2024. The workshop focused on the current challenges and priorities for the value chain to diversify and add more value. The workshop brought together representatives from public institutions, business support organisations and private businesses.

**Figure 14** Consultation with stakeholders along the pilot value chains in Uganda



Workshop on the challenges and opportunities for value chain diversification, organized in Kampala, Uganda on 25-26 April 2024

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Representatives from private sector, business support organisations and public agencies from three pilot value chains



## Cross-cutting trade issues: Insights from the NTM Business Survey

In cooperation with Uganda's Ministry of Trade, Industry and Cooperatives, the International Trade Centre (ITC) conducted a comprehensive survey on non-tariff measures (NTMs) in Uganda. This survey involved interviews with

493 firms, covering all major export sectors except mining, and several import sectors, including agriculture, metals, chemicals, plastics, and other manufactured goods.

### Around half of the companies affected by non-tariff measures

The survey found that 46% of the companies struggle with regulations imposed by Uganda and partner countries. While certain manufacturing products, like cosmetics, are subject to stringent regulations, agricultural goods are, on average, more heavily impacted by non-tariff measures due to strict standards related to human health, safety, and environmental protection. Companies exporting coffee and processed foods are among the most affected.

About two-thirds of NTM cases concerned regulations applied by partner countries, with the rest relating to NTMs applied by Uganda and a few by transit countries. The procedural obstacles hindering compliance occurred in Ugandan agencies (70%), followed by partner countries (28%) and a few in transiting country (2%).

Most export difficulties (53% of the reported cases) stem from procedural obstacles, meaning practical issues with the way regulations are implemented (such as delays, insufficient facilities and administrative hurdles, either in destination markets or in Uganda itself). Only 17% of the NTMs were deemed difficult because exporters found the requirements themselves to be too stringent or complex. The remaining 31% of NTMs were challenging due to both regulatory and procedural obstacles.

Nearly all importers' challenges with NTMs arose from procedural obstacles. Specifically, 30% of the NTMs were problematic solely due to associated procedures, while 68% were considered burdensome due to a combination of regulatory and procedural trade barriers.

Administrative hurdles, high fees and charges, delays and inadequate testing facilities affected Ugandan businesses both at their border and in destination markets. Delays were the biggest challenge, largely due to the need for certification or testing.

#### What are procedural obstacles?

To provide a better understanding of the nature of problems that exporters face, the NTM survey methodology identifies the measures that are burdensome to exporters as well as the underlying reasons they are burdensome.

Exporters often find it difficult to comply with a particular regulation not only because it is too strict or complex, but also (and at times solely) because of the related procedures. Non-tariff measures are official regulations applied by the competent authorities in the exporting or importing country, and traders must comply with them. Procedural obstacles are hurdles that companies face due to the way a regulation is applied.

### Key regions and countries

Countries in the EAC and the EU, Uganda's two biggest markets, imposed the most NTMs. Almost one-third of exporters' difficulties were due to regulations imposed by members of the EAC, which was also Uganda's top export market (buying 49% of its exports at the time of the NTM Business Survey). This means the share of NTMs applied by EAC countries was proportionally lower than their export share. Conformity assessment and rules of origin were the toughest NTMs applied by EAC countries. Rwanda and Kenya imposed the greatest percentage of these regulations.

EU countries imposed a proportionally higher share of NTMs than their share of Ugandan exports. EU countries bought 21% of Ugandan exports at the time of the survey but applied more than 27% of the reported NTMs. The United Kingdom and Belgium applied the most NTMs among EU countries, with technical requirements and conformity assessment being the biggest challenges for Ugandan exporters.

The share of NTMs and exports in the COMESA countries was proportionally similar while in North America and Europe (excluding the EU), the share of NTMs was proportionally higher than the export share. The same was true for Asian countries, which imported roughly 12% of Ugandan exports at the time of the survey but were responsible for 16% of the NTMs.

## Main hurdles faced by companies

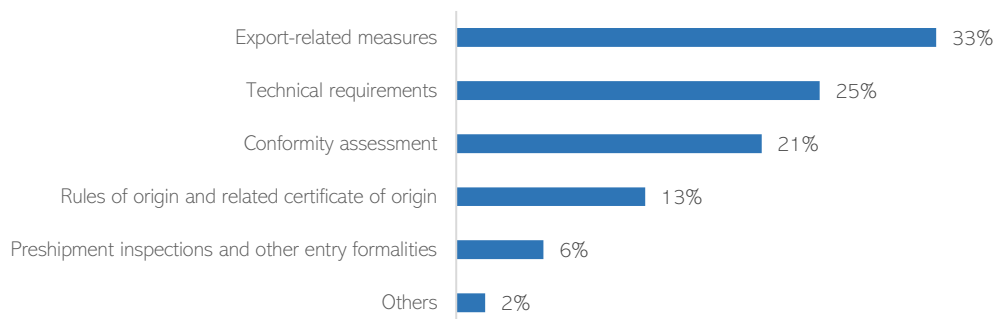
The business survey also provides insight on the type of burdensome NTMs faced by companies. ITC uses an NTM Survey classification based on an international classification developed by the Multi-Agency Support Team (MAST), incorporating minor adaptations to the ITC business survey approach<sup>33</sup>.

The most frequently reported concerns were export-related measures (33%), which are measures imposed by Uganda on its own exports. Following this, technical requirements—covering product specifications related to quality standards, safety, production processes, and sanitary requirements—accounted for 25%. Conformity assessment requirements, which determine whether a product meets technical standards through measures such as testing and certification, represented 21% of burdensome NTMs reported. Lastly, rules of origin and associated certificate of origin requirements made up 13% of reported constraints.

**Export requirements applied by Ugandan authorities:** Ugandan ‘export related measures’ accounted for a third of the reported NTM cases. Most of these (20%) involved export certifications required by Ugandan authorities prior to export. For instance, a coffee exporter reported difficulties with the Ugandan Bureau of Standards (UBS) to get SPS certification as the process was costly and time-consuming (three weeks). Other commonly reported NTMs were taxes and charges on exports (4%), licenses or permits to export (2%) and difficulties due to export license requirements by Ugandan authorities.

**Rules of origin (RoO) certification:** Difficulties with RoO or the process of obtaining certificates of origin made up 14% of the reported NTM cases. Lack of facilities and the absence of trained employees at the Ministry of Trade and Industry, the agency responsible for issuing the certificate, was commonly cited. As HS codes for exporting and receiving countries differed, it led to confusion in filling out the form due to incomplete or wrong codes on the form owing to lack of understanding among exporters. Further, exporters expressed concerns regarding time needed to process the request for the certificate of origin, lack of laboratories and the cost of the certificate. Many exporters also faced difficulties due to the lack of recognition of Ugandan certificates in China.

**Figure 15** Types of regulatory and procedural obstacles faced by Ugandan exporters



**Source:** ITC business survey in Uganda (2018).

**Quality standards in destination markets:** Technical requirements were especially a major concern for agriculture exporters when exporting to the EU which has very strict quality standards on imported food products. Most of the difficulties with technical requirements related to food-safety issues such as product characteristics and quality, tolerance limits for residues or contamination by certain substances. For example, an exporter of hot pepper to Switzerland expressed concern about the lack of sufficient inspection capacity and trained staff in Uganda to detect any harmful substance in the product. As a result, the exporter's consignments were destroyed when harmful substances were detected in the foreign market. For exporters of manufactured goods, fumigation obligations were the most commonly cited measures. For example, an exporter of handcrafts to the EU said that the destination countries asked for fumigation certificates even when the product did not need to be fumigated.

**Procedural obstacles:** Exporters found testing, products certification and inspection requirements burdensome. This was largely due to the delays, roughly half of which occurred in Uganda; and high cost associated with it. Delays (26%) were most common at the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), which was

<sup>33</sup> For more information, please see <https://ntmsurvey.intracen.org/en/support-materials/ntm-classification>



responsible for testing and certifying foods and agri-based products in Uganda; at the Uganda National Bureau of Standards (UNBS); Uganda Revenue Authority (URA) and the National Agricultural Research Organisation. Most of these delays were linked to waiting for certifications – and customs clearance processes. High fees and charges, occurring mostly at UNBS and URA, were also cited, and accounted for 26% of the reported obstacles. Exporters further noted that UNBS suffered from lack of testing laboratories to issue quality assurance certificates which forced exporters to pay high fees to get it from private companies. Additional taxes and charges when dealing with customs valuations as well as informal payments were also reported.

**Pre-shipment inspections:** Exporters of food and agri-based products reported facing challenges during pre-shipment inspections and other entry formalities, as well as quantity-control measures (e.g., non-automatic licences, quotas, prohibitions). These accounted for 11% of the reported cases. Exporters reported having to submit several documents, including an SPS certificate to get an attestation prior to export. For manufacturing exporters too, pre-shipment inspection such as customs clearance procedures were arduous and time consuming. Specifically, exporters noted that the authorities struggled to identify the exact HS code of the product because it included many materials.

### Value chain specific issues

The subsequent chapters will elaborate in detail the key challenges and needs of the selected value chains based on the results of the Value Chain diagnostic survey.





## CHAPTER 4

# SECTOR SPECIFIC CHALLENGES: ANIMAL FEED



# CHAPTER 4

## SECTOR SPECIFIC CHALLENGES: ANIMAL FEED

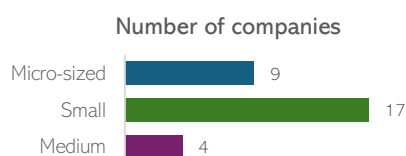
### Box 4

#### Profile of companies consulted in the animal feed value chain

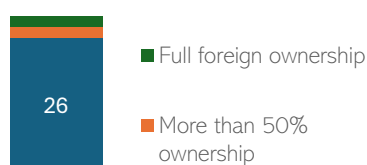
ITC conducted in-depth interviews with 30 companies in the animal feed sector, five public agencies relevant to the sector and one business support organisation. In addition to the in-depth interviews, ITC led a workshop on opportunities and challenges for diversification in the animal feed sector in Uganda with 39 participants. The results of this section are based on these consultations



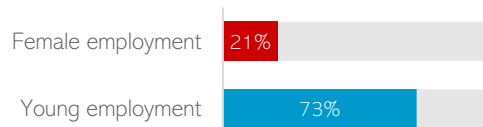
#### Company size



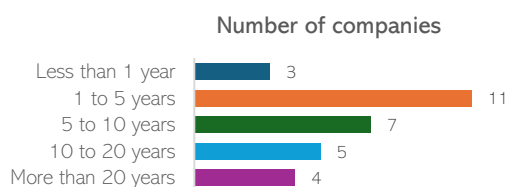
#### Foreign ownership



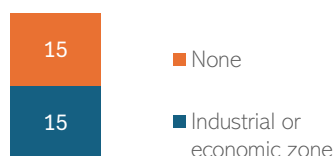
#### Average share of women and young employees in a company



#### Years in operation



#### Location in a Special Economic Zone



#### Women leadership





## Knowing the Ugandan animal feed sector

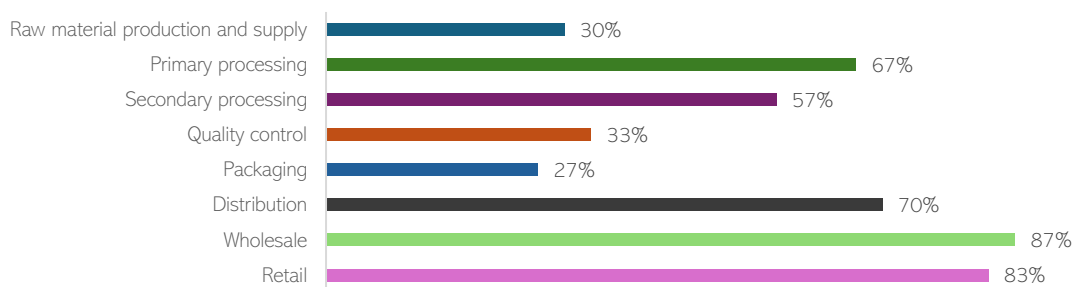
### Distribution, wholesale and retail are the most common activities along the value chain

Animal feed companies are actively involved throughout the value chain. Half of the businesses surveyed engage in at least five stages of the value chain, and all of them are involved in at least two stages.

Wholesale and retail are the most common activities, engaging more than 80% of the companies, followed by distribution. Primary processing is done by two thirds of interviewed companies, while more than half are engaged in secondary processing. Around one third of the companies supply raw material and perform quality control. Packaging is the less common activity, involving around a quarter of businesses.

*We receive raw materials, store them and then prepare rations based on the nutritional profile of the animal or bird whose feed we are trying to produce.*

**Figure 16** Businesses' engagement along the value chain (% of businesses)



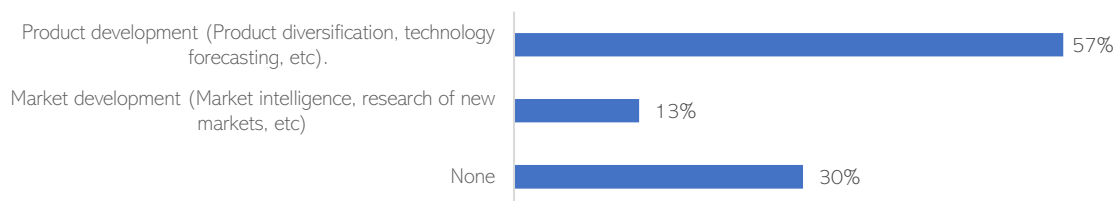
Source: ITC business survey in Uganda (2024).

### Companies are active in product development

A total of 70% of the companies are engaged in some type of research and development activity. More than half of the companies are active mainly in product development activities. Testing new ingredients and alternative raw materials is common. Companies also seek to improve the quality of their products by enhancing the feed formulations.

*We do a lot of research on the quality of feeds and alternative raw materials to replace protein and energy.*

**Figure 17** Businesses' engagement in R&D activities (% of businesses by main R&D activity)



Source: ITC business survey in Uganda (2024).

Only 13% are actively engaged on market development activities. Few companies perform market intelligence and attend market fairs or similar platforms to find new markets. Close to a third of the companies are not active in any R&D activity. They cite lacking support to engage in innovative practices. They also consider much of the research on the sector remains theoretical and is not applied by companies.

Optimism about Uganda’s animal feed value chain development potential

On a scale of one to ten, 77% of the interviewed businesses rate the potential for the development of the animal feed value chain in Uganda to be rather high, rating it to be 7 or above. In fact, on average companies rate the potential of value chain development in a score of 7.1 out of ten.

The potential for value chain development in this sector is high for many reasons. First, Uganda is rich in raw agricultural products like cereals, which are ideal for animal feed. Second, demand for Ugandan animal feed is growing both domestically and internationally, driven by the rising demand for animal products. Stakeholders indicate that there is a significant interest in expanding Uganda’s animal products industry including the leather industry, which presents opportunities for increasing exports and economic growth. Enhancing the quality of animal feed directly impacts the quality of leather produce and leather products.

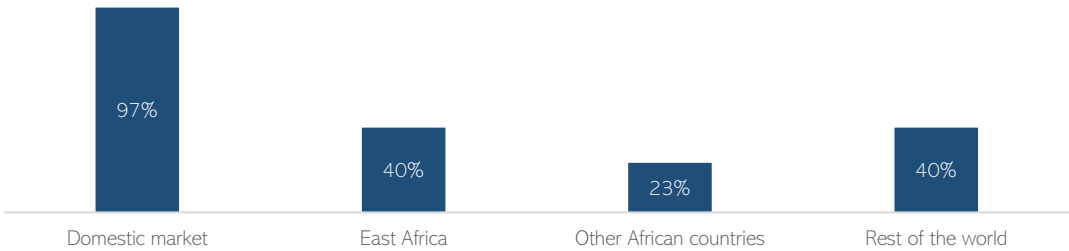
*The increased demand for animal products has led to a rise in animal farming, which in turn drives high demand for animal feed. Additionally, a growing population boosts the demand for food, further elevating the need for animal feed.*

Businesses agree that to unlock this potential, the sector must focus on transforming raw materials into animal feed more effectively, standardizing quality and formulas, and enhancing competitiveness against international rivals.

Domestic market is the primary source of inputs

Almost all companies interviewed source at least part of their inputs from the domestic market, while 40% of companies source inputs from EAC and beyond Africa. Less than a quarter of companies source from Africa– outside the EAC.

Figure 18 Share of companies sourcing inputs from each region



Source: ITC business survey in Uganda (2024).

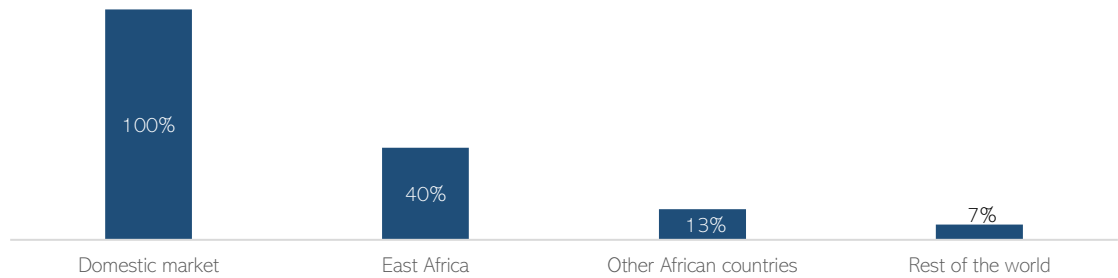
The domestic market is also the most predominant in terms of share of total inputs, with half of the companies sourcing exclusively from Uganda. On average, a company sources 84% of its inputs locally. The share of inputs procured from Africa is low, with an average share of 3.6% and 2.5% of a company’s inputs coming from EAC and other African countries, respectively. Inputs from the rest of the world average 11% of a company’s inputs, though this varies widely, with some companies sourcing nothing and others sourcing entirely from abroad.

Companies mainly sell domestically

All companies interviewed sell their products locally. In fact, 60% of businesses sell exclusively in Uganda, and all of them sell at least half of their produce internally. On average, a company sells 93% of its produce in Uganda.

A total of 40% of the companies sell within EAC, although exports remain low. On average, only 6% of a company’s produce is sold to other EAC countries. Exports to other African countries and continents are marginal, with 13% of companies selling outside EAC and 7% selling outside Africa. In both cases, the average exports are less than 1% of a company’s production.

Figure 19 Share of companies selling to each region



Source: ITC business survey in Uganda (2024).

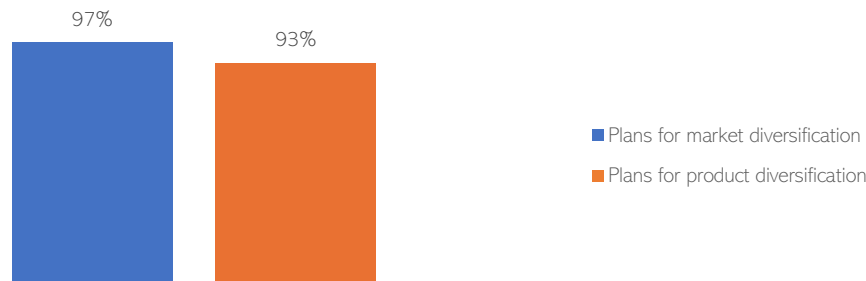
Opportunities and constraints to value-addition, market diversification and product diversification

Businesses are keen on accessing new markets and diversifying into new products

The vast majority of the businesses interviewed plan to expand into new markets both within Africa and beyond, with nearly as many intending to diversify into new products. Companies are aware of their advantages and opportunities to explore new market opportunities. A diverse supply of raw materials is an entry point into new markets. As an emerging industry, animal feed businesses believe there is room for expansion inside the country, particularly as livestock is relying more on formulated feed. Some companies are successfully using new digital marketing channels, such as TikTok, to reach new customers.

We plan to grow into new markets within Uganda that we have not been able to reach, like the northern region.

Figure 20 Business plans for market and product diversification (% of businesses)



Source: ITC business survey in Uganda (2024).

In terms of product diversification, many businesses believe they have the expertise to manufacture new products. Some companies are tailoring their feed production to consumer preferences and regional demands, enabling them to specialize in different market niches. Others plan to diversify not only into new products but also into services related to the value chain, such as veterinary services.

We have an established brand name which has been built over some time which provides us with an opportunity. We also have reasonable experience and knowledge to produce new varieties.

We want to introduce veterinary services bringing all services nearer to consumers who need them and increase our profits.

Innovations like producing casein and whey, which are high-value products, can help Uganda tap into new markets, workshop participants agree. There is a growing global demand for organic and sustainably produced animal feed. Uganda can capitalize on this trend by promoting organic feed production.

Financial constraints and lack of information among factors hindering market and product expansion

Expanding to new markets and into new products presents numerous challenges. Limited financial resources and investment is the main one. Companies would need to acquire and upgrade new machinery to expand their production. Marketing and establishing contacts in new markets is a costly activity, for which many companies do not have the resources.

Lack of information on new markets, such as market prices, potential buyers, market size, also pose significant barriers. Other challenges include compliance with high-quality standards, and poor infrastructure within Africa.

Equipment is very expensive. A bio reactor of 500 litres will cost not less than 5 billion shillings yet that is just one machine.

We lack information on procedures to export. We are afraid of venturing into exports.

Shortages, high costs and low quality are the main challenges when sourcing inputs

Over 85% of businesses face challenges sourcing inputs. High input costs and shortage of locally available inputs were the most common concerns, affecting 70% and 63% of companies respectively. These issues are frequently intertwined.

Raw materials for animal feed, such as maize, soya, and cotton, are seasonal crops. Companies face shortages during the off-season, a problem worsened by inadequate storage capacity and high demand of crops for other industries. These shortages drive up prices making it difficult for feed producers to maintain consistent production and profitability throughout the year.

The availability of animal protein is also limited. For instance, one company reports a severe shortage of Mukene fish due to excessive and unregulated fishing.

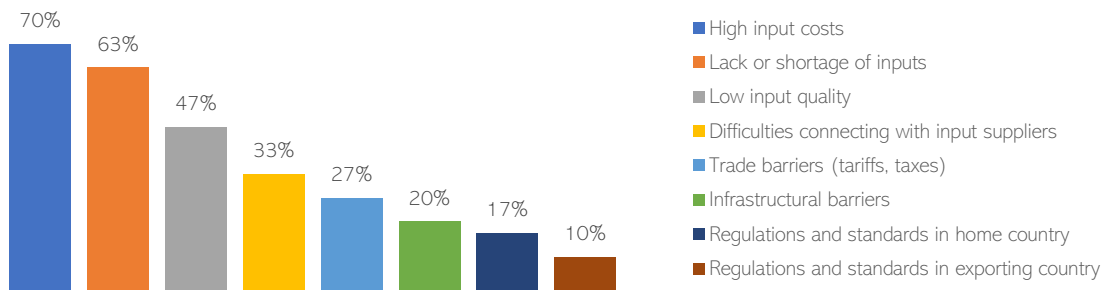
The raw materials are seasonal in nature, we have no capacity of storage until the next season, so we are out of the market temporarily

Mukene fish is one of the best proteins even for humans. The government does not regulate the fishing of Mukene, which has resulted in terrible protein shortage. Soya, which would act as a substitute is not readily available, and if available it is more expensive.

Around half of the companies interviewed encounter issues with the quality of inputs sourced. Locally available feedstock often has lower nutritional content compared to imported concentrates, workshop participants cited. Farmers and suppliers often do not put in place proper quality control systems, affecting the quality of raw materials. Products sometimes fail to meet test and product certification due to the presence of toxins in inputs. Pesticides also compromise the quality of agricultural inputs.

During off-season of agricultural products like maize, soya, cotton, sunflower we struggle with scarcity and price fluctuations.

Figure 21 Share of businesses facing difficulties accessing inputs



Source: ITC business survey in Uganda (2024).

According to industry stakeholders, climate change and post-harvest issues (e.g., high moisture levels, presence of foreign bodies, and aflatoxins) affect the quality and availability of raw materials used in feed production. Effective advisory services could improve post-harvest handling and feed quality.

Difficulties connecting with input suppliers is a concern for a third of the businesses. Poor road networks contribute to the challenges. Other obstacles mentioned are trade barriers, infrastructural barriers, and regulations.

Limited technological capacities and difficulties complying with standards challenge production

Most of the companies interviewed also face challenges related to their production process. Over 60% struggle with limited technological capabilities. Businesses often operate in an artisanal manner, lacking the means to acquire specialized machinery and technologies to improve their productivity. Likewise, producers are not aware of the latest equipment and best practices in the animal feed sector.

We do not have the money to buy machinery like driers and moisturisers, we rely on the sun.

To meet the growing demand for protein and compete globally, the sector needs to embrace new technologies and machinery. Workshop participants mentioned that introduction of advanced technologies, such as Near-Infrared Reflectance Spectrophotometry (NIRS), can improve feed quality assessment and formulation.

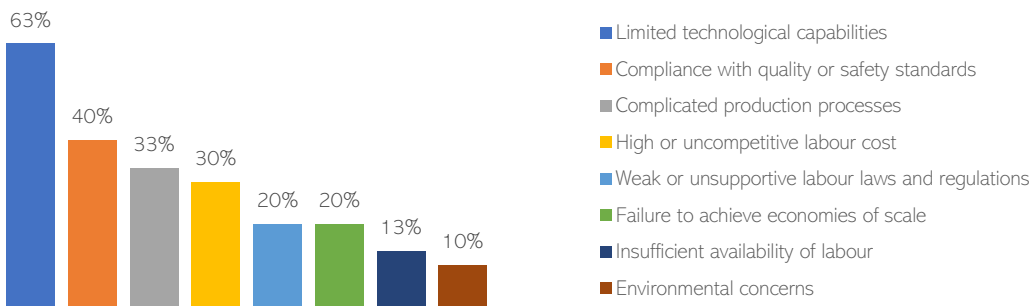
There is adulteration, people resort to sand or other materials in the mix.

Compliance with quality and safety standards challenges 40% of companies. Numerous businesses operate informally, disregarding standards and altering product specifications, which endangers both human and animal health and damages the sector's reputation. In addition to informal animal feed businesses, many farmers find commercial feeds unaffordable, prompting them to produce their own, often of substandard quality. This results in a disparity in product quality.

Even when companies operate formally, they struggle complying with standards. There are confusions and a lack of reliable guidance on meeting nutritional standards, leading to inconsistent product quality and potential harm to livestock, workshop participants agreed. Furthermore, many businesses find it difficult to obtain the quality mark (Qmark) from the Uganda National Bureau of Standards (UNBS).

Poor quality feeds have led to significant economic losses for farmers, as evidenced by a workshop participant's experience of losing 2000 chickens due to substandard feed. Likewise, the gap in local feed quality has been exploited by foreign companies, which bring in high-quality feeds and advanced technologies, capturing a significant market share and impacting local producers' competitiveness.

Figure 22 Share of businesses facing difficulties with production



Source: ITC business survey in Uganda (2024).

A third of the companies are concerned about complicated production processes, largely due to challenges in meeting standards. High or uncompetitive labour cost is a challenge for 30% of the companies. The industry suffers from a lack of adequately trained animal nutritionists and technical experts who can ensure high-quality feed production, workshop participants noted.

Furthermore, the industry is experiencing a brain drain. Skilled professionals, such as veterinarians, often leave local positions to join international organizations due to better opportunities and facilities. Local markets and businesses struggle to sustain the employment of highly qualified professionals due to financial constraints. The cost and difficulty of transporting professionals to various locations within Uganda make it impractical for them to provide widespread services. This often leads to reliance on remote consultations or referrals, which are less effective.



Other issues include weak or unsupportive labour laws (20%) failures to achieve economies of scale (20%), insufficient availability of labour (13%) and environmental concerns.

### Challenges with the legal framework

Uganda has struggled for years to pass the Animal Feed Bill, which is crucial for regulating and developing the animal feed industry. The absence of this bill has created a fragmented legal environment, hindering the growth and standardization of the sector. Without a robust legal framework, the animal feed market is flooded with low-quality, unregulated products that fail to meet nutritional standards, affecting both animal productivity and the overall quality of livestock products. The lack of a strong regulatory framework has also made it difficult to enforce standards effectively. Although the UNBS has established standards, the absence of enforceable regulations means these standards are not being implemented as they should be. This lack of strict regulations allows unscrupulous producers to flood the market with substandard feeds, taking advantage of farmers' need for affordable options. Weak enforcement of existing regulations further exacerbates the problem, negatively impacting animal health and productivity.

However, significant progress was achieved with the passage of the Animal Feed Act in May 2024. This act establishes a comprehensive regulatory framework for the animal feed industry, setting clear guidelines for production, import, and export, alongside stringent quality requirements, permits, and sanitary and phytosanitary measures. Its implementation is expected to drive sector growth and harmonize quality standards across all producers.

Despite this progress, according to the Uganda Animal Feeds Manufacturers Association (UAFMA), most of their members are not prepared to comply with the new regulations. If implemented prematurely, these regulations could push out approximately 95% of the current manufacturers and stockists. Additionally, the Food and Nutrition Bill, if enacted, could indirectly boost the animal feed industry by promoting milk consumption in schools, thereby increasing the demand for animal feed. Legislative delays, such as those affecting the GMO bill, also hinder the adoption of technologies that could improve the nutritional quality of feed ingredients. The proposed law to govern the entire feed process is currently awaiting the President's assent.

### High interest rates and limited access to credit stall businesses expansion

Almost 90% of the companies face challenges accessing financial services. Approximately three-quarters of businesses are concerned about high interest rates, currently ranging between 18% and 20% according to companies, making it difficult for companies to access financing.

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*Interest rates are very high, 18% and above. Conditions to access credit services are not favourable. If you want to take a loan from a bank this will take weeks. So people resort to money lenders who charge higher interests.*

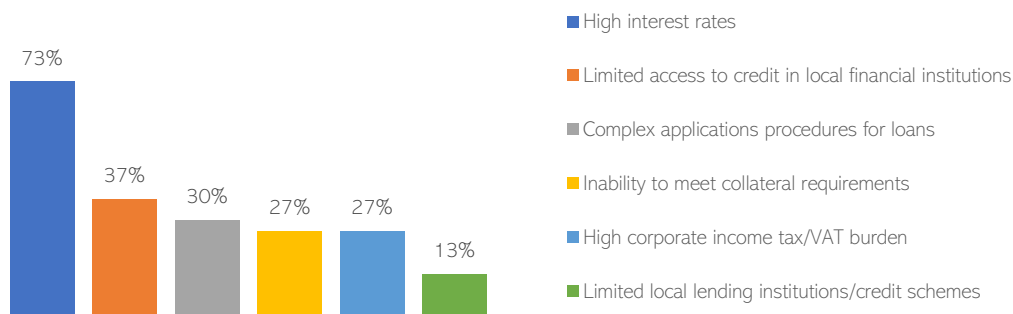
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Limited access to credit and complex application for loans are challenging for around a third of the companies. Waiting times are often long, and documentation required by banks is too complex. As many animal feed businesses still operate informally, access to formal financing options is impossible. Due to the lack of collateral, some companies turn to private or informal lenders who often charge even higher rates, further straining their financial stability. Businesses also feel that commercial banks do not align with the seasonal nature of their industry, which implies a specific timing for financing. As a result, there is a strong need for more agricultural banks that can cater to the unique production cycles of the sector.

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*Financing is the elephant in the room. Our financial institutions lend less and at a very high cost. We are competing with Asian companies who get credit at 3.5% interest rate.*

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**Figure 23** Share of businesses facing difficulties accessing finance

Source: ITC business survey in Uganda (2024).

Other issues mentioned were inability to meet collateral requirements, high tax burden and limited local lending institutions.

### Road infrastructure is poor; electricity is costly and unreliable

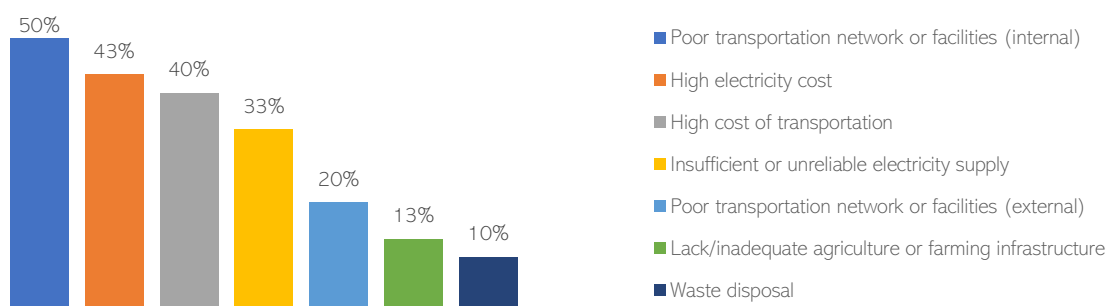
Over three quarters of companies reported difficulties with national infrastructure. Poor transportation networks concern half of the businesses. Roads are in poor condition, with almost no maintenance by the government, companies frequently cited as a concern. Reaching their customers and suppliers is often too difficult due to inadequate roads and transportation is quite expensive, as 40% of companies mention. Some businesses opt to maintain the roads themselves, even if this is a costly endeavour.

High electricity costs concern over 40% of the companies. Fees for electricity in rural areas are particularly high. Furthermore, unreliable electricity supply is a concern for a third of the companies. Power outages are common and can damage machinery. To avoid issues with outages, companies require their own power generators, which further increase costs.

*The road from Masaka to Kyotera is very bad. We find it hard to transport products from where we buy them to our location.*

*We maintain roads ourselves bringing in bulldozers and creating roads, sacrificing finances.*

*Electricity cost is high which translates into high production costs, in addition to costs of maintenance (especially when inadequate electricity destroys machines).*

**Figure 24** Share of businesses facing difficulties with national infrastructure

Source: ITC business survey in Uganda (2024).

Limited access to laboratories and testing facilities in Uganda was another issue mentioned at the national workshop. This hampers the ability to ensure feed quality. Only a few institutions in Kampala provide these services, leaving most farmers without essential quality assurance tools.

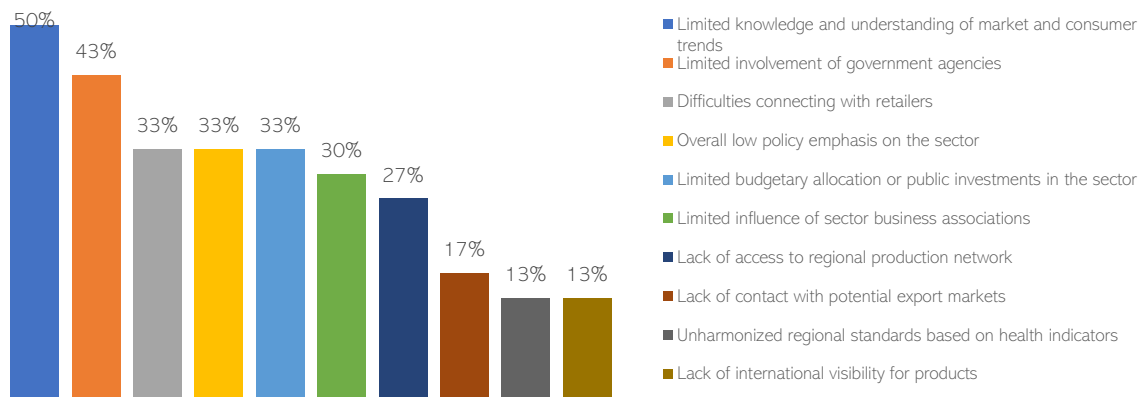
Need for better strategies and support for diversification

Seven out of ten companies reported other operational challenges. Half of the businesses struggle with a lack of understanding of markets and consumer trends.

Overall, businesses face challenges in reaching clients and retailers, partly due to a lack of marketing platforms and strategies, and partly due to insufficient knowledge of client needs. There is a need for better understanding on whether Ugandan consumers prefer local or imported animal feed, workshop participants agreed. This preference can drive industry strategies and influence how local producers position themselves in the market.

Limited government involvement affects 43% of companies, while a third considers there is a low policy emphasis on the sector and a limited public investment. Workshop participants advocate for a stronger legal framework and support from the government. In particular, they mention difficulties passing the Animal Feed Bill, which is crucial for regulating and developing the industry. The lack of this bill has resulted in a fragmented legal environment, hindering the growth and standardization of the sector.

Figure 25 Share of businesses facing other difficulties



Source: ITC business survey in Uganda (2024).

Compliance with quality standards is required to boost international trade

Few animal feed producers in Uganda are exporting, and those who do often struggle with meeting quality standards. Complying with the stringent requirements of markets like the EU remains a significant challenge. The standards are not only difficult to meet, but delays in laboratory testing and procedures also pose additional hurdles. Uganda’s animal feed industry must elevate its quality to compete globally.

Unharmonized standards within Africa present another challenge, though progress is being made. Efforts are ongoing to harmonize standards across regional blocs (EAC, COMESA, SADC, ECOWAS) and eventually the entire African continent through the African Organization for Standardization. This harmonization is crucial for promoting inter-bloc and intercontinental trade.

Environmental constraints

Lack of regulation for waste management and waste disposal is an emerging concern

While most businesses interviewed do not report challenges with environmental regulations, there is growing concern about the lack of clear guidelines on waste management and disposal.

Some companies argue that authorities have not specified how and where to manage and dispose waste effectively. Although companies are aware of the potential environmental impact of their waste disposal practices, they lack the necessary information to make improvements.

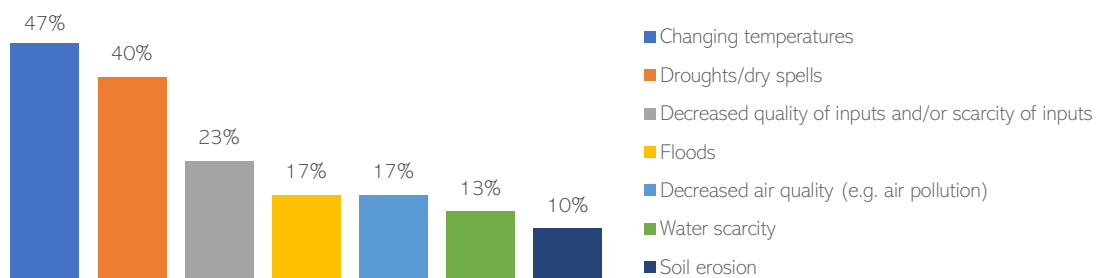
## Changing temperatures and dry spells impact the sector

Seventy percent of businesses consulted reported facing environmental risks in their operation. Changing temperatures was the upmost concern, with 47% of companies reporting this issue. Higher temperatures affect productivity. Key crops like maize are limited during extreme heat, causing problems in feed production. Chickens and birds are also affected by it. Extreme changes in temperature affect production and predictability.

*Due to climate change, maize is not available in June causing problems in feed production.*

Similarly, droughts and dry spells concern 40% of businesses. Key products like cotton and sunflower are affected by prolonged droughts. Other issues reported refer to lower quality of inputs, floods, air pollution, although at a lower rate.

**Figure 26** Risks most likely to impact businesses



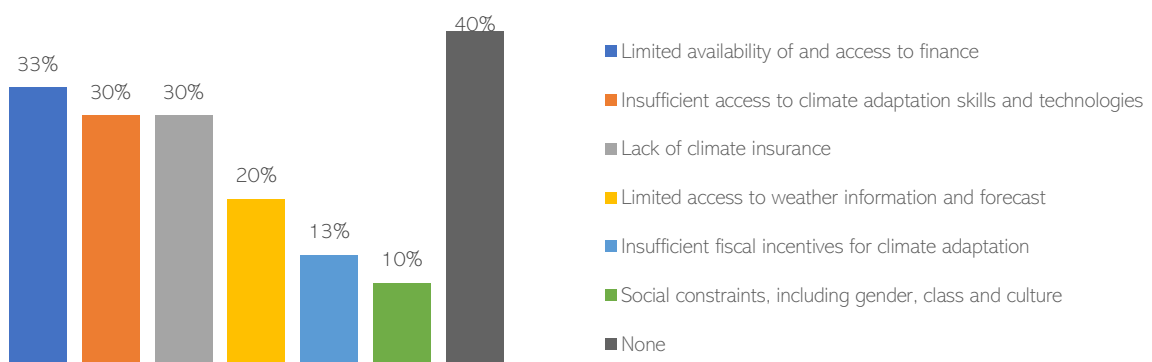
Source: ITC business survey in Uganda (2024).

## Lack of resources stop companies from mitigating climate risks

Adopting climate risk-mitigation measures was reported as challenging for 60% of the companies. The main obstacle comes from lack of financial resources to cope with environmental risks and climate change. Dealing with extreme temperatures requires investing in technologies that are often costly for animal feed companies operating at a small scale. Related to this, is the insufficient access to climate adaptations skills and technologies, a concern for around a third of the companies.

*Much of this requires money which the company is struggling to find.*

**Figure 27** Challenges to adopting risk-mitigation measures



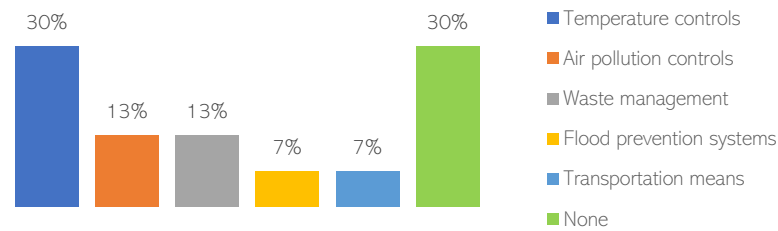
Source: ITC business survey in Uganda (2024).

## Efforts to counter rising temperatures

Despite the challenges, some companies are adopting strategies to make their production more environmentally friendly. One-third of these companies have implemented measures to better adapt to extreme temperatures. Some are using more energy-efficient ventilation systems, while others are planting trees to manage temperature.

Additionally, companies are focusing on air pollution control by reducing gas emissions and fumes. Recyclable packaging is also being introduced by some businesses.

**Figure 28** Efforts companies have made to become more environmentally friendly



Source: ITC business survey in Uganda (2024).

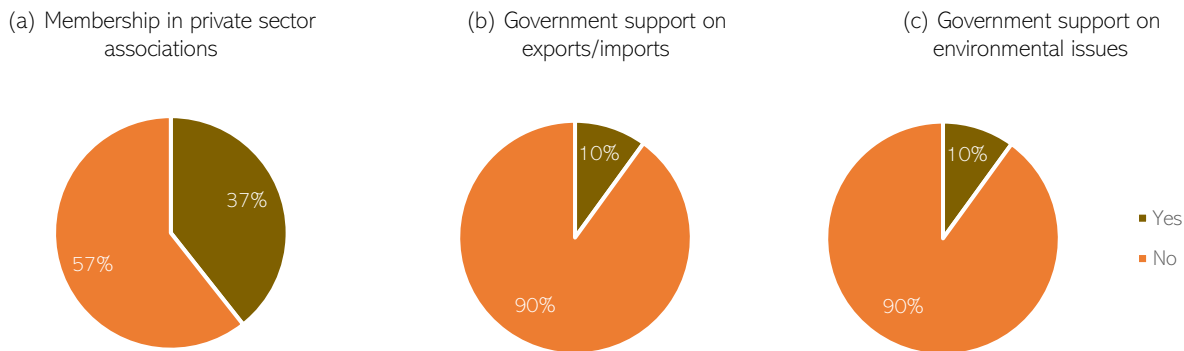
## Business support network

### Weak support network for the industry

The support network for Uganda's animal feed sector remains underdeveloped. While over a third of companies are part of private sector associations, none of these associations focus exclusively on the animal feed industry. Additionally, 90% of companies lack Government support in areas like exports, imports, and environmental concerns.

Workshop participants believe that the government does not adequately consult or support them. There is a call for more direct engagement and consultation to understand the practical challenges faced by producers. There is a pressing need for assistance in various areas, particularly in investment and financing for technologies and machinery, infrastructure development, capacity building, and access to market information

**Figure 29** Business support network



Source: ITC business survey in Uganda (2024).

## Financing, capacity building and information on market prices: three priorities for market and product diversification

When asked about the main support needed for accessing new markets and products, businesses cited financing, capacity building and information on market prices as their top requirements. Financing for new machinery and storage is key. Limited capital restricts businesses' ability to scale-up production and improve productivity. It also prevents them from mitigating risks related with seasonality and high temperatures.

In terms of capacity building, companies recognize the need to upgrade quality and harmonize production standards among businesses. Informal companies require support to transition to formal production, guaranteeing high-quality and safe products. Training and research and development at the farm level are also important to improve the availability and supply of raw materials.



**Figure 30** Main support needed for market (left) and product diversification (right)

Source: ITC business survey in Uganda (2024).

Capacity building in marketing is crucial. Companies must enhance their ability to effectively advertise products and reach new customers. While digital marketing initiatives exist, scaling them requires proper training.

Likewise, information is a common need, mainly on market prices, market size and export potential inside and outside Uganda. The informal nature of many feed producers makes it difficult to collect reliable data and enforce regulations. One concern raised by stakeholders was the lack of detailed data on production and export of key commodities like maize. Maize is a critical component of animal feed and represents a significant portion of exports. Accurate and comprehensive data is essential for informed decision-making and strategy development.

## The way forward

This section summarizes the business recommendations targeted to increase market and product diversification.

- i. **Upgrade and standardize quality in the sector:** Improving quality on locally produced animal feed is key for increasing demand and access to new markets. For this, it is necessary to:
  - Encourage the adoption of modern, automated machinery in feed production to improve efficiency and quality. This includes equipment for precise mixing, pelleting, and packaging.
  - Develop cooperative models that can foster relationships among farmers, traders, and manufacturers. This can help streamline the value chain, ensuring fair practices and quality control.
  - Enhance the capacity of the UNBS and other regulatory bodies to enforce quality standards effectively.
  - Develop clear, achievable standards and ensure they are communicated effectively to all stakeholders. Simplified guidelines can help producers understand and meet the requirements.
  - Establish a robust feedback mechanism to continuously improve standards based on industry input and evolving market conditions.
  - Encourage active participation from all stakeholders in the standard-setting process. This can be incentivized by offering allowances for participation, acknowledging the financial constraints faced by many stakeholders.
- ii. Strengthen regulatory frameworks: implement the Animal Feed Bill to create a structured and regulated industry. Allow a transition time for necessary adjustments and capacity building in the sector.
- iii. Introduce micro-insurance schemes to protect farmers and feed producers against market volatility and supply disruptions.
- iv. To reduce input costs, consider direct marketing channels for farmers to sell their raw materials to feed producers, bypassing middlemen and ensuring fairer prices.
- v. Prioritize capacity building in:

- Training programs to educate producers about standards, best practices, and nutritional requirements. This will help improve the overall quality of animal feeds produced locally.
  - Training farmers and cooperatives to streamline the production, processing, and marketing of raw materials. Cooperatives can negotiate better prices, access storage facilities, and reduce the influence of middlemen
- vi. Promote organic and sustainable feed production practices to meet global demand and enhance market competitiveness.
- vii. Invest in silos, drying and storage facilities to stabilize the supply of raw materials and finished products, ensuring consistent pricing and availability. Consider communal facilities.
- viii. Investing in R&D is crucial for innovation in animal feed production, ensuring quality, and enhancing competitiveness. This includes exploring new feed formulations and improving existing processes.





## CHAPTER 5

# SECTOR SPECIFIC CHALLENGES: BEAUTY AND PERSONAL CARE PRODUCTS



# CHAPTER 5

## SECTOR SPECIFIC CHALLENGES: BEAUTY AND PERSONAL CARE PRODUCTS

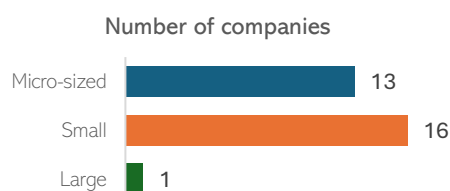
### Box 5

#### Profile of companies consulted in the beauty products value chain

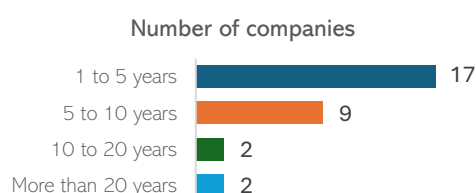
ITC conducted in-depth interviews with 30 companies in the beauty products sector, seven public agencies relevant to the sector and one business support organisation. In addition to the in-depth interviews, ITC led a workshop on opportunities and challenges for diversification in the beauty sector in Uganda with 37 participants. The results of this section are based on these consultations



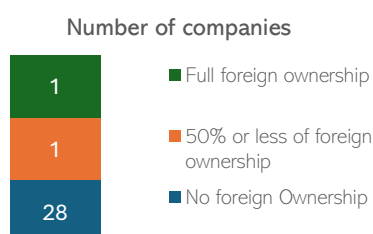
#### Company size



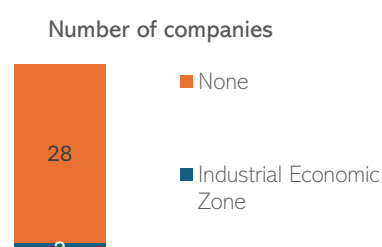
#### Years in operation



#### Foreign ownership



#### Location in a special economic zone





## Knowing the Ugandan beauty products sector

### Most businesses are involved in the production phase

The survey finds a high degree of involvement of businesses at the processing stage, with 80% of the interviewed businesses engaging in manufacturing and production. Normally, businesses buy raw ingredients and tailor them to what consumers are looking for.

Packaging and distribution activities are undertaken by nearly 40% of the interviewed businesses. Relatively fewer businesses are involved in research and development (30%), raw material production and supply (27%) and the quality control stage (13%) within the value chain.

*We purchase raw materials, melt them, prepare sodium hydroxide, and then add the herbs. After it cools down, we combine everything together, to form a piece of soap.*

*We only repackage the product. We put our label on and then take it to the market.*

Some businesses also simply buy the finished product, re-package, and resell. Kenya and Malaysia were identified as two sourcing partners for some businesses.

**Figure 31** Businesses' engagement along the value chain (% of businesses)



Source: ITC business survey Uganda (2024).

### Businesses are diversifying products but need to innovate and explore new markets

Around 60% of the interviewed businesses are investing primarily in product development and diversification activities. Usually, this involves research on different plants used as raw materials in the case of natural and organic products; keeping abreast of new technologies as well as improving product offerings based on an understanding of consumer preferences.

However, participants at the national workshop addressed the pervasive issue of a 'copycat mentality' in Uganda, where businesses replicate existing products instead of innovating. They stress the country's natural resource wealth, which remains underutilized due to a lack of willingness to pioneer new uses for locally available materials. Manufacturers could diversify their raw materials and innovate beyond shea butter to include other indigenous resources like matoke leaves for skincare or roots for hair care. Innovation, they argue, is key to expanding market reach and tapping into export opportunities.

Likewise, local producers struggle with access to high-quality formulations, which are essential for developing competitive products. The absence of support and resources for obtaining international-standard formulations hinders the growth and development of the local cosmetics industry. This lack of access prevents small-scale industries from scaling up and improving their product quality.

Even if efforts on innovation could improve, businesses are well-aware of the importance of intellectual property rights for fostering them. They emphasize the existence of patents, trademarks, and logos for their products, despite the high costs associated with obtaining and maintaining these protections. The expense of intellectual property management includes not only registration fees but also the potential need for hiring consultants. They advocate for policy changes to reduce these costs, enabling more businesses to protect their innovations.

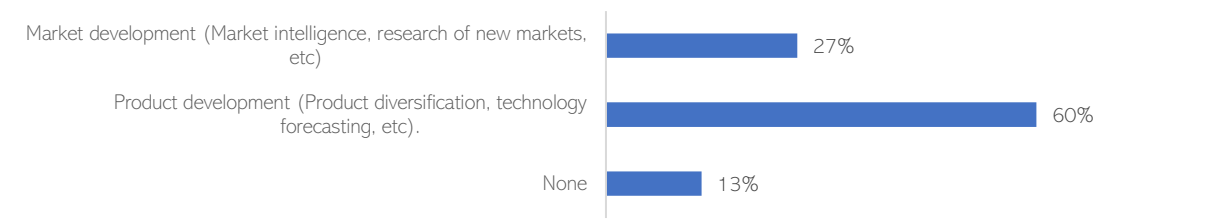
Investment in market development is relatively less common, undertaken by around a quarter of the interviewed businesses. This generally takes the form of market research to fully gauge customer needs; participating in marketing events; customer outreach and advertising – all with the aim of reaching newer markets across the globe. Conducting market research is expensive and often beyond the reach of individual businesses. Businesses require financial support to invest in research and innovation to stay competitive.

*We do a lot of research on plants. We use them in our production as many people are now preferring organic natural cosmetic beauty products.*

*We are consistently looking at product formulation and more consumer-based research to see if people like our products, we get their feedback on our different products.*

*We usually send out a team of people to conduct market intelligence for our products to identify suitable markets.*

Figure 32 Businesses' engagement in R&D activities (% of businesses)



Source: ITC business survey Uganda (2024).

Optimism about Uganda's beauty products value chain development potential

On a scale of one to ten, almost 90% of the interviewed businesses rate the potential for the development of the beauty products value chain in Uganda to be rather high, rating it to be 7 or above. In fact, on average companies rate the potential of value chain development in a score of 8.1 out of ten.

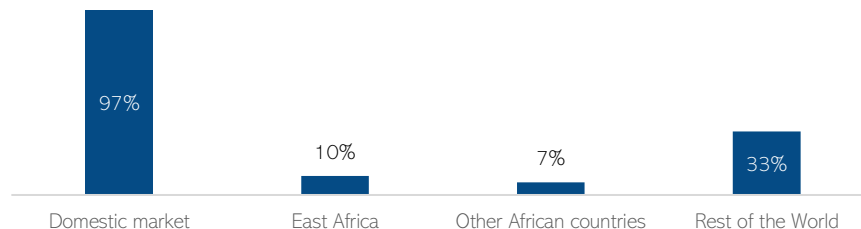
*Our potential to be a hub for beauty products to the world is rather high. Our shea butter is the best.*

The potential for value chain development in the sector is high for several reasons. First, Uganda is rich in natural resources like shea butter, cocoa butter, coconut oil, and various herbs and plants with skincare and haircare benefits, offering a competitive advantage in producing natural and organic beauty products. Second, the country has a steadily growing consumer market, driven by increasing urbanization, rising disposable incomes, and a growing middle class, which provides ample opportunities for expanding the beauty products value chain. Third, Uganda has a vibrant entrepreneurial ecosystem with many SMEs in the beauty and cosmetics sector, creating potential for innovation and collaboration to further develop the value chain.

### Domestic market is the primary source of inputs

Most of the companies interviewed source at least part of their inputs from the domestic market. Only a minority source from within Africa: 10% from EAC and 7% from other African countries. One-third of the companies (33%) procures inputs from outside of Africa.

**Figure 33** Share of companies sourcing inputs from each region



**Source:** ITC business survey in Uganda (2024).

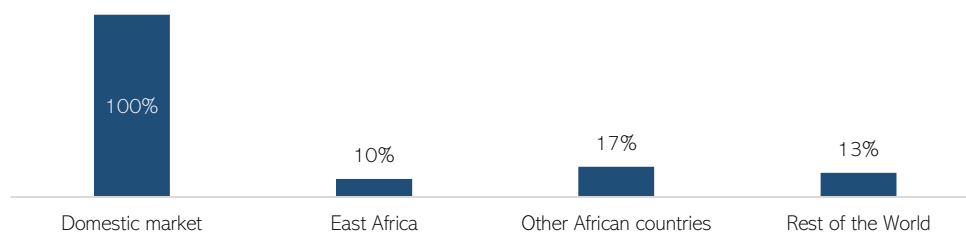
Most companies interviewed primarily procure their inputs within Uganda, with 60% exclusively relying on domestic market, and 80% obtaining over half of their inputs locally. On average, a company sources 80% of their inputs domestically. The remaining inputs are predominantly imported from countries outside Africa, averaging about 14%, with some companies importing nothing while others source up to 90%. Inputs from EAC contribute an average of 6% of a company's inputs, while inputs from other African countries outside EAC average only 1%.

### International sales remain limited

All companies interviewed sell their products within Uganda, while few companies are expanding beyond the domestic market: 10% sell within EAC, 17% concentrate on other African countries, and 13% target markets outside of Africa.

Most companies interviewed primarily focus on the domestic market, with an average of 88% of a company's production being sold domestically, and 77% of the companies focusing solely on the domestic sector. Regarding exports, on average, a company exports 2% of their production to EAC. Among the companies that sell to this region, all sales account for less than 30% of their total sales. In addition, on average 6% of a company's sales go to other African countries outside of EAC, with sales varying significantly from none to as much as 80%. Finally, an average of 5% of a company's sales goes outside Africa.

**Figure 34** Share of companies selling to each region



**Source:** ITC business survey in Uganda (2024).

## Opportunities and constraints to value-addition, market diversification and product diversification.

Businesses are keen on accessing new markets and diversifying into new products

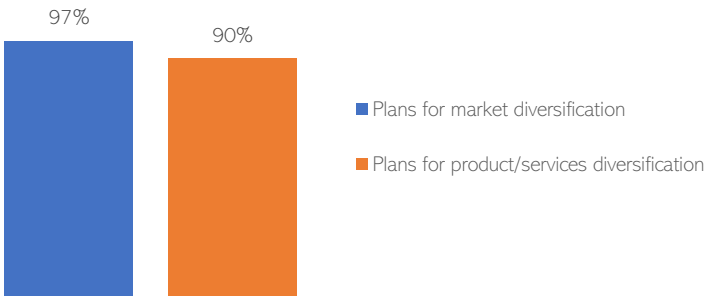
A large majority of the interviewed businesses (97%) aim to enter new markets both within and outside Africa. They are confident in the quality of their products, such as shea butter, which could attract strong markets beyond Uganda. They are keen on increasing their brand visibility in new markets and generate higher profits for the business. Accordingly, businesses wish to acquire new machineries and equipment, make their brands more attractive, and continue to work on quality.

*We plan to expand to southern Uganda. This region imports a lot of shea butter from abroad and yet our shea butter is better.*

Nine out of ten of the interviewed businesses plan to diversify into new product lines, to serve either existing or new markets. They consider it to grow the brand, access additional customers in current and new markets, and attain economies of scale. Businesses also see opportunities for green products given the increasing demand for chemical-free beauty and personal care products

*We can consider expanding our presence into new geographical markets within Uganda, as well as neighbouring countries in East Africa and beyond. This could involve setting up distribution networks, establishing partnerships with local retailers, or even exploring e-commerce channels to reach a wider audience. We could also explore opportunities for vertical integration by expanding operations in upstream or downstream products in the value chain. This would involve investing in raw material production or sourcing, manufacturing packaging materials in-house, or even establishing retail outlets to sell directly to consumers.*

**Figure 35** Business plans for market and product diversification (% of businesses)



Source: ITC business survey in Uganda (2024).

### There are challenges to new product and market development or expansion

Limited financial means and lack of market intelligence are the primary concerns, which hamper investment in improved processing technology. Regulatory hurdles and time-consuming certification processes further complicate expansion efforts. Moreover, competition with imported goods, limited market connections, and the need for capacity building among technical and managerial staff are significant barriers

*It's so hard to get product certification from the Uganda National Bureau of Statistics (UNBS) and to meet their requirements. We cannot export because we have no certification from Uganda. New markets may also need more certification.*

*One of the primary challenges is conducting thorough market research to understand the dynamics, preferences, and regulations of the new markets. Each market may have unique cultural, economic, and regulatory factors that could impact the success of our products abroad.*

*The finances to acquire machinery will be one of our biggest challenges.*

*We lack skills and technologies to create new products.*



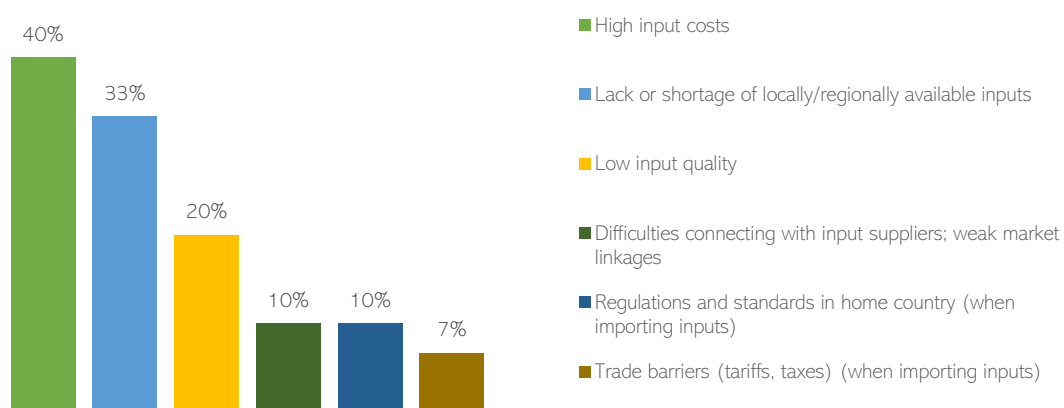
*We will likely face competition from local and international brands already operating in new markets. Understanding the competitive landscape and developing strategies to differentiate its products and capture market share will be essential.*

*Trade barriers are problematic. For example, if we are to take our products to South Sudan, rules and regulations are too many. We have to put in a lot of time and money to know how to handle the whole process before we enter into a new market.*

## High input costs, lack of domestically available inputs and inconsistencies in terms of quality hamper businesses

Close to three quarters of businesses cite challenges in sourcing inputs. High input costs are the topmost concern (40%), followed by limited availability of locally available inputs (33%) and low input quality (20%). A smaller share of business also faces difficulties connecting with input suppliers (10%), with regulations and standards in home country (10%) and with trade barriers when importing (7%).

**Figure 36** Share of businesses facing difficulties accessing inputs.



**Source:** ITC business survey in Uganda (2024).

Businesses find locally available raw material too expensive. Many cosmetic companies in Uganda rely on imported organic inputs, which are costly and subject to variable shipping delays and customs charges. The cost and unpredictability of shipping and customs charges lead to instability in product pricing. Furthermore, lack of standardized customs charges and delays can cause raw materials to spoil.

Although companies can find organic inputs locally, improper harvesting practices disqualify products from being classified as organic. For instance, natural inputs, like organic manure from rocks, are available, but farmers often prefer synthetic fertilizers due to familiarity and perceived effectiveness. Ensuring organic integrity begins with managing the farming process, including soil health. Farmers need to use natural inputs and practices that enhance soil fertility while maintaining its natural state.

Businesses also find supply of local raw material to be inconsistent in terms of quality, especially in light of the increasing industry demand. Many shea butter producers in Uganda purchase raw materials from middlemen, lacking the capacity to test the quality of the shea nuts. This reliance on middlemen results in variable quality, which can affect the final product.

Additionally, some businesses indicate that there are currently fewer suppliers for the natural and organic inputs, making them expensive. The lack of pharmacological laboratories in Uganda also hampers the ability to ensure raw material quality, which affects the final product. Some producers have undergone training to improve post-harvest management, ensuring cleaner and better-quality nuts reach processing plants. However, the challenge remains in maintaining these standards consistently.

Another issue reported was seasonality. Key inputs like shea nut are seasonal, and the supply is inconsistent. During surplus periods, the lack of capital prevents producers from stocking up, leading to fluctuations in quality and availability

*Shea butter is a seasonal crop. A wrong forecast for the demand may lead to losses. Some people export raw shea nuts bringing about a lot of competition and raising cost of raw materials.*

Limited access to technology, and quality or safety compliance are key production-related challenges

Limited access to technology, technical assistance and difficulties complying with quality and safety standards are key production-related challenges. Seventy percent of companies reported challenges with production capabilities and standards. Most concerns are about limited access to technological capabilities, followed by difficulties to upgrade to new technologies.

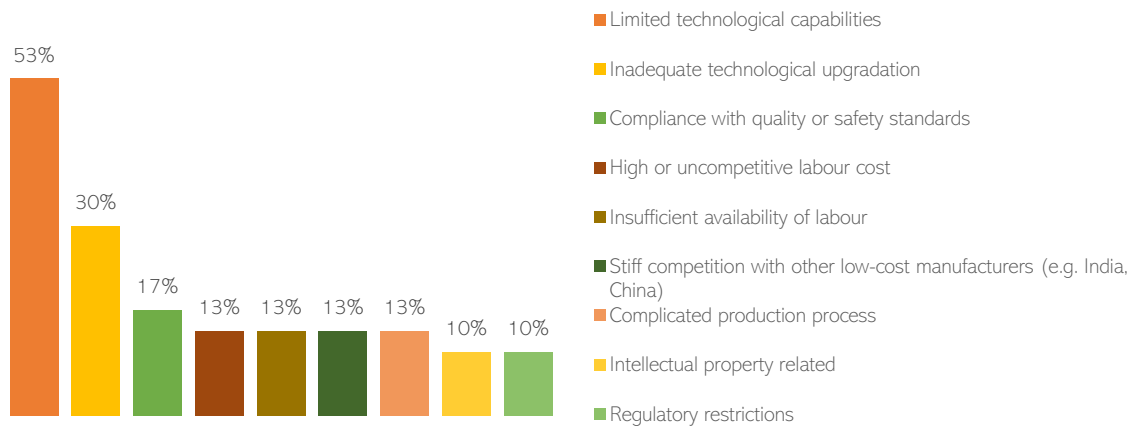
*We need to get the right kind of technology to be able to produce up to the standards, which is currently lacking.*

While other sectors in Uganda have successfully collaborated with universities—such as the food sector's partnership with Makerere University, which provides incubation and production spaces, food scientists, and production equipment—the cosmetic sector lacks similar cooperation. The absence of public and private funding for dedicated incubators and production spaces for cosmetic products creates challenges for shea butter producers in obtaining the necessary scientific and technical assistance.

Compliance with quality and safety standards is a challenge for nearly a fifth of the interviewed businesses. One significant challenge identified in the workshop is the development and harmonization of standards for cosmetics and beauty products. UNBS is tasked with creating these standards, but the process is often slow due to limited funding and resources. Standards like those for shea butter have been developed from scratch, but many other products still lack specific standards. Slow development process, reliance on standards from bodies like ESC or ISO, high certification costs and the high workload of the UNBS team are key challenges.

The introduction of the Digital Conformity Marking (DCM) aims to combat substandard cosmetics in Uganda. The DCM has been mandatory for cosmetics since August 2024. However, the cost of implementation is high for both SMEs and large companies, requiring changes to packaging and processes.

Figure 37 Share of businesses facing difficulties with production



Source: ITC business survey in Uganda (2024).

Regular and comprehensive product testing over the lifecycle is essential to ensure quality and shelf-life. Businesses need to understand the importance of testing products at various stages to maintain quality and comply with standards. However, facilities for testing and certifications are scarce and sometimes difficult to reach for companies and farmers located in remote areas.

Workforce gaps in terms of quantity, quality or pertinence were another issue mentioned by 13% of businesses. Workshop participants highlighted this issue. There is a lack of qualified professionals, such as biochemists, to help improve product quality to meet international standards. Many producers are self-taught and lack formal training in key areas like emulsification and shelf-life determination. The standard-setting and assessment procedures of certification bodies could benefit from professional guidance.

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*Since our factory is very far, we have faced a lot of challenges with certifying our products. The UNBS find it hard to reach us due to the distance.*

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### Packaging, branding and labelling need improvements

High-quality packaging is crucial for consumer perception, market competitiveness, and brand image in addition to protecting the integrity of the product. However, the cost of packaging is high, as it is mainly imported. High quality packaging companies for the beauty products sector in Uganda are scarce. This increases the overall cost of production and higher prices for the final product, making it difficult for local producers to compete with cheaper imported alternatives. This limits the market reach and competitiveness of Ugandan products. Furthermore, importing packaging materials is expensive due to unpredictable taxes and import duties, which further increase the final product cost.

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*We cannot find glass bottles for packaging avocado oil. No one is manufacturing them here in Uganda.*

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Likewise, many business owners operate in an environment with limited access to professional services such as branding, printing, and labelling. This often results in inconsistent quality and operational inefficiencies. Most printing and branding services are sourced from certain areas in Kampala, where many providers are self-taught.

Local producers also struggle with marketing their products due to limited financial resources. International brands have significant marketing budgets, allowing them to dominate media channels and consumer attention. Building a brand in Uganda's cosmetics industry is significantly hindered by the high costs associated with advertising. Major advertising platforms like radio and TV require substantial budgets, which many local businesses find prohibitive. Effective advertising is crucial for reaching a larger audience and establishing a brand presence, but the financial barrier limits the ability of local brands to compete with well-funded international companies. SME owners often lack the technical guidance needed to build their brands and effectively use modern marketing platforms like social media. Professional advice on how to position products on social media channels is crucial for reaching target segments.

This adds to the lack of consumer support for locally manufactured products. Ugandans tend to prefer imported cosmetics, which are perceived to be of higher quality. This preference further diminishes the market share for local products.

### Access to finance is a challenge for most of the interviewed businesses, inability to meet collateral requirements being the most constraining factor

More than 80% of the businesses face challenges with access to finance. Among the topmost constraints to accessing finance is the inability to meet collateral requirements, cited as a challenge by half of the businesses. The other commonly cited concerns are high interest rates, cited by 37% of businesses.

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*We have tried to apply for financial assistance but all in vain due to lack of needed and desired collateral.*

---

For 30% of businesses, access to credit in local financial institutions is limited and the process for credit application is rather complicated for 27% of companies. For over a quarter of the businesses, access to credit in local financial institutions is a challenge, while 10% of the companies reported challenges due to high taxes.

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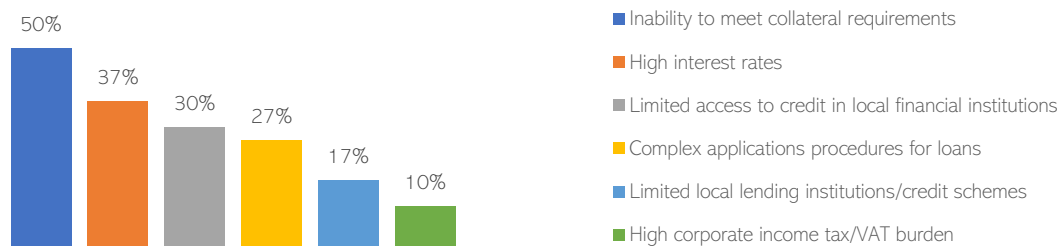
*We have tried getting money from the bank and failed because the loans are expensive, as the interest is too high.*

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The cost of borrowing in Uganda is exceptionally high, with companies reporting interest rates around 28% per annum. This high cost of capital makes it difficult for businesses to invest in necessary activities such as advertising, purchasing machinery, and expanding operations. Likewise, banks and lenders in Uganda require substantial proof of viability and collateral, making it hard for businesses, especially SMEs, to secure loans.

Even when there is demand, as in the case of a local business receiving an order for three containers every three months, limited capital can prevent the business from scaling up production to meet these demands. It took one local business three years to raise the necessary funds to fulfil such an order, illustrating the significant delays and missed opportunities caused by capital constraints.

**Figure 38** Share of businesses facing difficulties accessing finance



Source: ITC business survey in Uganda (2024).

High domestic taxation is a concern

One of the most significant challenges discussed during the workshop is the high taxation on production machinery. This issue is compounded by multiple taxes, including staff duty, excise duty, and VAT, which cumulatively increase production costs. The high taxation on local manufacturers makes their products more expensive compared to international products, which not only have better quality, but often benefit from lower import taxes.

High costs and unreliable supply of electricity are the most cited infrastructural concerns

For 80% of the businesses consulted, the state of the national infrastructure is a constraining factor. Unreliable electricity supply and high electricity costs feature among the top infrastructural constraints cited by close to a third and a quarter of businesses, respectively.

Since we operate online, insufficient and unreliable electricity supply is a challenge as we need electricity on full time, but we usually have electricity cuts.

Poor transport network and high transportation costs account for other key challenges with 20% of the interviewed businesses citing poor transportation network and facilities (both external and internal), and high costs of transportation as central infrastructural hurdles.

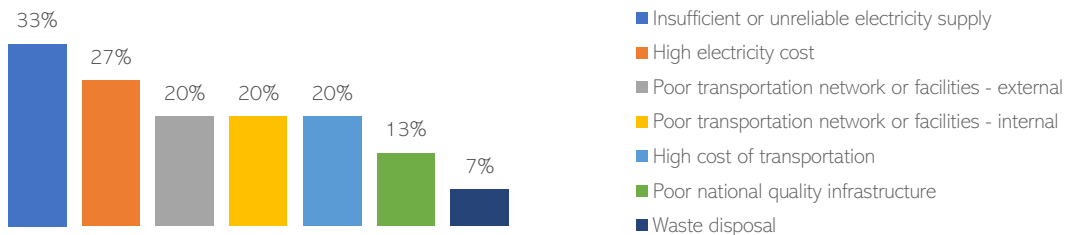
Poor distribution networks and limited availability of delivery companies like DHL to handle deliveries is one of our key constraints.

Poor national quality infrastructure is cited as a challenge by 13% of the businesses. Businesses cite lack of laboratories for raw materials and final products, which makes it hard to attain certification.

We have very bad roads. In rainy season they are not usable.

Few businesses also cite facing challenges pertaining to limited waste disposal, lack of adequate e-commerce channels, limited digital channels and lack of technology and manufacturing expertise.

**Figure 39** Share of businesses facing difficulties with national infrastructure



Source: ITC business survey in Uganda (2024).

## Limited knowledge of markets and trends

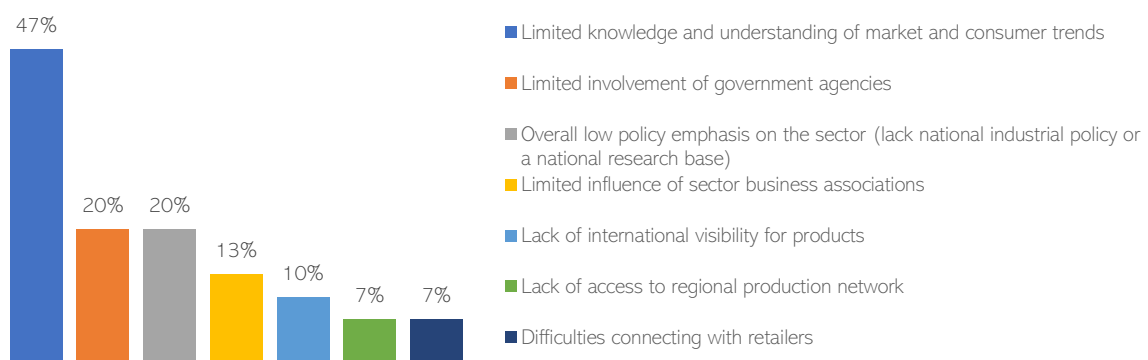
Among other issues, half of the interviewed businesses reported limited knowledge and understanding of market and consumer trends, which prevents them from tailoring products and reaching consumer expectations. Ten percent state that their products lack international visibility. Both these factors make market access less competitive.

Other issues reported relate to the limited involvement of government agencies, low policy emphasis on the sector and limited influence of business associations. These results suggest that the sector may not be viewed as strategically important and could benefit from improved organization.

Lack of access to regional production networks, difficulties connecting with retailers and unharmonized regional standards also bother businesses, albeit in small number.

*We have not had chance of getting any involvement of government in what we do, like helping us with maybe safety gears or trainings at all.*

**Figure 40** Share of businesses facing difficulties with other issues related with production



Source: ITC business survey in Uganda (2024).

## Lack of information, difficulties with documentation and high costs hinder exports

Producers face difficulties in navigating export procedures and regulations. First, information on trade procedures is not readily available and is scattered across agencies. Second, meeting export standards and obtaining necessary certifications is deemed daunting by small producers. The process for obtaining certification is cited as being incredibly expensive and tedious by a few businesses. Businesses find it hard to complete the complex documentation formalities. In the absence of the necessary certification, it is impossible to export. Another commonly cited barrier to trade are long and cumbersome inspection procedures undertaken at home at the time of export, which causes delays and adds to costs.

Uganda's landlocked status and other logistical challenges hinder exports. Both air and sea transport are expensive, with additional complications at border points. Small producers struggle with upfront costs and ensuring reliable payment from international buyers. High costs of shipping also significantly hinder export potential.

Producers often focus on high-demand products like shea butter and moringa due to existing market demand and export restrictions. Trade restrictions, high costs of doing business, and high internet and communication costs are the key challenges.

*It is very hard to get certification for our products. It requires many documentations and approvals which are hard to pass. It is expensive and very technical to get products certified. Lack of certification hinders us from exporting formally. We give our products to friends and other people traveling to, for example Kenya, to carry along the product and deliver to our customers.*



## Environmental constraints

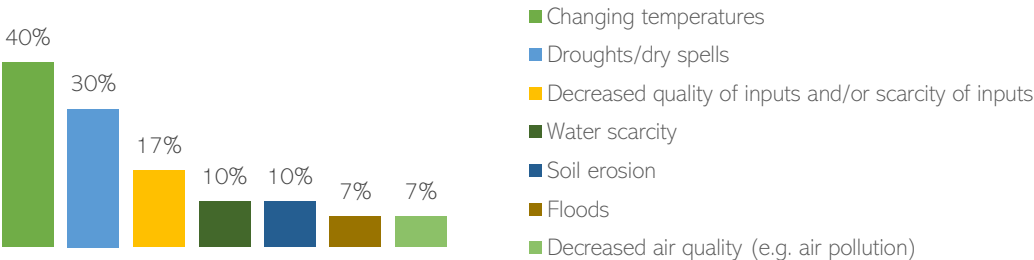
### Environmental risks are a concern

Almost none of the businesses interviewed cites concerns regarding environmental rules and regulations. However, two-thirds of businesses say that they face environmental risks. Changing temperatures are most cited (40%). Businesses indicated that excessive rains in the region affect production, especially of shea nuts, and transportation. This is followed by droughts and dry spells (30%) and decreased quality of inputs and/or scarcity of inputs (17%). A rather small number of businesses are also affected by water scarcity (10%), soil erosion (10%), floods (7%) and decreased air quality (7%).

*We get our raw materials from farmers. So, when the rains don't come, we do not get good avocado.*

*Weather affects us a lot. Our shea butter crops grow in one season of the year. If the weather is bad, then we get low yields that affect our production along the entire year.*

Figure 41 Risks most likely to impact businesses



Source: ITC business survey in Uganda (2024).

### Deforestation is a pressing issue

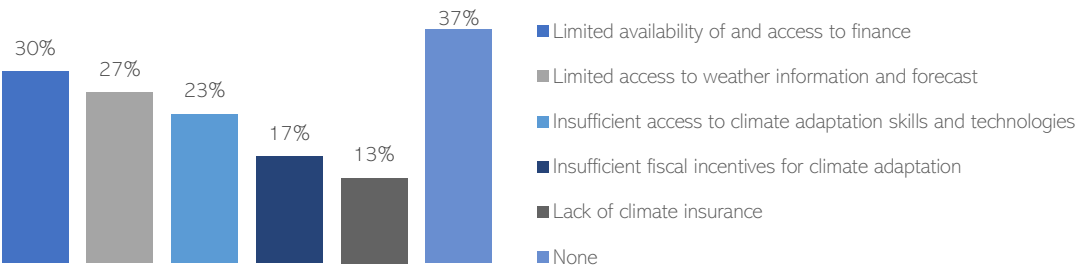
High demand for shea butter and deforestation for charcoal production threaten shea tree preservation, as they take over 15 years to mature. This unsustainable practice endangers the long-term availability of shea nuts. With each tree producing only five kilos of nuts, local farmers find it economically unviable compared to charcoal production. The perceived low profitability of shea butter discourages farmers from adopting best practices. Encouraging value addition at the farm level and ensuring fair prices can motivate farmers to improve their practices.

### Limited access to finance and to climate adaptation skills and technologies prevents businesses from adopting climate risk mitigation measures

Almost two-thirds of the businesses face some challenge adopting climate risk mitigation measures. For close to a third of businesses, the challenge is the limited access to finance that curtails adoption of risk-mitigation measures. Lack of access to weather information systems also affects close to a quarter of the businesses, as well as insufficient access to climate adaptation skills.

*We have limited availability of funds to purchase fire extinguishers to put down the fire.*

Figure 42 Challenges to adopting climate risk-mitigation measures



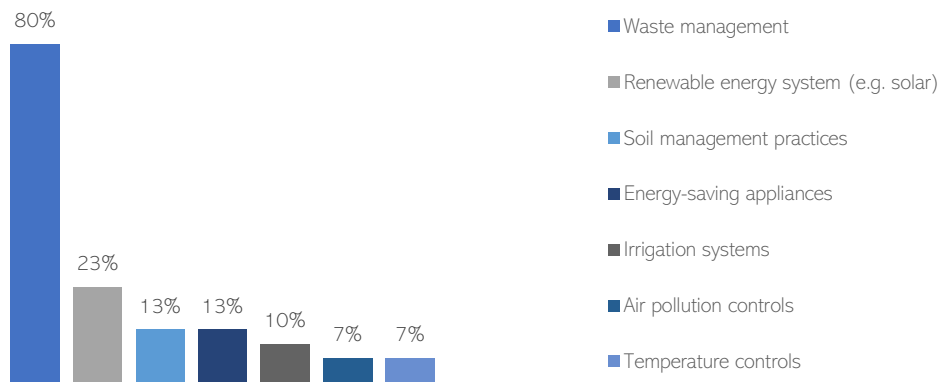
Source: ITC business survey in Uganda (2024).

## Businesses are acting on environmental matters

Despite the challenges, businesses are striving to align with environmental risks and best practices. Effective management of waste is an important initiative, being undertaken by 80% of the interviewed businesses.

Other climate risk-mitigation measures include the installation of renewable energy systems. Particularly common are the use of solar power and captured rainwater. Albeit fewer in number, some businesses are also adopting good soil management practices and energy saving appliances, irrigation systems and air pollution controls. An even smaller number of businesses are making use of flood prevention and power generation systems.

**Figure 43** Efforts companies have made to become more environmentally friendly



Source: ITC business survey in Uganda (2024).

## Business support network

### Weak business support network for the industry

The business support network for the beauty products sector in Uganda is still weak. Only one third of the companies interviewed are part of a business association. The absence of a dedicated business association for the beauty products sector is cited as an obstacle to its development and to effectively communicating specific concerns to the public sector. Mentorship from other experienced companies would be valuable for small businesses wishing to access international markets.

*We need an association for beauty products to promote our sector and our natural ingredients.*

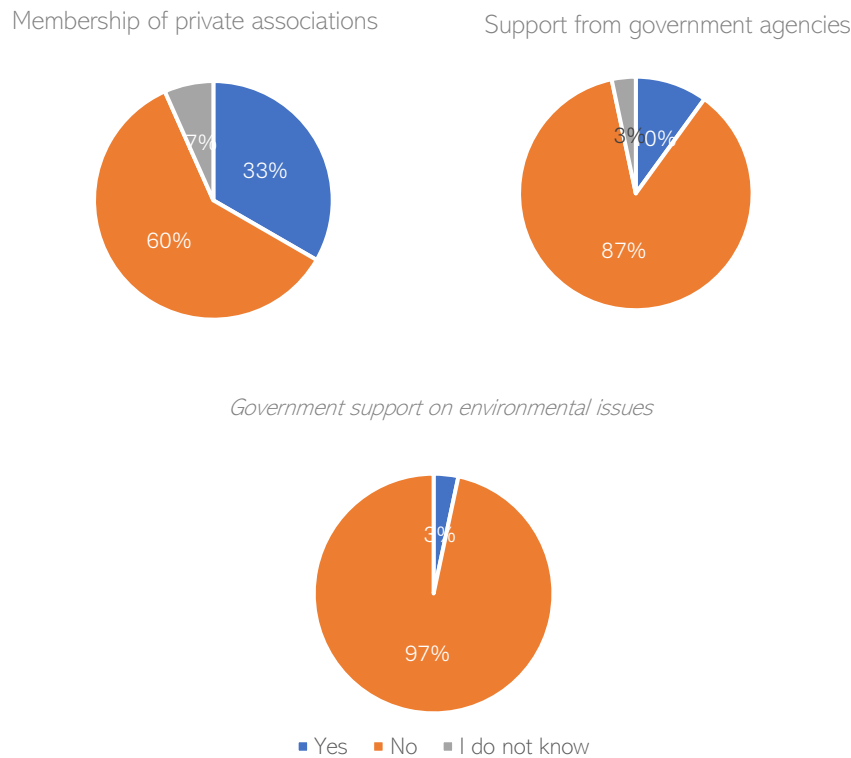
Workshop participants also revealed limited interaction among stakeholders in the industry. Many industry players do not frequently engage with peers or associations, limiting opportunities for learning and collaboration. They agree that regular meetings and forums can facilitate knowledge sharing and collaboration, helping businesses improve their products and expand their markets.

Forming cooperative societies, workshop participants agreed could help share costs, streamline production, and improve bargaining power in the market. They could also facilitate access to shared resources such as machinery, certification services, and export logistics.

The limited distribution network for local cosmetics also poses a challenge. Many producers rely on personal networks for distribution, which restricts their market reach. The lack of extensive marketing and advertising further limits their ability to expand beyond their immediate geographic area.

Support from the government is considered even lower, with nearly 90% of businesses reporting no support from government agencies, and almost none receiving assistance on environmental issues. Businesses require support in different aspects, including information on market access and capacity building. In terms of environmentally friendly practices, companies would require assistance on sustainable packaging, renewable energies, post-harvesting practices and improved weather forecasting.

Figure 44 Business support network



Source: ITC business survey in Uganda (2024).

Financing, capacity building and information on market prices: three priorities for market and product diversification

When asked about the main support needed for accessing new markets and products, businesses cited financing, capacity building, and information on market prices as their top requirements. Financing for technology upgrades and achieving economies of scale is a priority. Limit capital restricts businesses' ability to diversify product lines and invest in necessary marketing efforts to compete with established international brands.

In terms of capacity building, companies recognize the need to enhance their production capabilities, research and improve their knowledge of transportation and logistics, particularly within Africa. Market intelligence is a common need, mainly information on market prices, market linkages, and general knowledge on accessing international markets.

Figure 45 Main support needed for market (left) and product diversification (right)



Source: ITC business survey in Uganda (2024).

## The way forward

This section summarizes the business recommendations targeted to increase market and product diversification.

- i. **Improve the public-private dialogue and cooperation in Uganda's beauty sector:** Businesses are confident in the potential the sector has for growth and diversification. However, better synergies are required *within* the private sector and *between* public and private sector. For this, it is necessary to:
  - Create a business association dedicated to the beauty sector in Uganda, to advocate for policy reforms and requirements that are specific to the sector.
  - Establish clear guidelines and provide capacity building from the government to producers seeking certification. Government and industry bodies should work together to streamline the certification process.
  - Develop export promotion programs. These programs should provide financial assistance, training on export regulations and standards, and assistance in establishing international distribution networks.
  - Strengthening collaborative networks by encouraging more extensive networks among shea butter and other commodity producers to leverage shared resources and maintain product quality.
  - Continue holding industry dialogues to foster collaboration and growth across different sectors.
  - Seek government support in training farmers and improving post-harvest handling to ensure quality inputs.
- ii. **Capacity building on market access information:** There is a demand for more comprehensive training on using ITC tools to help businesses effectively identify market opportunities and trends. Enhanced understanding of these tools can significantly support businesses in making informed decisions regarding market entry and pricing. Prioritizing the participation of women, who are key contributors and leaders within this sector, is essential. Training should also focus on developing market entry strategies that consider the specific requirements and preferences of target markets
- iii. **Upgrade and standardize quality in the sector:** Improving the quality of locally produced final products is key for increasing demand and access to new markets. For this, it is necessary to:
  - Increase funding for UNBS to speed up the development and harmonization of standards relevant to the beauty products value chain.
  - Work with international bodies to adopt and adapt existing standards more quickly.
  - Support for DCM: provide subsidies or financial support to companies for the implementation of DCM. Offer training programs to help companies comply with DCM requirements.
  - Improve access to accredited testing facilities for quality assurance in remote regions.
  - Establish pharmacological laboratories to ensure raw material quality.
  - Liaise with the Uganda Industrial Research Institute (UIRI) to help producers understand and meet certification requirements. This support could include training programs and clearer guidelines on quality standards.
- iv. **Streamline export documentation and reduce bureaucratic hurdles** to facilitate smoother and more cost-effective international trade.
- v. **Accelerate the adoption of best practices on sustainability**, particularly:
  - Expand training programs on sustainable harvesting, post-harvest management, and quality assurance for both collectors and processors.
  - To prevent the destruction of shea trees for charcoal, alternative fast-growing tree species suitable for charcoal production should be promoted. Providing seedlings and support for planting these trees can help preserve shea trees while meeting energy needs.
- vi. **Provide tax incentives** for companies investing in local packaging production to encourage domestic manufacturing.
- vii. Create cooperatives among small manufacturers to pool resources and negotiate better deals for packaging materials.

- viii. **Capacity building on organic farming practices** to untap the potential the country has on this type of final products. This includes zoning areas for organic farming, providing training to farmers, and implementing policies that encourage sustainable agricultural practices.
- ix. Invest in **education and training programs** for biochemists and other relevant professionals for the sector
- x. Increase investment in research, development and innovation, by:
  - Providing incentives for companies to adopt cost-effective and innovative business practices.
  - Developing sector-specific incubators to provide scientific and technical support to the development of new products
- xi. Launch campaigns to promote the benefits of locally manufactured products and encourage Ugandans to support their local industry. Highlight the unique advantages of products tailored for the Ugandan climate and preferences.
- xii. Ensuring better implementation of development plans and providing essential infrastructure and services in rural areas.
- xiii. Creating affordable loan schemes and securing international backing to support SMEs and women-led companies in scaling their operations.









## CHAPTER 6

# SECTOR SPECIFIC CHALLENGES: PROCESSED FOOD

# CHAPTER 6

## SECTOR SPECIFIC CHALLENGES: PROCESSED FOOD

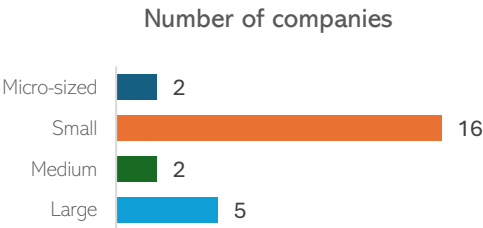
Box 6

Profile of companies consulted in the process food value chain

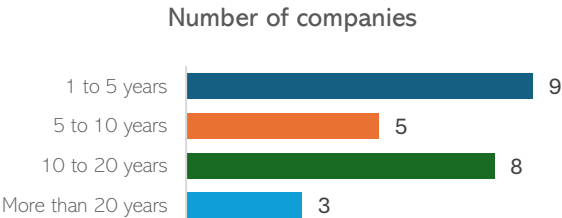
ITC conducted in-depth interviews with 25 companies in the processed food sector, three public agencies relevant to the sector and two business support organisations. In addition to the in-depth interviews, ITC led a workshop on opportunities and challenges for diversification in the beauty sector in Uganda with 37 participants. The results of this section are based on these consultations



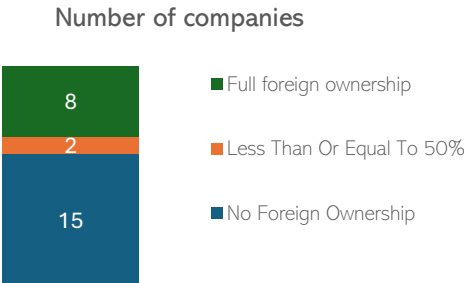
Company size



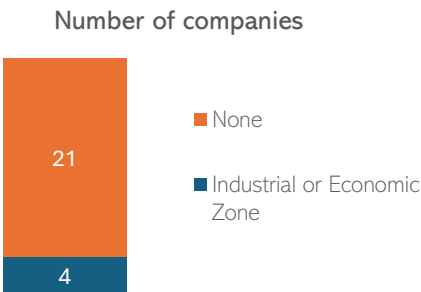
Years in operation

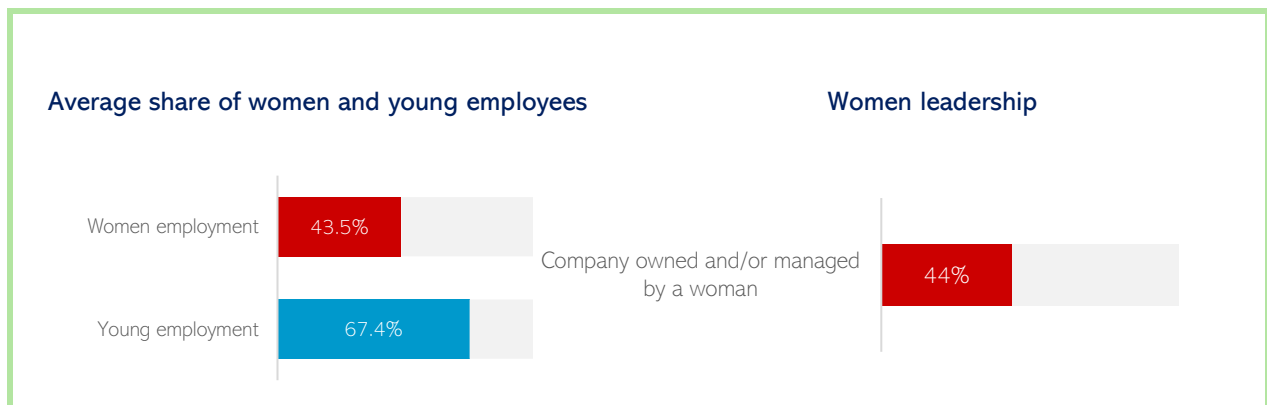


Foreign ownership



Location at an Industrial or Economic Zone





## Knowing the Ugandan processed food sector

### Businesses are active along the value chain

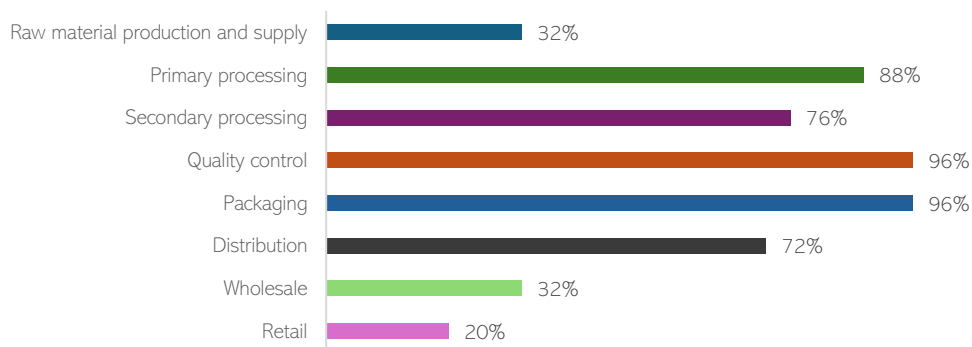
Overall, 80% of the businesses interviewed are active in at least five stages of the value chain, transforming raw materials into final products, packaging them, and handling distribution. The remaining businesses undertake fewer activities along the value chain.

Almost all businesses (96%) are engaged in quality control and packaging, while 88% participate in primary processing. Around three-quarters are also involved in secondary processing and distribution. Almost a third of companies are engaged in raw material production and wholesale, while 20% of businesses are involved in retail.

*We receive ripe coffee berries from farmers. We then pulp them, ferment the coffee, wash it, dry, hull, sort, roast, grind, (primary and secondary processing), and finally package it before selling.*

*We process fresh fruits into dried fruit, juice, pulp, jam, and other condiments.*

**Figure 46** Businesses' engagement along the value chain (% of businesses)



Source: ITC business survey in Uganda (2024).

### Businesses are active in research and development activities, mainly product development

A total of 80% of interviewed businesses are involved in some sort of research and development activity. Nearly half of the businesses (48%) are investing primarily in product development, focusing on product diversification, technology forecasting, and enhancing the quality of existing products. These businesses aim to improve production processes and develop new products to better meet customer preferences. They work together with academia to enhance their existing products.

*As a start-up company we are heavily involved in market research to establish markets for the product both at the local and regional levels.*

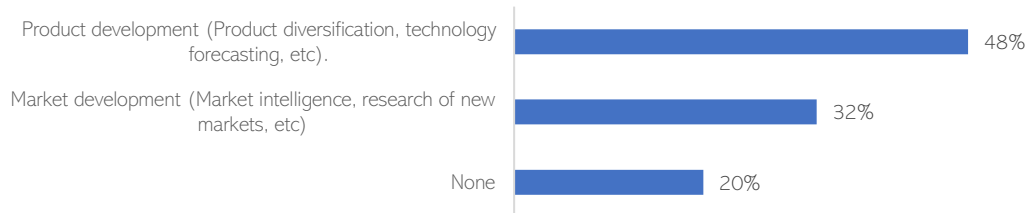
*We undertake research in product development to suit customer needs. For example, the sugar levels in most products have been reduced as a response to consumer feedback.*

Industry stakeholders emphasize the importance of integrating intellectual property (IP) rights into product development in Uganda from the outset, rather than treating them as an afterthought. They highlighted an example of a program funded by the Dutch Embassy in 2020 where Ugandan entrepreneurs developed the young jackfruit value chain<sup>34</sup>. This initiative successfully introduced an innovative product to Uganda and potentially the global market but failed to establish clear IP rights from the beginning.

Other workshop participants shared that their focus on innovation is often stifled by local regulations, particularly the UNBS Qmark certification. Despite having multiple ready-to-launch products, the high costs and bureaucratic hurdles of obtaining Qmark certification have impeded one company's ability to introduce these innovations to the market. These issues remain unresolved despite multiple meetings with UNBS management.

Around one third of businesses (32%) are involved mainly in market development. These efforts aim to secure more markets at regional and international levels, with companies conducting market research to better understand the needs of potential clients. Twenty percent of businesses are not engaged in either product or market development, indicating potential areas for growth and increased competitiveness.

**Figure 47** Businesses' engagement in R&D activities (% of businesses)



**Source:** ITC business survey in Uganda (2024).

### Optimism about Uganda's processed foods value chain development potential

On a scale of one to ten, 88% of the interviewed businesses rate the potential for the development of the processed food value chain in Uganda as high, with a score of 7 or above. On average, companies rate this potential at 8.4 out of ten.

This optimism is attributed to Uganda's rich agricultural resources and favourable climate, which support a variety of crops and agricultural products, alongside increasing demand and potential for value addition. However, businesses also recognize the need for improvements in technology, infrastructure, and government support to fully realize this potential.

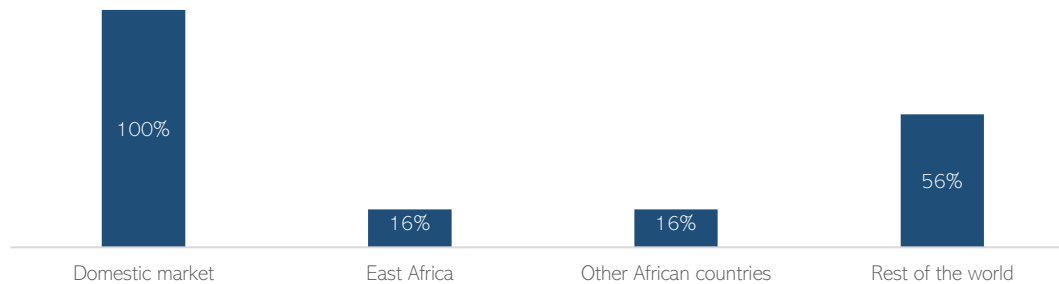
*With Uganda being primarily an agricultural nation, the potential for value addition for local and international sales is enormous. We are an example of the fact that it is very possible to export value-added products to the EU.*

*The raw materials are available, but we currently lack the right technology and knowledge to develop better products, and market information.*

### Domestic market is the primary source of inputs

All companies interviewed source at least part of their inputs from Uganda. Additionally, 56% of the companies procure inputs from regions outside Africa, while 16% source from EAC and another 16% from other African countries.

<sup>34</sup> <https://www.newvision.co.ug/news/1516367/dutch-embassy-support-ugandan-fruit-farmers>

**Figure 48** Share of companies sourcing inputs from each region

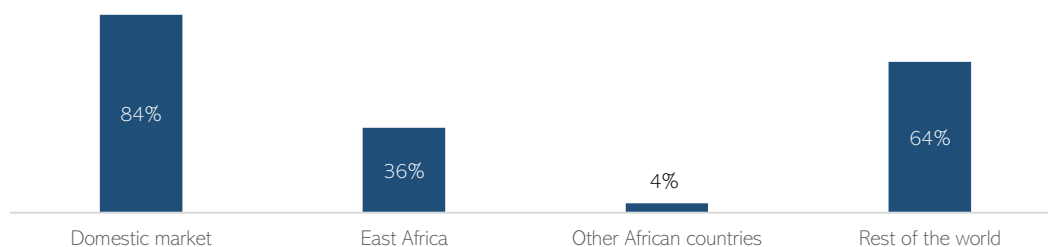
Source: ITC business survey in Uganda (2024).

The domestic market is the primary source for inputs, with all companies sourcing at least half of their inputs from Uganda, and 85% of companies sourcing 90% or more locally. On average, a company obtains 91% of its inputs domestically. Inputs from EAC are relatively minor, averaging 4% of a company's inputs, with companies sourcing 50% or less from the region. Inputs from other African countries are even less significant, averaging just 1%. On average, inputs from international markets make up just 3% of a company's total inputs, with no company sourcing more than 20% from abroad when they do source internationally.

### Exporting companies focus primarily on markets outside Africa

The interviewed companies primarily sell their products either locally or outside Africa, with 84% of businesses serving the domestic market and nearly two-thirds exporting outside Africa. Over one-third (36%) distribute their products within EAC and only 4% of the companies target other African countries that are not part of EAC.

On average, a company sells 54% of its production locally, though this figure varies widely: some companies sell exclusively within Uganda, while others do not sell domestically at all. In terms of exports, a company on average sells 41% of its production outside Africa. Over half of the companies surveyed report that at least 30% of their sales are to markets beyond the continent. In contrast, exports to African countries remain minimal; companies export an average of 5% of their products to EAC and almost none to other African countries.

**Figure 49** Share of companies selling to different markets

Source: ITC business survey in Uganda (2024).

## Opportunities and constraints to value-addition, market diversification and product diversification

### Businesses aim to expand market reach and diversify product lines

A significant majority of the interviewed businesses (96%) are eager to explore new markets both within and beyond Africa. Additionally, 80% of businesses are looking to diversify their product offerings to cater to either existing or new markets. Beyond the potential of accessing new markets and product lines, companies recognize that these efforts will create additional market opportunities and boost revenue. To achieve these objectives, businesses are actively identifying promising markets and new products for diversification.

*We work with experts to develop new products and improve the quality of existing ones. For example, the cereal bar that we sell was a result of R&D undertaken by the company through hired experts.*



**Figure 50** Business plans for market and product diversification (% of businesses)



**Source:** ITC business survey in Uganda (2024).

Companies see the following opportunities for market diversification:

- emerging markets: opportunities to tap into growing markets such as South Sudan, Democratic Republic of Congo, Kenya, Rwanda, and the Middle East.
- product demand: high demand for Ugandan products like coffee, chocolate, and dried fruits in both regional and international markets.
- health trends: growing consumer interest in health-conscious products, including green bananas and plant-based foods.
- regional opportunities: benefits from agreements like AfCFTA and improved economic conditions in neighbouring countries.
- global demand: increasing opportunities driven by global demand for organic and specialty products in markets such as the EU, USA, and Asia.

*We plan on exploring the markets in South Sudan and DR Congo. The food industry in these countries is still young and the demand for beverages is high, supported by the increasing population and urbanization.*

*New regional agreements, such as AfCFTA, that promotes intra-African trade and economic integration, have created new market opportunities.*

Likewise, the companies also see the potential to pursue product diversification:

- product development: there is a push towards creating new products and exploring various market segments. Companies are focusing on developing value-added coffee products, dried vegetables, and plant-based foods to meet evolving consumer preferences and enhance revenue streams.
- growing demand and consumer trends: rising consumer demand for organic, nutritious, and low-sugar foods is driving product innovation. Companies are aligning their offerings with these trends, developing high-quality products like organic herbs and mushrooms to meet health-conscious consumer needs: Companies are also tapping into rising consumer interest in healthier products, such as ready-to-drink juices, banana crisps, and probiotic yogurt.

*The growing middle-income population that is health cautious provides a great opportunity for us to expand production and offer products such as ready-to-drink juice.*

*There is an increasing demand for herbal teas locally. These products are being promoted as therapeutic foods for the management of noncommunicable diseases such as diabetes.*

## Limited financial resources are the main barrier to market and product expansion

Overall, insufficient financial resources and stiff competition are the major obstacles hindering market expansion. Expanding to new markets presents several challenges for Ugandan businesses. High operational costs, including logistics, infrastructure setup, and promotional activities, are significant barriers. Intense competition from well-established brands and companies in target markets adds further difficulty. Non-tariff measures, such as export permits and quality claims, complicate entry. Limited financial resources affect the ability to invest in marketing, infrastructure, and production capacity.

*We face strong competition from companies producing the same products, especially in Kenya where there are well-established companies, that have wide experience and have much more financial resources.*

*We anticipate facing stiff competition from established brands like Delmonte and Kevian from Kenya, Inyange from Rwanda, and Ceres from South Africa who are already selling in the markets we are targeting.*

*Lack of capital for investment in the machinery and infrastructure for diversification and expansion is one of our key constraints.*

*Our challenge is to deal with the increased operational costs arising from putting up new structures in the new markets, advertising and other promotional costs.*

Additionally, gaps in market knowledge, including understanding cultural differences and regulatory requirements, are challenges businesses also face. Political and economic instability in target countries can also impact market access and operations. Navigating complex regulatory environments and obtaining necessary certifications adds to the complexity and cost of market entry.

Limited financial resources are also the main obstacle for product diversification, restricting investment in new processing technology and operational expansion. Securing capital for equipment and technology is difficult due to high interest rates. Companies also struggle with gaps in technical knowledge and skills required for new technologies and processes.

Acquiring skilled labour and obtaining necessary certifications for new products are additional hurdles. The financial and administrative burden of meeting regulatory requirements and certification processes further complicates expansion efforts. Variability in raw material and input costs also affects production expenses and inventory management.

*Inadequate finances to purchase better equipment and hire skilled labour hinders our operations.*

*We do not have adequate information on the latest technology trends, cocoa-based products, and their health benefits.*

## High input costs and input shortages affect businesses

Almost 90% of businesses report facing challenges sourcing inputs for production. The primary concerns are the lack or shortage of inputs and high input costs, with over a half of businesses facing these challenges.

*Price fluctuation for most raw inputs is a challenge for us. For example, during the dry season the price of tea leaves goes up due to limited supply. This disorganizes the supply chain and negatively affects production volumes.*

Companies face issues with the seasonality of fresh produce such as fruits and vegetables, leading to limited supply and fluctuating prices, which impacts production consistency and increases costs. Inadequate storage capacity and lack of proper cold chain infrastructure further exacerbates the problem, making it difficult to maintain a steady supply year-round.

*We import most of the packaging materials because there are no companies capable of supplying such inputs*

Certain agricultural inputs are very expensive in the local market regardless of the season, according to industry stakeholders. For example, the cost of soybean in Uganda is nearly double the global price, which hinders the competitiveness of local produce in export markets. Several factors contribute to this issue including smallholder farming where most farmers cultivate in small plots of land, resulting in low levels of overall production and productivity. Likewise, the quality of seeds and the yield per hectare are significantly lower in Uganda, with an average yield of 1.4 to 1.5 tons per hectare compared to the global average of 3 tons. Lack of resources for installing proper irrigation systems and low irrigation outreach also contribute to

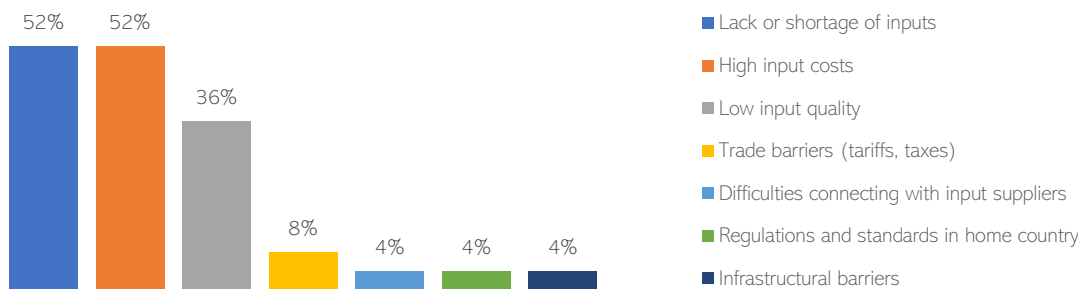
*The government has recently imposed 18% VAT on imported packaging materials which never used to be the case since they are regarded as raw materials. This has significantly increased the production costs.*

Likewise, the quality of seeds and the yield per hectare are significantly lower in Uganda, with an average yield of 1.4 to 1.5 tons per hectare compared to the global average of 3 tons. Lack of resources for installing proper irrigation systems and low irrigation outreach also contribute to

this challenge. Similarly, products like apples and guavas have a very limited supply in Uganda, leading to imports of inputs that also increase production costs. Sourcing appropriate packaging is a big concern for most of the companies. There are very few packaging manufacturers in the country, companies argue. Essential packaging materials, such as aseptic bags and conical steel drums, are not produced locally in Uganda, workshop participants cited.

Producers rely on imports from countries like China, Egypt, and Kenya, resulting in long lead times and high transportation costs, particularly when air freight is required for urgent needs. This has resulted in increased production costs and reduced competitiveness of Ugandan products, such as mango pulp, in the international market. Small-scale producers unable to import must rely on generic packaging solutions that do not facilitate product differentiation or meet market demands effectively.

**Figure 51** Share of businesses facing difficulties accessing inputs



**Source:** ITC business survey in Uganda (2024).

More than one third of businesses are also troubled by the low quality of available inputs. Key products like coffee and cocoa beans often fail to meet producers' standards, leading to high costs as companies source only from selected farmers. Inconsistent quality of products from suppliers is one the main concerns for food processors.

*Quite often, we have the challenge of poor-quality raw materials (coffee) supplied by farmers and cooperatives. Despite several engagements, suppliers (farmers) have not heeded our call to meet the required standards.*

The lack of organization in the agricultural sector affects both animal and crop production, workshop participants argued. Finding good breeds and consistent quality inputs is challenging. Quality control at the farm level is inadequate, leading to wastage and reduced marketability.

### Accessing technological capabilities and high skill labour is a challenge

Roughly three quarters of businesses reported facing challenges with production process. Limited technological capabilities are the hindering factor for 40% of the businesses in their production. Many companies lack advanced machinery for processing and packaging, which limits their production range and restricts their competitiveness. For instance, in the coffee sector, the largest roasting machine has a capacity of only 25 kilos per batch. This limitation poses significant challenges when fulfilling large orders, such as a container of roasted coffee. Establishing common user facilities could mitigate this issue, as acquiring large machines for every company may not be feasible.

There is also limited capacity to promptly repair or produce equipment parts. In some new value chains such as the young jackfruit, existing equipment, initially designed for other products, proved to be unsuitable. These limitations pose significant challenges when fulfilling large orders.

More than one third of businesses are concerned about shortage of high-skilled labour, which affects their ability to maintain operational efficiency and meet production targets. Specialized labour is often

*We have limited equipment capacity so we cannot produce enough to meet the client's demands.*

*We lack the technology to sort the coffee beans quickly and we do not have enough personnel to do hand sorting effectively.*

*Limited availability of labour with technical competencies in operating equipment such as the Tetra Pak food processing and packing machines is a real challenge.*

*The process of having new products certified by UNBS is lengthy. This is because most of the products are new on the market. To get the Q mark, we have to wait for standards to be developed by UNBS.*

costly. The reduction in extension educators has led to a gap in knowledge transfer, workshop participants agreed.

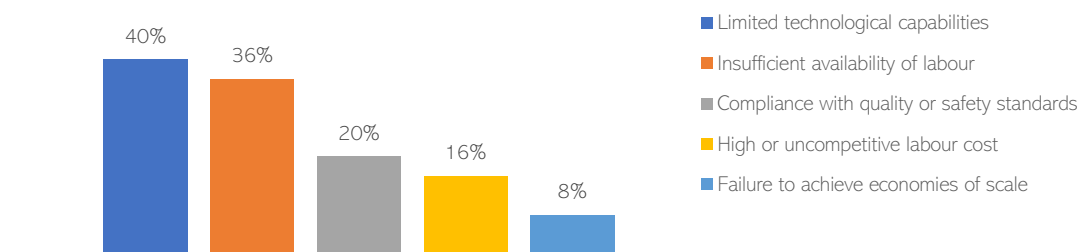
Compliance with quality and safety standards was a concern for a few companies. Stringent certification standards and the high costs associated with product testing and certification impose additional financial burdens. Bureaucratic processes also slow down the process. Industry stakeholders at the national workshop raised concerns about 'over-regulation' and high compliance costs in the food sector. Even minor variations in products, such as different flavours of yogurt, require separate certifications. In addition to product-specific standards, producers must also purchase related standards for packaging, labelling, and potable water. This excessive regulation creates unnecessary complexity and financial burdens for producers. Moreover, these producers struggle with the high costs and limited accessibility of testing equipment, which are essential for ensuring product quality and compliance with standards.

The need for educators and quality compliance support within the processed food sector was emphasized at the national workshop. Successful programs, such as the Quality Champions initiative in Tanzania's spices sector, have demonstrated the value of having trained individuals guide small-scale producers on compliance and quality assurance. Expanding similar programs to other sectors in Uganda could significantly improve compliance and product quality.

Workshop participants also noted that Uganda's agricultural sector lacks commercialization, hindering its ability to meet export demands. For example, despite being one of Africa's largest producers of banana plantains, the country lacks commercial-scale farms capable of fulfilling large export orders. This issue extends to the animal industry, where demand for Ugandan meat in the Middle East cannot be met due to subsistence farming practices.

Uganda's agricultural production system requires restructuring to enhance efficiency and output. The current system, where farmers handle breeding, weaning, fattening, and trading of animals, is unsustainable. Similar restructuring is needed in crop production to achieve higher yields and better quality. Participants highlighted fragmented production processes, lack of specialization in breeding, weaning, and fattening, and inadequate aggregation of smallholder outputs as critical issues that need to be addressed.

**Figure 52** Share of businesses facing difficulties with production



Source: ITC business survey in Uganda (2024).

### High interest rates hinder access to finance

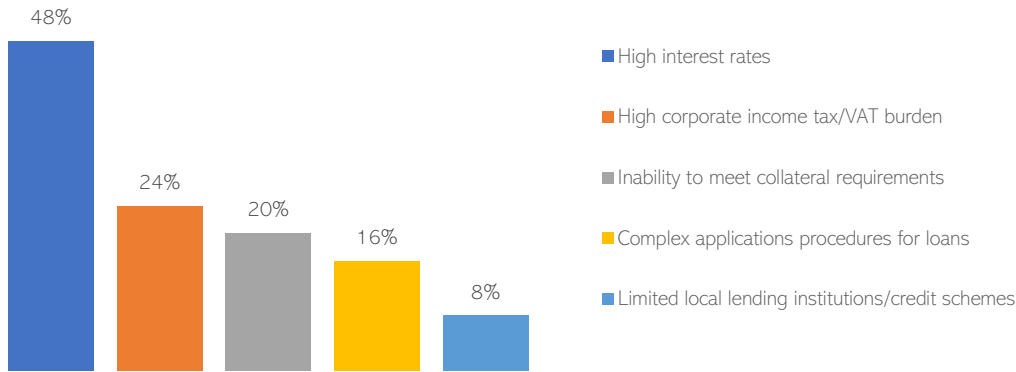
Over two-thirds of businesses interviewed faced difficulties accessing finance. The topmost constraint to accessing finance are the high interest rates, which can reach up to 25% according to companies.

Furthermore, industry stakeholders say efforts such as the Uganda Development Bank's (UDB) post-COVID financial support have been hindered by cumbersome application processes and unpredictable lending conditions imposed by banks. Accessing funds remains an arduous task, even when earmarked specifically for industry support.

*We would like to diversify into ready-to-drink products, but we are constrained by the high interest rates (13-25%) on loans from commercial banks. We therefore have to wait until the company saves enough resources to acquire the line for processing the ready-to-drink products.*

The high corporate income tax and VAT also concern around a quarter of businesses. Additionally, 20% of businesses struggle to meet collateral requirements, a challenge exacerbated for women who typically do not own land titles, the most preferred form of collateral.

**Figure 53** Share of businesses facing difficulties accessing finance



Source: ITC business survey in Uganda (2024).

### Costs of doing business is perceived as being high

Businesses in the food processing sector face substantial financial challenges linked to high cost of doing business. SMEs bear statutory fees of multiple types which greatly impacts their operations. These include but are not limited to:

- company registration: initial registration fee and an annual fee to the Uganda Registration Services Bureau (USB) for filing returns.
- health certification: Kampala Capital City Authority (KCCA) charges a fee for certifying food handlers' health twice a year.
- product certification: each product requires certification, with an additional annual renewal fee.
- industry-specific permits: dairy businesses need a Dairy Development Authority (DDA) permit and an annual trading license.

Likewise, the taxation system is stringent, with SMEs facing VAT and corporate taxes that significantly cut into profits. The requirement to pay taxes on products that have not yet been sold exacerbates financial strain. The Private Sector Foundation Uganda (PSFU) and other stakeholders are advocating for more reasonable compliance costs, including grace periods for new product taxes and streamlined certification processes. Industry associations have also raised issues with the Uganda Revenue Authority (URA) regarding upfront tax payments and tax rates on unsold products.

### Unreliable electricity supplies affect production

Most businesses reported challenges related to national infrastructure, with the most common issue being insufficient or unreliable electricity supply, cited by 56% of the businesses. Companies face constant power outages, making production planning difficult and costly.

*Power cuts are frequent, resulting in reduced production volumes and high production costs when we use a generator.*

Poor internal transportation networks or facilities also affect over half of businesses (52%), followed by the high cost of transportation, which impacts 48% of the companies. Rural and agricultural areas seem to be particularly impacted by a poor network, directly affecting processed food businesses.

*The poor road network in the fruit-producing communities leads to high transportation costs and sometimes delays in delivering fruits to the factory.*

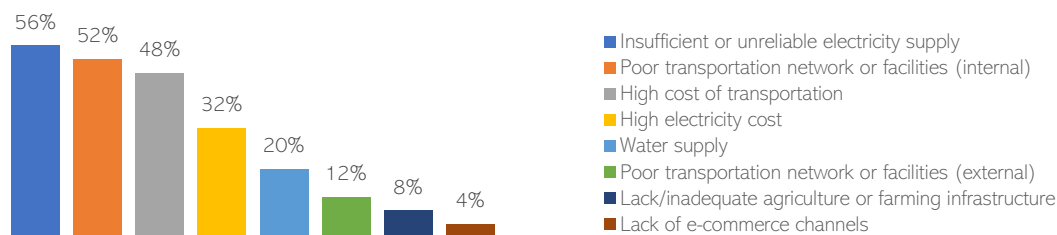
High electricity costs affect close to a third of the businesses. High costs of refrigeration and power make the cold chain unsustainable for many businesses. Companies incur losses due to challenges in maintaining product quality post-harvest, especially during transportation. Furthermore, the cost of running cold storage facilities is made even more difficult due to unreliable power supply and the high cost of fuel for generators.

Issues with water supply affected 20% of business, while poor external transportation facilities were a challenge for 12% of businesses. Export opportunities are missed due to the inability to maintain product quality during transportation. For instance, while there is demand for meat products in countries like the Democratic Republic of Congo, lack of proper cold chain transportation facilities makes it difficult to tap into this export potential.

While only a few businesses report concerns about a lack of adequate agriculture or farming infrastructure during the survey, industry stakeholders in the workshop expressed their concerns in relation to the availability of warehousing and cold facilities. Warehousing facilities are often not suitable for maintaining the quality of stored agricultural products. For instance, coffee stored at an appropriate moisture level of 12% in an unsuitable warehouse dropped to 8% moisture content within three months. This has led to substantial loss of product quality and significant financial losses for producers due to degraded products.

Many SMEs cannot afford refrigerated trucks or cold storage facilities. Workshop participants estimated that around 10-20% of products are lost during trade due to inadequate refrigeration. Some businesses resort to adding preservatives to avoid foods from going bad due to lack of refrigeration.

**Figure 54** Share of businesses facing difficulties with national infrastructure



Source: ITC business survey in Uganda (2024).

### Exporters ask for economic and streamlined export process

While only 30% of exporting companies reported facing difficulties when complying with export regulations, all of them referred to high costs and lengthy processes. Product certification and testing for exports are regarded as highly costly, given the scarce accredited laboratories to perform such requirements.

Public agencies consulted also recognise this as a problem. They note that many traders comply with domestic procedures. However, many exporters and importers opt for the informal sector and do not comply with mandatory procedures for international trade. This is common across EAC borders.

To taking full advantage of the AfCFTA, industry stakeholders say improved regional cooperation and logistical infrastructure are needed. A critical barrier are the complex visa requirements for intra-African travel, hindering the seamless movement of people and goods. To support Ugandan businesses in tapping into the regional African market PSFU in collaboration with UNDP have taken some initiatives to equip local businesses with the skills and knowledge to effectively navigate and capitalize on regional trade agreements. According to PSFU, their advocacy efforts have yielded positive outcomes, such as reduced NTBs at the Busia one-stop border post connecting Uganda and Kenya, where integrated customs and immigration services have expedited cross-border trade. This model, recognized as a best practice, is being replicated in other African regions to enhance trade efficiency.

High-level engagements, including discussions with South Africa, have resulted in commitments to enhance trade relations and reduce bureaucratic impediments. Efforts are underway to establish visa-free travel for businesspeople between Uganda and South Africa, aiming to foster greater economic collaboration.

## Environmental constraints

### The EU regulation on deforestation-free products is a growing concern

While only few companies reported challenges with environmental regulations, all that did expect to face issues complying with the new EUDR, which requires that products imported to the EU do not originate from deforested land.

*The implementation guidelines for the new EU policy on deforestation are not very clear and the policy may be costly to implement because it will require hiring external experts to certify the farms.*

This regulation is considered strict by many companies, which lack the means to easily prove the origin of their products or may need to require suppliers to adjust their production processes. Businesses agree that the implementation guidelines



are unclear and the timeline for implementation is approaching too quickly. They require government support and technical expertise to comply.

Industry stakeholders consulted in the workshop agree that the EUDR poses big challenges for commercial farming in Uganda, they say. The broad applicability of regulations across diverse ecological zones is a particular worry. Participants questioned whether clearing land with minimal tree cover in arid regions would also be classified as deforestation, given the sparse vegetation typical of such areas.

National workshop participants also highlight contradictions between environmental preservation and agricultural expansion. An EU-funded initiative promoting coffee cultivation conflicts with the EUDR, they consider, especially in a context where land fragmentation and commercial tree farming are prevalent. This raises pertinent questions about the practicality and feasibility of complying with both mandates.

In general, the impending implementation of the EUDR is viewed as a pivotal moment that could reshape Uganda's agricultural export landscape. Given the historical reliance on expanding agricultural land to boost production rather than improving yields through technological advancements, the regulatory shift could pose significant implications for the country's trade relations with the EU.

Droughts, floods, and changing temperatures are among the top environmental risks faced

All the businesses interviewed indicated that environmental risks could significantly impact their operations. The most imminent impact is the decreased quality of inputs – mainly agricultural produce- reported by 88% of the companies. This could lead to disruptions in supply chains, increased operational costs, and potential declines in product quality and

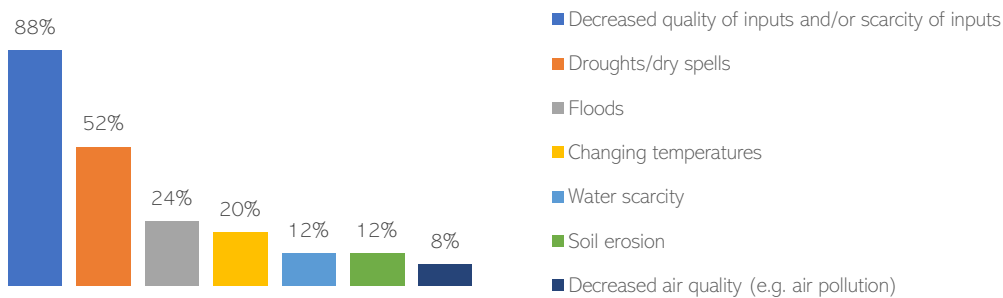
*Extreme weather events such as droughts, floods, and storms can disrupt agricultural production, lead to crop failures, and affect the availability and supply of quality fruits to the factory.*

*The changes in climate are bringing pests and diseases forcing farmers to apply chemical-based inputs. This threatens our supply chain since we export only organic certified coffee.*

*Prolonged drought reduces banana production and productivity. Banana is a moisture-intensive crop.*

availability. This is caused mainly by extreme weather and changing temperatures, such as droughts and floods, commonly reported by companies.

Figure 55 Environmental risks faced by businesses



Source: ITC business survey in Uganda (2024).

Businesses need support to adopt climate risk-mitigation measures

While businesses recognize that environmental threats can impact their operations, close to three quarters face some sort of constraints when adopting risk-mitigating measures

Close to a third of businesses are constrained by a limited availability of and access to finance. Many farms lack the financial resources to introduce climate adaptation technologies such as irrigation systems and energy-saving technologies.

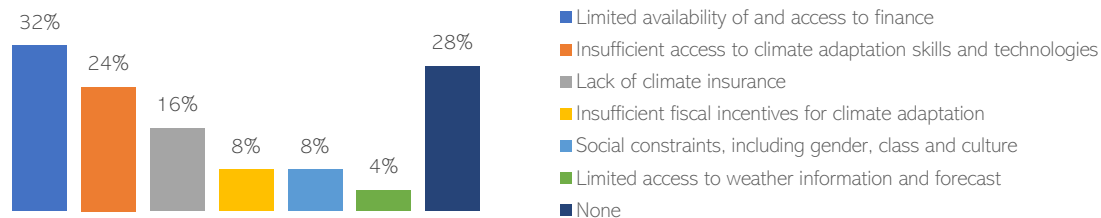
*Limited finances to invest in energy-saving technologies. Tea processing is energy intensive, and we mainly depend on firewood to generate steam. We need to invest in more efficient technologies that use less firewood.*

*We lack skills and knowledge of the best possible mitigation methods that can be adopted.*

Around a quarter of businesses pointed to insufficient access to climate adaptation skills and technologies, highlighting a lack of knowledge and expertise in implementing effective mitigation methods for both farmers and businesses. Lack of climate insurance affects 16% of businesses, which hampers their ability to manage climate-related risks.

Other constraints include insufficient fiscal incentives for climate adaptation, and social constraints such as gender, class, and culture; and limited access to weather information and forecasts which have been mentioned by a few companies.

**Figure 56** Challenges to adopting climate risk-mitigation measures



Source: ITC business survey in Uganda (2024).

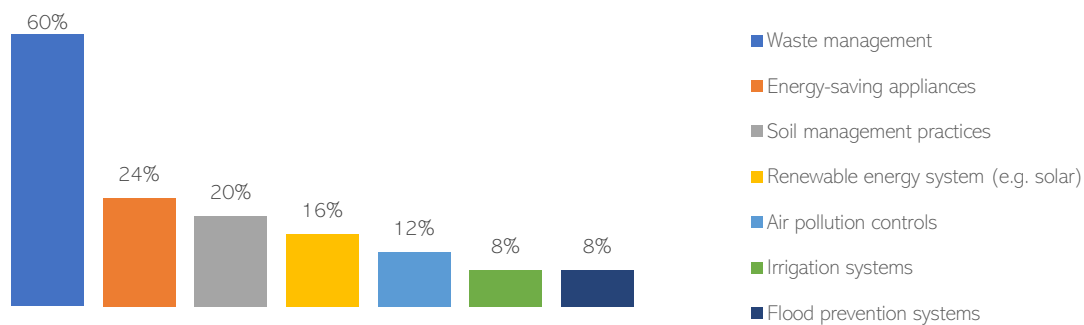
## Businesses are acting on environmental matters, especially in waste management

With all the challenges and given the support received, businesses are trying their best to be in line with environmental requirements. Waste management is the top priority for 60% of businesses, adhering to National Environmental Management Authority (NEMA) regulations.

*Some of the waste generated at the factory is treated and used as manure in the fruit orchards.*

Energy-saving appliances are the focus for 24% of businesses, while 20% are concerned with soil management practices. Renewable energy systems, such as solar power, are adopted by 16% of businesses. Air pollution controls are managed by 12%, and both irrigation and flood prevention systems are addressed by 8% of businesses.

**Figure 57** Efforts companies have made to become more environmentally friendly



Source: ITC business survey in Uganda (2024).

## Business support network

### Scope for strengthening business support network further

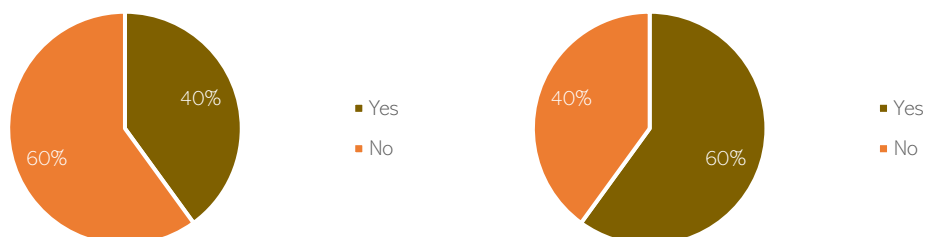
A total of 40% of businesses are members of a private sector association. Membership varies significantly, with some companies being part of product or sector specific associations, such as coffee or tea, and others being members of broader associations. Yet, most of the companies are not members of any private sector association, which could be a channel to address their concerns.

*The government agencies provide technical support on coffee agronomic practices that protect the environment.*

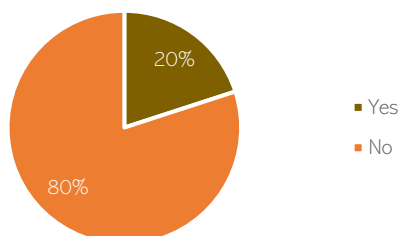
Some 60% of companies have received support from government agencies for export or import activities. Support come from different government agencies, including the Ministry of Agriculture, the Coffee Development Authority, the National Agricultural Advisory Services, among others.

**Figure 58** Business support network

(a) Membership of private sector associations (b) Government support on exports/imports



(c) Government support on environmental issues

**Source:** ITC business survey in Uganda (2024).

Public agencies consulted confirm they offer services to the private sector wishing to engage in international trade activities. The Uganda Export Promotion Board conducts market research and provides market intelligence to food and beverages businesses, including information on export opportunities, market trends, consumer preferences, and competitor analysis in target markets.

The DDA routinely provides training and workshops to dairy businesses on topics such as export procedures, quality standards, and packaging requirements to enhance their competitiveness in new markets. The DDA also has a Dairy Training School where dairy stakeholders are trained in milk quality control, small scale milk processing (yoghurt, ice cream, cheese, butter and ghee), dairy farm production and management, and dairy business management. The school is yet to be upgraded to a National Dairy Training and Incubation Centre to offer accredited milk programs.

Only 20% of businesses report government support for environmental compliance. They seek financial aid for climate adaptation and waste valorisation, access to affordable capital and tax incentives, technical assistance in sustainable practices, training on new regulations, and support for eco-friendly packaging and energy-saving technologies. Additionally, they need extension services for small-scale farmers and favourable policies to encourage environmentally friendly practices.

### Improvements in financing is the key need for diversification

When asked about the main support needed for accessing new markets and products, businesses ask for financing, better information and capacity building as their top requirements. In terms of financing, there is a need for flexible, low-interest options for acquiring processing equipment, supporting market research, promotion, and distribution, as well as increasing production capacity. Affordable capital is also needed for modernizing technologies, reaching larger markets, and developing new products.

*We need tailor-made financial support. The financing model should be flexible, have a low interest rate (preferably 2-3% per annum), and long-term payment options.*

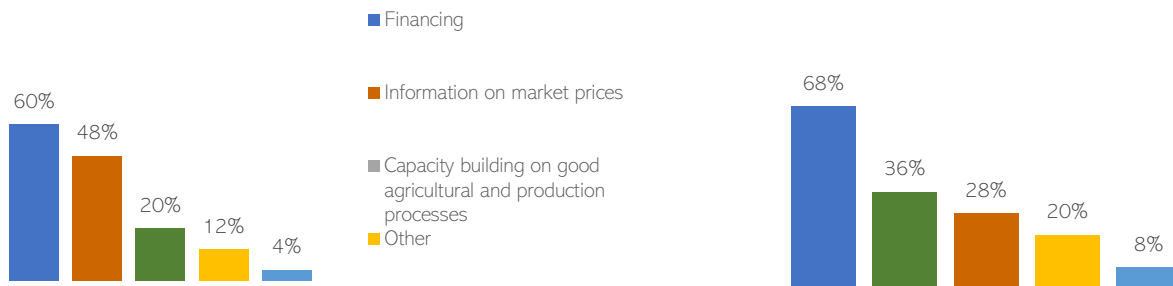
*We need better market information, including assessing the size of the market, identifying potential customers, understanding their needs and preferences, and evaluating the competitive landscape.*

Market information and intelligence is also required. Businesses seek comprehensive market data, including size, customer preferences, competitive landscape, and pricing in target markets to design effective marketing strategies and reduce costs.

In terms of capacity building, businesses require training in the use of new technologies, compliance with quality and safety standards, staff skills development, and understanding new market regulations. They also seek assistance in developing and implementing effective marketing strategies and improving production processes

*We need technical support and training to understand the various regulations in the new markets*

**Figure 59** Main support needed for market and product diversification



Source: ITC business survey in Uganda (2024).

## The way forward

This section summarizes the businesses recommendations targeted to increase market and product diversification:

- i. Provide capacity building at the farmer lever in terms of quality production and waste management
- ii. Increase the production and achieve **economies of scale**. For this:
  - develop commercial-scale farming operations to meet export demands,
  - encourage the formation of cooperatives to aggregate and standardize smallholder outputs for export,
  - invest in common **large-scale machinery and processing equipment**.
- iii. Promote and invest in a **technology upgrade** among the value chain. For this:
  - explore funding options and technological advancements to enhance processing capacities,
  - specialized equipment tailored to new value chains.
- iv. Invest in the development of **warehousing facilities, refrigerated trucks and cold storage facilities** that maintain optimal conditions for different types of agricultural products and implement training programs for warehouse managers on best practices for product storage. This will help preserve product quality and quantity, reducing financial losses.
- v. Upgrade **quality** of raw materials, inputs and final products, via:
  - implementing quality control systems at both farm and production levels,
  - providing affordable access to quality testing equipment,
  - investing in facilities for testing.
- vi. Simplify the certification process to reduce redundancy and lower costs for producers. Consider treating products with minor variations, such as different flavours, under a single certification.
- vii. Support **research and development activities**, particularly:
  - conduct research on how to improve crop and livestock quality. For example, research on banana ripening processes or developing specific mango varieties for export,

- encourage technology transfer from developed countries that can modernize Ugandan agriculture. Business delegations and partnerships can facilitate the adoption of advanced farming equipment and practices,
  - invest in laboratories to support the SMEs to undertake research and development. This could be implemented by establishing specialized laboratories targeting specific value chains,
  - provide and build technical expertise to undertake advanced research and development. In addition to providing experts, capacity building for local staff could also be undertaken.
- viii. Improve the availability and quality of **locally produced packaging**. For this, it is necessary to:
- support small-scale producers, particularly women producers, in adopting innovative packaging solutions,
  - invest in the establishment of local manufacturing facilities for packaging materials such as aseptic bags and conical steel drums,
  - provide incentives such as tax breaks and subsidies to attract investors and stimulate local production.
- ix. Develop and expand programs that train and certify workforce, like the quality champions scheme, that can provide on-the-ground support to producers.
- x. Provide **capacity building** on:
- best practices for production, drying, and quality control to reduce contamination and improve product standards.
  - compliance of standards and requirements of destination markets, including the recent EU regulation on deforestation
- xi. Create **targeted financing mechanisms** tailored to the sector. ensuring lower interest rates, alternative collateral requirement, and facilitating access to essential resources such as equipment, raw materials, and infrastructure.
- xii. Invest in transportation infrastructure, including railways and shipping ports, to facilitate **smoother intra-African trade**.
- xiii. **Harmonized Regulatory Frameworks:** Continued advocacy for standardized regulations and reduced trade barriers across member states to ensure fair and equitable trade practices.
- xiv. Adopt cohesive national strategies that integrate environmental sustainability with agricultural productivity. Suggestions included long-term irrigation plans to mitigate weather fluctuations and optimize land usage effectively.







## CHAPTER 7

# SUPPORTING EXPORT DIVERSIFICATION IN UGANDA

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## SUPPORTING EXPORT DIVERSIFICATION IN UGANDA

To advance the diversification of Ugandan exports into higher value-added segments of promising value chains, the diagnostic and analysis of challenges presented in this study should be complemented by comprehensive actions that address both cross-sectoral and value chain-specific challenges. To foster an environment conducive to value chain development some of the key areas to be addressed include:

### *Developing infrastructure*

Infrastructure deficits, particularly in transportation and energy, present significant barriers to the growth of value-added exports in Uganda. Inefficient road networks, high transportation costs, and unreliable electricity supply are common challenges that increase production costs and reduce the competitiveness of Ugandan products in regional and global markets. To mitigate these issues, continued investment in infrastructure development is essential.

Key areas for intervention include upgrading and expanding road networks, improving logistics services to lower transport costs, increasing electricity generation and distribution capacity, and ensuring a stable supply of energy to key industrial areas. As part of these efforts, enhancing road networks connecting agricultural zones to processing centres and main highways is critical to streamline supply chains. Similarly, the expansion of reliable electricity supply especially to rural areas where agroprocessors operate is essential to reduce downstream costs. In remote areas, alternative solutions such as off-grid solar mini-grids and small-scale hydro projects can provide reliable power, reducing dependency on the main grid and supporting local inclusion in value chains.

Beyond these traditional infrastructure priorities, the diagnostic analysis highlights other critical needs. Developing affordable warehousing and cold storage facilities through public-private partnerships is essential to reduce post-harvest losses and maintain product quality. Seasonality is a major issue across the key value chains analysed: shea butter producers face high spoilage rates due to inadequate storage during peak harvest periods, while processed food and animal feed sectors suffer from post-harvest losses of key inputs like fruits, vegetables, maize, and soybeans. Improving storage infrastructure could help smooth seasonal supply fluctuations, reduce wastage, and ensure a consistent year-round availability of inputs for these and other promising value chains.

Importantly, expanding information and communication technology (ICT) infrastructure to increase broadband connectivity can promote e-commerce and digital inclusion, enabling better market access and enlarging domestic markets for Ugandan products. Additionally, improved digital infrastructure could also enhance access to market information and foster innovation in value-added sectors.

Lastly, prioritizing climate-resilient infrastructure is essential to ensure the sustainability of infrastructure investments. Climate considerations must be integrated into infrastructure planning and development, including encouraging private sector investments in climate-resilient infrastructure—through incentives and public-private partnership where needed. This approach will help protect infrastructure, and the value chains it serves, from climate impacts and support long-term economic growth.

### *Enabling access to affordable finance*

The limited availability and high cost of finance are significant barriers for businesses to develop new products, invest in new technologies, expand production, and enter new markets. This issue was particularly highlighted by firms in the processed food and animal feed sectors, where businesses face difficulties accessing affordable credit, often due to stringent collateral requirements.

To address this, policy interventions should focus on improving access to finance, possibly through the establishment of dedicated funds or credit facilities that provide low-interest loans to businesses in strategic value chains, offering tax incentives to financial institutions that support them, or streamlining access to insurance products that allow them to better manage the risks they face.

Additionally, strengthening the capacity of financial institutions to assess and support agro-industrial and manufacturing ventures and providing targeted financial literacy and business development training for smallholders and agroprocessors can enable better financial planning and more accurate evaluations of creditworthiness.

Expanding digital financial services, such as mobile banking and digital payments, can enhance quick access to financing, and improve financial inclusion in rural areas, where small-scale processors operate. In addition, innovative financing mechanisms should be considered, such as digital crowdfunding, blockchain-based supply chain finance, and agriculture-specific fintech solutions, which offer promising ways to strengthen Uganda's value chains. By leveraging mobile platforms for microloans, implementing blockchain for transparency in transactions, and introducing digital marketplaces with embedded finance options, smallholders and processors can access capital, reduce risks, and connect directly with buyers. These tools, along with impact bonds for infrastructure and data-driven credit scoring, can enhance resilience and expand market access.

Policies aimed at improving access to finance should also seek to address the cross-cutting issue of climate resilience by incorporating incentives for the adoption of climate mitigation and adaptation measures. This approach ensures that financial support not only fosters growth but also builds long-term sustainability.

#### *Strengthening quality and compliance along value chains*

Compliance with international quality standards remains a significant hurdle, particularly in the agricultural and food processing sectors. The inability to meet sanitary and phytosanitary (SPS) standards, for example, has led to frequent rejections of Ugandan exports in key markets. Addressing this challenge requires a multi-faceted approach that includes bridging identified regulatory gaps, strengthening the capacity of national regulatory bodies like the UNBS, and providing training and technical assistance to producers and exporters. Enhancing access to laboratory and testing facilities, for example by establishing regional laboratories and mobile testing units, can reduce compliance costs and ensure that Ugandan products meet existing international standards.

Continuing ongoing efforts to streamline processes and documentation, and to harmonise to international standards is also key. Moreover, establishing traceability systems that better ensure transparency in product origins and safety—for example by refining or creating certification schemes and supporting businesses in obtaining relevant certifications—can open up new market opportunities, ensure compliance with emerging international standards and increase the competitiveness of Ugandan exports.

This can also be an avenue to further the adoption of sustainable practices. Environmental sustainability is both a critical goal and a strategic opportunity for Uganda's value chains. Promoting green practices—such as sustainable sourcing, waste management, energy efficiency, and organic farming—not only strengthens Uganda's positioning in global markets for value-added, eco-friendly products but also ensures the long-term viability of its agricultural and industrial sectors. Rising global demand for organic, health-conscious, and environmentally responsible products presents a unique opportunity for Uganda to expand exports of plant-based processed foods, chemical-free beauty products, and sustainably produced animal feed. To fully seize these market opportunities and meet key environmental goals, Uganda can encourage the implementation of green practices through both regulatory measures and incentives embedded in the quality and compliance mechanisms along the value chains.

#### *Prioritizing capacity building, skill development and SME export programmes*

Capacity-building efforts are essential for the development and competitiveness of Uganda's value chains. Beyond quality compliance, capacity building should focus on improving processes, fostering sustainability, promoting the adoption of new technologies—including climate adaptation and mitigation technologies—and exploring emerging market opportunities. Establishing specialized training programs tailored to each value chain and collaborating with technical institutions and industry experts will help bridge skill gaps, enhance product quality, and support the transfer of vital technologies. Additionally, capacity building should include developing skills in marketing and branding, particularly for sectors like processed food and beauty products, where product differentiation and appeal are essential for entry into new markets. Importantly, institutional capacity building is similarly necessary to create a strong foundation for Uganda's value chains. Strengthening these capacities can ensure that Ugandan products not only meet international standards, but that they also remain competitive in the evolving global market.

One effective way to structure capacity-building efforts for SMEs can be through export programs, especially those focused on high-potential value chains. Uganda already has or had several initiatives in place—such as the Passport to Export Programme, Growing Beyond Borders Entrepreneurial Training Programme, the INVITE Project, and services offered by the Uganda Export Promotion Board (UEPB)—that support SMEs in preparing for international markets. To maximize impact, these programs should be refined, expanded, and more widely shared to ensure they address the full spectrum of SME

needs and that they reach them. In particular, they should include export readiness assessments, market research assistance, and comprehensive guidance on international trade regulations and documentation. Additionally, mentorship programs that connect experienced exporters with emerging businesses, and partnerships that link medium- and large-scale businesses with small-scale enterprises, would further strengthen SME capabilities. By further developing, expanding, and effectively disseminating such programs, Uganda can create an ecosystem that fosters SME growth in the global market.

#### *Leveraging e-commerce and digital solutions*

E-commerce presents a transformative opportunity for Uganda as an LLDC, offering a pathway to overcome geographical barriers and tap into regional and global markets. Staying current with e-commerce trends is essential to maintain competitiveness, making it a cross-cutting priority that should be integrated into infrastructure, finance, quality and capacity building initiatives.

Uganda has made commendable strides in expanding ICT access and developing mobile payment systems, but remaining gaps in internet penetration, digital literacy, and e-commerce infrastructure still limit the potential of these technologies to fuel export growth. To fully leverage e-commerce for diversification, efforts should focus on increasing access to affordable broadband and, as mentioned earlier, expanding infrastructure, especially in rural areas.

Additionally, initiatives like local e-commerce marketplaces and e-commerce business facilitation centres should be supported and developed to help local producers sell domestically and internationally. Capacity-building efforts, including training on digital marketing, online content management, and compliance with e-commerce platforms, will equip businesses to fully harness these tools. Lastly, enhancing consumer protection and trust in online transactions, and improving enforcement of intellectual property rights (IPR), will foster a safer, more reliable e-commerce environment. By addressing these challenges, Uganda can further integrate e-commerce into its export strategy and capitalize on global market opportunities.

#### *Mainstreaming climate adaptation and mitigation*

The impacts of climate change present significant challenges to Uganda's economy, particularly when looking to promote agriculture-based value addition, which is dependent on stable environmental conditions. Climate adaptation and mitigation efforts are therefore essential to ensure the sustainability and resilience of Uganda's key value chains. As mentioned earlier, integrating climate resilience into infrastructure, finance, quality and capacity building efforts will not only protect investments but also enhance Uganda's competitiveness in markets increasingly focused on sustainability.

Effective climate adaptation and mitigation efforts require collaboration among government agencies, the private sector, and civil society. Sector-specific working groups focused on climate resilience, and roundtable sessions with industry stakeholders can align climate priorities with business needs. Moreover, partnerships with regional and international organizations focused on climate resilience and adaptation can bring technical expertise, funding, and knowledge-sharing opportunities to further Uganda's climate goals. By actively fostering these partnerships, Uganda can accelerate the adoption of climate-resilient practices across its value chains.

Incorporating climate adaptation and mitigation measures into Uganda's economic and policy framework will enhance the country's ability to respond to environmental changes, support sustainable growth, and improve the resilience of key sectors essential to export diversification.

#### *Fostering public-private dialogue and partnerships*

Robust public-private dialogue and cooperation will remain essential in aligning policies to business needs and facilitating export diversification. Sector-specific working groups and roundtable sessions on key issues—like improving the regulatory environment, facilitating access to international markets, fostering innovation and technology adoption—can drive targeted discussions on best practices and connect businesses with support programs. Moreover, creating digital platforms for continuous feedback between the private sector and policymakers can foster real-time communication and quick resolution of emerging issues. Where not yet implemented, private sector actors should also be encouraged to collaborate and coordinate, share resources, and address common challenges collectively.

#### *Furthering regional integration and South-South trade*

Leveraging intra-regional trade opportunities, is critical for Uganda's diversification strategy. Intra-regional trade offers a pathway to scale up production, access new markets, and develop regional value chains that can drive industrialization and economic growth. Focusing on trade facilitation, including streamlined export documentation, reduction of NTMs, and

alignment with regional trade policies can help Uganda's export diversification. By prioritizing intra-regional trade, Uganda can diversify its trade partnerships and enhance its economic resilience.

Among other ongoing regional integration initiatives, the AfCFTA, in particular, presents an opportunity to upgrade procedures, harmonize standards, and foster collaboration among African nations to expand intra-regional trade. Trade facilitation, including streamlined export documentation, reduction of NTMs, and alignment with regional trade policies are some of the policies that can reduce trade barriers within Africa and enhance regional connectivity to unlock intra-regional trade.

Similarly, expanding South-South trade presents a promising pathway for Uganda to diversify its exports, broadening its economic partnerships beyond traditional North-South trade relationships. By supporting South-South trade, Uganda can capitalize on the growing markets in developing regions that often share similar developmental goals and needs. Countries within South-South trade networks often exhibit lower barriers to entry, offering Ugandan exporters the potential for easier market access and less restrictive regulatory environments compared to some high-income nations. Additionally, South-South trade can support Uganda's ambition to move down value chains by facilitating knowledge exchange, technological transfer, and capacity-building partnerships with other developing economies with geographic, economic, or cultural similarities.

Actively targeting intra-regional and South-South trade aligns with Uganda's diversification goals of reducing dependency on a narrow set of products and increasing value addition, while also building a more robust, interconnected, and resilient trade framework.

The analysis in this report underscores Uganda's potential to diversify its exports and enhance value addition through the development of key value chains. While challenges in infrastructure, access to finance, skills gaps and compliance with international standards remain, the opportunities for growth are substantial. The recommended policy actions aim to address these challenges while also integrating cross-cutting priorities, in particular climate adaptation and mitigation, and opportunities for e-commerce and digital solutions. These focus areas and actions serve as a foundation to facilitate policy discussions, monitor the progress of existing plans, and, as Uganda continues its path towards LDC graduation, guide strategic decisions, technical assistance design, and investments—all supported by active public private dialogue. Continued commitment and support for Uganda's ongoing efforts to promote export diversification and value addition—particularly by leveraging intraregional and South-South trade opportunities—will be essential to achieve long-term economic growth and resilience.







The background of the page is an abstract composition. The top half features a light teal gradient with a series of fine, white, curved lines that sweep across the frame. A bright, circular light source is positioned in the upper left, creating a soft glow. The bottom half of the page is a solid dark blue. The word "APPENDICES" is centered in this section in a white, serif font. Below the dark blue section, the background transitions back to a teal gradient, with a large, bright, circular light source in the lower right, creating a strong lens flare effect. The overall design is modern and professional.

# APPENDICES

## APPENDICES

### Appendix I Value chain selection methodology

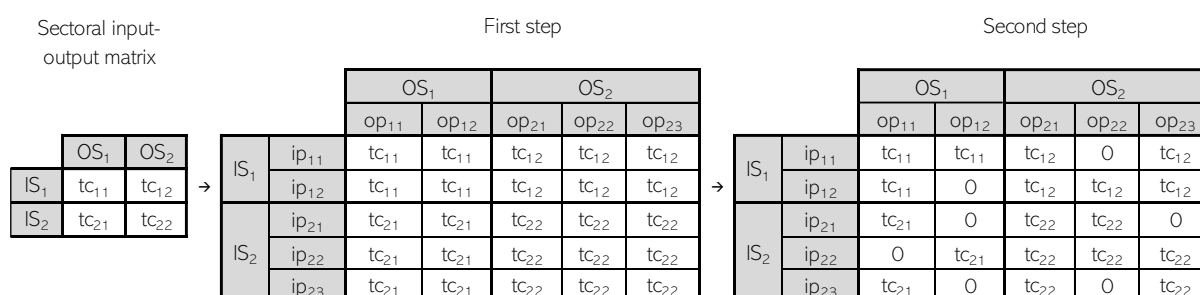
As briefly outlined in Chapter 2, the ITC value chain selection methodology relies on the definition of product-level value chains, built from existing sector-level input-output matrices, and the feasibility and desirability assessments. This appendix provides additional details on these steps.

#### The product-level definition of value chains

The definition of value chains at the product level is the cornerstone of the identification of feasible value chains. The starting point to determine input-output links at the product level are the sector-level input-output matrices of the United States, Mexico, and the Philippines. These input-output matrices are selected as the basis for the methodology because they disclose a greater sectoral disaggregation than most, and they represent countries with very different economic structures and development levels. There are two main motivations not to use the input-output matrix of the country being analysed. First, not all countries have an input-output matrix defined at the level of detail provided by the ones used in the methodology, or updated as often, or available at all. Second, the input-output matrix of any given country can only reflect the input-output links of activities already taking place in the country, whereas the methodology seeks to identify opportunities for new products as well.

Input-output matrices are a representation of trade across industries and indicate the value of inputs used to produce an output at the sector level. The value of input requirements per unit of output is called a technical coefficient (*tc*). The input-output matrices are originally defined at the sector level and must therefore be transformed to the product level for our exercise, and the technical coefficients have to be distributed accordingly. To do that, in an initial step, all products (*p*) that are matched to an input sector (*IS*) are considered potential inputs for all products matched to an output sector (*OS*). Figure A. 1 illustrates this expansion with two hypothetical input sectors (*IS*<sub>1</sub> and *IS*<sub>2</sub>), two output sectors (*OS*<sub>1</sub> and *OS*<sub>2</sub>), and their corresponding products. In this first step all possible products assigned to a sector are also assigned their respective sector's technical coefficient.

**Figure A. 1** Disaggregation of a sectoral input-output matrix to the product level



**Note:** *IS* stands for input sector, *OS* for output sector, *ip* for input product, *op* for output product and *tc* for technical coefficient.

**Source:** Authors' own diagram.

Matching all possible input products of a sector to all possible output products of a sector necessarily generates some inaccurate input-output links at the product level. For example, frozen bovine carcasses and frozen swine carcasses are in the same output sector, while bovine animals and swine are in the same input sector. In the matrix resulting of the initial step of the disaggregation, swine is incorrectly considered an input to frozen bovine carcasses.

Therefore, the second step consists of removing any inaccurate input-output links. Correct links are identified implementing several approaches. The first one is applying natural language processing techniques to the description of input products and output products. Information on input-output links from rules of origin provisions of over 70 trade agreements is also incorporated. Lastly, manual corrections are made following the assessment of sector experts. In the example cited above, the word match of "bovine" carcasses and "bovine" animals allows us to conclude that bovine animals are used to produce bovine carcasses (and swine are not). When a link is removed, the corresponding technical coefficient is set to zero (Figure A. 1, right). The technical coefficients are reallocated to all remaining matched inputs for each output.

Lastly, the technical coefficients of all three input-output tables are aggregated, weighted by each country's market share of the output product.

The resulting product-level input-output matrix only represents the immediate inputs used during the last step of production (i.e., direct inputs). To better capture the production process, intermediate consumption of inputs (i.e., indirect inputs) can also be considered. This can be done by tracing the production of inputs in the input-output matrix itself. To fully capture the entire production process, the input-output matrix is inverted. The resulting matrix, also known as the Leontief matrix, contains the total requirements of each input product for each output product, that is the value of an input that is required to produce a unit of the output, taking into account the entire upstream value chain production processes.

## Feasibility

### Availability of inputs

As explained in Chapter 2, in order to determine whether sufficient inputs are available within the country to produce a specific value chain output, trade data and the product-level input-output table are used.

In the case Uganda, the criteria applied are as follows:

- a. For each output, each input is checked, comparing its projected exports to:
  - the minimum exports of that input among countries that export the output with a revealed comparative advantage, and
  - the average exports of that input among countries that export the output with a revealed comparative advantage.

When projected exports exceed these thresholds, the input is considered to be available.

- b. For each output, the sum of all available inputs needs to be:
  - above 20% of the sum of all necessary inputs,
  - above the minimum share of necessary inputs available among countries that export the output with a revealed comparative advantage, and
  - above the average share of inputs available among countries that export the output with a revealed comparative advantage.

The combination of the different thresholds in a. and b. generates a range of criteria (6), going from some that are often met, generally the ones associated to minima, to others that can hardly ever be met, mostly the ones that require surpassing the averages of countries exporting the output with a revealed comparative advantage. In cases where none of the criteria are met, it is considered that inputs are not available domestically for that product. When only criteria associated to minima are met, the input availability is considered to be 'weak'. Medium, strong, and very strong categories of input availability are defined depending on the number of criteria met.

### Required capabilities

To assess Uganda's *capabilities* for a given product, the requirements applied were that:

- the product is already being exported, OR
- the product is sufficiently 'similar' to other products Uganda currently exports.

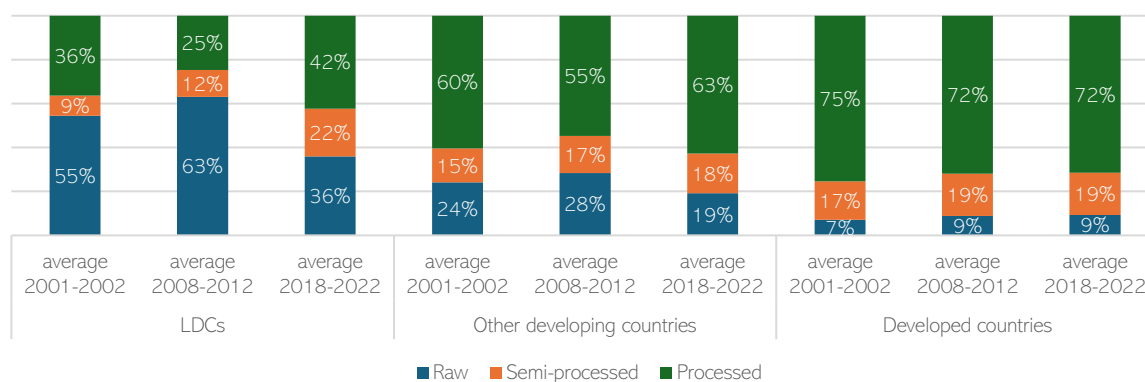
The concept of 'similarity' relies on the notion of product space and density, as developed in Hidalgo, et al. (2007). A product is considered to be sufficiently similar to current exports if:

- Uganda's density for that product is higher than its average density, AND
- Uganda's density ranking for that product is lower than the average density ranking for that product among countries that export it with a comparative advantage.

The underlying assumption is that products typically exported simultaneously require the same capabilities.

## Appendix II Additional figures

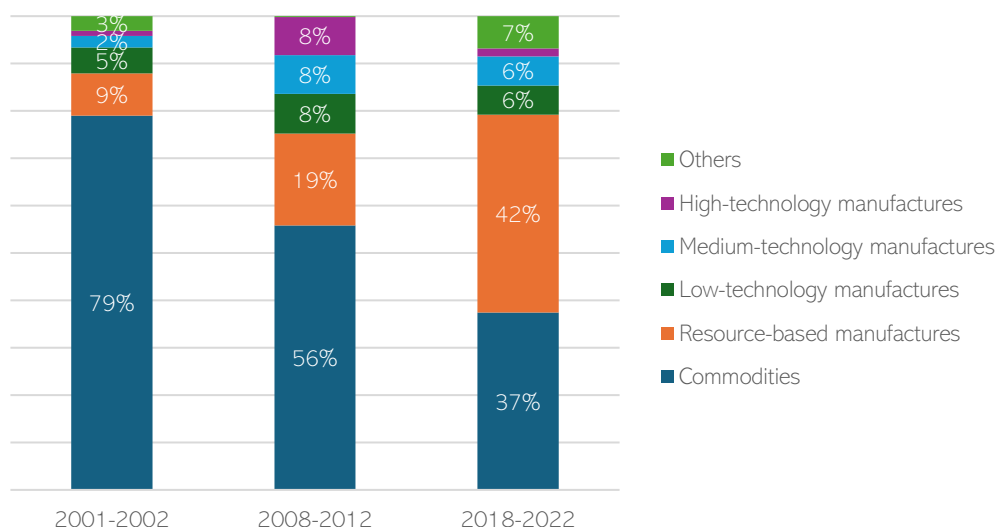
**Figure A. 2** Exports, by level of processing and country group



**Note:** The classification of products into raw, semi-processed and processed is based on the [Multilateral Trade Negotiation Categories \(MTNC\) of the World Trade Organization \(WTO\)](#).

**Source:** Authors' calculations based on ITC Trade Map (2023).

**Figure A. 3** Ugandan exports, by technology level



**Note:** The classification of products by technology level is based on Lall (2000), as defined in UNCTADStat (<https://unctadstat.unctad.org>). In this nomenclature, processed, non-monetary gold is included in the category "others".

**Source:** Authors' calculations based on ITC Trade Map (2023).

## Appendix III Definition of partner regions

Europe, the Americas and Pacific are defined geographically,

The group “Other Asian countries” includes all Asian countries not in the Middle East, as defined below.

The group “Other African countries” includes all African countries not in Eastern or Central Africa, as defined below.

### Middle East

Bahrain  
Iran, Islamic Republic of  
Iraq  
Israel  
Jordan  
Kuwait  
Lebanon  
Oman  
Palestine, State of  
Qatar  
Saudi Arabia  
Syrian Arab Republic  
Türkiye  
United Arab Emirates  
Yemen

### Eastern Africa

Comoros  
Djibouti  
Eritrea  
Ethiopia  
Kenya  
Madagascar  
Mauritius  
Rwanda  
Seychelles  
Somalia  
South Sudan  
Sudan  
Tanzania, United Republic of  
Uganda

### Central Africa

Burundi  
Cameroon  
Central African Republic  
Chad  
Congo  
Congo, Democratic Republic of the  
Equatorial Guinea  
Gabon  
Sao Tome and Principe

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