SMEP

Sustainable Manufacturing and Environmental Pollution Programme

TRADE IN SECONDHAND CLOTHING

Analysis of markets in Uganda, the United Republic of Tanzania and the United States of America

April **2026**

UK International Development

Partnership | Progress | Prosperity

This study was prepared by Jennifer Wang and Richard Wang in the context of the Sustainable Manufacturing and Environmental Pollution (SMEP) Programme, funded by the Foreign, Commonwealth and Development Office of the United Kingdom (FCDO) and implemented in partnership with UN Trade and Development (UNCTAD).

It received contributions from Avita Soor, Gender and Inclusive Development Specialist, and Dr. Akampumuza Obed, Consultant of the Full Cycle Resource Team initiative. Comments and insights were provided by Henrique Pacini, Elizabeth Dewar and Chantal Line Carpentier from the UNCTAD Secretariat.

The authors gratefully acknowledge the substantive and data contributions of Secondary Materials and Recycling Textiles (SMART) Association, and inputs and comments by Prof. Jonas Larsson (Baras Textile University), Zahara Perez Arribas (EU JRC), Matteo Magnani and Valerie Boiten (Ellen MacArthur Foundation), Karla Magruder (Accelerating Circularity), Elzette Henshilwood (SouthSouthNorth) and Heidi Cox (Fabrics Unravelled).

Desktop formatting, layout and graphics were designed by Lia Tostes.

Disclaimer

All views herein are those of the authors and do not necessarily represent views of their institutions.

Contents

Abbreviations

CIF	Cost, Insurance, and Freight
COVID-19	Coronavirus disease
EAC	East African Community
EAS	East African Standard
EPA	Environmental Protection Agency
EPR	Extended Producer Responsibility
EU	European Union
FCDO	Foreign, Commonwealth & Development Office (UK)
FOB	Free on Board
GAO	Government Accountability Office (US)
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (Germany)
GNI	Gross National Income
GRS	Global Recycle Standard
HDPE	High-density Polyethylene
HS	Harmonized System
ITA	International Trade Administration (US)
JRC	Joint Research Centre (European Commission)
MSW	Municipal Solid Waste
MT	Metric Tonnes
NIST	National Institute of Standards and Technology (US)
OECD	Organisation for Economic Co-operation and Development
PET	Polyethylene Terephthalate
RRS	Resource Recycling Systems
SGS	Société Générale de Surveillance (Switzerland)
SHC	Secondhand Clothing
SMART	Secondary Materials and Recycled Textiles Association
SMEP	Sustainable Manufacturing and Environmental Pollution Programme
TRA	Revenue Authority (United Republic of Tanzania)

TX	Texas (US)
TZS	Tanzanian Shilling
UGX	Ugandan Shilling
UK	United Kingdom of Great Britain and Northern Ireland
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
URA	Revenue Authority (Uganda)
US	United States of America
USD	United States Dollar
WRAP	Waste and Resources Action Programme (UK)
WWF	World Wide Fund for Nature

Executive summary

Global trade in secondhand clothing (SHC) plays a vital role in promoting textile circularity. By extending the lifespan of garments, it helps reduce the pressure on landfills in exporting countries and provides affordable clothing options in importing countries where new garments are often financially inaccessible for a large majority of the population. This practice aligns with the circular hierarchy, which prioritizes reuse over recycling and disposal, and supports inclusive access to clothing in poorer regions.

Despite these environmental and social benefits, the SHC trade is frequently at the center of global debates on whether large volumes of unusable textiles or useful clothing and recycling materials are being shipped to poorer countries. The assumption that waste is shipped to developing countries has influenced both exporting and importing regions' policies. Yet addressing these concerns requires robust, evidence-based analysis validated through primary data.

This report contributes to these debates by presenting empirical findings from Uganda and the United Republic of Tanzania (Tanzania), two major SHC importers in sub-Saharan Africa, as well as insights from the United States of America (US), an important export market. Uganda and Tanzania were selected as they are focus countries of the Sustainable Manufacturing and Environmental Pollution (SMEP) Programme's SHC intervention in East Africa, and complement research already underway in Kenya, while the US adds a major source market to complement existing research on European and Asian sources.

To inform the debate on whether large shares of SHC imports constitute waste or not, it is necessary to document the content of imports. This report thus documents bale contents received from overseas, by sampling field markets in Tanzania and Uganda, distinguishing between wearable and non-wearable clothing and defining what qualifies as waste to the receiving countries. The classification is aligned with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) definitions and criteria, followed by interviews with traders. The objective being that findings of grade and economic value reflect real market conditions rather than assumptions.

Overall 244,500 clothing items across major markets in Uganda and Tanzania were analyzed revealing that 96 per cent of imported SHC is rewearable. Some 2.9–3.2 per cent are classified as rags – items that are downgraded but still retain some resale value and only 1.1–1.3 per cent qualifies as textile waste. This bale analysis contrasts with the prevailing narrative of widespread waste dumping.

Indeed, while some pre-sorting occurs in export countries, most detailed sorting and grading is conducted in lower wage importing or destination markets. Yet mandatory pre-sorting in source markets must be designed with consideration for downstream affordability to avoid unintentionally excluding low-income consumers.

This is important for livelihood and employment reasons. SHC is indispensable for low-income households in importing countries. In Uganda, where the average daily income is 2.68 USD, new clothing can cost up to six days' worth of disposable income, while a SHC item (priced at 2.70 USD) equates to 1.56 days. SHC markets also support formal and informal employment, as well as entrepreneurial mobility, with traders often progressing from entry-level roles to positions in higher paid retail and import posts.

This globalized sorting model with pre-sorted bales sent to developing countries highlights the complexity of this value chain. Regulatory and technical gaps persist due to non-harmonized definitions under HS Code 6309 and B3030. Ongoing discussions on the potential inclusion of used clothing within the scope of the Basel Convention have introduced additional uncertainty, particularly with respect to distinguishing SHC intended for reuse from textile waste. Although the East African Standard 356:2024 mandates strict quality checks before import through third-party audit. Enhancing transparency in sorting operations in export countries through standardized reporting; third-party audits could improve trust and traceability.

Closing that gap to minimize waste in shipping and investments in fibre identification technologies, recycling infrastructure, and localized circular models could complement reuse efforts without compromising SHC affordability and job creation.

This report aims to provide evidence-based data at a time when regulatory changes are being considered, with subsequent impacts along existing supply chains. The data can help minimize negative spillover effects on circular activities, while maximising the environmental benefits. In importing countries, national strategies should integrate SHC into broader circular economy plans, identifying infrastructure gaps and fostering collaboration between formal and informal actors. At the global level, harmonizing definitions, improving data systems, and incentivizing transparency across the SHC value chain would help balance environmental goals with socioeconomic realities.

1.

Introduction

Globally, the 1.7 trillion USD clothing industry employs over 300 million people across its value chains and plays a crucial role in industrialization, trade, development, and social value creation (McKinsey & Company, 2025. Statistica, 2022). Global fiber production increased 7 per cent from 116 million metric tonnes (MT) in 2022 to 124 million MT in 2023 (Textile Exchange, 2024; International Cotton Advisory Committee, 2024). This is driven by a growing middle-class worldwide and higher per capita purchases in developed economies (Gschwandtner, 2022).

Global clothing consumption has increased by 400 per cent over the past two decades due to population growth, economic development, and e-commerce, with associated resources and environmental challenges (Morgan, 2015). Price-sensitive consumers are driving the demand for affordable clothing options like fast fashion. Fast fashion is characterized by the production of low-cost, trendy clothing that mimics current styles – whether inspired by high-end runway designs, social media trends, or popular culture. This model has significantly increased the volume of textiles in circulation. On average, consumers discard the lowest-priced garments after only seven wears, and for every five garments produced, three end up in landfills or are incinerated (McKinsey & Company, 2025). The rise of ultrafast fashion[1][2] has further accelerated production and consumption cycles, enabled by e-commerce websites and platforms popular among American GenZ (Deighton, 2024; McKinsey & Company, 2024).

As a result, the fashion industry is one of the most polluting sectors globally. All stages of production from farming of fiber / petroleum extraction to wet treatment processes, such as dyeing, finishing, and printing, are significant sources of environmental pollution, including solid and liquid discharges, while fossil energy reliance in spinning, weaving, knitting and web formation exacerbates carbon emissions and particulate pollution (Stone, 2020; Patti, 2021). The textile industry is responsible for approximately 1.2 billion MT of GHG emissions globally each year; accounting for approximately 2 to 8 per cent of global greenhouse gas (GHG) emissions (UNEP, 2019).

This contributes to 92 million MT of global textile waste annually (Global Fashion Agenda, n.d) and could reach 134 million MT by 2030 (WWF, 2024). In the US alone, textiles accounted for 17 million MT, or 5.8 per cent of MSW, in 2018, yet only 14.7 per cent of these textiles were recycled (EPA, 2023). Unsustainable patterns of consumption and production contribute to a triple planetary crisis: accelerating climate change, depleting natural ecosystems, and escalating pollution levels. Addressing these challenges requires a substantial reduction not only in the garment consumption, but also in environmental impact of garments, with studies suggesting reductions of 30 to 100 per cent needed in high-income countries by 2050 to stay within planetary boundaries (Niinimäki et al., 2020). While material-shift towards alternative fibers and improved production processes can help reduce the impact of textiles, increasing reuse and recycling to minimize resource use, emissions, and waste generation is necessary.

1 Fast fashion is the mass production of low-cost, trend-based clothing with turnaround times of a few weeks.

2 Ultrafast fashion goes further, using real-time online trends to release thousands of new styles within days, prioritizing speed, volume, and low prices.

Scaling circularity in the context of global fiber expansion

Global fiber production reached 124 million MT in 2023, a 7 per cent increase from 2022, and could hit 160 million MT by 2030 (Textile Exchange 2024). Synthetic fibers dominate at 57 per cent of total production, with polyester output rising from 67 to 75 million MT in a continued shift away from plant-based fibers, which declined from 29.1 per cent in 2019 to 25.3 per cent in 2023. Cotton production fell from 25.1 to 24.4 million MT, with 29 per cent now certified sustainable. Animal fibers are growing, with responsible wool accounting for 4.8 per cent of production, and 47 per cent of all mohair produced globally under the Responsible Mohair Standard (RMS). Manmade cellulosic fibers (MMCF)[3] such as viscose and rayon, expanded to 7.9 million MT (6 per cent of production). Thus, the fiber industry remains synthetic-driven, while sustainability efforts in natural and alternative fibers are advancing slowly (Textile Exchange, 2024).

Reusing textiles

While chemical and mechanical fiber-to-fiber recycling offer pathways toward circularity, both face limitations in terms of cost, infrastructure, and material purity requirements. Fiber-to-fiber recycling aims to convert textile waste into new fibers for garment or textile production. Establishing a circular system within the textile industry, reducing reliance on virgin materials, and minimizing waste. The process of chemical recycling involves breaking down textiles into chemical components and regenerating them into new fibers – which often requires pure, mono – material inputs of polyester or cellulose-based fabrics. However, the method remains costly, infrastructure-intensive, and dependent on a consistent supply of suitable feedstock and reliable off-takers. As a result, many chemical recycling companies struggle to scale, reflecting broader challenges in industry adoption and commercial viability (McKinsey & Company, 2022).

Mechanical fiber-to-fiber recycling involves shredding textiles to revert them to a state that allows re-spinning. This process can degrade fiber and length, resulting in lower-quality outputs and requiring specialized machinery. To meet performance standards for new yarn, mechanically recycled fibers are often blended with virgin cellulosic material or recycled polyester to enhance the length and strength. Even with blending, the resulting yarns may lack the smooth texture, softness, and visual appeal of the original textiles.

As a result, a large share of textiles that are not suitable for reuse are diverted into downcycling streams. Downcycling is the process of converting used textiles into lower-value products, typically through mechanical shredding, needle punching, or re-spinning of fibers. It results in more accessible, but lower-value products such as insulation, mattress padding, underfelt, non-apparel products, blankets, or coarse yarn, which require lower product standards (GAO, 2024c) compared to mechanical and chemical recycling as those fibers do not re-enter the apparel supply chain.

These challenges reflect broader issues within the textile sector, where the transition to more sustainable production methods faces barriers in market uptake and production feasibility. As fiber-to-fiber recycling technologies continue to evolve, their potential impacts on adjacent industries must be carefully examined. One such sector is the rags and wipers industry, which relies on discarded textiles that are not fit for rewear, but fit for industrial and commercial cleaning applications. This market currently offers higher returns for certain textile types and accommodates a wider range of fabric compositions than recycling systems. Until fiber-to-fiber recycling achieves consistent demand, sufficient volume, and competitive price, much of the material will continue to flow toward other pathways to maximize profitability such as, the rags and wipers sector. As such, emerging recycling technologies should be integrated thoughtfully, ensuring they complement rather than displace existing reuse markets that remain economically viable and environmentally beneficial.

Secondhand clothing

As textile waste continues to grow, alternative solutions such as reuse and resale are gaining traction. SHC consumption has emerged as a critical circular economy practice, aligned with the waste hierarchy which prioritizes avoidance and reuse rather than recycling. Reuse markets can help lower environmental impacts by extending product lifespans and reducing resource use. SHC markets can also promote sustainable consumption if it shifts demand away from new products and encourages the use of existing ones. However, the extent to which SHC displaces the purchase of new clothing remains debated; if secondhand consumption merely supplements rather than replaces new purchases, its overall environmental benefits may be limited. With policy developments to address the growing SHC market, the European Union (EU) is planning to extend producer responsibility to textiles, requiring manufacturers to account for the end-of-life management of their products (European Commission, n.d.). Similarly, the US is developing a national textile recycling strategy with the Environmental Protection Agency (EPA) targeting implementation within the next 5 to 10 years (GAO, 2024b).

Under this context, this study bridges the upstream dynamics of SHC sourced from high-income countries, particularly the US, with the downstream realities faced by non-OECD countries like Tanzania and Uganda.

International trade in secondhand clothes

In international trade, the Harmonized System (HS) Code 6309 categorizes secondhand textiles as "worn clothing" and other used textile articles intended for reuse, while under the Basel Convention's Annex B (Code B3030), such items may be classified as "waste" if contaminated or unsuitable for reuse. Applying these Codes in practice is challenging due to the nature of the supply chain where clothing is typically donated in an unsorted state – often referred to as original or credential – that contains a high percentage of reusable items, but also a smaller proportion of non-reusable ones (Watson et al, 2016; Habib and Parris, 2024; Garson & Shaw and Full Cycle Resource, 2025). The credential clothes may be sent to another country for sorting, either for domestic reuse or for re-export to international markets under HS Code 6309.

As the shipment may include contaminated or unsuitable for reuse shipment considered non-waste by the exporting country may be classified as waste by the importing country, triggering legal and logistical complications under the EU Waste Shipment Regulation and the Basel Convention. Difference in national classifications may further add to the complexity (Habib and Parris 2024). For example, Germany interprets all domestically collected textiles as waste and applies the Basel Convention criteria to shipments of used textiles. In contrast, Finland does not consider textiles collected through charities or private collectors to be waste (Watson et al., 2016; Danish Environment Agency, 2020).

These discrepancies create regulatory inconsistencies, enforcement challenges, uncertainties, and added costs for traders. US exporters, while not bound by Basel, face scrutiny when trading with Basel member countries like Tanzania and Uganda. Clearer differentiation between reusable textiles and waste would be critical to facilitate reuse of textiles. Establishing clear definitions is essential to prevent waste disguised as reusable textiles from entering markets, protect environmental and economic interests, and ensure international trade aligns with sustainability and development goals.

This study further explores the upstream in the SHC value chain, especially sourcing in the US, and its connections with the destination markets, to understand how exporters and traders in recipient countries define and distinguish SHC from textile waste. This involves addressing key issues such as the percentage of imports suitable for reuse, the economic impacts of trade, and the development of global criteria for categorizing textiles. Field surveys were conducted in Tanzania and Uganda, enabling cross-country comparisons and highlighting context-specific challenges and opportunities in defining and regulating SHC versus waste.

3 Manmade cellulosic fibers (MMCFs) are regenerated fibers derived from natural cellulose sources, such as wood pulp. They are produced through chemical processes that transform cellulose into fibers suitable for textile applications. Common types of MMCFs include viscose (rayon), lyocell, modal, acetate, and cupro (Textile Exchange, 2024).

↑ Image 1. Secondhand garments in Owino market in Kampala, Uganda, showing the range of clothing available in informal retail settings.

Finally, the study further investigates the economics of consumer affordability and trade competitiveness within the globally interconnected SHC market. As a highly competitive industry involving diverse actors – from sorters and exporters to importers, retailers, and informal vendors – the SHC trade is shaped by cost structures and consumer's price sensitivities. In this context, policy interventions introduced upstream, such as mandatory pre-sorting or enhanced compliance requirements in source markets, may have downstream implications for market accessibility and pricing, particularly in low-income countries. By analyzing these interconnected dynamics, the study aims to inform regulatory approaches that are both environmentally sound and economically responsive to the realities of affordability and inclusion within the global reuse economy.

1.1. Methodology

This study combined desk and field-based research to analyze textile sorting practices in the US and SHC market dynamics in selected markets in East Africa.

United States upstream analysis

In collaboration with the Secondary Materials and Recycled Textiles (SMART) Association, an online survey was distributed to the US-based and overseas sorters handling US-collected clothing. The survey captured sorting steps, grading criteria, and material flows. Twelve such sorting companies participated, with several opting in follow-up interviews for deeper insights.

Further qualitative interviews were conducted with collectors (5), brokers (3), wipers traders (3), and retailers (5) to gain deeper insights into market practices, material flows, and stakeholder perspectives across the upstream segment of the SHC value chain.

East Africa fieldwork

A mixed-methods approach was used to examine the SHC trade in Tanzania and Uganda. Primary data was collected through structured surveys and interviews with key stakeholders, including importers, retailers, and vendors, across major markets. Field interviews used local academic research partners in Tanzania and Uganda to reduce response bias. Interviewers used structured interview templates and were trained to ensure consistency. A total of 2,147 respondents were engaged, providing quantitative and qualitative insights into market dynamics, trade practices, and socioeconomic impacts. Each interview lasted around 20 minutes and focused on sorting practices, pricing, and perceptions of quality. Paper questionnaires with unique surveyor IDs were used, digitized, and cross-verified for accuracy.

- **Uganda**: conducted in Kampala's Owino Market (May–June 2024), covering 1,019 respondents: 18 importers, 598 retailers, 312 vendors, and 91 tailors.
- **Tanzania**: conducted in Dar es Salaam (July–August 2024) across importer's area in Kariakoo, Ilala market, and Karume markets, with 1,091 respondents: 35 importers, 642 retailers, and 405 vendors.

The research approach was adaptive, evolving in response to ongoing field experience and contextual insights. In Uganda, data collection focused on core market dynamics such as sorting criteria, pricing structures at Owino Market, and the characteristics of waste and rags. Quality characteristic ratings were captured for garments classified as Grade A, Grade B, Grade C, rags, and textile waste. However, other subcategory ratings were not collected at that stage, as their significance only became apparent during subsequent peak tracing[4] analysis (Annex 1).

While initial observations suggested potential quality distinctions and overlaps within existing grades and subcategories, these patterns were confirmed and further clarified through the analytical process. Building on these foundational insights, the subsequent Tanzanian study incorporated methodological refinements to improve data resolution. Specifically, quality ratings and item-level subcategories were introduced to enable a more nuanced analysis of value attribution and grading practices across Dar es Salaam's primary SHC markets (Annex 1).

Secondary data were sourced from official reports, including official trade data from UN Comtrade and national revenue authorities, to analyze traded volumes, pricing structures, and policy frameworks. Comparative analysis was conducted to identify similarities and differences between the two countries, focusing on grading criteria, waste management practices, and economic mobility opportunities.

Limitations

While this study provides comprehensive insights into upstream and downstream dynamics of the SHC trade, it faces some limitations. The data collection with sorting companies presented challenges. Although the participating sorters openly shared general process information, obtaining granular data on throughput volumes, material yields by grade, and offtake destinations proved difficult due to the diversity of operational models and commercial sensitivities. Many sorters operate across multiple markets with varied buyers and contractual arrangements, making standardization of responses across firms complex.

The findings represent a temporal snapshot and are subject to seasonal fluctuations in supply, demand, and pricing. The quality and composition of SHC can vary over time in response to global fashion cycles, donation trends, and shifting consumer preferences. Moreover, data was collected only from specific markets, namely Owino Market in Kampala and three major markets in Dar es Salaam, and therefore may not be representative of other regions within each country.

4 In the peak tracing method, price distributions were plotted for both the overall market and single-grade purchasers. Peaks indicate the most common selling prices in each subcategory, reflecting that items are sold at whole-number prices (e.g., 1 or 2 USD per SHC piece) rather than fractional values.

← Image 2. Consumer browsing clothing on a retail rack in the United States.

© C. Deluvio (Unsplash), 2020.

2.

The United States of America textile landscape

2.1. Consumption, waste, and circularity challenges

Based on trade under HS Code 6309,[5][6] the US was the world's largest importer of new clothing, accounting for 24.6 per cent of global import volume (Table 1). China remained the largest supplier to the US, holding a 38.4 per cent market share, followed by Vietnam (12.1 per cent) and India (8.2 per cent) (Table 2) in 2022. While China's share by weight is rising, its market share by value is declining (Figure 1), indicating a shift toward lower-cost textiles that may impact SHC quality and resale value. Meanwhile, Vietnam has increased its market share by value without significantly increasing export volume, emphasizing higher-value textiles and accounting for 13.3 per cent of US import by weight but 19.3 per cent by value.

The rising clothing consumption in the US, where on average 68 garments are bought per person each year (Malhotra, 2024), along with the increase in textile waste generation (EPA, 2018), directly impacts the SHC trade and textile waste management. The US EPA estimates a 50 per cent increase in textile waste between 2000 and 2018, driven by multiple factors, including the rise of the fast fashion business model, limited collection and sorting systems, and textile recycling technologies still in its infancy (US GAO, 2024a). Data from the International Trade Administration (ITA) show a 182 per cent increase in textile and apparel imports from 2000 to 2023, reflecting higher trade in this sector and corresponding to greater disposal rate (US GAO, 2024b).

On average, US consumers generate 17 million MT of textile waste,[7] with 66 per cent (11.3 million MT) of discarded textiles ending up in landfills, 19 per cent incinerated, and only 14.7 per cent diverted for recovery (US GAO, 2024). Indeed, although 60 per cent of consumers engage in donation, resale, or recycling, 40 per cent still discard textiles as trash, bypassing sorting systems and contributing directly to MSW streams (Fashion for Good and RRS, 2024).

5 Categorization into HS Code 6309 is based on the US International Trade Commission's Chapter 63 definition, with equivalent new clothing items identified under corresponding HS codes (Annex 2).

6 UNCTAD team used HS code definition from UN Comtrade then analyzed datasets from US Census Bureau https://www.census.gov/foreign-trade/schedules/b/2025/index.html and World Custom's Organization (WCO)'s HS Code definition https://www.wcotradetools.org/en/harmonized-system/.

7 The data from United States Environmental Protection Agency (EPA) 2018.

Textiles face unique challenges in recycling compared to traditional recyclables like plastics or glass. Contamination – such as moisture or chemical residues – remains a significant barrier to effective material recovery (GAO, 2024b). According to a 2022 NIST report, textiles must be clean, dry, and free from hazardous chemicals to be eligible for reuse or recycling. Manual sorting of garments for reuse is labor-intensive and costly, while sorting for recycling remains inefficient due to the complexity of accurately identifying fiber compositions (NIST, 2022). Without robust collection and sorting systems, textiles are discarded to MSW streams.

Bans and tariffs on used textile imports in several countries have restricted export options, further contributing to domestic textile waste. Federal entities are working to transition the US textile industry from a linear to a circular economy (GAO, 2024b).

↓ *Source: Authors analysis based on UN Comtrade data.*

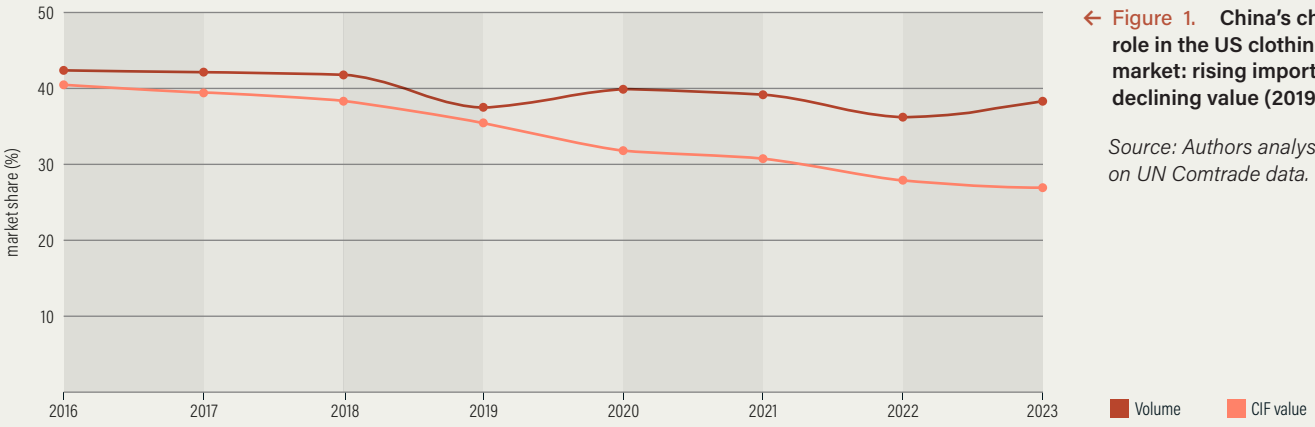
Table 1. **Ten largest importing countries of HS Code 6309 equivalent of new clothing**

Country	Market share by weight (%)		Market share by value (%)	
	2022	2019–2023 (average)	2022	2019–2023 (average)
US	24.6	23.4	24.0	22.2
Germany	7.5	7.6	9.8	9.6
Netherlands	7.4	4.3	3.9	3.8
Japan	4.9	5.5	5.1	5.5
France	4.8	4.8	6.0	6.0
Italy	3.4	3.4	4.4	4.4
Spain	3.0	3.3	4.3	4.2
Republic of Korea	2.4	2.6	2.6	2.6
Poland	2.4	2.5	2.7	2.7
UAE	2.2	1.9	1.4	1.3
All other countries	37.3	40.7	35.8	37.7

Table 2. **Ten largest exporting countries of HS Code 6309 equivalent of new clothing**

Country	Market share by weight (%)		Market share by value (%)	
	2022	2019–2023 (average)	2022	2019–2023 (average)
China	36.4	38.4	28.0	30.6
Viet Nam	13.3	12.1	19.3	17.9
India	8.1	8.2	6.5	6.2
Bangladesh	7.3	6.0	6.6	5.7
Indonesia	3.9	3.5	5.9	5.3
Italy	0.8	0.8	3.2	3.1
Mexico	2.9	3.1	3.0	3.2
Cambodia	3.3	2.9	3.7	3.3
Pakistan	5.6	5.2	2.9	2.7
Honduras	3.2	2.7	2.2	2.1
All other countries	15.2	17.1	18.8	20.0

↑ *Source: Authors analysis based on UN Comtrade data.*



← Figure 1. **China's changing role in the US clothing market: rising import volume, declining value (2019–2023)**

Source: Authors analysis based on UN Comtrade data.

2.2. Growth, collection, and supply chain dynamics

Amid shifting consumer habits and evolving fashion markets, the global secondhand apparel market continues to expand. According to ThredUp's 2024 Resale Report, based on GlobalData estimates, the market reached 197 billion USD in 2023, up from about 167 billion USD in 2022, and is projected to grow up to 350 billion USD by 2028 (ThredUp, 2024). These figures refer to the overall secondhand and resale apparel market, including domestic resale channels, and are therefore broader than customs-based trade statistics. By contrast, international trade data capture only cross-border flows: under HS Code 6309, nearly all countries participate in the SHC trade as exporters, importers or processors, and UN Comtrade data used in this report indicate that 5.8 million tonnes were traded globally in 2022, with a free-on-board (FOB)[8] value of 5.7 billion USD.

In 2023, the US SHC industry generated 25.6 billion USD in retail sales, with projections suggesting growth to 75.5 billion USD by 2033 (Garson & Shaw, 2024). This sector also contributed 2.5 billion USD in tax revenues in 2023 (could reach 8.8 billion USD by 2033) supporting approximately 342,000 jobs in the US.

The expansion of the SHC market in the US is largely driven by younger generations, particularly millennials and Gen Z, who accounted for an estimated 68 per cent of the sector's revenue in 2022 (Statista, n.d.). The stigma surrounding SHC is diminishing as sustainability concerns and evolving fashion trends fuel its acceptance in affluent communities, where it was once linked to poverty (Yang et al., 2024). While rising demand has led to higher prices in some markets, many young consumers still see secondhand fashion as a cost-effective and eco-conscious choice.

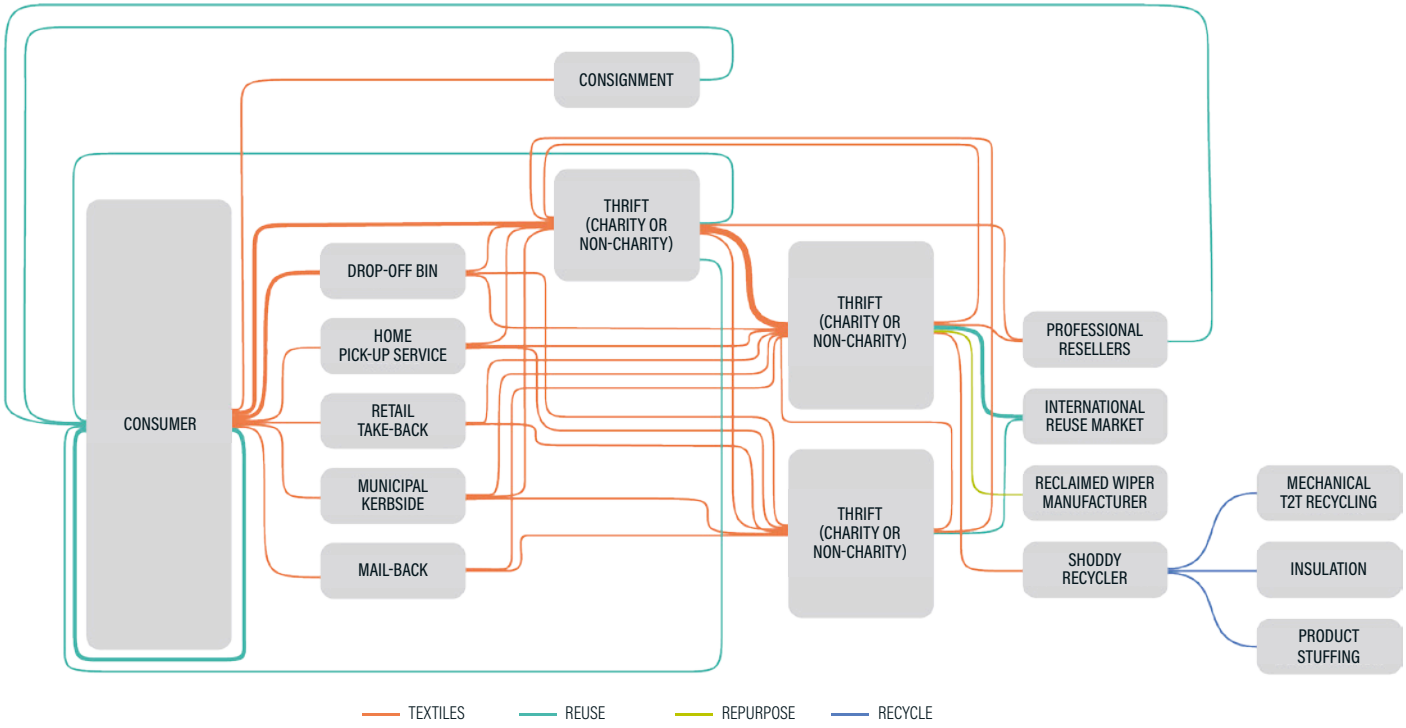
Textiles can be diverted from waste stream through a mix of formal and informal collection channels, managed by for-profit and non-profit entities, with municipalities playing a minor role. Key collection methods include donation bins, thrift stores, in-store take-back programs, and door-to-door collection (Figure 2) (Fashion for Good and RRS, 2024). Once collected, textiles follow multiple pathways, going directly to retail, passing through sorters and brokers, or being exported. Items unsold at retail are often redirected for bulk resale and further sorting domestically or internationally. The textiles that do not make it to these collection methods and are disposed of as trash end up in landfills or are incinerated (Fashion for Good and RRS, 2024).

8 FOB is an international trade term used to indicate that the seller is responsible for delivering goods to a specified port and loading them onto the shipping vessel. Once the goods are on board, ownership and risk transfer to the buyer, who is then responsible for freight, insurance, and any further transport and import duties.

↓ Figure 2. **Pathway of used textile diverted from disposal in the US**

Source: Fashion for Good and RRS, 2024.

Each collection system has a different business model, cost structure, targeted clientele, and profit margin. An entity may operate at multiple points along the value chain depending on its level of integration. Some act as collectors and sorters, others as collectors and exporters, while some are fully integrated, managing collection, sorting, retail, export, and rag-cutting operations. These configurations vary based on the organization's strategic priorities, infrastructure, geographical location, and target markets.



Consumers

Consumers divert what they consider high value textiles and dispose of low value textiles. When examining motivation of individuals to divert higher quality textiles, supporting a charity is the most influential factor in determining the overall choice of textile disposal (Fashion for Good and RRS, 2024). Regarding items perceived to be damaged, consumers are more inclined to throw these in the trash or repurpose them as rags.

← Image 3. Sorting facility in Guatemala City, Guatemala, the largest importer of United States of America secondhand clothing (HS Code 6309) in 2023.

Collectors

The location of clothing collections plays a crucial role in shaping the SHC supply chain. Urban areas generate higher volumes and a greater variety of styles due to dense populations and fast fashion turnover, whereas rural areas primarily contribute to practical, durable garments. Climate also affects collection patterns with colder regions supplying a mix of winter gear and seasonal wear, while warmer regions predominantly contribute to lightweight garments. Importantly, sorters and other buyers often exhibit a discernible preference for clothing collected from specific geographic regions, driven by perceptions of style relevance and trend alignment. Buyers seeking fashionable items tend to selectively source materials based on the fashion sensibilities of particular areas, aligning their purchases with the preferences and demands of their target consumer both domestically and internationally. Collectors place bins in various locations, including churches, shopping malls, gas stations, residential neighborhoods, and other high-traffic public spaces to maximize donations. However, the exact locations of these bins are not systematically mapped or publicly available. To maintain consumer engagement and encourage donations, collectors invest in upkeep, ensuring the donation bin or structure is well-maintained, repaired, and visibly branded to attract donors.

Clothing donations are typically received in polythene bags to facilitate easy transport. Collectors retrieve these donations on a scheduled basis, loading the polythene bags onto collection trucks for delivery to a consolidation warehouse. During the loading and consolidation process, a screening takes place to remove any visibly inappropriate materials such as glass, plastic bottles, or wet garments. Donations that are damp or wet pose a risk of mold development and contamination and are therefore commonly classified as waste by sorting facilities. The remaining donations are then put into a capsack, which is a large flexible polypropylene sack, or a large bale at the consolidation warehouse for bulk transport to the next location.

↓ Image 4. Collector handling polythene bags of donated clothing.

← Image 5. Workers inspecting and assessing donated garments at a sorting facility.

© Full Cycle Resource, 2024.

Sorting

If the collector is not vertically integrated, the consolidated donations are typically sold to brokers or directly to sorting facilities located domestically in the US or abroad. In cases where collectors partner with non-profits, including religious institutions, the collector pays a monthly fee to the institution for the placing of the bin. This unsorted, untouched donated clothing is known as credential clothing in the US and is commonly known as "original" in Europe. These items are often preferred by sorters and traders, as credentials have not undergone prior filtering and therefore tend to contain a higher proportion of resalable vintage and premium garments, shoes, and accessories. This contributes to a higher yield and improved profit margins within the sorting or reselling processes.

The surveys indicated that the US conducted less fine sorting, a two-step sorting process, compared to other regions that use three or more. Labor costs influence whether sorting occurs in North America or lower-cost markets like Mexico, Malaysia, Pakistan, United Arab Emirates (UAE), and in destination countries that allow receiving of credential and institutional rags. Some companies conduct detailed sorting entirely within North America, selling textiles in both domestic and international markets. Others consolidate shipments in North American warehouses before exporting the credential or institutional rags for final sorting, either for local consumption or re-export. This highlights the global nature of the textile supply chain, where textiles move across multiple countries for sorting, processing, and distribution.

Retail

Some charities operate retail outlets, where donated clothing is sorted and sold, while unsold or unsuitable items are redirected for bulk resale or further sorting. These items are often bundled and sold under the product name "institutional rags" or secondhand retail pull. The name is misleading as this category does not refer to rags, but rather to pre-sorted, reusable secondhand garments from thrift stores or donation shops, such as retail excess (unsold items removed from the sales floor), and donations that were never placed for retail sales. Since these items have been pre-filtered with some premium pieces taken out, institutional rags are typically sold at a lower price to the brokers and sorting facilities to undergo sorting, than credential clothing. Some retailers transport the institutional rags to centralized warehouses for sorting before selling to the export market.

3.

Global trade and processing of secondhand clothing

In 2023, the largest importers of US HS Code 6309 were Guatemala, Canada, India, Chile, and Honduras. Guatemala led the imports with a total volume of 117.46 million kilograms, followed by Canada with 85.17 million kilograms and India with 72.17 million kilograms. Chile imported 61.53 million kilograms, while Honduras received 46.35 million kilograms. Collectively, these five countries accounted for 55 per cent of the total US export volume of sorted SHC (UN Comtrade, 2024).

Uganda imported 80 million kilograms of SHC under HS Code 6309, with 2.5 per cent originating from the US. Tanzania imported 86.3 million kilograms, of which 9.1 per cent came directly from the US. In East Africa, Uganda and Tanzania imported a combined total of 166.3 million kilograms of SHC in 2023 (UN Comtrade), representing 13.1 per cent of Africa's total 1.27 billion kilograms of SHC import. In both countries, the majority of SHC imports originated from China – accounting for 47.3 per cent of Uganda's total and 55.5 per cent of Tanzania's.

Although all shipped under HS Code 6309, SHC importation regulations differ between Uganda and Tanzania and countries such as Guatemala. While East African Community (EAC) countries require imported clothing to be sorted by type and quality, Guatemala allows both the importation of unsorted SHC (credential and institutional rags) and pre-sorted SHC, which are then either processed at local sorting facilities or sold directly in their original form. Due to East African Standards (EAS) on used clothing import requirement, sorting facilities exporting to these countries must conduct a detailed in two stages sorting. This additional sorting steps makes the US a less favorable direct supplier unless goods are routed through overseas hubs to offset higher sorting and transport costs.

Canada and India's FOB pricing for SHC is significantly lower than that of other major importers, at slightly less than 50 per cent of the average US FOB price and only 33 per cent of the FOB price paid by Honduras in 2023. The lower FOB pricing suggests that Canada and India are either handling lower-value goods such as institutional rags or processing bulk mixed bales at scale before redistributing them.

← Image 6. Local market in Antigua, Guatemala, where imported secondhand clothing is sold in small-scale retail settings within national distribution systems.

3.1. The type of output from sorting facilities

Based on findings from our survey, garments entering sorting facilities are typically classified into one of three main categories: rewearable, unrewearable, or designated for waste disposal (Figure 3). Rewearable items are suitable for direct reuse as clothing or may require only minor repairs to restore their functionality for continued wear, while unrewearable items may be reused as rags or directed to recycling, and downcycling. Items that do not qualify as rewearable or unrewearable are classified as waste. Textiles are carefully sorted based on market demand, and customer quality requirements which create variability of definition across markets.

Reuse may serve both domestic and international markets and generally fall into five grades: vintage-style clothing, premium clothing, Grade A (or Grade 1), Grade B (or Grade 2), and Grade C (or Grade 3). In the US, vintage clothing holds the highest value, however, the composition of vintage clothes within a credential consignment is limited. The definition of vintage is influenced by both cultural factors and fashion trends, shaping demand and pricing. Vintages are then graded based on quality and specific subcategories, ensuring differentiation in the resale market. These garments are either sold domestically or exported to international markets such as the US, Europe and Japan, where vintage fashion is highly sought after and hold the highest value. However, vintage clothing does not hold the same value in the East African market, where consumer fashion preferences and purchasing power differ.

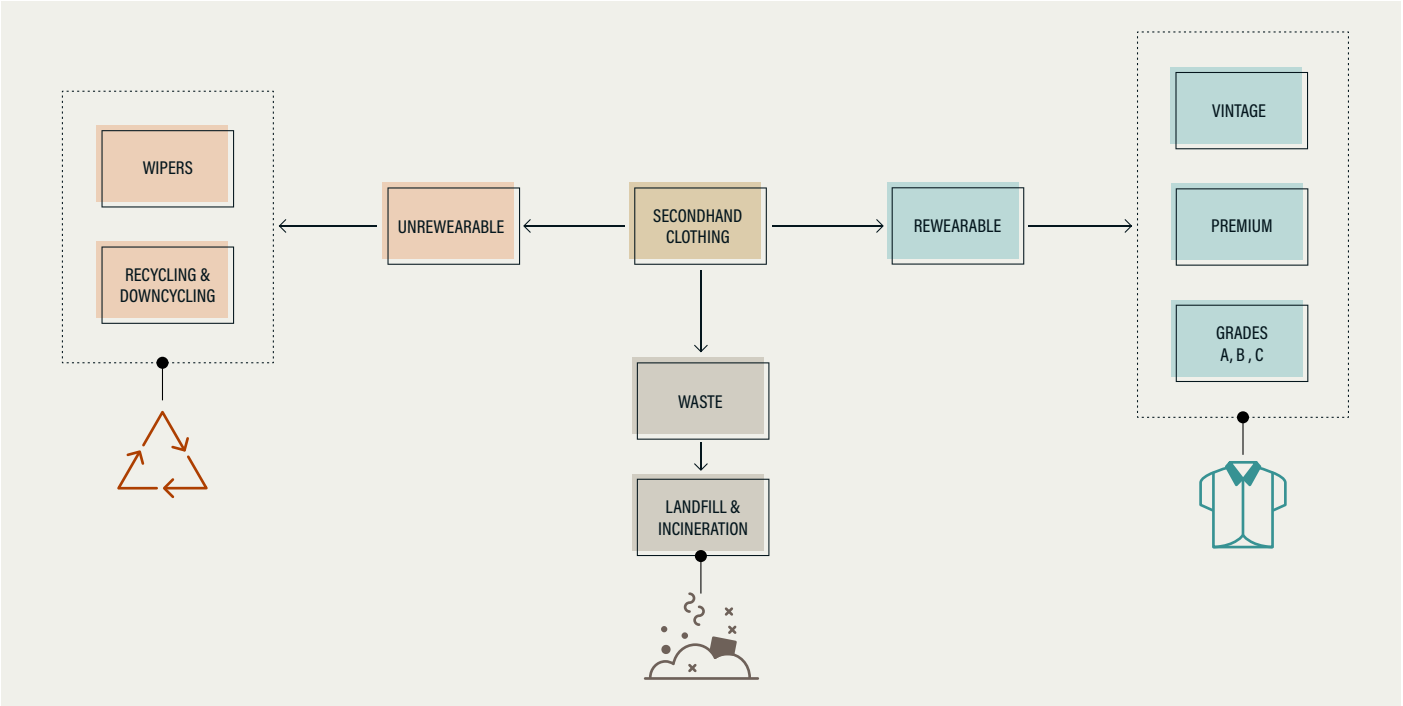
Premium clothing refers to new or like new garments, often with retail pricing tags attached, that receive the highest rating based on appearance, condition, fashion relevance, functionality, and durability. While these items are sold both domestically and internationally, not all clothing with tags qualifies as premium. Garments that are unworn or show little to no sign of wear but are no longer in fashion in the US are instead categorized as Grade A, the highest quality for export. This distinction ensures that premium-rated clothing retains its value in resale markets. Top-quality items such as premium and Grade A surplus are directed toward international markets with higher purchase power, such as those located in Latin and Central America.

SHC is further categorized into **Grade A**, **Grade B**, and **Grade C** shaping both supply and demand. Importers in East African countries such as Tanzania and Uganda primarily prefer Grade A and Grade B bales, while Grade C is significantly less present in the region. This aligns with survey data from 53 importers across Uganda and Tanzania, where 83 per cent reported importing Grade A bales, 15 per cent import Grade B, and only 2 per cent import Grade C.

↓ Figure 3. **Secondhand clothes sorting pathways**

Source: Prepared by the authors.

Note: The general flow of SHC from sorting facilities depends on the sorter's operational mode, with some pathways ending earlier or offering fewer downstream options. This applies to both domestic and international sorting facilities.



Trading in Grade C items is generally more viable in lower-cost labour markets, because the detailed sorting required to recover value from these goods is often not economically feasible in higher-cost countries such as the US. As a result, these items are frequently bundled and exported to sorting facilities in other regions, where lower labour costs and different market conditions make further value recovery possible. Depending on the material and available end markets, this may involve continued reuse or separation into unrewearable streams such as **wipers, recycling, downcycling, or final disposal**.

In many sorting facilities, a high proportion still holds reuse potential, in the rags and wipers industry, which supplies cleaning cloths for the automotive, hospitality, manufacturing, and maintenance sectors. On average, the production of wipers – textile materials repurposed for industrial or commercial cleaning – accounts for approximately 15 to 20 per cent of total output of credential in countries where sorting is more expensive. In contrast, in lower-cost countries, wipers make up a slightly smaller share of output (12 and 15 per cent). This difference reflects the influence of labor and operational costs on how sorting facilities prioritize the allocation of materials. In high-cost countries, facilities are more likely to divert lower-value or damaged items to wiper production, as exporting or further processing them may not be economically viable. Conversely, in countries with lower sorting costs, there is greater potential to extract additional value from materials through more granular sorting or re-export, reducing the share allocated to wipers.

The cutting and sorting process for wipers follows categorization based on size, composition, and end-user requirements. A manual hand-feel sorting process helps determine fabric composition, with higher-quality wipers preferred to be plain, free from writing or flags. Lastly garments with zippers, snaps, or metal fasteners have those removed.

Other unwearable items are sold for mechanical fiber-to-fiber recycling, downcycling, or chemical fiber-to-fiber recycling. Sorting for these pathways is differentiated based on fiber composition, and such items are often sent to specialized recycling hubs, such as Panipat, India, for further sorting and processing. Before recycling, value addition steps – such as the removal of multilayers, buttons, and zippers, as well as dyeing – are undertaken. Materials that cannot be processed in-house are typically diverted to nearby recyclers through secondary sales. Finally, textiles that are too contaminated or degraded for further use become waste, with some incinerated energy recovery and the rest sent to landfills.

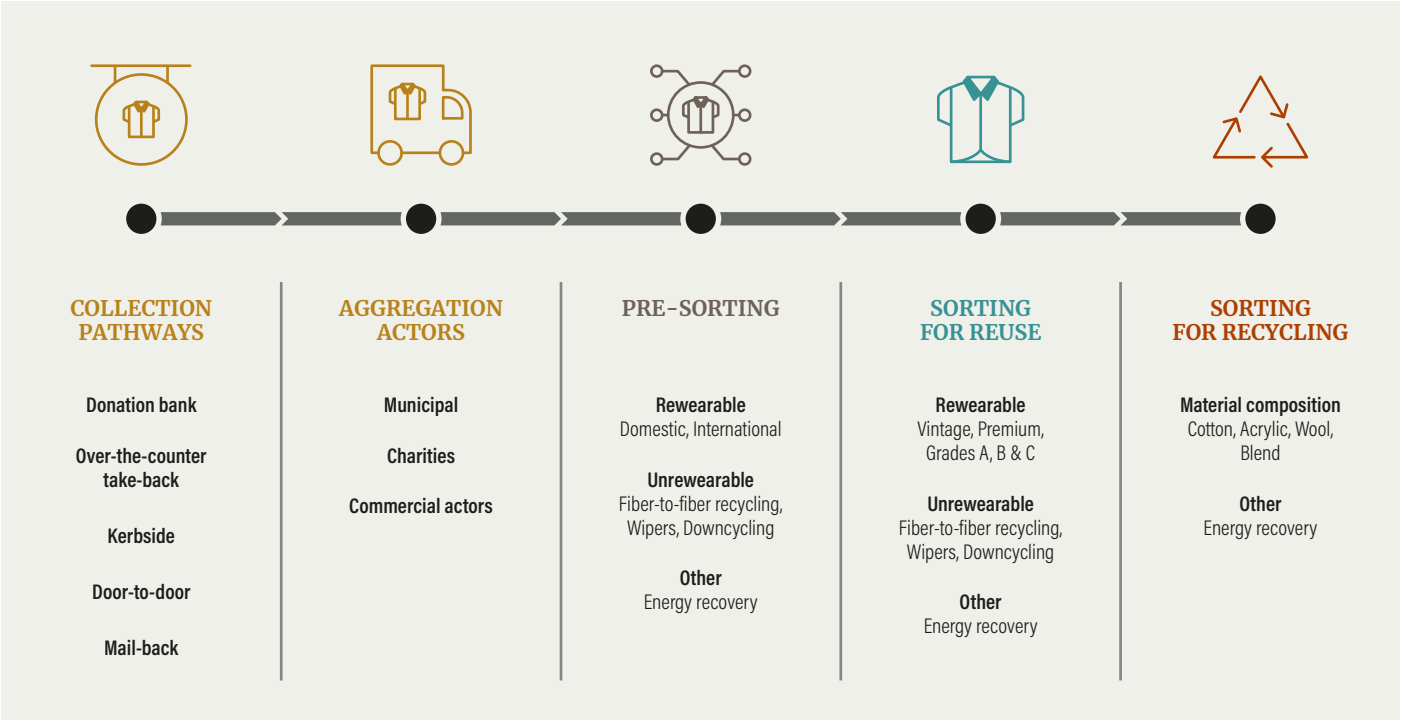
The definition of textile waste was adopted from the most recent GIZ report, which is textile material designated for final disposal not subject to any recycling or reuse measures. When analyzing the distribution subcategories among 244,506 pieces of clothing in the two destination countries across three markets, the percentage of textile waste in both markets combined was observed to range between 1.1 and 1.3 per cent (Table 3) while rags make up 2.9 to 3.2 per cent.

Table 3. **The distribution of subcategories within the SHC in Uganda and Tanzania**

	Low range		High range	
	Pieces	Percentage	Pieces	Percentage
First	63,654	26.0	78,977	26.2
Second	92,648	37.9	110,952	36.8
Third	26,306	10.8	35,955	11.9
Fagia ▪ Ronya	52,040	21.3	62,015	20.6
Rags	7,102	2.9	9,495	3.2
Waste	2,756	1.1	3,933	1.3
Total pieces counted	244,506	100	301,327	100

← *Source: Full Cycle Resource, 2024; SMEP, 2024; WasteAid, 2025.*

Note: The textile waste within a bale reflects the three sampled markets in Uganda and Tanzania.



↑ Figure 4. **Textile sorting and reuse pathways**

Source: Based on Fashion for Good and RRS, 2024, adapted by the authors.

This means that, for the markets surveyed, 4 to 4.5 per cent of a bale consists of items not classified under HS Code 6309.00.01. In Tanzania, textile waste sampled was slightly higher, ranging from 1.3 to 1.5 per cent of bales compared to Uganda bales ranging from 0.9 per cent to 1 per cent (WasteAid, 2024).

After extensive sorting and reuse efforts, the share of credential clothing ultimately classified as waste varies by facility, depending on its ability to recover value and secure suitable off-takers. Globally, this residual share is estimated at between 1 and 12 per cent of the credential clothing received by sorting facilities. These items are considered unsellable and have no economic value, as they do not meet the minimum criteria for either rewearable use or non-wearable reuse. They are therefore classified as textile waste. Ideally, this final waste fraction is collected by licensed waste operators and disposed of in accordance with local waste management regulations, although collection capacity remains limited in many countries.

← Image 7. Residual textile fractions after sorting for reuse, comprising non-wearable cotton materials diverted to reuse applications such as industrial wiping rags, representing the final stage before classification as textile waste.

Two-way communication stream to maximize profits

The quality of clothing directly impacts profitability for traders. Sorters and importers maintain long-term relationships with recurring buyers and suppliers to ensure stability and consistency in the supply chain.

When ranking key performance indicators for sorters and sorting facilities, quality of goods and cost competitiveness emerge as the top criteria. To uphold quality assurance, key practices include trust-based supplier relationships (48 per cent), regular inspections (29 per cent), and certifications (22 per cent). Additionally, collaborative problem-solving (37 per cent) and consistent communication (47 per cent) are crucial for maintaining long-term supplier partnerships. All interviewed sorters shared effective communication with clients is a critical aspect of the operation, allowing sorting facilities to adapt to customer feedback and make necessary adjustments to sorting processes. Some facilities work with clients to customize a mixture of grades within a bale to fit the pricing affordability.

Communication also plays a pivotal role, with both parties relying on visual methods, such as photos and videos, to assess and agree on clothing quality. Among importers, 43 per cent engage with sorters weekly, 24 per cent communicate monthly, and 16 per cent do so bi-weekly.[9] This proactive approach has resulted in 90 per cent of importers reporting improved product quality after providing feedback. Importers also prefer customized orders, adjusting quality mixes in bales to align with market demand and pricing.

The procurement teams working for SHC trade also relies on historical data collected on the supplier to optimize purchasing strategies including target price and identifying suppliers that offer the best balance between cost, quality, and expected resale value. Sorters noted that pre-sorted shipments can add to the cost of goods without eliminating the need for further sorting, especially given the diversity of off-takers and internal quality control procedures. In highly price-sensitive and competitive markets, this added cost can erode profit margins. While initial screening to remove visible waste or non-textile contaminants is widely accepted and practiced, full upstream pre-sorting may limit value recovery and compromise long-term economic sustainability.

Fine sorting categories within a container are often negotiated with importers to align with market demand, ensuring the right mix of grades, styles, and seasonal preferences. The output data from sorters is essential for inventory updates and buyer communication. By continuously tracking the availability and composition of graded textiles, facilities can inform buyers about current stock levels and anticipated supply, ensuring that purchasing decisions are aligned with real-time inventory. This allows for more strategic sales planning, reducing the risk of overstocking or shortages while ensuring that client needs are met efficiently.

In practice, bales from well-known suppliers with more favorable grade distributions often come at a higher price. Still, retailers make purchasing decisions based on a combination of quality expectations, financial capacity, and operational needs – including cash flow, payment terms, and supplier flexibility. The overall market operates with a shared understanding of the distribution of subcategories within each bale. Retailers are often familiar with these patterns by supplier, making brand recognition a key part of purchasing strategy. As a result, bales typically display visible supplier logos, allowing buyers to anticipate quality and align their purchases with the expectations of their customer base.

This practice also supports market differentiation. If an importer sources from multiple suppliers, each with varying grade profiles, maintaining separate logos helps avoid confusion or dissatisfaction among buyers. This can be particularly challenging for retailers who are new to the trade or switching suppliers without a clear understanding of their customers' price sensitivity and preferred grade distribution. Without this insight, mismatches between product quality and customer expectations can affect sales performance and inventory turnover of retailers.

9 Mixed-methods data collection included structured surveys and interviews with importers, focusing on communication frequency and quality assurance practices with suppliers.

↑ Figure 5. **Sorting facility's workflow**

Source: Prepared by the authors based on field insights from visits to sorting facilities in Lithuania, Oman, El Salvador, the Netherlands, and interviews with sorters based in the United States, Canada, Pakistan, and Malaysia.

Note: The image demonstrates a typical workflow at a sorting facility including data collection steps which can vary from sorter to sorter. It is important to note that not all sorters apply the same steps.

3.2. Sorting process, quality control, and regulatory compliance of the secondhand clothing entering Uganda and the United Republic of Tanzania

According to the surveys carried out, sorting facilities vary in their level of automation, with some relying entirely on manual labor, while others incorporate semi-automated systems to enhance efficiency. This section focuses on sorting facilities that supply buyers in East Africa, where national regulations often mandate stricter quality control and inspection protocols. These markets frequently necessitate a two-stage sorting process, known as pre-sorting (known as main sorting) and fine-sorting (known as detailed sorting).[10] Sometime the sorting stages are split between different locations depending on logistics, cost, regulations, and operational capacity.

Despite these operational differences, data collection remains the foundation of sorting facility management, influencing procurement, quality assessment, waste reduction, and supplier selection. Drawing on both qualitative interviews and quantitative survey data collected as part of this study, the following section examines the data collection systems employed by sorters. While common practices exist, they are not standardized and vary across organizations based on operational priorities (Figure 5).

Documenting quality

Sorting facilities rely on data to guide their day-to-day operations. Facilities procure multiple containers per shipment, requiring an organized and data-driven approach to ensure smooth operations. Sorting processes vary across facilities and regions, but quality control standards remain consistent. In both OECD and non-OECD countries, sorter accuracy is documented and reported for performance evaluation and training.

Upon arrival, bags are unloaded by forklifts and systematically stacked in the storage area, often categorized by suppliers. Operational flows differ between sorting facilities; there are two common approaches to collecting data on suppliers. The first involves setting aside a dedicated sample, with a portion of each consignment determined by weight allocated for analysis. The second relies on operational observation, **tracking consignments** as they move through sorting lines.

10 Pre-sorting is the initial stage in which clothing is broadly categorized by type (e.g., shirts, trousers, dresses, home textiles), streamlining subsequent detailed grading Fine sorting then divides items into specific subcategories (e.g., summer dresses or cotton shirts) based on market requirements, followed by quality assessment. Items are graded by condition, appearance, fashion and durability, and assigned categories such as Premium, Grade A, Grade B, Grade C, wipers, recycling or waste.

In some facilities data is collected at each stage to track accuracy, monitor sorting speed, and implement adjustments in sorting based on customer feedback, supply fluctuations, and seasonal fashion trends. In some facilities, multiple consignments are processed simultaneously, enabling comparative analysis across supplier streams. In both methods, consignments are assessed by subcategory composition, allowing sorting facilities to estimate the total output volume of the entire shipment.

Two-stage sorting is required regardless of whether consignments are pre-sorted at origin. Many sorters therefore prefer purchasing credential (unsorted) goods, as this allows them to retain control over value extraction. Where goods have already been handled or partially sorted by another vendor, higher-value items may have been removed, reducing the overall value that can be recovered during downstream sorting. As a result, sorters place strong emphasis on collecting detailed data on incoming consignments and on working with trusted suppliers, in order to ensure consistency in quality, transparency in sorting practices, and effective communication across transactions.

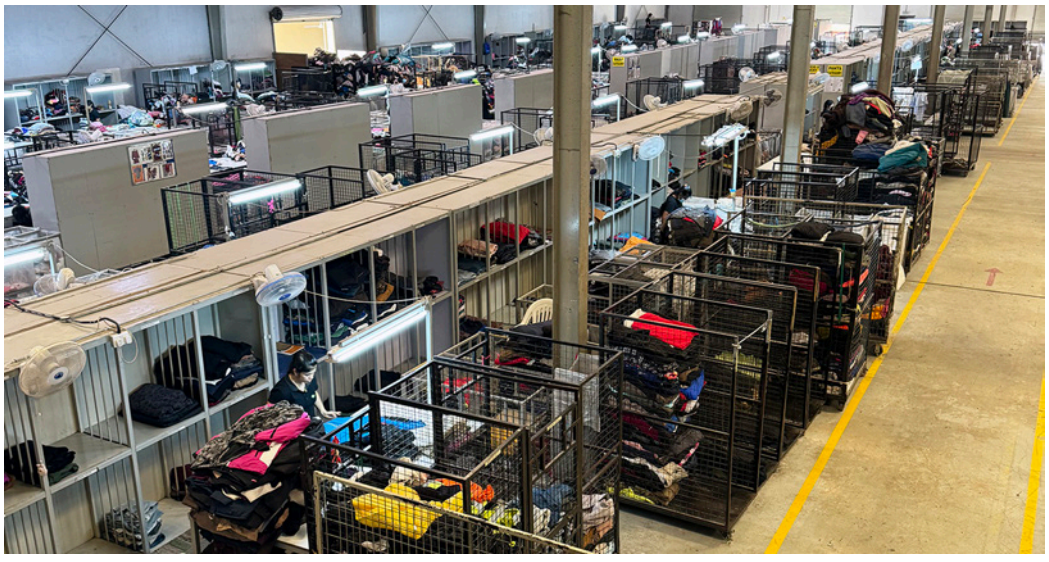
Pre-sorting (Main sorting)

The first sorting step, known as main sorting or pre-sorting, mainly categorizes clothing into broad groups such as shirts, trousers, dresses, shoes, handbags, toys, children's garments, home textiles, and items not for reuse. The number of categories varies by facility and their end-market buyers' requirements, but the primary goal is to filter items efficiently for the next stage of sorting known as **fine sorting or detailed sorting**. Clothing from the bulk-collected capsack is emptied onto a sorting platform, with garments taken out of the polythene bags that protect them from being soiled by other donated items.[11]

In some **manual sorting facilities**, workers place sorted items into labeled trolleys, each clearly marked with identifiers corresponding to the main category and sorting table number. This system facilitates subsequent quality checks and operational efficiency assessments. Once a trolley is filled, floor handlers transport it to the weighing area, where the weight of the trolley is recorded. Key data including the sorting table number, total and net weights, and textile category is logged either by the floor handler or the main sorting area supervisor on a data collection sheet. This data is then transferred to the **fine sorting** area for further processing.

In **semi-automated sorting facilities**, the process is streamlined through automated conveyors, which transport each pre-sorted category directly to the fine sorting area. In this system, weights are automatically recorded, reducing the need for manual data entry while ensuring greater efficiency and consistency in inventory tracking. The speed and accuracy of each sorter are recorded for performance evaluation. This allows facilities to track individual productivity, identify training needs, and optimize workflow.

11 Damaged items such as wet, soiled, heavily bleached, or torn garments are removed to ensure only viable pieces for reuse proceed to the next stage. Some sorting facilities are equipped with drying stations where wet garments can be dried. Once dried, these items are returned to the main sorting table for processing.



← Image 8. Fine sorting facility in Oman, where garments are further categorized into detailed subcategories to align with specific export market requirements.

Fine sorting

After the initial pre-sorting (main sorting), the floor handlers manually transport the textiles to the dedicated detailed sorting area, where each trolley is allocated to a specific sorting table manned by a single detailed sorter.

In the **fine sorting** stage, specialized sorters refine grading and subcategories to ensure greater accuracy in quality assessment and market alignment. For example, exportation to East Africa would require that dresses from main sorting may be further categorized into summer dresses, winter dresses, wedding dresses, cotton dresses, and other subcategories. The number of subcategories varies between sorting facilities, reflecting the specific market demands each facility targets.

Fine sorters typically have more experience than those in main sorting, as accurately assessing textiles requires a keen eye for detail, an understanding of fashion trends, knowledge of fabric composition, and the ability to identify key quality characteristics like durability, stitching, and material integrity.

After sorting into subcategories, each piece is **graded based on key quality characteristics**. Quality assessment extends across the supply chain, from sorters to importers and traders in receiving countries, where clothing is evaluated based on appearance, condition, fashion, functionality, and perceived durability. Based on these factors, each item is assigned a grade.

- **Appearance**: vibrance of coloring, absence of fading, visual and presence of stains;
- **Condition**: physical state of the clothing, such as wear, shape and tear;
- **Fashion**: current trends and branding of the clothing;
- **Functionality**: the clothing's ability to serve its intended purpose effectively. For example, a functional zipper, intact buttons and appropriate sizing contribute to the overall utility of the item; and
- **Perceived durability**: the expected longevity and ability of the clothing to retain its quality over time.

Garments are examined by stretching and visually inspecting the fabric to assess quality characteristics. For tops, key areas include the underarms, cuffs, hems, elbows, and collars. For bottoms, inspection focuses on the knees, inner thighs, groin area, and hems. Jackets and coats are also checked on the inside to ensure stitching is intact. All garments with buttons and zippers are inspected for confirmed functionality.

Once clothes are sorted into subcategories, they undergo inspection at the quality control station. In the non-OECD respondents, all vintage, premium, and Grade A clothing are inspected, while in the US for instance only vintage and premium pieces are, while lower-grade items are subject to random quality checks throughout the day.

For lower-quality grades, one company interviewed shared that 100 kilograms of clothing (approximately 200–300 items) are selected for spot checks per sorter each day, in accordance with the receiving country's standard. This is based on the estimate that one kilogram contains an average of 2.5–3.2 pieces. The inspection figure varies from company to company, depending on their operational standards.

↑ Image 9. Garments inspected following fine sorting to ensure alignment with customer quality requirements.

Skills, training, and retention

Sorters interviewed reported that it takes six months of training for a fine sorter to become experienced. Training structures vary across facilities, with some implementing structured programs that include weekly evaluations. These evaluations are designed to facilitate incremental skill development, progressing from brand recognition and fabric identification to quality assessment. Sorters typically begin their careers in the main sorting area before advancing to fine sorting and, eventually, to the role of quality control manager. Once a sorter is trained, retention is critical to a facility's success, and incentives are offered to improve speed and accuracy. One sorter reported an average staff tenure of 12 years, while another noted the longest tenure reaching 40 years. To stay aligned with fashion trends, sorting facilities track global runway trends and market shifts. Training sessions provide insights that help fine sorters anticipate demand and accurately grade textiles based on resale value. To reinforce this knowledge, visual guides are often printed and displayed as reminders for sorters.

Fine sorters serve as a critical feedback loop, helping facilities assess main sorting accuracy and adjusting as needed. To support this quality control process, each fine sorting table is assigned to a specific main category, such as dresses or men's pants. If an item is misplaced – like pants found in the dress section – it is placed into a designated Mistake Trolley. Misplaced garments are weighed and documented, with records linking them to their original main sorting table. This tracking allows supervisors to monitor sorting accuracy and identify recurring errors. At the end of each day, data on total volume sorted and error rates from the main sorting station are logged and reviewed to improve overall efficiency. This information is then relayed to supervisors overseeing main sorting process, who are responsible for tracking sorter performance, conducting spot checks, and providing training as needed to maintain quality standards. A similar process is followed between fine sorters and the quality control station, reinforcing accuracy at each stage of sorting.

← Image 10. Container of secondhand clothing unloaded to a local dealer in Kampala, Uganda. Bales are labeled and securely wrapped in accordance with regional trade standards (EAS 356:2024).

Pricing

Sorting facilities work with end market buyers to customize mixture of grades within a bale to fit the pricing affordability. The role of managers and quality controllers are to respond quickly to market needs, ensuring that the sorting process remains efficient, accurate, and aligned with receiving country standards.

Sorting facilities with integrated retail supply chains may include an additional step of assigning prices to items directly at the sorting facility after fine sorting, allowing for greater control over inventory flow and pricing consistency. Others choose to send consignments to retail shops for localized pricing, enabling sellers to adjust prices based on regional demand, product condition, or purchasing power. Similarly, buyers of sorted goods – such as retailers – may assign prices at their own warehouses or upon delivery to retail outlets, depending on their business model and market dynamics.

3.3. East African Standard 356:2024 on secondhand clothing

The method of sorting and packing secondhand textiles is tailored to meet customer requirements and the regulations of destination countries. Within the EAC, countries require specific bale sizes and weight limits to ensure compliance with trade regulations. According to the EAC standard (EAS 356:2024), each bale must be labeled and securely wrapped in polythene to protect against dirt and damage during transportation. Labels should provide essential information, including the textile grade, garment sub-category, and total weight, ensuring clarity and compliance with both customer expectations and regulatory requirements.

Certain used textile products are strictly prohibited from importation into EAC markets to uphold health and safety standards. To ensure additional consumer protection, the EAC prohibits the importation of secondhand textiles from countries experiencing epidemics or endemics, including those affected by Ebola, leprosy, anthrax, or radioactive contamination. Additionally, all garments in a consignment must be dry, free from dirt, and absent of hazardous materials such as asbestos, mineral wool, or erionite.

Furthermore, shipments must undergo Pre-Export Verification of Conformity (PVoC) before export, ensuring compliance with national quality requirements. This process includes third-party inspection to certify that the goods conform to the EAC 356:2024 standard, and shipments must be accompanied by a valid fumigation certificate from a recognized authority in the exporting country. The certificate must specify the type of fumigant used, and only approved chemicals such as cypermethrin, permethrin, tetramethrin, and d-cis/trans-allethrin are permitted. Methyl bromide and phostoxin are strictly prohibited as fumigants. EAC member states designate third-party inspection agencies to conduct PVoC inspections at the supplier's premises before shipment. Additional random inspections may be carried out upon arrival at the port of entry.

Before being shipped to EAC markets, the consignment undergoes a quality inspection to verify compliance (Table 4, Table 5). The number of bales randomly selected for inspection depends on the total volume of the shipment as per Table 4. Inspectors follow a standardized checklist aligned with the East African quality standards and document their findings with photographs.

Each sampled bale selected for inspection is opened, and two garments are randomly drawn for inspection. If inspectors find that the consignment contains new clothing or a mix of new and used garments, the entire shipment will be rejected. The EAS 356:2024 standard also establishes strict defect classification criteria to maintain quality control. Defects are categorized into serious, major, and minor classifications. Serious defects include holes, tears, stains, and burns. Major defects cover issues such as bad odor, mottled appearance, dropped stitches, and missing or defective ancillaries. Minor defects include slubs, double yarn, straying ends, and bruises.

↓ *Source: East African Community Standard 356:2024.*

Table 4. East African Community Standard 356:2024: number of bales for inspection by consignment size

Consignment size (bales)	**Sample lot size** (bales)
1 to 3	1
4 to 9	2
10 to 27	3
28 to 81	4
82 to 243	7
244 to 729	10
Above 730	15

The number of allowable defects is determined by the sample size taken from each shipment, with tolerance thresholds set according to an accepted distribution ratio. This system aims to balance enforcement of quality standards with the practical realities of large-scale SHC shipments. The acceptance criteria for defects are outlined in Table 5.

This multi-step verification process helps ensure that imported SHC meets the quality and safety requirements of EAC member countries before items reach local markets. If the number of defects in the inspected sample exceeds the allowable threshold, the consignment may be rejected, subjected to re-sorting, or re-inspected before being cleared for entry into the EAC market. Once a shipment passes all inspection and verification requirements, it is sealed by the inspection company and approved for export.

Table 5. East African Community Standard 356:2024: number of garments for inspection by consignment size

Consignment size (bales)	**Sample lot size** (bales)	**Garments inspected**	**Max allowable deffects**		
			SERIOUS	MAJOR	MINOR
1 to 3	1	2	0	1	2
4 to 9	2	4	1	2	3
10 to 27	3	6	2	3	4
28 to 81	4	8	2	4	5
82 to 243	7	14	3	5	7
244 to 729	10	20	5	7	10
Above 730	15	30	7	8	15

← Image 11. Baled secondhand clothing prepared forinternational trade, reflective ofvalue-based sorting practicesthat maximize rewearable content.

3.4. Economic incentives and trust-building between exporters, sorters and importers

The SHC trade is often portrayed as a one-directional flow that risks shifting unusable textiles to importing countries. Field evidence and market behavior, however, indicate a more incentive-compatible system: both exporters (sorters) and importers face strong commercial incentives to minimize waste content inside bales, because unusable items impose real costs while generating limited or no revenue. In the Uganda and Tanzania bale analysis, imported bales are overwhelmingly composed of rewearable items (≈96 per cent), while a comparatively small fraction is classified as rags (≈2.9–3.2 per cent) and textile waste (≈1.1–1.3 per cent). This distribution is consistent with profit-maximizing trade patterns: items without resale value still incur costs in sorting, shipping, duties, and handling.

1. **Waste reduces recoverable value and cashflow**: across downstream markets, traders price and sort to maximize recoverable value from each bale. Since importers and retailers must pay for a container, clear customs, transport bales to market, and recover costs quickly to finance subsequent orders, bale quality has a direct impact on margins and liquidity. Importers surveyed rank quality of goods and cost competitiveness among top decision criteria for choosing suppliers, alongside delivery performance; these are operationalized through repeat sourcing from suppliers with known quality deliveries. Importers also operate in highly price-sensitive environments, where resale value depends on the share of higher-value pieces within each bale (e.g., "first/second") and the speed of inventory turnover. Unsellable waste therefore represents a double loss: it lowers average resale value per kilogram and consumes working capital that could otherwise rotate into the next shipment.

2. **Trust as a market entry barrier and governance mechanism**: because bale purchases are made under uncertainty (buyers cannot perfectly observe true bale composition until opening), trust functions as a core governance mechanism. In the importer survey, trust is explicitly cited as essential in supplier relationships, and it is reported as a major barrier for new entrants trying to access reliable supply channels. This trust is not abstract: it is produced through repeat transactions, predictable quality, responsiveness to complaints,

and stable commercial terms. Importers' sourcing patterns also reflect this: most source directly from global sorting facilities, while brokers serve as a secondary option where speed and availability are prioritized.

3. **Feedback loops and quality assurance as "two-way stream" relationships**: field interviews and survey results highlight that importer–sorter relationships are iterative. Importers communicate frequently with suppliers (often weekly or monthly, see above) and use pragmatic verification tools such as photos, videos, and structured feedback on defects, mix, and grading outcomes. A very high share of importers reported improved product quality after providing feedback, suggesting that quality is actively co-produced through a buyer-seller learning loop rather than assumed. At the sorter level, quality control is reinforced by multi-stage sorting and inspection routines. While processes vary across facilities, two-stage sorting (broad pre-sorting followed by fine sorting) and sample-based checks are standard approaches used to align output with buyer specifications and destination market requirements.

4. **Branding and bale identity as a reputation collateral in downstream markets**: In both Uganda and Tanzania, this branding plays a critical role in the downstream market. Retailers and vendors recognize and trust specific bale brands as indicators of expected quality. When a sorting facility consistently delivers goods that match an importer's quality specifications, importers tend to maintain the relationship over time, as downstream buyers become familiar with the product mix and are often reluctant to switch. Retailers and vendors learn to associate these brand identifiers with predictable quality distributions, which directly influences purchasing decisions and buyer loyalty. Branding therefore functions as a reputational commitment mechanism: if an importer alters supplier quality without clearly signaling the change, downstream buyers may incur losses and shift to alternative suppliers, imposing an economic penalty for inconsistency. As a result, branding reinforces long-term relationships, quality discipline, and information transparency within the SHC supply chain. Importers report that when introducing an additional sorter, a distinct branding logo is applied to bale packaging to avoid the mixing of brands and to prevent interference with existing supplier relationships. Maintaining separate brand identifiers allows importers to preserve clear signals of origin and quality to downstream buyers, ensuring that variations in sorting practices or quality specifications do not undermine established market trust.

5. **Payment terms as a mechanism for trust and supplier stability**: importers report that long lead times, import tariffs, freight costs, and delivered quality directly affect margins, and supplier selection prioritizes quality and cost competitiveness alongside delivery performance. Financial terms are a core part of trust building. Many importers operate under FOB terms, requiring full payment at origin and placing pressure on cashflow; a smaller share uses CIF terms that allow payment closer to arrival. Over time, trusted relationships can yield more favorable terms (partial upfront payments, deferred settlement), which reduces risk for importers and stabilizes repeat demand for exporters. This helps explain why suppliers that offer flexible payment arrangements can gain market share even when the cost per-kilogram price is not the lowest.

Implication

The incentive structure and trust mechanisms described above help explain the empirical finding of low waste shares in imported bales. Rather than being a system designed to externalize waste, the SHC bale trade exhibits multiple layers of commercial and reputational discipline that reward reliable quality delivery and penalize persistent deviation. Policy interventions that aim to reduce waste should therefore strengthen transparency and reduce uncertainty without undermining affordability or imposing redundant costs that weaken these existing incentive-compatible relationships.

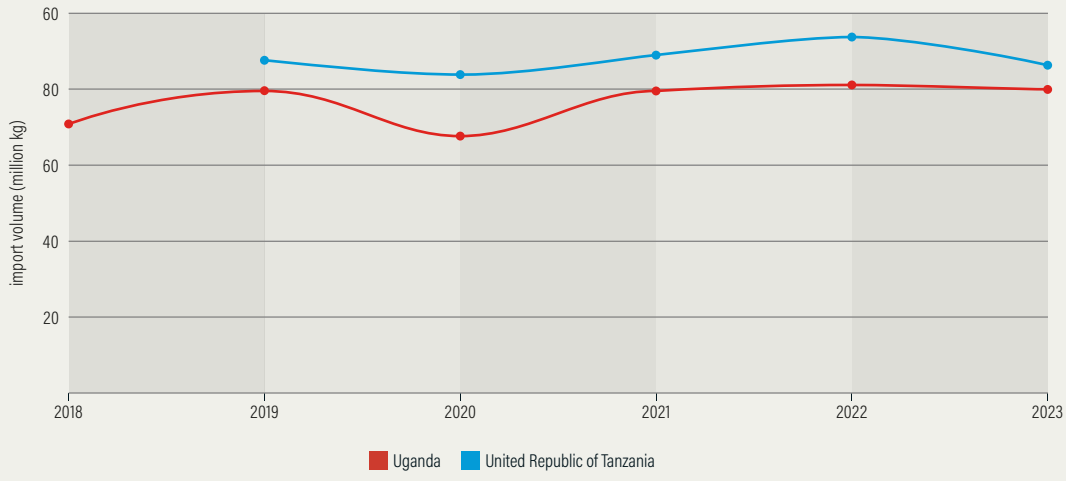
4.

The destination of secondhand clothing
Uganda and the United Republic of Tanzania

Uganda and Tanzania are both classified as least developed countries, with a significant share of their populations struggling to afford essential goods and services. According to the World Bank, in 2023, the average daily income in Uganda is 2.68 USD and 3.32 USD in Tanzania. With these extremely limited disposable income, affordability is a key factor in purchasing decisions. In 2023, Uganda and Tanzania imported a combined total of 168 million USD in SHC, equivalent to 166.3 million kilograms (UN Comtrade, 2024). Uganda alone imported 80.0 million kilograms, generating Ugandan shilling (UGX) 262 billion (70.85 million USD) in fiscal revenue (Figure 6). Tanzania imports 86.3 million kilograms of SHC annually (Figure 6). Combined, Uganda and Tanzania account for 13.1 per cent of Africa's total 1.266 billion kilograms of SHC imports.

In 2023, Uganda imported 80 million kilograms of SHC under HS Code 6309.00.100, which equates to an average of 54.9 containers of 28MT arriving weekly, according to the Uganda Revenue Authority (URA). Tanzania also reported significant volumes, with the highest levels of imports occurring between April and September according to the Tanzania Revenue Authority (TRA). While both countries previously exhibited pronounced seasonal trends, with increased imports during mid-year and a slowdown towards the end of the year, this pattern has become less pronounced between 2022 and 2023. The data suggests a shift toward more steady and continuous importation throughout the year (Figure 7, Figure 8).

This shift reflects a strategic response by importers in both countries, who have adapted their purchasing behaviors to align with consumer spending patterns. Rather than relying on large, episodic shipments, importers now aim to maintain a consistent flow of goods into the market. This allows importers to meet high demand during peak periods without risking overstock during slower months. Once containers are cleared through customs, the goods are typically sold immediately, leaving minimal buffer stock. This fast-paced model is made necessary to maintain cash flow to purchase the next container, which can cost over 55,000 USD. It also underscores the importance of dependable supplier relationships, as a steady supply of reliable quality goods is essential for managing risk and responding to fluctuations in consumer demand (see earlier section on trust building).

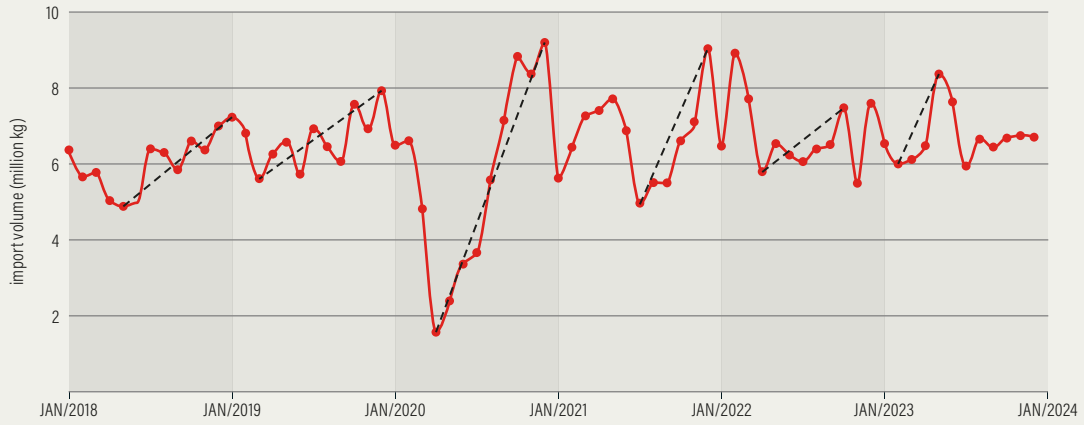


← Figure 6. **Annual import volumes of secondhand clothing in Uganda and Tanzania**
2018 to 2023

Source: Tanzania Revenue Authority, Uganda Revenue Authority, analysed Full Cycle Resource.

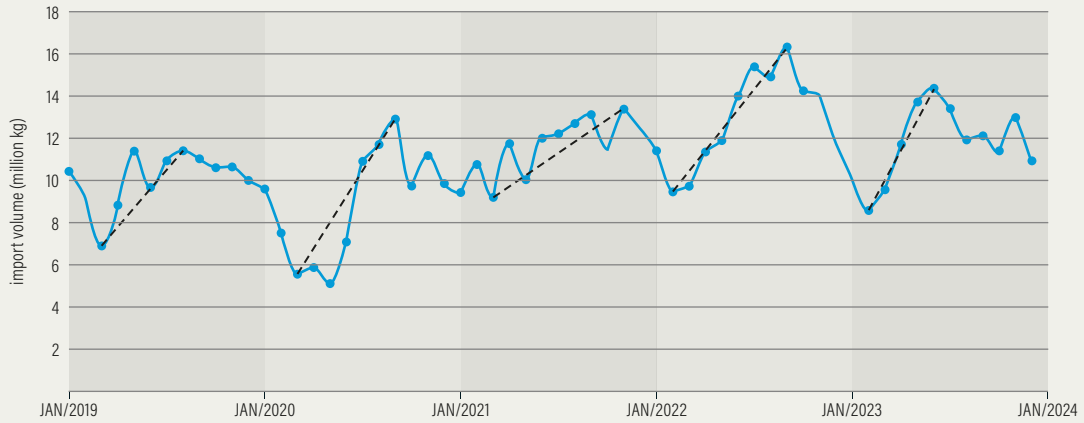
Note: Uganda's SHC imports are stable at ≈80 million kg annually, with a brief COVID-19 disruption.

Tanzania Revenue Authority did not provide 2018's import volume.



← Figure 7. **Monthly import volume of secondhand clothing, Uganda** (2018–2024)

Source: Uganda Revenue Authority analysed by Full Cycle Resource.



← Figure 8. **Monthly import volume of secondhand clothing, Tanzania** (2019–2024)

Source: Tanzania Revenue Authority analysed by Full Cycle Resource.

4.1. Profitability drivers and trade frictions in the secondhand clothing import business

An analysis of shipment data, including cost, insurance, and freight (CIF), from UN Comtrade and the URA highlights key factors shaping SHC market in Tanzania and Uganda. Imports from overseas serves as the primary supply channel for SHC in these countries, and understanding shipment origins, import tariffs, freight costs, clothing types, and garment quality are essential for assessing the market's business value and quality dynamics. These factors contribute to the changes in the dynamics of the global SHC trade and evolving sourcing strategies among importers.

Among 54 importers, 62 per cent cited long lead times[12] as the biggest barrier, while all cited import tariffs, freight costs, origin, and garment quality as impacting profitability. To address these challenges, importers employ strategic adjustments such as optimizing supplier relationships (see section 3.4) and exploring financing options.

Freight costs surged in 2024, with 28-ton container shipping rates alone ranging from 6,000 to 7,000 USD, peaking at 13,000 USD due to geopolitical and shipping constraints. In 2023, a 28-ton container in Tanzania filled with SHC bales cost 47,954 USD, reflecting a 5.6 per cent increase from 2022, with import taxes and levies accounting for 61.4 per cent of the CIF value and 38 per cent of the total cost (Table 6). In Uganda, the same container cost 57,080 USD, with taxes and levies comprising 77 per cent of the total cost (Table 7).

12 Long lead times in SHC shipments are often caused by customs delays, documentation issues, port congestion, transshipment routing, and external disruptions such as conflict, weather events, or shipping route blockages.

Table 6. **CIF cost of secondhand clothing in Tanzania, per kilogram and per 28-ton container** (USD, 2018-2023)

Year	CIF cost per kg	Tax cost per kg	Total cost per kg	Total import cost for 28-ton container
2019	1.03	0.63	1.67	**46,663**
2020	1.00	0.62	1.62	**45,415**
2021	1.03	0.63	1.66	**46,419**
2022	1.01	0.62	1.62	**45,418**
2023	1.06	0.65	1.71	**47,954**
Average	1.03	0.63	1.66	**46,358**

← *Source: Tanzania Revenue Authority analysed by Full Cycle Resource.*

Note:The table presents year-to-year costs per container, broken down into CIF and tax per kilogram.
Exchange rate (July 2024): 1 USD = 2,707 Tanzanian shillings (TZS).

Table 7. **CIF cost per kilogram of secondhand clothing imports to Uganda, by country of origin** (USD, 2018-2023)

Country	2018	2019	2020	2021	2022	2023	Variation from global average
China	0.99	0.99	1.00	1.05	1.13	1.14	99.2%
India	1.00	1.00	1.00	1.05	1.13	1.14	99.1%
UAE	0.97	0.99	1.00	1.04	1.12	1.15	99.4%
Pakistan	0.98	1.00	1.00	1.05	1.12	1.14	98.9%
Canada	0.98	1.00	1.00	1.05	1.12	1.15	99.7%
Poland	0.98	0.99	1.00	1.03	1.13	1.14	98.7%
Malaysia	0.98	1.00	1.00	1.04	1.13	1.15	99.9%
US	1.00	1.00	1.00	1.05	1.15	1.36	117.9%
Germany	0.98	1.01	1.00	1.05	1.23	1.15	99.4%
UK	1.20	1.12	1.08	1.08	1.00	1.30	112.5%
Uganda	**0.99**	**1.22**	**1.00**	**1.05**	**1.14**	**1.15**	—

↑ *Source: Ugandan Revenue Authority and UN Comtrade analysed by Full Cycle Resource.*

Note: The CIF cost per kilogram for SHC imports from the US and UK is notably higher than that of other source countries. This may have contributed to the decline in the US market share, which fell from 8.2 per cent in 2018 to 2.3 per cent in 2023.

A pricing analysis of the top 10 SHC exporters to Uganda revealed high-cost uniformity, with eight exporters maintaining prices within 2 per cent of the 2.04 USD per kilogram average (URA). However, imports from the US and the United Kingdom exceeded this by 18 per cent and 13 per cent, respectively, impacting trader margins (Table 7). Chinese imports averaged 2.03 USD per kilogram, while US imports were 2.17 USD per kilogram. These variations directly affect profitability, as resale profits range from 29.89 to 43.46 USD per bale for Chinese goods, compared to 23.60 to 37.10 USD for American imports. While per-kilogram price differences may seem marginal, their impact becomes significant at scale, influencing traders' overall earnings.

In Tanzania, the average total cost per kilogram of SHC is 1.86 USD, with Chinese goods priced at 1.96 USD, US goods at 1.67 USD, and Pakistan offering the lowest price at 1.66 USD (TRA, UN Comtrade). Despite being more expensive than other sources, the increase in Chinese market share is driven by flexible payment terms and strategic partnerships.

4.1.2 Payment terms, cashflow and risk sharing

Payment terms are critical for cash flow management, with 74 per cent of importers operating on FOB terms, requiring full payment at the port of origin. 26 per cent use CIF terms, allowing payment upon arrival. Through the cultivation of long-term trust relationships, sorting facilities may eventually offer improved payment terms that would enable importers to have better cash flow. Importers expressed that Chinese suppliers offer more flexible options, with some importers paying only 50 per cent upfront and the balance upon receipt. During oversupply periods, traders may defer payments, covering only import duties and transport costs without accruing interest, reducing financial risk and improving liquidity. In 2023, taxation accounted for 43.8 per cent of total container costs. However, flexible payment methods allowed importers to acquire two containers for the cash equivalent of one. Additionally, Chinese sorting facilities collaborate with local entrepreneurs in joint ventures to secure material flow, further reinforcing their market presence. These financing advantages have fueled China's increasing dominance in Tanzania's SHC trade, despite its higher per-kilogram costs compared to other suppliers.

4.1.3. Supplier competition and sourcing shifts

In 2018, China held 26.4 per cent of Tanzania's market, surging to 55.5 per cent of 86.3 million kilograms by 2023, while Uganda saw China's share grow from 29.9 per cent to 47.3 per cent of 80 million kilograms in the same period. Meanwhile, the US market share declined from 13.9 per cent to 9.1 per cent in Tanzania (Table 8, Figure 9) and 8.2 per cent to 2.5 per cent in Uganda with an evaluation of 2 million kilograms (Table 9). In Tanzania, this surge in Chinese imports is in stark contrast to the declining import volumes from other major suppliers, including US, UAE, Canada, Malaysia, Germany, and the Republic of Korea.

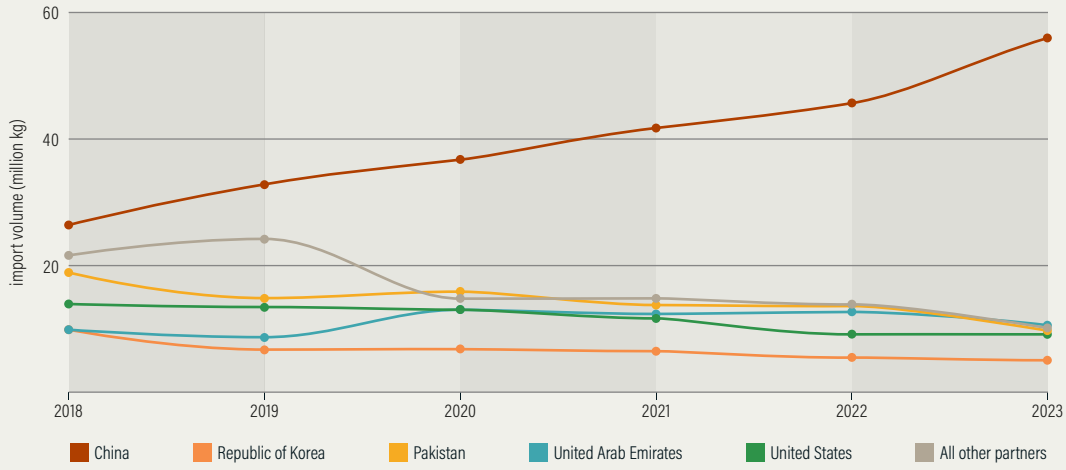
↓ *Source: UN Comtrade analysed by Full Cycle Resource.*

Note: Between 2018 and 2023, China emerged as the dominant supplier of SHC imports into Tanzania, increasing its exports from 23.5 million kg (26.4 per cent market share) to 49.2 million kg (55.5 per cent). Over the same period, imports from the United States declined from 12.4 to 8.0 million kg.

As already seen, supplier choice reflects a profitability bundle. Within this context, the rising market share of Chinese suppliers in both Tanzania and Uganda is best understood as an outcome of competitive sourcing combined with relationship-based trade facilitation: frequent communication and feedback loops that improve quality consistency, reputational branding that supports predictable downstream resale, and – critically – more flexible payment terms that ease importer cashflow constraints These mechanisms help explain sourcing shifts even when per-kilogram price differences are modest, because liquidity and risk-sharing can dominate procurement decisions in fast-turnover, low-buffer stock markets.

Table 8. **Ten largest trading partners of secondhand clothing to Tanzania, by weight and market share** (2018-2023)

Country	2018		2019		2020		2021		2022		2023	
	MILLION KG	%	MILLION KG	%	MILLION KG	%	MILLION KG	%	MILLION KG	%	MILLION KG	%
China	23.5	26.4	29.3	32.6	33.7	36.5	37.3	41.5	43.2	45.3	49.2	55.5
Pakistan	16.7	18.8	13.3	14.7	14.6	15.8	12.3	13.6	13.0	13.6	8.6	9.7
US	12.4	13.9	12.1	13.4	11.8	12.8	10.4	11.6	8.7	9.2	8.0	9.1
UAE	8.8	9.9	7.8	8.6	12	13	11.2	12.4	12.1	12.7	9.1	10.3
Republic of Korea	8.6	9.6	5.9	6.6	6.4	6.9	5.7	6.3	5.2	5.5	4.5	5.1
Canada	4.9	5.5	5.5	6.1	3.5	3.7	2.6	2.8	2.7	2.8	1.9	2.2
Poland	4.3	4.9	4.7	5.2	2.8	3.1	2.7	3.0	3.4	3.5	2.6	3.0
Germany	3.3	3.7	2.1	2.4	1.4	1.5	1.0	1.2	1.3	1.4	0.4	0.4
India	2.0	2.2	1.6	1.7	1.2	1.3	2.2	2.4	1.4	1.5	1.0	1.1
Asia (others)	1.4	1.6	1.8	1.9	0.8	0.8	0.4	0.5	0.9	0.9	0.6	0.7
All other partners	3.1	3.5	6.1	6.8	3.5	4.5	4.1	4.7	3.5	3.7	2.5	2.9



← Figure 9. **Top five exporters of secondhand clothing to Tanzania, by weight** (2018–2023)

Source: UN Comtrade analysed by Full Cycle Resource.

Note: China's market share rose from 29.9 per cent to 47.3 per cent, while others declined from 70.1 per cent to 52.7 per cent. Since 2018, China's share has nearly doubled, becoming the leading source by 2023.

Table 9. **Ten largest trading partners of secondhand clothing to Uganda, by weight and market share** (2018-2023)

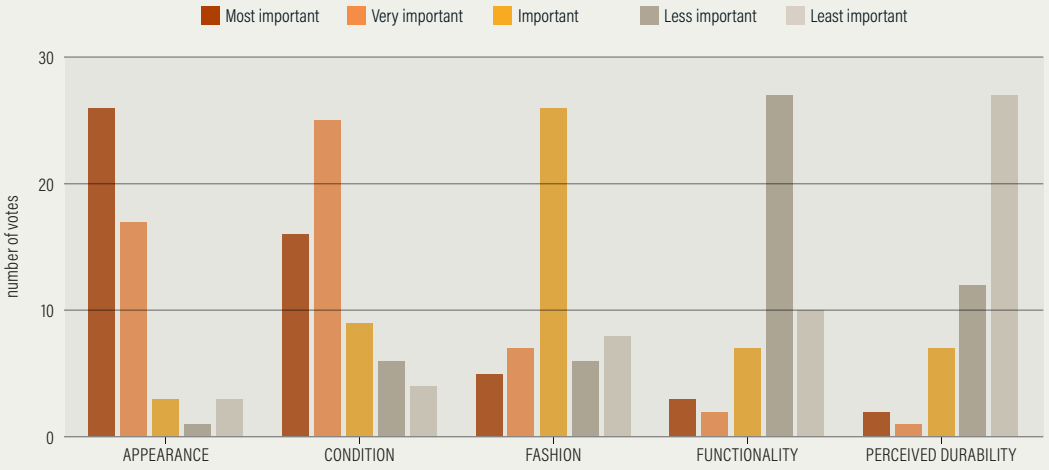
Country	2018		2019		2020		2021		2022		2023	
	MILLION KG	%	MILLION KG	%	MILLION KG	%	MILLION KG	%	MILLION KG	%	MILLION KG	%
China	21.3	29.9	25.1	31.5	20.5	30.3	26.9	33.6	32.9	40.7	37.9	47.3
India	8.1	11.4	8.1	10.2	7.9	11.7	11.0	13.8	9.6	11.8	9.6	12
UAE	10.6	14.9	10.0	12.5	9.9	14.5	12.6	15.7	10.7	13.3	8.8	11.0
Pakistan	5.8	8.1	6.7	8.4	7.9	11.7	9.5	11.9	9.5	11.7	7.5	9.4
Canada	5.9	8.2	7.4	9.3	5.6	8.2	4.9	6.1	3.6	4.4	4.1	5.2
Poland	5.5	7.8	6.0	7.5	4.9	7.2	5.0	6.2	4.8	5.9	3.9	4.8
Malaysia	3.1	4.3	4.1	5.1	2.6	3.9	2.3	2.8	3.0	3.7	2.7	3.4
US	5.8	8.2	6.3	7.9	2.9	4.3	2.8	3.6	2.4	2.9	2.0	2.5
Germany	0.9	1.3	1.1	1.4	0.9	1.3	0.7	0.9	0.7	0.9	0.5	0.6
UK	0.4	0.6	0.4	0.5	0.4	0.6	0.4	0.5	0.5	0.6	0.5	0.6
All other partners	3.8	5.3	4.6	5.7	4.3	6.3	3.9	4.9	3.3	4.1	2.6	3.3

↑ *Source: UN Comtrade analysed by Full Cycle Resource.*

| 4.2. Examining quality of secondhand clothing

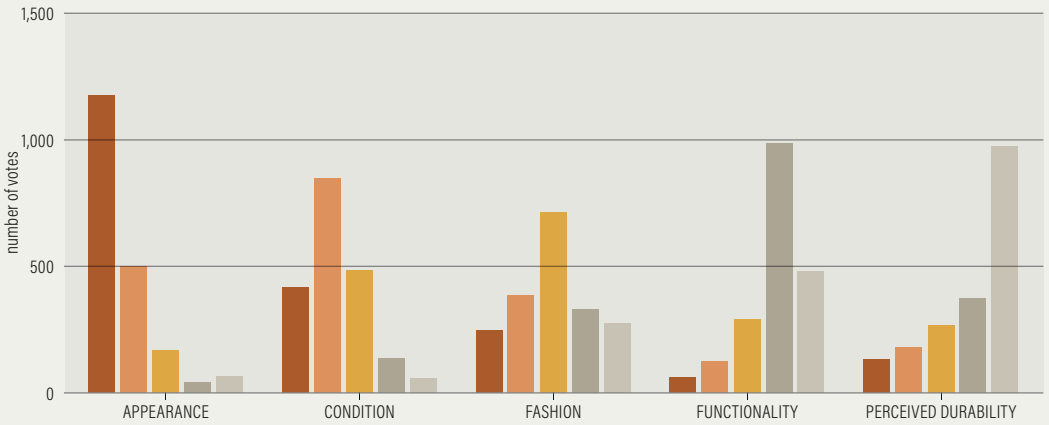
Among 1,457 traders surveyed, the use of 40-kilogram and 45-kilogram bales were the most common, with a 2 per cent weight variation observed. It was consistently found in both Tanzania and Uganda that retailers prefer Grade A and Grade B bales over Grade C, highlighting a demand for higher-quality stock.

Since both local traders (importers, retailers, and vendors) and consumers in Uganda and Tanzania are highly price-sensitive, a detailed field survey examined the impact of pricing on SHC quality. The survey consulted 2,020 traders, spanning 1,056 traders in Tanzania (Ilala and Karume markets) and 910 in Uganda (Owino market). It covered a total sample of 244,500 clothing pieces, providing valuable first-hand insights into SHC market dynamics. The findings offer an evidence-based understanding of these markets, with the goal of informing policy decisions tailored to local conditions while aligning with global sustainability goals.



← Figure 10. **Ranking of quality characteristics by importance among importers in Uganda and Tanzania**

Note: Survey of 52 importers identified appearance, condition, fashion, functionality and perceived durability as key quality criteria, aligning with retailer and vendor responses across the value chain.



← Figure 11. **Ranking of quality characteristics by importance among importers in Uganda and Tanzania**

Note: A survey of 1,946 retailers and vendors identified appearance, condition, fashion, functionality and perceived durability as key quality criteria. These align with importer responses, indicating shared preferences across the value chain and supporting more efficient, demand-driven SHC markets.

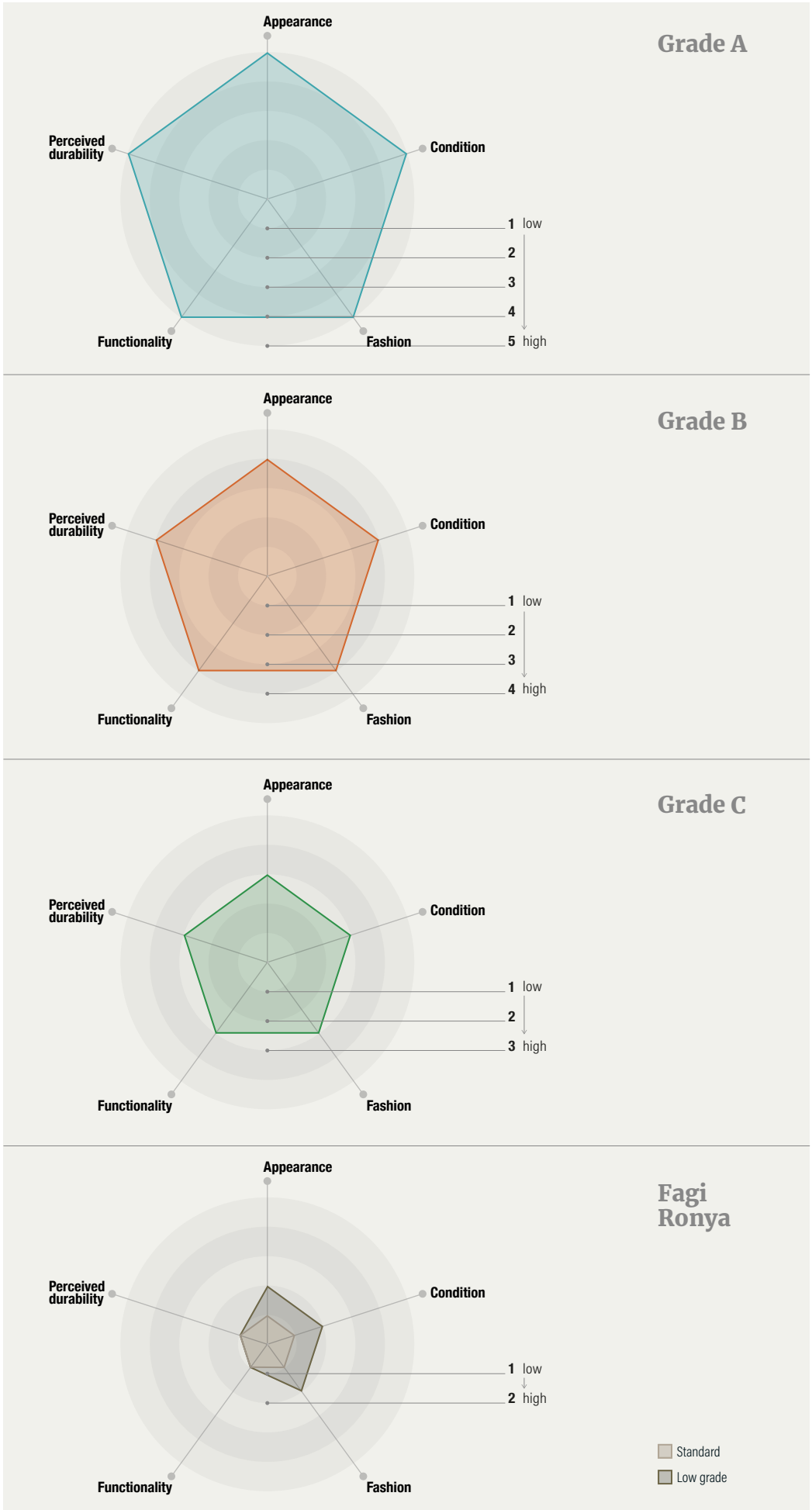
When asked to assess the five key characteristics that define clothing quality – appearance, condition, fashion, functionality, and perceived durability – market participants (importers, retailers, and vendors) demonstrated a high degree of alignment in their responses. Appearance and condition were consistently ranked as the most important indicators, followed by fashion, functionality, and, lastly, perceived durability (Figure 10, Figure 11). The relatively lower emphasis placed on functionality may also be influenced by the widespread availability of local tailoring and repair services, which allow minor defects to be addressed at low cost and reduce the need for garments to enter the market in perfect working condition.

This shared prioritization is significant, as it ensures that sorting and grading practices upstream are closely aligned with downstream buyer preferences and end-user expectations. Such alignment enhances supply-chain efficiency, reduces the risk of unsold inventory, and supports a more responsive, demand-driven SHC market.

The survey also reflected the market's rating for each grade based on the five categories, establishing a quality baseline for individual grades and the accepted variance within them. For example, the market's expectation for Grade A SHC is the highest, with a rating of 5 for appearance, condition, fashion, functionality and perceived durability.[13]

Grading serves as a price segmentation tool, linking sorters and importers and driven by demand and product quality. Quality perceptions vary across the SHC value chain, reflecting the roles of importers, retailers and vendors. Importers require higher grading standards to define sorting and minimize financial risks. Retailers, often bale openers, operate with slightly lower expectations, incorporating items not selected by vendors back into inventory. In contrast, vendors prioritize the highest grading standards, as they purchase individual items to match customer preferences. While this approach incurs higher costs, it allows vendors to justify premium prices for curated inventory. This differentiation in grading requirements reflects the diverse needs across the SHC value chain (Figure 13).

13 First, second, third, ronya, rags, and waste are subcategories within the overarching Grade categories. These subcategories are divided based on the perceived market value of the piece of clothing. 'First' represents the highest market value, followed by 'second' and 'third,' ronya (also commonly known as fagi) represents the least wearable subcategory. Rags are articles of clothing used as wiping cloths, while waste includes items with zero perceived market value. Although retailers may sort clothing into these subcategories based on the seller's perceived market value, it is in conjunction with the buyer's perceived market value that the market is established.



← Figure 12. **Baseline quality ratings by traders, Uganda and Tanzania**

Source: Field data by Full Cycle Resource, 2024.

← Figure 13. **Perceived quality ratings by market role, Tanzania and Uganda**

Source: Field data by Full Cycle Resource, 2024.

Box 1. Quality grade definitions based on rating criteria

Grade A

Items are characterized by top ratings across all categories: appearance, condition, fashion, functionality, and perceived durability. These items are of the highest quality, often appearing nearly new, and command premium prices due to their strong consumer appeal.

Grade B

While still maintaining good quality, typically receive slightly lower ratings of 3 to 4 for fashion and functionality, but retain higher scores for appearance, condition, and perceived durability. They may show minor signs of wear but remain attractive to consumers seeking quality at a more affordable price. Items with lower ratings exhibit visible signs of wear and minor defects, with less emphasis on fashion and functionality. However, appearance and condition remain important, as they are harder to modify compared to functionality, which can often be improved through tailoring. These items cater to a market segment prioritizing affordability over quality.

↑ *Source: Prepared by authors.*

Clothing quality is the most significant factor influencing the economic value of each bale, with higher-grade clothing consistently commanding premium prices. The field research found that imported bales are not homogenous, with each bale containing items of higher and lower grades. After bales are opened, items are further sorted into subcategories based on economic value and market demand, to target specific customer segments more effectively. In Owino market in Uganda, traders typically sort clothing into five subcategories: first, second, fagi, rags and textile waste. Meanwhile, in the two surveyed markets in Tanzania, the sorting process involves six subcategories: first, second, third, ronya, rags and textile waste. Fagi (or ronya) acts as the consolidation point for slow turnover items sold at discounted price, representing the lowest rating for wearable clothing before being designated as rags (Figure 12).

Retailers and vendors prioritize the appearance and condition of the piece, reflecting a market preference for visually appealing and well-maintained items, even when priced affordably. The assigned sub-categories, however, can decline over time due to inventory aging and shifting market trends. Fashion is particularly sensitive to seasonal changes and evolving consumer preferences. This means that a single piece of clothing can initially be classified as first but may later be downgraded to "ronya" or "fagi".

When separating wearable and non-wearable items, 61.7 per cent of the 1,408 responses indicated that the condition is the primary factor leading to a product's downgrade from "fagi" or "ronya" to "rags." Additionally, 80.3 per cent of the 1,313 responses suggested that a combination of **appearance and condition is the key determinant, distinguishing wearable clothing from waste**. These categories and attributes reflect the market's perception of waste.

Perceptions of clothing quality vary across the supply chain, and expectations differ significantly between markets. Vintage clothing, for example, may hold limited economic value in some regions but it is highly sought after and commands a premium in others. As a result, downstream or other markets may assign different quality ratings to the same goods, illustrating how local market dynamics shape both demand and value perception.

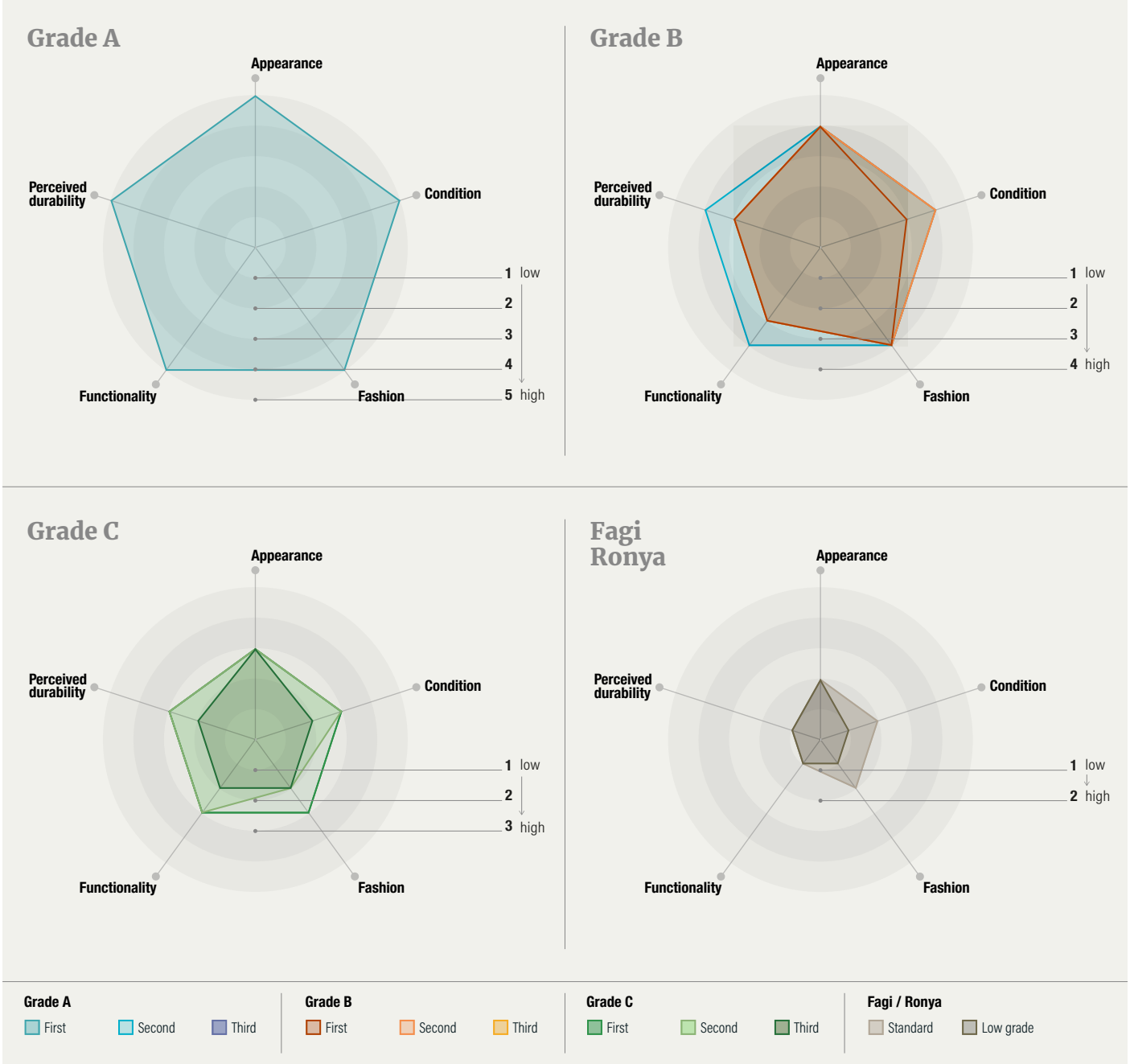
4.2.1 Perceived quality ratings of subcategories across grades in Tanzania

The quality ratings of the subcategories within each grade decline progressively from first to ronya. While the subcategories of first, second, and third within each grade vary, ronya and rags maintain consistent ratings. The ratings indicate that bales are labeled based on the highest-rated subcategories relative to the baseline (Figure 14). For example, the Grade B first rating aligns with the baseline rating for Grade B, and a similar pattern is observed for Grade C, where the first rating matches the baseline rating for Grade C. Ideally, there would be a clear distinction between each subcategory. However, surveys have identified overlaps between Grades and their corresponding subcategories – for example, Grade A Second overlaps with Grade B First and Second (Figure 14).[14]

14 In Uganda, data collection covered sorting criteria, pricing at Owino Market, and waste characteristics. Quality ratings were collected for Grade A–C, rags and textile waste, while other subcategories were assessed later through peak tracing. These insights informed the Tanzania study of the relationship between subcategories and overall grade.

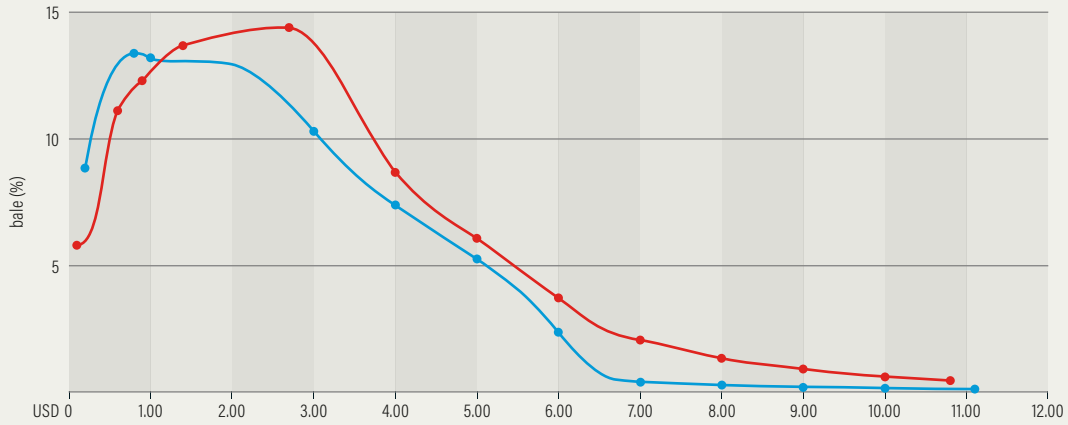
↓ Figure 14. **Perceived quality ratings by grade and subcategory, Tanzania**

Note: Perceived quality ratings decline from 'first' to ronya. Subcategories are grouped by equivalent quality across grades, meaning similarly rated subcategories appear together regardless of grade. Accordingly, Grade A corresponds to Grade A 'first' and Grade B 'first'; Grade B to Grade A 'second', and Grade B 'first' and 'second'; and Grade C to Grade A 'third', Grade B 'third', and all Grade C subcategories. Ronya shows consistent ratings across grades.



4.3. Examining price distribution of selling prices across secondhand clothing market

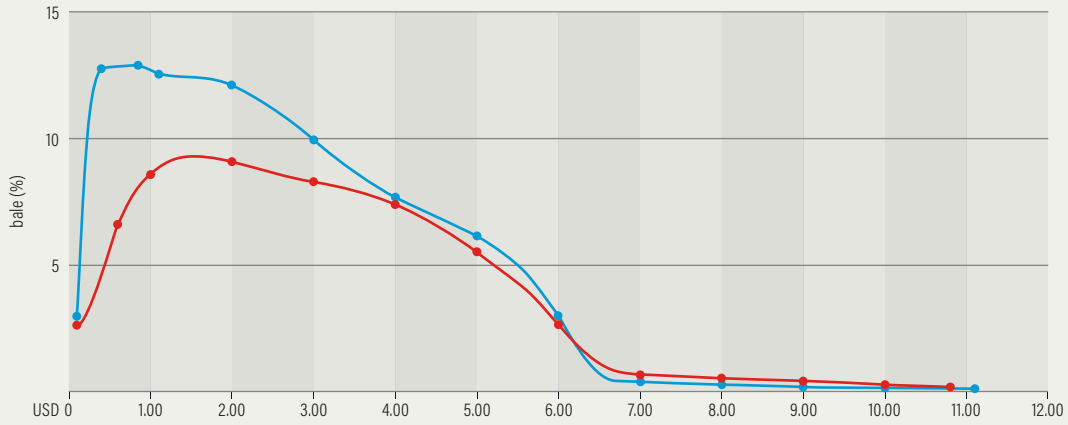
To clarify market dynamics, a "peak tracing method" is employed in the graph to visualize the distribution of selling prices across the SHC market. This method enables the identification of peaks (or modes) in price frequency, which represents the most common selling prices of garments due to local traders' tendency to price their products in whole numbers (e.g., at 500 TZS, 1000 TZS, 2000 TZS per piece, instead of fractions like 750 TZS per piece). The resulting data demonstrates that the pricing of these subcategories forms a left-skewed distribution (Figure 15), indicating that lower-valued items represent higher percentages in the average bale. The differences in the subcategory distribution within each market, reflecting unique local demand and purchasing power dynamics (Figure 16).



← Figure 15. **Price distribution of secondhand clothing by bale composition, Uganda and Tanzania**

Source: Full Cycle Resource, 2024.

Note: In both countries, the price distribution of SHC per piece for all Grades shows a left-skewed bell curve pattern, indicating a prevalence of lower-cost items.

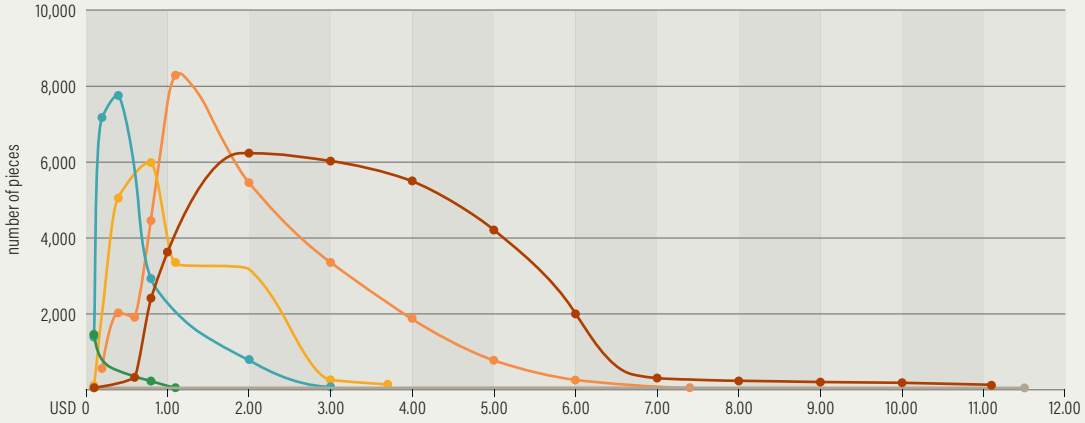


← Figure 16. **Price distribution of Grade A bales, Uganda and Tanzania**

Source: Full Cycle Resource, 2024.

Note: The price distribution of SHC per piece for Grade A shows that pricing is market dependent.

The left-skewed pricing distribution indicates that the sorting of pieces within each bale follows a systematic pattern based on clothing quality. As items are categorized from higher to lower quality – ranging from first to ronya and rags – their prices correspondingly decrease, reflecting the link between quality characteristics and market value. For example, Figure 17 demonstrated that the most frequently occurring selling price declines as the quality drops from first to second, third and finally to ronya and rags, in the surveyed markets in Tanzania. Uganda's data signify denser and more distributed pricing and volume.

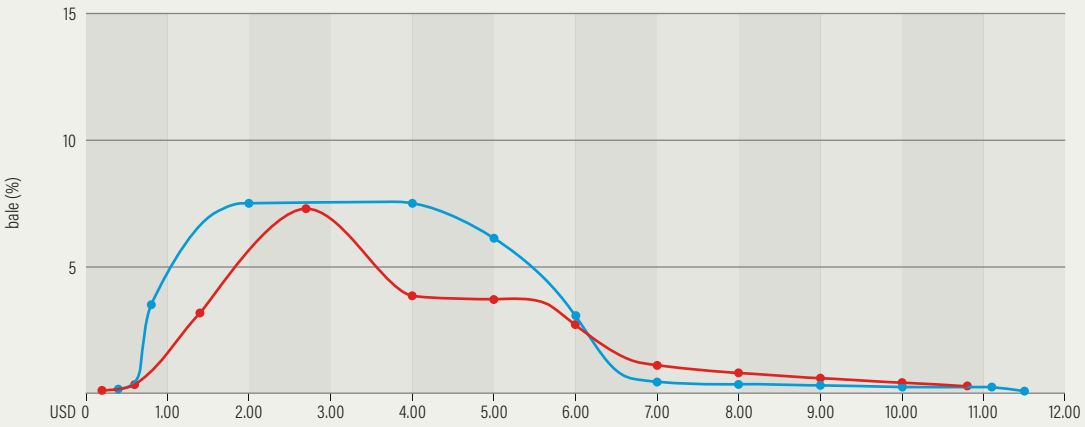


← Figure 17. **Comparison of pricing across subcategories, Tanzania**

Source: Full Cycle Resource, 2024.

Note: The price distribution per SHC piece for the 'first' subcategory shows a similar bale composition, with slight variations indicating higher prices in Tanzania.

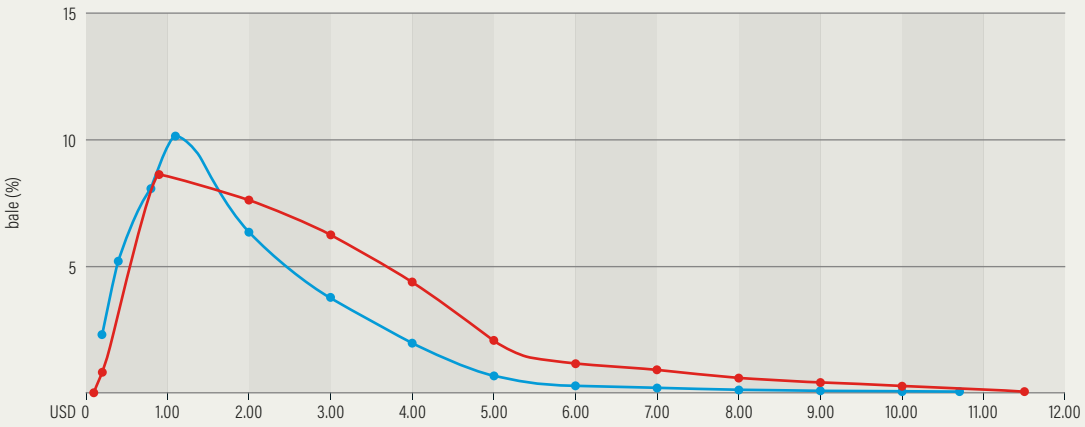
A comparison of the first, second, and fagi/ronya subcategories reveals a similar distribution in bale composition between Uganda and Tanzania (Figure 18, Figure 19), indicating consistency in sorting practices across both markets. However, market pricing varies slightly due to local economic conditions, consumer demand, and purchasing power. Notably, even the lowest-rated wearable clothing, categorized as fagi and ronya, retains market value in both countries (Figure 20), driven by sustained consumer demand and affordability considerations.



← Figure 18. **Price distribution within bales, subcategory 'first', Tanzania and Uganda**

Source: Full Cycle Resource, 2024.

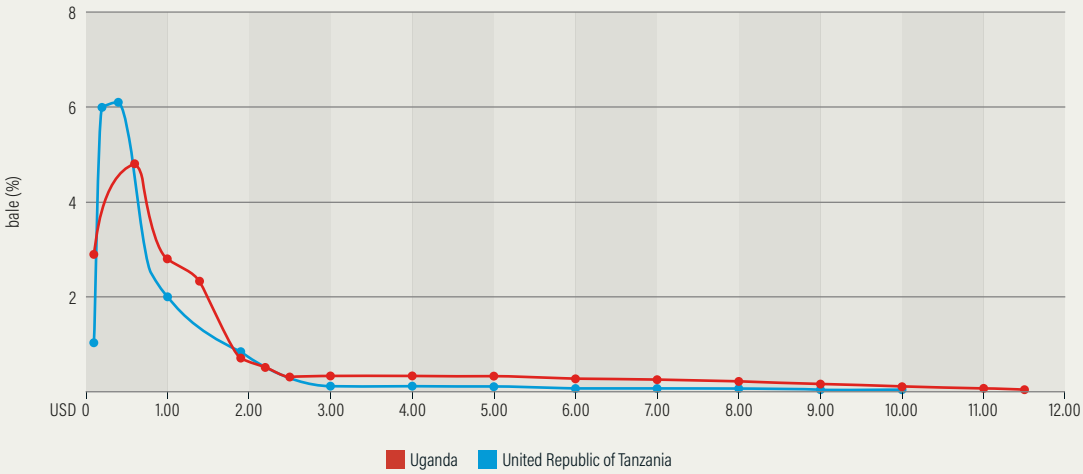
Note: The price distribution of SHC per piece for all Grades in both Uganda and Tanzania shows a left-skewed bell curve pattern, indicating a prevalence of lower-cost items.



← Figure 19. **Price distribution within bales, subcategory 'second', Tanzania and Uganda**

Source: Full Cycle Resource, 2024.

Note: Uganda's 'second' subcategory costs more than Tanzania's because Uganda has four subcategories and Tanzania five, with Tanzania's second and third matching Uganda's second.



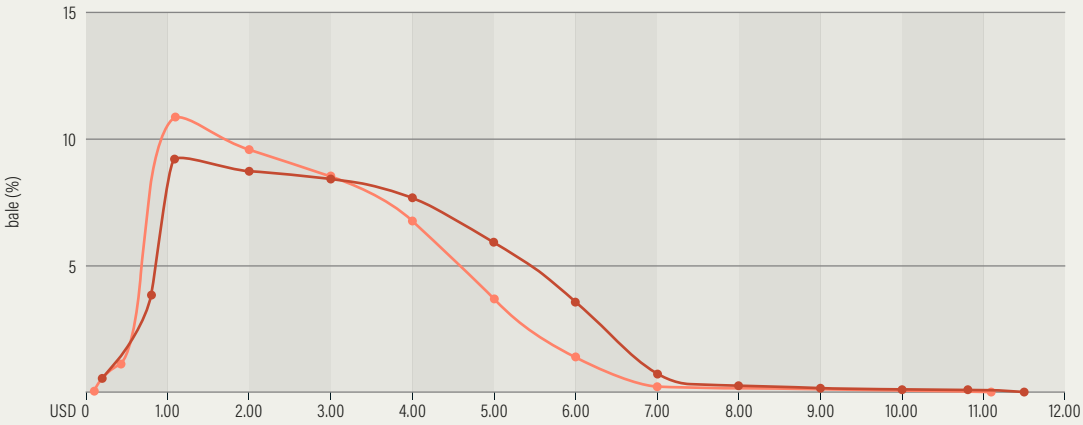
← Figure 20. **Price distribution within bales, 'fagi' and 'ronya' subcategories, Tanzania and Uganda**

Source: Full Cycle Resource, 2024.

Note: Analysis of 87,923 of 127,249 pieces (single-grade purchasers) shows that higher-priced items become less frequent in lower-rated subcategories, with the price mode declining as quality decreases across all grades.

The grade of the bale is correlated with the mode of the purchasing price and directly affects pricing within subcategories. On a per-bale basis, Grade A bales contain a higher proportion of first- and second-quality items than Grade B (Figure 21). Higher selling prices for Grade A items across all subcategories shift the price distribution rightward, indicating more frequent higher-priced sales. Retailers favour higher-grade bales as they offer more premium items that can be sold at higher prices, maximizing margins.

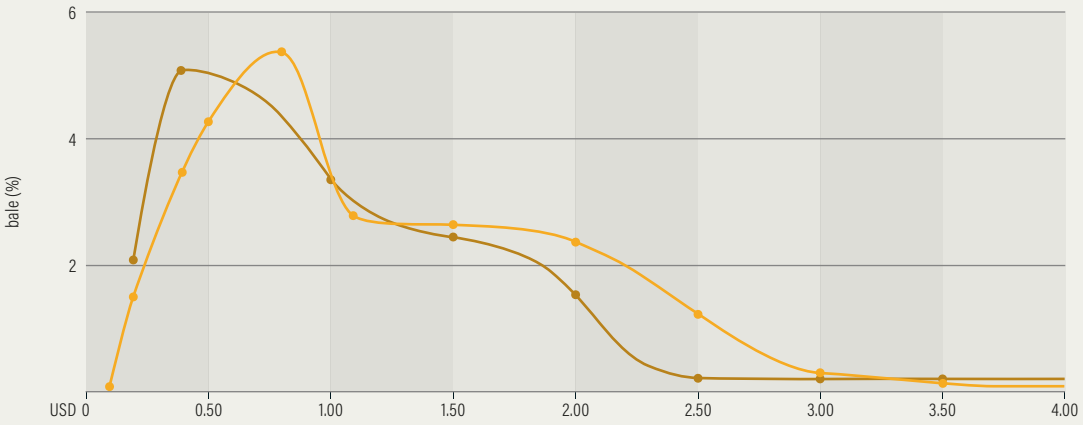
The market price for the third subcategory across all grades suggests that, at lower quality levels, grade distinctions become less relevant (Figure 22). The number of pieces classified as ronya indicates it serves as a consolidation point for slow-moving items from the first, second and third subcategories. Traders therefore emphasize volume sales or bundling strategies to clear inventory and increase cash flow.



← Figure 21. **Price distribution by Grades A and B, subcategory 'first', Tanzania**

Source: Full Cycle Resource, 2024.

Note: The graph highlights a rightward shift in the price distribution for Grade A compared to Grade B, driven by a higher proportion of premium "First" and "Second" quality items in Grade A bales.



← Figure 22. **Price distribution by Grades A and B, subcategory 'third', Tanzania**

Source: Full Cycle Resource, 2024.

Note: Grade A thirds are sold at a slight premium over Grade B, with similar bale composition.

Given that each grade contains subcategories where the perceived value can vary, the 'First' category in Grade A, for instance, is not equivalent to the 'First' in Grade B. Whereas Grade A second items and Grade B first share quality ratings along with economic value (Figure 14). Thus, Retailers and vendors prefer to purchase bales or pieces that have been graded (e.g., Grade A, B, or C). Both single grade buyer and mix grade buyer will mix slower moving stock with newer stock. This helps drive sales and increases overall profit by ensuring that older inventory continues to move while maximizing revenue opportunities from the new stock. 75 per cent of 1001 traders (retailers and vendors) choose to stock items from multiple grades to appeal to a broader range of customers.[15]

4.4. Bale composition by subcategory

4.4.1. Distribution of secondhand clothing in Tanzania by subcategory

The distribution of subcategories in Tanzania indicated the decline of grade is correlated with the increase of share that is classified as waste within a bale. For example, Grade A contains 1.1 to 1.2 per cent waste, in contrast to grade C bale, which contains 2.2 to 5.1 per cent of waste (Table 10). An inverse correlation is observed for ronya: as the grade decreases, the percentage of ronya also declines (Table 10).

Given the overall survey of 127,677 pieces of clothing, the textile waste was observed to be 1.3 to 1.5 per cent while rags make up 3.4 to 3.5 per cent (Table 11). This means that, for the market surveyed, 4.7 to 4.8 per cent of a bale consists of items not classified under HS Code 6309.00.01.

4.4.2. Distribution of secondhand clothing in Uganda by subcategory

The distribution of pieces within a bale was assessed from the response of 683 participants of the 910 surveyed in Owino market. In an overall survey of 117,257 pieces of clothing, the textile waste was observed to be 0.9 per cent to 1.0 per cent, while rags make up 2.4 to 2.6 per cent (Table 12) (WasteAid, 2024). This means that, for the market surveyed, 3.3 to 3.6 per cent of a bale consists of items not classified under HS Code 6309.00.01. The percentage of rags and waste are lower than Tanzania's market distribution indicating market variation.

15 The survey consulted 1001 retailers and vendors, and found that 75 per cent of participants purchase only a single grade, while 22 per cent buy two different grades of clothing. When examining the purchasing behavior of retailers, a sample of 640 indicated that 70 per cent of retailers purchase a single grade, while 30 per cent mix different grades to appeal to a broader customer base by offering a range of quality levels. Among 361 vendors, 78 per cent purchase a single grade – primarily because they buy clothing by the piece rather than in whole bales. This allows vendors to selectively choose items and maintain consistent quality for their specific market segment.

← Image 12. Secondhand garments displayed in a local market in Tanzania, pointing to end-market distribution where bale composition shapes resale value.

© H. Pacini (UNCTAD), 2024.

Table 10. **Percentage breakdown of clothing subcategories by grade in an average bale Tanzania**

		Grade A (%)	Grade B (%)	Grade C (%)
First	LOW RANGE	23.3	32.7	12.3
	HIGH RANGE	23.2	30.4	14.3
Second	LOW RANGE	26.2	26.8	31.5
	HIGH RANGE	26.1	26.6	30.3
Third	LOW RANGE	21.1	20.1	43.9
	HIGH RANGE	20.8	20.2	39.7
Fagi Ronya	LOW RANGE	24.9	14.5	10.0
	HIGH RANGE	25.3	15.7	10.6
Rags	LOW RANGE	3.4	4.0	0
	HIGH RANGE	3.4	4.8	0
Waste	LOW RANGE	1.1	1.9	2.2
	HIGH RANGE	1.2	2.2	5.1

← *Source: Prepared by the authors.*

Note: As the grade of the bale decreases, a higher percentage of waste is observed in the Tanzanian market.

Table 11. **Percentage breakdown of clothing subcategories by grade in an average bale Tanzania**

	Low range		High range	
	PIECES	PERCENTAGE	PIECES	PERCENTAGE
First	33,601	26.4	47,165	26.5
Second	36,469	28.7	52,006	29.2
Third	26,306	20.7	35,955	20.2
Ronya	24,849	19.5	34,076	19.1
Rags	4,323	3.4	6,310	3.5
Waste	1,701	1.3	2,755	1.5
Total pieces counted	**127,249**		**178,267**	

← *Source: Prepared by the authors.*

Note: The textile waste within a bale in the two sampled markets in Tanzania is estimated to range from 1.3 to 1.5 per cent, while rags make up 3.4 to 3.5 per cent. This means that 4.7 to 5 per cent of a bale consists of items not classified under HS Code 6309.00.10.

Table 12. **Percentage breakdown of clothing subcategories by grade in an average bale Uganda**

	Low range		High range	
	PIECES	PERCENTAGE	PIECES	PERCENTAGE
First	30,053	25.6	31,812	25.9
Second	56,179	47.9	58,946	47.9
Fagi	27,191	23.2	27,939	22.7
Rags	2,779	2.4	3,185	2.6
Waste	1,055	0.9	1,178	1.0
Total pieces counted	**117,257**		**123,060**	

← *Source: WasteAid, 2024; UNCTAD and Full Cycle Resource.*

Note: The textile waste within a bale in the Owino markets in Uganda is estimated to range from 1.3 to 1.5 per cent, while rags make up 3.4 to 3.5 per cent. This means that 4.7 to 5 per cent of a bale consists of items not classified under HS Code 6309.00.10.

4.4.3 Bale distribution and profitability

Retailers acquire imported bales according to the specified weight. Although the specified bale weight is typically fixed (for instance, a 45 kg bale may actually range between 43 and 46 kg), the quantity of clothing pieces inside each bale can differ. Retailers who frequently open bales of a particular category develop an inherent understanding of the number of pieces contained within their bale, which was documented through surveys. This insight is conveyed as a range; for instance, 200 to 250 pieces per bale. The lower bound (200) signifies the minimum expected count, whereas the upper bound (250) represents the maximum expected count. A retailer's inherent understanding of subcategory distribution ranges has a direct effect on their return on investment.

4.5. Understanding the socioeconomic impact of the secondhand clothing to the traders in Uganda and Tanzania

The field analysis reveals that the SHC sector provides economic mobility opportunities for the traders of both genders.[16] Participants in the market can progress from entry-level roles, such as bale carriers, all the way to importers.[17]

Gender considerations

Male ownership accounts for 66 per cent (n=1101) and female ownership for 34 per cent (n=568) of SHC businesses in Uganda and Tanzania. 14.7 per cent (n=285) out of 1936 total respondents are employees. Many enterprises operate as informal family units, where male business owners often employ their spouses. This pattern reflects a collaborative, household-based business model that influences operational roles and labour distribution.

Among female business owners (n=568), 69.5 per cent are retailers and 30 per cent are vendors (Table 13). Similarly, 61 per cent of male owners (n = 674) operate as retailers, while 38.7 per cent are vendors. This is a positive gender indication, as retailers typically generate higher income and require more capital investment to enter the trade. The higher proportion of women engaged in retail suggests increased access to capital and stronger market positioning, indicating potential upward mobility for both genders within the SHC sector.

16 A higher proportion of male respondents (n = 778) compared to females (n = 271), with men accounting for a larger share of business ownership. Among female respondents, 244 were business owners, including 65 vendors and 179 retailers. Market-specific data showed 621 business owner responses in Ilala (211 females, 410 males) and 275 in Karume (34 females, 241 males).

17 SHC market hierarchy typically spans from the lowest level (Bale Carrier) to Fagia Trader, Vendors, Retailers, Distributors and Importers (top role).

← Image 13. Secondhand clothing vendor in a local market in Tanzania, indicating income-generating opportunities within SHC trade systems.

Table 13. **Secondhand clothing business ownership by gender in Uganda and Tanzania**

	Female owned		Male owned	
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
Retailers BUY IN BALES, SELL IN PIECES	395	37	674	63
Vendors PURCHASE IN PIECES	173	29	427	71
Total	**568**	**34**	**1101**	**66**

← *Source: WasteAid, 2024; Full Cycle Resource.*

Note: Across genders, retailers outnumber vendors. This is a positive sign, as retailing typically generates higher income and requires greater capital investment.

Table 14. **Market entry positions and career progression of retailers and vendors in Uganda and Tanzania**

		0–1	1–3	3–5	5–10	10+	Percentage of business type
Retailers	BUY IN BALES, SELL IN PIECES	**2.8**	**10.7**	**28.3**	**30.1**	**28.1**	**100.0**
	Moved up the value chain	**1.9**	**5.4**	**17.0**	**17.2**	**15.9**	**57.4**
	Maintained the same level	0.7	3.9	8.5	9.6	10.7	33.3
	Moved down the value chain	0	0.5	0.4	0.9	0.5	2.3
	Other or not specified	0.3	0.9	2.5	2.4	1.0	7.1
Vendors	PURCHASE IN PIECES	**4.2**	**22.0**	**34.0**	**21.0**	**18.8**	**100.0**
	Moved up the value chain	**0.3**	**2.5**	**4.4**	**3.0**	**2.0**	**12.4**
	Maintained the same level	3.2	16.2	24.5	13.7	11.7	69.4
	Moved down the value chain	0	1.5	1.9	1.9	3.0	8.3
	Other or not specified	0.7	1.7	3.2	2.4	2.0	10.0
Percentage of the market		**4.8**	**16.6**	**30.2**	**25.5**	**22.9**	**100.0**

↑ *Source: WasteAid, 2024; Full Cycle Resource.*

Note: Among 1928 survey responses on market entry position and career progression, 1226 were retailers or staff of retailers, accounting for 1060 owners and 166 staff members. Among the 702 vendors surveyed, 591 are vendor business owners and 111 are staff members.

Vendors

Among the 702 vendors surveyed, **591 are business owners** and 111 are staff members. Of the 591 vendor business owners, 12.4 per cent (n=73) **progressed from a position that is lower in the value chain**, 69.4 per cent (n=410) started as vendors, 8.3 per cent (n=49) moved down the value chain, and 10.3 per cent (n=59) came from outside of the SHC industry. Among those aiming to become vendors, about 23 per cent attain this status within 1 to 3 years, while 59 per cent reach this level within 3 to 5 years (Table 15). Interestingly, bale carriers show a higher probability of upward mobility to vendor status, with 71.4 per cent achieving this within 3 to 5 years, compared to 51.5 per cent of ronya traders (Table 15).

Retailers

Becoming a retailer generally necessitates the purchase of bales, which entails higher expenses compared to buying individual clothing items. Among 1928 survey responses on market entry position and career progression, 1226 were retailers or staff of retailers, accounting for 1060 retail business owners and 166 staff members. **Of the 1060 owners, 57.4 per cent (n=608) progressed from a position lower in value chains** to become a retail business owner, 33.3 per cent (n=353) started as a retailer, 2.3 per cent (n=24) moved down the value chain into this role, while 75 (7.1 per cent) came from outside of the SHC industry. Within the 608 retail owners that progressed from lower value chain, 2.5 per cent transition to retailers within the first 1 to 3 years, 42 per cent do so within 3 to 5 years, and 72 per cent achieve this milestone within 5 to 10 years (Table 15). This indicates **progression from vendor to retailer remains a challenging step**. Of the retailers and vendors, 8.1 per cent of those joining the SHC industry came from other industries, emphasizing the attractiveness of SHC value proposition for the participants.

This progression also reflects a process of knowledge accumulation: those (vendors, bale carrier) who successfully transition into retail often do so after gaining a better understanding of brand recognition, bale distribution patterns, customer segmentation, and sales strategies. As in other sectors, such knowledge is essential for managing financial risk, aligning inventory with market demand, and ensuring consistent turnover – particularly once vendors begin purchasing bales directly and taking on greater operational responsibility and risks.

These statistics highlight the potential for **career mobility** within Uganda and Tanzania's SHC market. The education levels of male and female business owners are relatively comparable, and **both genders have an equal probability given the same education level**, to advance within the supply chain (Table 16).

Table 15. **Examining economic mobility in Tanzania and Uganda**

		0–1	1–3	3–5	5–10	10+
Retailers	BUY IN BALES, SELL IN PIECES	3.0	13.0	42.0	72.0	100.0
	Bale carrier	2.0	12.0	51.0	70.0	100.0
	Ronya trader	3.0	8.0	45.0	78.0	100.0
	Vendor	3.0	13.0	41.0	72.0	100.0
Vendors	PURCHASE IN PIECES	3.0	23.0	59.0	84.0	100.0
	Bale carrier	0	25.0	71.4	89.3	100.0
	Ronya trader	4.4	22.2	51.1	80.0	100.0

← *Source: Primary market sampling by the authors.*

Table 16. **Secondhand clothing business ownership by gender in Uganda and Tanzania**

	Female owned		Male owned		Grand total
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	
No formal education	53	8.0	64	5.0	97
Elementary	148	23.0	320	25.0	403
Secondary	367	58.0	749	58.0	956
Tertiary	55	9.0	139	11.0	164
Others	14	2.0	27	2.0	31
Total	**637**		**1299**		**1651**

← *Source: Primary market sampling by the authors.*

4.5.1 Socioeconomic impact of SHC to the traders in Tanzania

The Ilala and Karume markets collectively account for 62 per cent of retailers and 38 per cent of vendors.[18] According to the Tanzania Revenue Authority, Ilala Market hosts an average of 723 active traders with retailers making up 65 per cent and vendors 35 per cent focusing exclusively on clothing. In contrast, Karume Market features over 1,184 stalls offering various goods, including clothing and footwear, specializing in footwear distribution, with a clothing trader composition of 56 per cent retailers and 44 per cent vendors. The most common 40-to-45-kilogram bale sells for 110.2 to 129.3 USD, with prices varying by customer type, weight, clothing type, and quality. For example, clothing type determines the turnover rates, with faster-moving items commanding higher prices than slower-moving ones. Furthermore, heavier bales or those with children's clothing are costlier due to higher item counts. Men's and women's clothing sell in nearly equal proportions, with adult clothing usually targeted by gender, while children's and infant clothing is predominantly unisex.

18 A survey was carried out with 1056 respondents in the two markets.

Table 17. **Secondhand clothing business ownership by gender in Uganda and Tanzania**

	Female owned		Male owned		Grand total
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	
No formal education	53	8.0	64	5.0	97
Elementary	148	23.0	320	25.0	403
Secondary	367	58.0	749	58.0	956
Tertiary	55	9.0	139	11.0	164
Others	14	2.0	27	2.0	31
Total	**637**		**1299**		**1651**

← *Source: Primary market sampling by the authors.*

Table 18. **Examining economic mobility in Tanzania**

Role in the market	Retailer		Vendor	
	NO.	%	NO.	%
Below current role	328	61.0	43	13.0
At or above current role; or from outside of SHC industry	212	39.0	296	87.0
Total	**540**		**339**	

↑ *Note: In surveyed Tanzanian markets, 61 per cent of retailers advanced from lower positions, compared to 13 per cent of vendors; 87 per cent of vendors entered SHC in their current position.*

Table 19. **Economic mobility of traders over time, by business type** (%)

Business type	Retailer	Vendor
0 to 1 year	2.7	0.0
1 to 3 years	8.5	23.3
3 to 5 years	40.2	62.8
5 to 10 years	70.4	88.4
10+ years	100.0	100.0

↑ *Note: 40.2 per cent of retailers progressed from vendors within 3–5 years, rising to 70.4 per cent over 5–10 years. For vendors, 62.8 per cent advanced from bale carriers within 3–5 years, increasing to 88.4 per cent over 5–10 years, indicating faster mobility.*

In Tanzania, field analysis indicates that although the majority of clothing items are sold at lower price points, the industry still offers opportunities for economic advancement. Market participants can advance from entry-level positions, such as bale carriers, up to the level of importers. For retailers, 61 per cent started below their current role within the market hierarchy, while only 13 per cent of vendors started below their current role (Table 17). For those aspiring to become vendors, approximately 23.3 per cent achieve this status within the first 1 to 3 years, with 62.8 per cent reaching this milestone within 3 to 5 years (Table 18). In Tanzania, 8.5 per cent of vendors become retailers within the initial 1 to 3 years, 40.2 per cent in 3 to 5 years, and 70.4 per cent within 5 to 10 years (Table 18). Retailers typically earn 400,000 to 600,000 TZS (148 to 222 USD) per month, while vendors earn 200,000–400,000 TZS (74 to 148 USD), reflecting a 50 per cent income increase when transitioning from vendor to retailer.

A correlation was observed between higher education levels and improved economic outcomes. Most female business owners had completed secondary education (59 per cent), followed by elementary education (31 per cent), while only 9 per cent had tertiary education. In comparison, 33 per cent of male business owners had completed elementary education, 56 per cent completed secondary education, and 9 per cent completed tertiary education. Overall, 100 respondents had tertiary education, and those with higher education typically earned within the higher range of 400,000 to 600,000 TZS (148 to 222 USD).[19]

The survey of 1,046 respondents revealed that business ownership by gender in Tanzania's SHC market shows a greater disparity compared to Uganda, with only 27 per cent (n=245) of 896 retailers and vendors being female. Among them, 19 per cent (n=65) of 277 vendor owners and 32 per cent (n=180) of 374 retail owners are women. Of 1,046 respondents, 60.5 per cent are married. Among the 837 respondents, 57.9 per cent reported having between 1 and 3 children. 99 per cent of respondents said they believe in equal opportunities for men and women, with a similar share (98 per cent) indicating the trade financially benefiting their family. The primary declared motivation to be involved in the sector was financial incentives (60.6 per cent), with 21 per cent mentioning the lack of alternative employment opportunities, suggesting entrepreneurship by necessity (Table 19).

19 High unemployment and limited job opportunities for higher education in Tanzania were mentioned as a reason for some individuals with tertiary education to partake in SHC trading.

4.5.2 Socioeconomic impact of secondhand clothing to the traders in Uganda

A survey was conducted to gather insights on market dynamics with 1,067 participants in Uganda's Owino Market, comprising 860 business owners and 142 staff, of whom 58 per cent male and 42 per cent female. Of the 910 responses from vendors and retailers, 531 were male and 379 female. Overall, 77 per cent of business owners were the main earners in their households. with 75 per cent of women and 79 per cent of men, which highlight the economic importance of SHC businesses.

According to WasteAid (WasteAid, 2024), the majority of both male and female business owners had completed secondary education, indicating no clear link between education level, gender, and business ownership. However, more male primary business owners held tertiary education (n=50) compared to females (n=19) (Table 20). Additionally, most women had been in the trade for 10+ years, while men had typically worked 5 to 10 years (Table 21), suggesting women's greater reliance on micro-trading (Mehra, 2021).

Based on the field survey and complementary analysis by WasteAid, educational attainment was broadly similar across genders: 13 per cent of women and 10 per cent of men had no formal education; 15 per cent of women and 14 per cent of men had elementary education; 57 per cent of women and 58 per cent of men had secondary education; and 14 per cent of men and 8 per cent of women had tertiary education (WasteAid, 2024).

The SHC market shows inclusivity across all education levels. Over half of retailers, between 54 to 89 per cent, had progressed up the SHC value chain, with the highest mobility (89 per cent) among those with tertiary education. Vendor mobility was far lower, ranging from 2 to 20 per cent depending on education level.

Table 20. **Comparative analysis of secondhand clothing business ownership, education and years in business among female-owned enterprises**

		Female						
		0–1	1–3	3–5	5–10	10+	NO RESPONSE	TOTAL
Primary earner	No formal education	2	2	6	4	11	—	25
	Elementary	1	1	15	9	10	1	37
	Secondary	5	20	36	44	43	1	149
	Tertiary	1	5	6	2	5	—	19
	Others	—	1	1	2	2	—	6
	No response	—	—	1	3	5	1	10
	Total	9	29	65	64	76	3	246
Non-primary earner	No formal education	—	7	1	4	6	—	18
	Elementary	—	1	2	4	1	—	8
	Secondary	4	8	10	11	5	—	38
	Tertiary	—	2	3	—	1	—	6
	Others	—	—	1	—	1	—	2
	No response	—	—	1	1	—	—	2
	Total	4	18	18	20	14	—	74
Total (all earner categories)		**13**	**47**	**83**	**84**	**90**	**3**	**320**

Table 21. **Comparative analysis of secondhand clothing business ownership, education and years in business among male-owned enterprises**

		Male						
		0–1	1–3	3–5	5–10	10+	NO RESPONSE	TOTAL
Primary earner	No formal education	—	3	7	7	10	—	27
	Elementary	2	7	16	12	10	1	48
	Secondary	12	35	60	60	41	2	210
	Tertiary	—	5	15	22	8	—	50
	Others	—	3	1	4	3	—	11
	No response	—	2	1	3	3	—	9
	Total	14	55	100	108	75	3	355
Non-primary earner	No formal education	2	3	1	4	4	—	14
	Elementary	—	2	3	4	5	—	14
	Secondary	3	6	15	11	2	—	37
	Tertiary	—	2	3	2	1	—	8
	Others	—	—	1	—	4	—	5
	No response	—	—	—	—	—	—	—
	Total	5	13	23	21	16	—	78
Total (all earner categories)		**19**	**68**	**123**	**129**	**91**	**3**	**433**

Table 22. **Comparative analysis of secondhand clothing business ownership, education and years in business by gender**

		Female-owned and male-owned enterprises						
		0–1	1–3	3–5	5–10	10+	NO RESPONSE	TOTAL
Primary earner	No formal education	2	5	13	11	21	—	52
	Elementary	3	8	31	21	20	2	85
	Secondary	17	55	96	104	84	3	359
	Tertiary	1	10	21	24	13	—	69
	Others	—	4	2	6	5	—	17
	No response	—	2	2	6	8	1	19
	Total	23	84	165	172	151	6	601
Non-primary earner	No formal education	2	10	2	8	10	—	32
	Elementary	—	3	5	8	6	—	22
	Secondary	7	14	25	22	7	—	75
	Tertiary	—	4	6	2	2	—	14
	Others	—	—	2	—	5	—	7
	No response	—	—	1	1	—	—	2
	Total	9	31	41	41	30	—	152
Total (all earner categories)		**32**	**115**	**206**	**213**	**181**	**6**	**753**

4.5.3 Waste management context in Uganda and Tanzania

Tanzania and Uganda face significant challenges in managing municipal solid waste (MSW) due to rapid urbanization, inadequate infrastructure, and low recovery rates, but these also present opportunities for circular economy initiatives.

Tanzania generates an estimated 12.1 to 17.4 million MT of solid waste annually, with a daily per capita generation of 0.66 to 0.95 kilograms (United Republic of Tanzania, Vice President's Office, 2020). However, less than 50 per cent of this waste is collected, with the remainder subject to unsustainable practices such as open burning (3 per cent), burial (30 per cent), and indiscriminate dumping (17 per cent) (United Republic of Tanzania, Vice President's Office, 2020). Comparably, Kampala, Uganda, reports a higher per capita waste generation of 0.97 kilograms per day, with collection coverage reaching 65 per cent in the capital, but falling below 15 per cent in surrounding municipalities (Ministry of Kampala Capital City and Metropolitan Affairs, 2023). In both countries, uncollected waste poses serious environmental and public health risks.

MSW in both countries originates from a range of sources, including households, markets, institutions, commercial enterprises, industries, construction sites, and agricultural activities. The composition of MSW in both contexts is dominated by organic waste – 67 per cent in Tanzania (food, garden, and wood waste) and 43 per cent biodegradable waste in Kampala – highlighting missed opportunities for organic recovery. Notably, **textiles represent a small but critical fraction of MSW: 2 per cent in Tanzania and 0.5 per cent in Kampala** (United Republic of Tanzania, Vice President's Office, 2020; GIZ, 2023)[20] despite large imports of SHC.

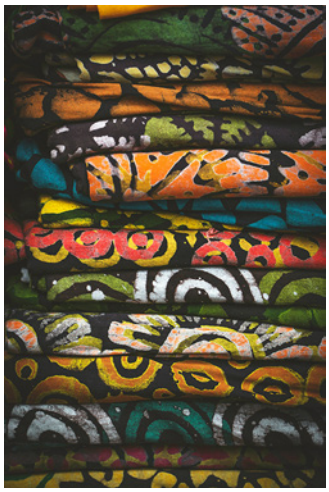
Despite the volume and diversity of waste produced, both Tanzania and Uganda face several persistent challenges in managing MSW effectively. These include inadequate waste management systems, poor infrastructure and technology, unsustainable production and consumption patterns, limited institutional capacity in terms of technical, human and financial resources, and low levels of public awareness regarding the environmental and health impacts of unmanaged waste (United Republic of Tanzania, Vice President's Office, 2020; Ministry of Kampala Capital City and Metropolitan Affairs, 2023). These challenges are particularly acute in rapidly urbanizing areas, underscoring the need for systemic reforms and investment in integrated waste management solutions (United Republic of Tanzania, Vice President's Office, 2020, 2021). In Tanzania, the government has identified key investment opportunities in waste management, beginning with the expansion of waste collection systems to ensure that waste is efficiently transported to designated disposal sites. Recycling MSW is the second priority, with specific emphasis on plastic (PET and HDPE), paper, e-waste, used oil, and used lead-acid batteries. These waste streams are highlighted due to their high annual generation rates, significant volumes of untapped recyclable materials, the existence of a ready market for recycled products, and a relatively low-cost labor force – all of which contribute to favorable return on investment (United Republic of Tanzania, Vice President's Office, 2020).

In Uganda, the Solid Waste Management Strategy for the Greater Kampala Metropolitan Area (Ministry of Kampala Capital City and Metropolitan Affairs, 2023) outlines several priorities to enhance the city's waste system. Expanding waste collection coverage, particularly in underserved low-income and informal settlements, with a target of increasing coverage in Kampala from approximately 65 per cent to 85 per cent by 2028. Another priority is upgrading disposal infrastructure, including the closure and rehabilitation of the Kiteezi landfill and the development of new sanitary landfills to accommodate future demand. Closure and rehabilitation are urgently needed due to the site's exceeded capacity and high environmental and public health risks, identified in multiple risk assessments (Ministry of Kampala Capital City and Metropolitan Affair, 2023; Aryampa et al., 2021). Continued operation would exacerbate pollution of air, water, and soil, and pose growing threats to surrounding communities. The strategy also emphasizes

20 In Tanzania, the average composition of municipal solid waste consists of 37 per cent of food waste, 30 per cent garden and wood waste, 11 per cent paper, 8 per cent ash, 7 per cent plastic, 4 per cent glass, 2 per cent textiles, and 1 per cent metal and tin (United Republic of Tanzania, Vice President's Office, 2020). In Kampala, Uganda, waste is predominantly composed of 43 per cent biodegradable waste, 42 per cent mixed fines, 6 per cent plastics, 3 per cent animal waste, 3 per cent sanitary waste, 2 per cent paper and cardboard, 0.5 per cent textiles, and 0.5 per cent other materials (GIZ, 2023).

← Image 14. Urban waste accumulation in Kampala, Uganda, demonstrating challenges in municipal solid waste management.

© O. Solomon (Pexels), 2025.



↑ Image 15. *Kitenge* fabric in Zanzibar, United Republic of Tanzania, capturing patterned textile traditions in East Africa.

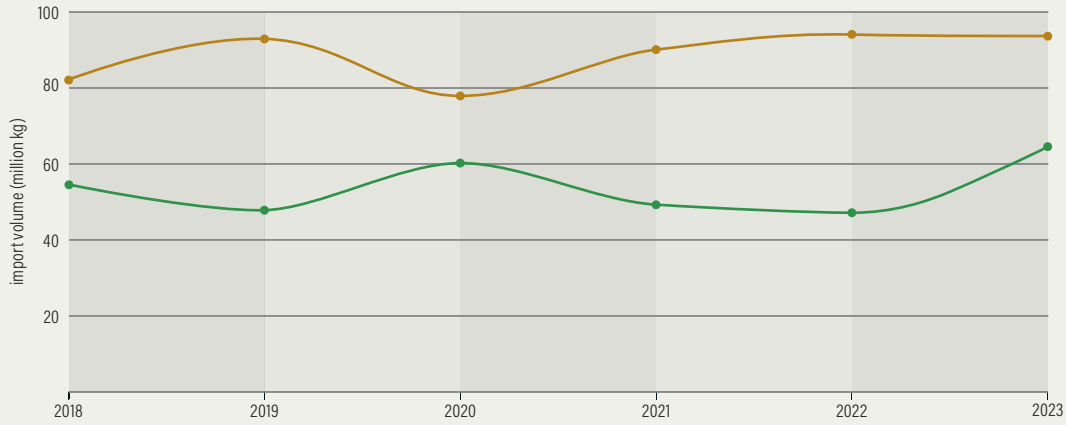
© P. Mueller (Unsplash), 2020.

the creation of a network of transfer and diversion centers to improve the efficiency of waste handling and support material recovery before final disposal. Promoting circular economy models is a central goal, with an aim to divert at least 35 per cent of collected waste from landfill through recovery of organics, plastics, textiles, and other recyclables, and by piloting extended producer responsibility (EPR) schemes.

Despite increasing interest in circular economy approaches, comprehensive data on the volume, production, and composition of textile waste in Uganda and Tanzania remains limited. This gap constrains effective policy development and infrastructure planning. Pre-consumer and post-industrial textile waste, including offcuts from garment production and unsold inventory, are among the most suitable for recycling due to its clean and uniform composition (Textile Exchange, 2021). Market waste collection in locations such as Owino in Uganda and Ilala and Karume in Tanzania are typically managed by municipal authorities or contracted service providers. Market hubs such as Owino Market in Uganda and Ilala and Karume in Tanzania illustrate the complexity of textile waste streams. A WasteAid examination revealed that textile waste in Owino Market primarily consists of tailor-generated offcuts, with 69 per cent contaminated and destined for landfill due to the absence of source separation (WasteAid, 2024). Uncontaminated offcuts, including traditional fabrics like *kitenge*[21] and residual secondhand imports remnants, are informally recovered and sold for uses such as furniture stuffing or fuel – reflecting informal practices but also highlighting inefficiencies due to mixed waste handling (WasteAid, 2024). The lack of structured recycling systems and source separation across markets exacerbates low recovery rates for textiles and other recyclables. Cleaners, whether municipal or contracted, focus on consolidating waste for disposal rather than material recovery, further limiting circular economy potential. Moreover, the symbiotic relationship between SHC traders, tailors, and informal collectors demonstrates an existing but under-leveraged ecosystem for textile reuse and value addition (WasteAid, 2024).

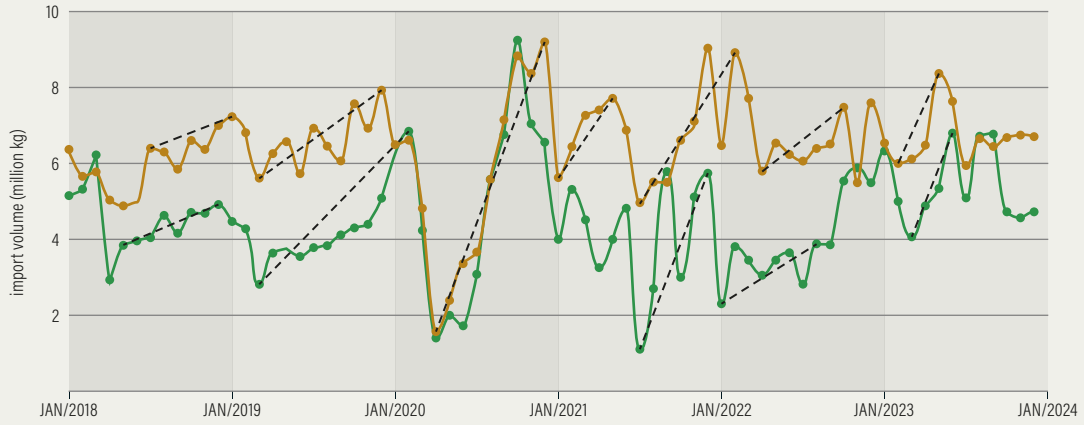
In conclusion, while both Tanzania and Uganda face similar MSW management challenges, their policy frameworks reveal a growing recognition of circular economy opportunities. Bridging data gaps, promoting source separation, connecting actors, and integrating informal actors into formal waste systems will be critical to unlocking the untapped potential within textile waste streams and beyond.

21 *Kitenge* is a type of fabric popular in East, Central, and West Africa known for its vibrant colours and bold patterns, which are often deeply symbolic or tied to local customs and traditions.



← Figure 23. **Annual import volumes of secondhand and new clothing, Uganda** (2013–2018)

Source: Uganda Revenue Authority, 2024.



← Figure 24. **Monthly import volumes of secondhand and new clothing, Uganda** (2018–2024)

Source: Uganda Revenue Authority, 2024.

Note: Both SHC and new clothing imports show cyclical seasonal fluctuations in volume.

4.6. East African Community's Vision 2050

The East African Community's Vision 2050 plan aims to reduce reliance on SHC by boosting domestic textile production and supporting a growing middle class. Tanzania and Uganda's textile sectors remain export-focused, relying on imported fabrics and raw materials. To encourage local production, the government has implemented a three-tiered import tax system: 0 per cent for machinery, 10 per cent for fabric, 25 per cent for new clothing, and 35 per cent for used clothing. While this tax regime is intended to incentivize domestic manufacturing, local production remains largely limited to assembly processes, such as cutting and stitching, with finished products primarily exported to high-end markets. Shifting focus to serve the domestic markets, characterized by lower disposable incomes, presents a significant challenge due to lower capacity to pay and thus profitability.

Uganda's clothing import market is undergoing a transformation, reflecting both economic growth and the enduring realities of economic challenges. In 2023, the country imported a total of 145 million kilograms of clothes consisting of 80 million kilograms of used clothing and 65 million kilograms of new clothing. Interestingly, the demand for used clothing imports plateaued between 2021 and 2023, while new clothing imports have risen from 49 million kilograms in 2021 to 65 million kilograms in 2023 (Figure 23, Figure 24).

This rise in new clothing imports indicates economic progress and shifting consumer aspirations. However, affordability remains a critical factor and a large share of the population still relies mostly on SHC. In 2023, new clothing imports were valued at UGX 614 million (CIF), nearly double the

← Image 16. Tailor in Owino Market, Kampala, Uganda, crafting locally designed garments from *kitenge* fabric.

© C. Maliq (Pexels), 2021.

UGX 342 million spent on SHC. The CIF price per kilogram of new clothing ranged from 198 per cent to 262 per cent higher than SHC, with a five-year average price differential of 223 per cent (Table 23). For many Ugandans, SHC is essential, with affordability being a key driver in the market. Given Uganda's minimum wage of 36.24 USD per month and a daily disposable income of 1.73 USD, a single SHC item priced at 2.70 USD represents 1.56 days of income. In contrast, new clothing prices range from 1.34 to 10.78 USD, requiring 0.8 to 6.2 days of disposable income. With 47 per cent of Uganda's population experiencing multidimensional poverty and 21 per cent living in monetary poverty, SHC serves as a critical resource for low-income households.

The role of SHC sector in meeting demand for affordable apparel must thus be considered. However, as economies grow and consumer aspirations evolve – particularly among urban, upwardly mobile populations – there is a gradual shift toward new, affordable garments that align with changing lifestyles, fashion preferences, and expressions of social identity. Locally manufactured clothing is increasingly positioned to meet this demand, overlapping with the demographic traditionally served by imported SHC. **Recognizing this convergence is critical for designing policies** that avoid the abrupt displacement of SHC with unaffordable alternatives too quickly, and instead enable a phased, inclusive transition that balances consumer accessibility with the growth of domestic apparel production.

↓ *Source: Uganda Revenue Authority; Full Cycle Resource.*

Note: Data for SHC imports were obtained from the Uganda Revenue Authority, while data for new clothing were calculated by the authors.
Exchange rates (July 2024): 1 USD = 3,707 Ugandan shillings (UGX).

Table 23. **Price comparison in Ugandan shilling between secondhand and new clothing imports per 28-ton container** (2018-2023)

		2018	2019	2020	2021	2022	2023	
		UGX	UGX	UGX	UGX	UGX	UGX	USD
Secondhand clothing	CIF	103,340,224	126,412,888	103,951,783	104,443,993	118,844,715	119,945,509	32,356
	Taxes (total)	80,254,462	78,797,391	79,821,031	83,721,431	88,209,625	91,859,629	24,780
	Total cost	**183,594,686**	**205,210,279**	**183,772,814**	**193,165,424**	**207,054,340**	**211,805,138**	57,137
New clothing	CIF	215,610,084	214,547,953	282,296,009	257,350,701	286,773,274	265,277,682	71,561
	Taxes (total)	137,990,454	137,310,690	180,669,446	164,704,449	183,534,896	169,777,716	45,799
	Total cost	**353,600,539**	**351,858,643**	**462,965,455**	**422,055,149**	**470,308,170**	**435,055,398**	117,361

5.

Field findings, regulation implications, and conclusion

The fieldwork highlights a set of recurring operational, economic, and relational factors that shape SHC trade outcomes in Tanzania and Uganda, alongside dynamics in the upstream supply chain. The analysis focuses on downstream market conditions and trade dynamics that are not fully captured in upstream reporting or aggregate trade statistics. By incorporating perspectives across multiple levels of the value chain, the evidence provides an empirical basis to inform ongoing discussions on textile circularity, waste classification, trade regulation, and the socioeconomic implications of SHC markets in these countries.

5.1. Fieldwork takeaways

The following takeaways set the context for the policy and operational recommendations that follow:

- **Low waste shares in bales challenge the "dumping" narrative**: Across 244,500 items sampled from fine sorted bales of HS Code 6309, ≈96 per cent were rewearable; only ≈1.1–1.3 per cent were classified as textile waste (with ≈2.9–3.2 per cent as rags). This directly challenges the "dumping" narrative.

← Image 17. Fieldwork conducted at Owino Market, Kampala, Uganda (May–June 2024).

- **B3030 original ("credential") clothing has low unsellable rates, typically around 1–12 percent, depending on sorter capability and market access**: This reflects differences in value extraction and secondary market linkages, and highlights the important value-added role of destination and transit hubs in sorting, job creation, and downstream market development.
- **Waste is economically disincentivized through tight margins and cashflow cycles**: Importers and downstream traders operate on tight margins and rapid cashflow cycles; unusable items impose costs without revenue, creating intrinsic incentives to minimize waste content.
- **Trust and feedback loops maintain quality consistency**: Quality consistency is maintained through repeated relationships, frequent communication, and feedback mechanisms that importers report improve outcomes; branding/logos reinforce reputation and predictability downstream.
- **Profitability is constrained by trade frictions like lead times and costs**: Lead times, tariffs/levies, freight costs, and payment terms are repeatedly cited as key constraints affecting importer decisions and market stability.
- **Sourcing shifts to suppliers like China are driven by profitability and financing flexibility**: Suppliers gain share not only through price/quality, but also through flexible payment arrangements and relationship-based risk sharing that improve importer liquidity.
- **SHC plays a critical socioeconomic role in low- and middle-income countries**: Evidence from Uganda and Tanzania shows that SHC is a vital source of affordable clothing and a major driver of informal employment and household enterprise. The sector is dominated by small, family-run businesses, with women accounting for over one-third of business owners and a high share of participants operating as retailers. These dynamics underscore SHC's importance for income generation, skills development, and social mobility, and highlight why policy changes affecting SHC can have significant livelihood and equity implications.

↓ Image 18. Bales of imported secondhand clothing being unloaded for sale in a local market in Tanzania.

← Image 19. Open-air stalls displaying secondhand garments in Owino market, Kampala, Uganda.

| 5.2. Implications for trade policy and standards

Together, the findings illustrate how downstream market realities influence quality outcomes, sourcing decisions, and the distribution of economic value across the supply chain, providing important context for interpreting reuse and waste rates and for assessing the potential impacts of regulatory and standards-related interventions. Based on empirical evidence and system-level analysis, the following recommendations are proposed:

- **Base regulatory design on country-specific empirical evidence, feasibility, and economic impact**: The findings indicate that variability of waste percentage is driven by market conditions, sorting expertise, and downstream recovery options, rather than systematic dumping. Policy should therefore prioritize market linkage support, capacity-building, and technical assistance over punitive or restrictive measures that would disrupt established reuse and sorting systems, undermine affordability, and displace downstream livelihoods.
- **Environmental measures should avoid unintended market disruptions**: Environmental interventions should avoid redundant sorting and cost increases that undermine reuse, affordability, and market access in low- and middle-income countries. Poorly calibrated measures risk disrupting reuse and sorting systems and displacing informal and semi-formal actors engaged in sorting, upcycling, resale, and related recovery activities, without delivering proportional environmental benefits.

- **Tackle synthetic fibre pollution at source, not through the Basel Convention**: Technical proposals to restrict B3030 by bringing textiles made partly or fully of synthetic fibres (e.g., polyester, nylon, acrylic) into scope risk misplacing responsibility for microplastic pollution. Concerns related to microplastics should be addressed upstream by original producers at the production and manufacturing stage, including through eco-design requirements for durability, fibre shedding reduction, and recyclability.
- **Align and phase regulatory expectations with system readiness and market competitiveness**: Regulatory frameworks should be sequenced in line with existing infrastructure, collection and sorting capacity, and technological feasibility (including fibre identification and material-based sorting), and be informed by feasibility and economic impact assessments. In a highly price-sensitive global SHC market, requirements that outpace system readiness risk increasing domestic costs, reducing competitiveness, and shifting global sourcing to alternative markets.
- **Strengthen transparency and accountability through standardized data, verification, and capacity building**: Work with sorting facilities to establish standardized reporting templates and traceability practices, supported by third-party auditing and facility certification. This will improve data reliability, enable external verification, and enhance supply chain transparency, while supporting compliance, accountability, and participation in incentive frameworks linked to reuse and recycling outcomes.

← Image 20. High-quality secondhand children's clothing displayed at a local market in the United Republic of Tanzania.

5.3. Implications for circular economy sequencing

These findings underscore the importance of circular economy sequencing – implementing circular interventions in an order that reflects value retention, system readiness, and real-world market conditions. Rather than prioritizing lower-value recycling or compliance-heavy measures prematurely, sequencing requires first strengthening reuse, repair, resale, and value-extraction systems that already deliver the highest environmental, economic, and livelihood benefits.

- **Map value chain actors and conduct system diagnostics at each stage and at country level**: Map donation points, collectors, sorters, recyclers, down-cyclers, remanufacturers, and reuse buyers, alongside diagnostics of collection, transport, sorting capacity, equipment availability, and end-market linkages. This mapping should cover each stage of the value chain to ensure that system gaps are identified where interventions will be most effective. This evidence base is essential to identify system constraints, design waste-hierarchy-aligned recovery pathways, guide targeted pilots, and ensure EPR and circular textile strategies are grounded in local realities and support inclusive economic development.
- **Strengthen market linkages to integrate downstream informal and semi-formal markets as part of circular economy sequencing**: This means prioritizing investment and policy support first in reuse, repair, resale, and upcycling markets – where the highest value retention occurs – before scaling recycling and disposal-focused interventions. Strengthening downstream market linkages includes improving access to buyers and suppliers, facilitating material matchmaking, enabling digital and physical trading platforms, and reducing transaction barriers for informal and semi-formal actors.

Taken together, the fieldwork and analysis highlight that effective circular textile policy depends not only on technical standards, but on sequencing, system readiness, and market integration. Policies that strengthen reuse and downstream value chains first, while building data systems, infrastructure, and capabilities over time, are more likely to deliver durable environmental gains, protect livelihoods, and avoid unintended disruptions. This sequencing-based approach provides a pragmatic pathway to advance textile circularity while maintaining affordability, market stability, and inclusive economic participation in low- and middle-income countries.

↓ Image 21. Women sorting and selecting secondhand garments for resale in small-scale, income-generating activities at Owino market, Kampala, Uganda.

References

Aryampa, S., Maheshwari, B., Zamorano, M., Sabiiti, E.N., Olobo, C. and Bateganya, N.L., 2021. *Adaptation of EVIAVE methodology to landfill environmental impact assessment in Uganda – a case study of Kiteezi landfill*. Journal of African Earth Sciences, 183, 104310. Available at: https://doi.org/10.1016/j.jafrearsci.2021.104310.

Deighton, J., 2024. *How Shein and Temu conquered fast fashion and forged a new business model. Harvard Business School Working Knowledge*. Available at: https://www.library.hbs.edu/working-knowledge/how-shein-and-temu-conquered-fast-fashion-and-forged-a-new-business-model.

Dissanayake, K. and Pal, R., 2023. Sustainability impacts of global used clothing trade and its supply chain. In: Kohl, H. et al. (eds), *Global circular economy and sustainable development*. Springer, Cham. Available at: https://link.springer.com/chapter/10.1007/978-3-031-28839-5_108.

EPA, 2023. *Textiles: material-specific data*. US Environmental Protection Agency. Available at: https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/textiles-material-specific-data.

European Commission, n.d. *EU strategy for sustainable and circular textiles*. Available at: https://environment.ec.europa.eu/strategy/textiles-strategy_en.

EuRIC, 2023. *Handling and sorting specifications for re-use and recycling of used textiles*. EuRIC – The European Recycling Industries' Confederation. Available at: https://euric.org/resource-hub/position-papers/handling-sorting-specifications-for-re-use-and-recycling-of-used-textiles.

Farrant, L., Olsen, S.I. and Wangel, A., 2010. *Environmental benefits from reusing clothes*. The International Journal of Life Cycle Assessment, 15(7), pp. 726–736. Available at: https://doi.org/10.1007/s11367-010-0197-y.

Fashion for Good, 2023. *Sorting for circularity India: wealth in waste – India's potential to bring textile waste back into the supply chain*. Available at: https://fashionforgood.com/resource/sorting-for-circularity-india-report/.

Fashion for Good and RRS, 2024. *Sorting for circularity USA: wealth in waste – USA's untapped textile resource*. Available at: https://reports.fashionforgood.com/report/sorting-for-circularity-usa.

US Government Accountability Office (GAO), 2024. *Textile waste: a growing environmental concern that requires better data and policy coordination*. GAO-25-107165. US Government Accountability Office. Available at: https://files.gao.gov/reports/GAO-25-107165/index.html.

GAO, 2024a. *Textile waste: actions needed to address fast fashion and reduce landfill use.* GAO-25-107165. US Government Accountability Office. Available at: https://www.gao.gov/products/gao-25-107165.

GAO, 2024b. *Textile waste: federal entities should collaborate on reduction and recycling efforts.* GAO-25-107165. US Government Accountability Office. Available at: https://www.gao.gov/assets/gao-25-107165.pdf.

GAO, 2024c. *Science and tech spotlight: textile recycling technologies*. US Government Accountability Office. Available at: https://www.gao.gov/products/gao-24-107486.

Garson and Shaw, 2024. *Promoting the circular textile industry: a call for strategic policy action in the Americas*. Available at: https://www.garsonshaw.com/wp-content/uploads/2026/04/GS-Report_2024.pdf.

Gschwandtner, C. (2022). Outlook on global fiber demand and supply 2030. In: *Lenzinger Berichte*, 97, pp. 11–19. Available at: https://a.storyblok.com/f/306166/d1807d354f/lenzinger_berichte_97_2022_and_96_2021.pdf.

GIZ, 2023. *Sector brief Uganda: waste and recycling*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. Available at: https://www.giz.de/de/downloads/giz2023-en-sectorbrief-uganda-waste.pdf.

Global Fashion Agenda, n.d. *Pulse of the industry*. Available at: https://globalfashionagenda.org/pulse-of-the-industry.

Habib, N.M. and Parris, H., 2024. *Reforming textile trade codes to be fit for purpose for the circular and sustainable textile economy*. Centre for Resilience and Sustainable Development, University of Cambridge. Available at: https://www.landecon.cam.ac.uk/sites/default/files/2025-01/CRSD%20Trade%20Codes_FinalReport_0.pdf.

Innovius Research, 2023. *Secondhand apparel market – global*. Available at: https://www.inoviusresearch.com/blog/market-report/secondhand-apparel-market-global/.

International Cotton Advisory Committee, 2024. *World textile demand 2024*. Available at: https://icac.org/years/2024.

Malhotra, S., 2024. *Cheap clothes, high costs: individual choices can't thread the needle on fast fashion*. Roosevelt Institute, 12 September. Available at: https://rooseveltinstitute.org/blog/cheap-clothes-high-costs-individual-choices-cant-thread-the-needle-on-fast-fashion/.

McKinsey & Company, 2022. *Scaling textile recycling in Europe: turning waste into value*. Available at: https://www.mckinsey.com/industries/retail/our-insights/scaling-textile-recycling-in-europe-turning-waste-into-value.

McKinsey & Company, 2025. *What is fast fashion?* Available at: https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-fast-fashion.

Mehra, R., 2021. *What works for low-income working women.* Co-Impact. Available at: https://co-impact.org/wp-content/uploads/2021/06/Evidence-Full-Women-ECON.pdf.

Ministry of Kampala Capital City and Metropolitan Affairs, 2023. *Solid waste management strategy for the Greater Kampala metropolitan area*. Kampala: Government of Uganda.

Morgan, A., 2015. *The true cost* [film]. Life is my movie. Available at: https://lifeismymovie.com/projects/the-true-cost/.

National Institute of Standards and Technology (NIST), 2022. *Textile recycling: opportunities and challenges in a circular economy*. NIST Special Publication 1500-207. Available at: https://nvlpubs.nist.gov/nistpubs/specialpublications/nist.sp.1500-207.pdf.

Niinimäki, K., Peters, G., Dahlbo, H., Perry, P., Rissanen, T. and Gwilt, A., 2020. *The environmental price of fast fashion*. Harvard University. Available at: https://doi.org/10.1038/s43017-020-0039-9.

Patti, A., Cicala, G. and Acierno, D., 2021. *Eco-sustainability of the textile production: waste recovery and current recycling in the composites world*. Polymers, 13(1), 134. Available at: https://doi.org/10.3390/polym13010134.

SMART, n.d. *Wiping best practices and cutting guidelines*. Secondary Materials and Recycled Textiles Association. Available upon request.

Statista, 2022. *Apparel supply chain worldwide: statistics & facts*. Available at: https://www.statista.com/topics/8824/apparel-supply-chain-worldwide/.

Statista, n.d. *Sustainable fashion worldwide: statistics & facts*. Available at: https://www.statista.com/topics/9543/sustainable-fashion-worldwide/.

Stone, C., Windsor, F.M., Munday, M. and Durance, I., 2020. Natural or synthetic: how global trends in textile usage threaten freshwater environments. Science of the Total Environment, 718, 134689. Available at: https://doi.org/10.1016/j.scitotenv.2019.134689.

Textile Exchange, 2021. *Guide to recycled inputs: GRS 202 V1.0*. Lubbock, TX: Textile Exchange. Available at: https://textileexchange.org/app/uploads/2021/09/GRS-202-V1.0-Textile-Exchange-Guide-to-Recycled-Inputs.pdf.

Textile Exchange, 2024. *Materials market report 2024*. Available at: https://textileexchange.org/knowledge-center/reports/materials-market-report-2024/.

ThredUp, 2024. *2024 resale report*. Available at: https://cf-assets-tup.thredup.com/resale_report/2024/ThredUp_2024_Resale%20Report.pdf.

UNEP, 2019. *UNEP and UN Climate Change provide fashion industry with practical guidance to align with climate action goals*. United Nations Environment Programme. Available at: https://www.unep.org/news-and-stories/press-release/unep-and-un-climate-change-provide-fashion-communicators-practical.

United Republic of Tanzania, Vice President's Office, 2020. *Tanzania investment guide on waste management*. Dodoma: United Republic of Tanzania. Available at: https://www.vpo.go.tz/uploads/publications/sw-1733133094-Tanzania%20Investment%20Guide%20on%20Waste%20Management%202020.pdf.

Watson, D. and Palm, D., 2016. *Exports of Nordic used textiles: fate, benefits and impacts*. Copenhagen: Nordic Council of Ministers. Available at https://www.oneplanetnetwork.org/knowledge-centre/resources/exports-nordic-used-textiles-fate-benefits-and-impacts.

WasteAid, 2024. *A study of textile waste at Owino Market, Kampala – towards a circular textile economy in Uganda*. Available at: https://wasteaid.org/wp-content/uploads/2025/02/A-STUDY-OF-TEXTILE-WASTE-AT-OWINO-MARKET-KAMPALA-2024.pdf.

WRAP, 2012. *Design for longevity: guidance on increasing the active life of clothing*. Banbury: Waste and Resources Action Programme. Available at: https://www.wrap.ngo/sites/default/files/2020-10/WRAP-Design%20for%20Longevity%20Report_0.pdf.

WWF, n.d. *Apparel and textiles*. Available at: https://wwf.panda.org/discover/our_focus/freshwater_practice/water_stewardship/our_sectors/apparel_and_textiles.

Yang, J., Al Mamun, A., Reza, M.N.H., Yang, M. and Abd Aziz, N., 2024. *Predicting the significance of consumer environmental values, beliefs and norms for sustainable fashion behaviors: the case of secondhand clothing*. Asia Pacific Management Review, 29(2), pp. 179–194. Available at: https://doi.org/10.1016/j.apmrv.2024.01.001.

Glossary of terms

Appearance
Vibrance of coloring, absence of fading, and presence or absence of stains.

Bale
A bundle of clothes that is collected, sorted, and compressed for resale or recycling purposes.

Cost, insurance, and freight (CIF)
A pricing term used in international trade to indicate that the seller covers the cost of goods, insurance, and freight to the destination port. It reflects the total landed value of imports, excluding local duties and taxes.

Circular economy
A model of production and consumption that involves sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products for as long as possible to extend the lifecycle of products.

Condition
Physical state of the clothing, such as wear, shape, and tear.

Credential
A term used in the secondhand clothing trade to refer to unsorted, original-condition clothing collected in high-income countries and packed into bales for export. Credential clothing has not been graded or processed and often includes a mix of wearable and non-wearable items.

Distributor
Entities that purchase bales from importers and sell them to various retailers, ensuring alignment with fluctuating market demand and supply dynamics.

Downcycling
The process of recycling material into a product of lower quality or functionality compared to the original material.

East African Community (EAC)
An intergovernmental organisation composed of six countries in the African Great Lakes region that promotes economic cooperation and integration.

Extended producer responsibility (EPR)
A policy approach where manufacturers are held accountable for the entire lifecycle of their products, including end-of-life waste management.

Fashion
Current trends and branding of the clothing.

Fast fashion
The rapid production of inexpensive clothing that imitates current fashion trends, typically with a turnaround time of a few weeks from design to retail. Brands release new collections frequently to encourage constant consumer purchasing.

Fine Sorting
Evaluation of individual garments to assign them to specific subcategories based on type, quality grade, material composition, seasonality and market demand. This enables greater value recovery, market-specific allocation and quality assurance, particularly for export and premium resale channels.

Functionality
The clothing's ability to serve its intended purpose effectively. For example, a functional zipper, intact buttons, and appropriate sizing contribute to the overall utility of the item.

Grading
A classification system used in sorting facilities to assess the quality and resale potential of secondhand clothing.

Gross domestic product (GDP)
The total monetary value of all goods and services produced within a country's borders over a specific time period, commonly used to measure a nation's overall economic performance.

Harmonized system code (HS Code)
A standardized international classification system for traded products, maintained by the World Customs Organization. It enables consistent reporting, customs processing, and statistical tracking of goods.

HS Code 6309
The specific HS code used for importing and exporting worn clothing and clothing accessories, blankets, travel rugs, household linen, and related secondhand textile articles.

Importer
Individuals or businesses that source secondhand clothing from global sorting facilities and import them into the receiving country.

Main Sorting
High-level classification based on general intended end use, serving as the foundational step for downstream processing.

Mechanical recycling
A recycling method that involves physically breaking down textiles into fibers, which are then respun into new yarn or fabrics. It is most effective for homogenous material.

Multidimensional poverty
A measure of poverty that goes beyond income, incorporating various deprivations experienced by individuals in health, education, and standard of living. It provides a more comprehensive view of poverty levels.

Unrewearable
Textiles that are unsuitable for direct reuse as garments but may be used in alternative applications such as wipers, industrial rags, or feedstock for recycling processes.

Peak tracing method
An analytical approach used to identify dominant price points—referred to as peaks or modes—within the distribution of selling prices across different subcategories of secondhand clothing.

Perceived durability
The expected longevity and ability of the clothing to retain its quality over time.

Post-consumer waste
Waste generated after consumers have used and discarded products, such as worn-out garments, bed linen, and towels. This material can then be recategorized for wearable and unwearable purposes.

Post-industrial waste
Waste generated during the manufacturing process, such as fabric ends, unsold garments, and by-products of spinning, weaving, and garment production.

Quality
A composite assessment used in the grading of secondhand clothing, determined by five key attributes: appearance, condition, fashion, functionality, and perceived durability.

Rags
Items with the lowest economic value, typically sold at the lowest prices and used primarily for cleaning purposes.

Retailer
Individuals or businesses that acquire bales of secondhand clothing from importers or distributors and sell the pieces of clothes individually to resellers and end consumers.

Secondhand clothing (SHC)
Clothing that has been previously owned and is being resold or donated for reuse.

Sorting facility
An operational site where incoming secondhand textiles are manually or mechanically sorted into categories based on the five characteristics of quality and demand.

Sub-categories
Classifications of clothing items within a bale based on their economic value and market demand. In Uganda, the primary sub-categories include First (Top), Second, Fagi (Fagia), and Rags. In Tanzania, the sub-categories include First, Second, Third, Ronya, and Rags.

Textile waste
Material designated for final disposal that is not subject to any recycling or reuse measures, often including clothing that is torn, heavily faded, or stained beyond repair.

Ultra-fast fashion
An accelerated form of fast fashion that uses real-time data from social media and online behavior to rapidly design and release new styles, often on a daily or weekly basis. It operates primarily through digital platforms, with production cycles as short as a few days and a strong emphasis on volume, speed and extremely low prices.

Vendor
Smaller-scale sellers who purchase individual items from retailers and resell them directly to consumers, operating from stalls or as hawkers without a fixed location.

Waste segregation
The process of separating different types of waste to improve recycling efficiency and reduce contamination.

Annexes

Annex 1

Data analysis approach for downstream data

DATA VISUALIZATION

Peak tracing method

- Visualization of price distribution: The peak tracing method was employed to visualize the distribution of selling prices across different grades and subcategories. Two distinct lines were plotted: one representing the overall market distribution (All Grades – Market Distribution) and the other focusing on pricing patterns for single-grade purchasers (Single Grade Purchaser Distribution). This method enabled the identification of peaks (or modes) in price frequency, which represent the most common selling prices for each subcategory.
- Identifying pricing trends: The peak tracing analysis revealed a left-skewed distribution, indicating that lower-priced items dominated the market in terms of volume. It demonstrated that higher quality grades (e.g., Grade A) consistently achieved higher market prices, while lower grades (e.g., Grade C, Ronya, Rags) were clustered at the lower end of the price spectrum. This visual approach clarified how quality grading influences market value, pricing strategies, and profitability.

QUANTITATIVE ANALYSIS

- Descriptive statistics: Descriptive statistics were used to calculate the mean, mode, and frequency distributions of perceived quality ratings for different grades and subcategories. This established baseline quality perceptions and identified patterns in pricing and market segmentation.
- Correlation analysis: A correlation analysis was performed to explore the relationship between grades (A, B, C) and subcategories (e.g., first, second, third, Ronya, rags, and textile waste) and their impact on pricing. This analysis provided insights into how grades affect market value and consumer preferences.

QUALITATIVE ANALYSIS

- Thematic and content analysis: Thematic analysis was conducted on qualitative data from interviews and open-ended survey responses to identify recurring themes related to grading practices, market strategies, and decision-making processes. Content analysis further coded responses to categorize feedback on grading systems, customer preferences, and perceived value.

Annex 2

New clothing harmonized system code that would be equivalent to HS Code 6309

—					
401519	6106	6116	6209	6302	940430
4203	6107	6117	6210	6303	—
4303	6108	6201	6211	6304	—
4304	6109	6202	6212	6305	—
5805	6110	6203	6213	6401	—
6101	6111	6204	6214	6402	—
6102	6112	6205	6215	6403	—
6103	6113	6206	6216	6404	—
6104	6114	6207	6217	6405	—
6105	6115	6208	6301	6406	—

Sustainable
Manufacturing and
Environmental
Pollution
Programme

UK International Development
Partnership | Progress | Prosperity