



# Technical Report on Assistive Technology and International Trade

Focus on select African countries

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## Foreword

The growing global demand for assistive technology underscores its essential role in achieving universal health coverage, promoting inclusion, and ensuring the rights of all people, particularly in low- and middle-income countries.

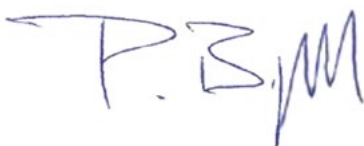
But access to assistive technology is not simply a health or social issue, it's also a trade issue. High tariffs, import taxes and complex custom procedures limit access to assistive products and raise costs.

At the core of ATscale's work is to build sustainable assistive product markets; to reshape global and regional markets to attract more buyers and suppliers of affordable, high-quality assistive products – especially those manufactured or assembled closer to users. Our goal is to create stronger, more-diverse supply chains that meet user needs and improve availability worldwide.

This technical report on assistive technology and international trade takes a critical, evidence-driven step in the right direction. It delves into the complex, and often overlooked, obstacles that impede the flow of affordable and appropriate assistive products to those who need it most. By mapping the landscape of import tariffs, local taxes, and non-tariff barriers across key African markets, this report shines a light on the structural trade barriers that drive up costs and restrict supply.

The findings presented here are an invaluable resource for policymakers, trade officials, and partners committed to improving the affordability and availability of assistive products. It offers a practical roadmap to implement effective fiscal and trade policies, streamline customs procedures, and strengthen the ecosystem. Without inclusive trade policies, globalization and digital transformation risks deepening existing inequalities for those already marginalized.

We invite policymakers, trade officials, and partners to join us in translating these findings into inclusive trade policies and a clear roadmap for action, ensuring affordable and appropriate assistive technology reaches all who need it.



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CEO, ATscale, the Global Partnership for Assistive Technology

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# Acronyms

<b>AfCFTA</b>	African Continental Free Trade Area
<b>APL</b>	Priority Assistive Products List
<b>ARMP</b>	Autorité de Régulation des Marchés Publics
<b>AT</b>	Assistive Technology
<b>AT2030</b>	Global Assistive Technology Programme
<b>BRI</b>	Belt and Road Initiative
<b>CAPMAS</b>	(Egypt) Central Agency for Public Mobilization and Statistics
<b>CEMAC</b>	Economic and Monetary Community of Central Africa
<b>CET</b>	Common External Tariff
<b>CNAS</b>	(Kenya) National Council for Social Action
<b>COMESA</b>	Common Market for Eastern and Southern Africa
<b>CRPD</b>	Convention on the Rights of Persons with Disabilities
<b>EAC</b>	East African Community
<b>EU-Egypt</b>	European Union–Egypt Association Agreement
<b>FOCAC</b>	Forum on China–Africa Cooperation
<b>GAFTA</b>	Greater Arab Free Trade Area
<b>GDP</b>	Gross Domestic Product
<b>GNI</b>	Gross National Income
<b>HDI</b>	Human Development Index
<b>HS</b>	Harmonized System
<b>IACC</b>	(Kenya) Inter-Agency Coordinating Committee
<b>INE</b>	(Mozambique) Instituto Nacional de Estatística
<b>ITC</b>	International Trade Centre
<b>KEMSA</b>	Kenya Medical Supplies Authority
<b>LIC</b>	Low-Income Country

<b>LMIC</b>	<b>Low- and Middle-Income Countries</b>
<b>LPI</b>	<b>Logistics Performance Index</b>
<b>MFN</b>	<b>Most Favoured Nation</b>
<b>NTB</b>	<b>Non-Tariff Barriers</b>
<b>OECD</b>	<b>Organisation for Economic Co-operation and Development</b>
<b>OPD</b>	<b>Organization of Persons with Disabilities</b>
<b>PTA</b>	<b>Preferential Trade Agreement</b>
<b>PwD</b>	<b>Persons with Disabilities</b>
<b>SADC</b>	<b>Southern African Development Community</b>
<b>SADC-EU EPA</b>	<b>SADC–EU Economic Partnership Agreement</b>
<b>SADC-UK EPA</b>	<b>SADC–UK Economic Partnership Agreement</b>
<b>SDGs</b>	<b>Sustainable Development Goals</b>
<b>UHC</b>	<b>Universal Health Coverage</b>
<b>UN</b>	<b>United Nations</b>
<b>UNCTAD</b>	<b>UN Conference on Trade and Development</b>
<b>UNFPA</b>	<b>United Nations Population Fund</b>
<b>UNICEF</b>	<b>United Nations Children’s Fund</b>
<b>UNOPS</b>	<b>United Nations Office for Project Services</b>
<b>VAT</b>	<b>Value Added Tax</b>
<b>WCO</b>	<b>World Customs Organization</b>
<b>WHO</b>	<b>World Health Organization</b>
<b>WITS</b>	<b>World Integrated Trade Solution</b>
<b>WTO</b>	<b>World Trade Organization</b>

# Definitions

**Assistive technology:** An umbrella term for assistive products and their related systems and services. Assistive products help maintain or improve an individual's functioning in cognition, communication, hearing, mobility, self-care and vision, thereby enabling their health, well-being, inclusion and participation<sup>1</sup>.

**Barriers to access:** Physical, financial, institutional or social obstacles that hinder or prevent persons with disabilities from obtaining assistive technologies. These include the absence of effective public policies and tax systems that raise the cost of essential products<sup>2</sup>.

**Customs duties:** “Duties laid down in the Customs tariff to which goods are liable on entering or leaving the Customs territory<sup>3</sup>”.

**Harmonized System Codes (HS Codes):** Generally referred to as “Harmonized System” or simply “HS”, the Harmonized Commodity Description and Coding System is a multipurpose international product nomenclature developed by the World Customs Organization. It comprises more than 5,000 commodity groups, each identified by a six-digit code. Countries use the system as a basis for their customs tariffs and for the collection of international trade statistics<sup>4</sup>.

**Human rights and disability:** Grounded in the biopsychosocial model, disability is understood as the interaction between health conditions and social barriers, which requires that trade policies adopt a human rights approach that extends beyond charity or purely medical views<sup>5</sup>.

**Most-Favoured Nation (MFN) tariffs:** MFN tariffs are the rates that WTO members agreed to apply to imports from other member states, except when preferential trade agreements – such as free trade areas or customs unions – apply<sup>6</sup>.

**Priority Assistive Products List (APL):** A country-specific list, derived from the WHO Priority Assistive Products List, that identifies essential assistive products governments should prioritize for procurement, financing, service delivery and regulatory action to ensure universal access<sup>7,8</sup>.

**Non-Tariff Barriers (NTBs):** Policy measures other than ordinary customs tariffs that can potentially have an economic effect on international trade in goods by altering quantities traded, prices or both<sup>9</sup>.

**Persons with disabilities:** Individuals who have long-term physical, mental, intellectual or sensory impairments, which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others<sup>10</sup>.

**Import tariffs:** A financial charge or tax on imported goods due on their importation. Most import tariffs are levied on the value of the imported good (e.g., a 10 per cent duty on a computer worth US\$ 1,000 will be US\$ 100)<sup>11</sup>.

**Taxes:** Compulsory, unrequited payments to the general government or to a supranational authority. They are unrequited in the sense that the benefits the government provides to taxpayers are generally not proportional to their payments<sup>12</sup>.

## Executive summary

- Globally, more than 2.5 billion people need one or more assistive products. Across Africa, over 200 million individuals need assistive products to live, work and fully participate in society. Yet, only a small fraction of those in need currently have access to these products<sup>13</sup>. The region is home to around 80 million persons with disabilities, alongside millions of older persons and individuals with chronic health conditions who would benefit from assistive products such as hearing aids, prostheses and orthoses, spectacles, wheelchairs and communication devices.
- While there is growing momentum to incentivize local manufacturing of assistive technology, the majority of African countries remain heavily dependent on imports. These imports, however, are subject to import tariffs, local taxes and high transportation costs due to limited infrastructure, which further restricts access.
- Markets outside the continent supply the majority of assistive products imported by African countries. Between 2016 and 2023, intraregional trade accounted for only 3.6 per cent of total imports.
- Assistive products are rarely classified as essential goods, with spectacles often regarded as ordinary consumption items in several tariff schedules. On paper, the average import tariff across Africa stands at 4.8 per cent, largely driven by higher duties on spectacles. Although official average tariffs appear modest – 1.4 per cent for hearing aids, 1.6 per cent for prostheses and orthoses and 1.8 per cent for wheelchairs, compared with 8.4 per cent for spectacles –, these rates are not consistently enforced in practice. Moreover, tariffs on assistive products remain disproportionately high compared to other essential commodities, such as medicines and basic medical supplies, further restricting access and affordability.
- Across the five analysed countries (Chad, Egypt, Kenya, Mozambique and the Republic of the Congo), the average statutory tax burden on assistive products is substantially higher than that on other essential health goods, despite partial exemptions in some jurisdictions. Value-added tax (VAT) averages around 16.6 per cent across these countries, ranging from 14 per cent in Egypt to 18 per cent in the Republic of the Congo and Chad. Hearing aids, prostheses and orthoses, and wheelchairs often face 0-5 per cent duty, whereas spectacles, lenses and frames are typically treated as consumer goods and seldom included in medical or disability exemptions. In practice, the effective tax burden is unevenly applied due to administrative discretion and ambiguous tariff classifications, meaning that the rates “on paper” often understate the actual fiscal barriers faced by importers and users.

- Tariffs and tax exemptions are not granted automatically. Importers need prior government authorization to benefit from these reductions. However, securing this authorization is often a lengthy and bureaucratic process, to the point that some importers prefer to pay the full tariffs and taxes rather than navigate customs clearance and exemption procedures. In addition, frequent misclassification further complicates the import process. Customs officials often lack sufficient knowledge about what constitutes assistive technology, which products fall under this category and which items are eligible for reduced tariffs or exemptions.
- Preferential trade agreements (PTAs) have become a critical yet underutilized lever for improving the affordability and availability of assistive technology in Africa. Given that most assistive products are imported, PTAs could offer a mechanism to reduce or eliminate tariffs, thereby lowering import costs. Africa's dense network of regional and inter-regional agreements – such as the African Continental Free Trade Area (AfCFTA), the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), the Southern African Development Community (SADC) and the Economic and Monetary Community of Central Africa (CEMAC) frameworks, along with bilateral agreements with the EU, EFTA and the United Kingdom – already provides for gradual or full tariff liberalization on most assistive technology products. However, the impact of these agreements remains largely nominal: trade data show that over 90 per cent of assistive technology imports in countries such as Chad and Kenya still come from non-PTA partners. Moreover, complex customs procedures, inconsistent application of preferences and limited awareness among importers often prevent preferential tariffs from being realized in practice.
- Import tariffs, local taxes and logistical expenses can dramatically drive up the final price of assistive products. For example, frames and mountings for spectacles imported into Kenya are subject to an import tariff of up to 10 per cent and a 16 per cent VAT. Logistical expenses are also substantial, with transportation expenses reaching up to 25 per cent. Furthermore, each day the cargo is held at the destination for clearance may incur an additional storage fee of up to US\$ 500. Together, these factors can amount to an additional 59.5 per cent increase in the product's tariff, tax and logistics costs alone. Over time, these costs accumulate and can drive the product price to 1.6 times the ex-factory price.
- The absence of reliable and up-to-date national data on the prevalence of functional difficulties and the need for assistive technology, along with other relevant information on local demand and supply, combined with the lack of a dedicated institutional body to coordinate assistive technology policies, continues to undermine evidence-based decision-making. Without consistent data, the identification of priority products, or a centralized authority responsible for data collection and planning, governments struggle to estimate demand, align trade and fiscal incentives, and implement coherent strategies. These institutional and informational gaps lead to fragmented procurement, inefficient public spending and persistent inequality in access to assistive products across African countries.

- The eight recommendations outlined in this technical report provide a practical roadmap for action. African countries can strengthen access to assistive technology by reducing high tariffs and taxes – especially on spectacles – through evidence-based cost–benefit analyses, while ensuring that existing exemptions are effectively implemented via transparent, simplified and accessible procedures. Countries should improve product classification by introducing more detailed Harmonized System (HS) codes and national tariff-line extensions, designating assistive products as essential goods to prioritize them in customs and fiscal policies, and investing in targeted training for customs officers, trade officials and importers. Aligning trade policies with national and regional production strategies is key to building resilient assistive technology supply chains, including by leveraging regional trade agreements and supporting local assembly, regional manufacturing hubs and pooled procurement. Public awareness campaigns can help ensure that tariff reductions and exemptions are widely understood and utilized. Lastly, governments should establish formal cross-ministerial coordination bodies with meaningful participation of organizations of persons with disabilities (OPDs) to harmonize implementation, strengthen accountability and integrate economic ministries into assistive technology policy decision-making.

# 1. Introduction

Globally, over 2.5 billion people need one or more assistive products. However, nearly one billion individuals still lack access to the assistive products they require. This gap is particularly severe in low-income countries, where only 10 per cent of the population has access to necessary assistive products – in some contexts, this figure drops as low as 3 per cent<sup>14</sup>. Various barriers, including the high cost of products, underexplored trade potential, import tariffs and logistical challenges, hinder access to assistive products in these regions<sup>15</sup>.

A contributing factor is the structural mismatch between the locations where assistive products are manufactured and those with the highest demand. Production is heavily concentrated in North America, Europe and China, regions with long-standing assistive technology industries supported by strong research ecosystems and regulatory frameworks<sup>16</sup>. In contrast, manufacturing in many African countries remains scarce or non-existent, despite growing policy efforts to attract investment in this sector. As a result, people in need depend largely on imported products<sup>17,18</sup>.

Imported assistive products often face relatively high import tariffs, local taxes and high transportation costs driven by limited infrastructure – factors that significantly restrict access. In addition to these financial barriers, access is further constrained by non-financial challenges, including incomplete regulatory systems, lack of coordination among relevant institutions, limited service delivery capacity and shortages of trained personnel for assessment, fitting and maintenance.

Tariffs and taxes play a critical role in determining the affordability and availability of assistive technology. Although they pertain to two different realms, of trade and fiscal policies respectively, coherence among them is key to creating enabling regulatory frameworks. While trade tariffs are often charged on imported goods and ruled by national trade and industrial or development policies, value added tax or other taxation mechanisms are charged on goods and services at different stages of the supply chain to raise revenues, influence prices, and even redistribute wealth. They frequently overlap and both shape the national or regional landscape that can strengthen or weaken the general framework that imply on higher costs to local providers and end users.

Along with raising costs for users, they can also discourage importers and distributors from entering or expanding the market, ultimately reducing product variety and competition. Moreover, inconsistent tariff classifications and unclear or incomplete tax exemptions may create administrative uncertainty, undermining efforts to integrate assistive products into health and social protection systems. Given Africa's substantial reliance on imported assistive products, this technical report focuses on mapping the tariffs and taxes landscape affecting assistive technology in the region, assessing key challenges and proposing practical policy options to improve access and affordability.

Beyond economic or market-readiness considerations, access to assistive technology is framed in international law as a human-rights obligation. The UN Convention on the Rights of Persons with Disabilities (CRPD) requires States Parties to ensure access to affordable, quality assistive products and related services as part of guaranteeing equal participation and non-discrimination<sup>19</sup>. The CRPD positions assistive technology not as a discretionary social good but as an enabling measure that underpins the enjoyment of multiple rights, including mobility, health, education, work and independent living. The Committee on the Rights of Persons with Disabilities' General Comment No. 2 on Accessibility underscores that States must proactively remove barriers, including regulatory and fiscal bottlenecks, such as tariffs and taxes, that limit access.

Regional instruments, such as the African Charter on Human and Peoples' Rights and the Protocol to the African Charter on the Rights of Persons with Disabilities, similarly obligate governments to adopt laws, standards and budgetary measures that expand assistive technology access<sup>20</sup>. The 2030 Agenda for Sustainable Development (especially SDGs 3, 4, 8, 10, 11 and 17), for instance, recognizes assistive technology as necessary for achieving inclusive development, and the World Health Organization (WHO) Resolution WHA71.8 calls on Member States to strengthen national assistive technology ecosystems through financing, regulatory reforms and local capacity<sup>21</sup>.

This technical report provides an overview of the current state of trade and tariffs for assistive products in Africa. It examines gaps between trade and tax policies, legal and institutional frameworks, and on-the-ground realities. It includes country-level assessments and cross-comparative analyses of five select countries, highlights best practices from other countries and synthesizes evidence from the existing literature. The conclusion of this report presents actionable recommendations to promote more inclusive and coherent trade and fiscal policies for assistive technology in Africa.

## 1.1 Statement of the problem

The aim of this study was to establish a clear baseline of international trade in assistive products in Africa, encompassing taxes and tariffs, to identify the key challenges that restrict access, and to provide preliminary recommendations to support evidence-based policymaking. The primary audience for this analysis comprises policymakers at global, regional and national levels, who are responsible for shaping trade, health, social protection and industrial policies that affect access to assistive technology.

In African countries, the manufacture of assistive technology remains scarce or non-existent, forcing people in need to rely on imports. In this context, international trade plays a crucial role in making assistive technology available to those who need it. However, access to imported assistive products in the African region is restricted by multiple barriers:

- **High dependence on imports:**

Most assistive products are sourced from abroad, leaving countries vulnerable to supply chain disruptions, tariffs and international trade costs.

- **Prohibitive tariffs and taxes for specific assistive technology categories:**

For example, spectacles imported into Kenya are subject to an import tariff of up to 10 per cent and a VAT of 16 per cent, adding up to 27.6 per cent to the product's cost in tariffs and taxes alone.

- **Logistical and administrative barriers hinder access:**

High transportation costs place African countries at a disadvantage in international trade and the efficiency of the clearance process remains a challenge in most African countries.

- **High need but limited effective demand:**

Demand remains low due to limited awareness of available solutions, insufficient information on product options and weak referral pathways, factors that discourage users from seeking assistive technology and reduce incentives for suppliers to enter the market.

- **Inconsistent regulatory and fiscal frameworks:**

Lack of harmonization of exemptions and import regulations discourages market entry and increases procurement complexity.

Identifying strategies to overcome these barriers to international trade is therefore essential to improving access to assistive technology across the continent.

## 1.2 Methodology

### 1.2.1 Scope of the study

This technical report provides a comprehensive assessment of the trade environment, tariff structures, local taxes and policy regimes affecting four priority assistive products (hearing aids, prostheses and orthoses, spectacles and wheelchairs) in five select countries (Chad, Egypt, Kenya, Mozambique and the Republic of the Congo). The report focuses on the markets and trade of the four assistive products with the highest demand. The countries were selected to represent a diversity of African countries at different stages of maturity with respect to international trade and the assistive technology sector. However, these five countries are not thought to be representative of the entire African continent.

### 1.2.2 Product selection

#### Identification of HS codes

An initial mapping of the selected HS codes across national tariff schedules was conducted to assess consistency in classification. This process utilized HS nomenclature, World Customs Organization (WCO) guidelines and the WHO Assistive Products List, cross-referencing international databases (ITC, UN Comtrade, WITS) and internal ATscale datasets and product narratives<sup>22</sup>. Through an iterative

screening process, 15 HS codes that specifically map finished assistive products were selected<sup>a</sup>. Although it is acknowledged that raw materials and parts also incur tariff burdens, these inputs were deliberately excluded due to the broad and non-specific nature of HS codes for materials, which renders assistive technology-related imports indistinguishable on a global scale. Moreover, their inclusion could produce methodologically unreliable attributions about trade barriers. Therefore, focusing on finished products provides greater validity and clearer reform levers.

### Misclassification challenges

Substantial discrepancies emerged during the process, particularly for spectacle frames, lenses and optical components, which are often categorized as consumer goods rather than assistive products. Variations in national interpretations, code splitting and code aggregation create inconsistencies in tariff application, limit the visibility of assistive technology within customs systems and impede access to tax exemptions. These classification issues constitute a major finding, affecting both data comparability and policy implementation. This is not just a methodological constraint but a structural trade barrier that directly affects access to assistive technology and results in: i) inconsistent tariff and VAT treatment; ii) poorly aligned exemption regimes; iii) difficulty for importers to claim existing benefits; iv) distorted or incomplete trade statistics; and v) administrative delays due to unclear documentary requirements.

## 1.2.3 Regional focus, target countries and rationale

Africa was selected as the initial region of analysis due to the magnitude of the unmet need for assistive products (as low as 3-10 per cent coverage), limited local manufacturing capacity, strong dependence on imports and consistency with global ATscale priorities. Africa provides a compelling context for understanding how tariffs, taxes and other import-related barriers influence the availability, affordability and market development.

### Country selection: criteria and process

The selection process for target countries followed two stages:

- **Stage 1:** Quantitative screening, cross-referencing import volumes (2016-2023<sup>b</sup>) and average MFN tariffs.
- **Stage 2:** Strategic screening, using additional criteria, guided by ATscale priorities, including economic and demographic significance; regional diversity (North, East, South and Central Africa); linguistic diversity (anglophone, francophone, lusophone); and national assistive technology priorities.

a For hearing aids (HS code 902140); prostheses and orthoses (HS codes 902110, 902131 and 902190); spectacles, lenses, frames and glasses (HS codes 701510, 900140, 900150, 900311, 900319, 900390 and 900490); and wheelchairs (HS codes 871310, 871390 and 871420). 900490); and hearing aids (HS code 902140).

b The time frame from 2016 to 2023 was selected to account for potential anomalies in international trade patterns caused by the COVID-19 pandemic. The pandemic disrupted global trade flows, supply chains and market dynamics from 2020 onward, creating irregularities that could distort the analysis if a shorter time frame were used. By starting the data collection in 2016, the analysis incorporates pre-pandemic trends, enabling a more balanced and representative evaluation of trade activities over a longer period.

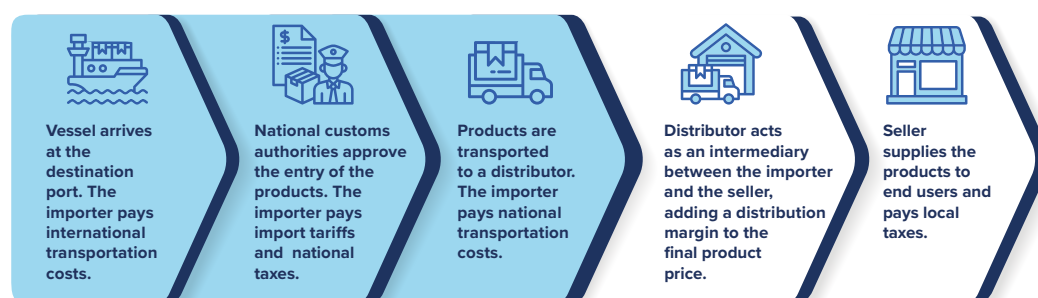
The final sample – Chad, Egypt, Kenya, Mozambique and the Republic of the Congo – encompasses a wide range of trade regimes, economic structures and assistive technology-related systems.

### 1.2.4 Analytical framework

A mixed-methods approach was applied, combining quantitative datasets with legal, institutional and qualitative evidence. For the quantitative assessment, international trade and tariff data were extracted from the ITC Trade Map, WTO Tariff Download Facility, UN Comtrade, WITS, and World Bank income classifications. National tariff schedules, customs laws, VAT legislation and PTAs were reviewed to map tariff regimes, tax instruments and exemption mechanisms. Non-tariff import-related costs, such as storage, brokering and clearance fees, were characterized when reported in national regulations or during stakeholder consultations.

Each in-depth study of the select countries followed a harmonized 11-component analytical structure: 1. country highlights; 2. situational analysis of persons with disabilities; 3. institutional framework for disability policies; 4. international commitments and constitutional and legislative contexts; 5. institutional framework for international trade and taxes; 6. access to assistive products: imports, donations and market characteristics; 7. preferential tariffs and the impact of PTAs by product category; 8. tax structure, VAT regimes and exemption procedures; 9. logistical and port-clearance aspects; 10. government procurement mechanisms relevant to assistive technology; and 11. local production, assembly capacity and industrial considerations. Trade data, legal documents, institutional mapping and qualitative insights from national stakeholders supported each component.

The analysis covered the import-to-distributor pathway – including port arrival, customs clearance, tax and tariff application, and release to importers and wholesale distributors. The distributor and retail stages are referenced contextually but were not the primary analytical focus, as shown in the figure below.



**Figure 1.** Import process for assistive products. The first three steps are examined by the report.

#### Qualitative evidence collection

Key informant interviews were conducted with health professionals, experts, policymakers, OPDs representatives and assistive technology service providers. Three extensive country-level participatory dialogues were used to validate findings and ensure contextual accuracy, particularly regarding

exemption procedures, logistical bottlenecks and the functioning of procurement systems and bureaucratic hurdles. Over 40 experts were engaged throughout the data collection and analysis process.

### **1.2.5 Advisory governance structure: Technical Advisory Group (TAG)**

A central methodological element was the formation of a Technical Advisory Group (TAG) at the outset of the project. The TAG included experts from UN agencies and international trade institutions, assistive technology system experts and market-shaping and industrial policy specialists. TAG contributions supported methodological refinement, validation of HS classifications, interpretation of tariff structures and identification of relevant policy pathways and regional instruments.

### **1.2.6 Methodological caveats and limitations**

Some limitations shaped the analysis, including:

- HS misclassification (a major constraint affecting tariff accuracy, exemption eligibility and data comparability).
- Data gaps and reporting issues (e.g., mirror data required for the Republic of the Congo, 2023).
- Difficulties quantifying Non-Tariff Barriers (storage fees, brokering charges and port delays are ad hoc and lack standardized reporting).
- Exclusion of raw materials (undistinguishable at the global level).
- Retail pricing out of scope (focus on import-to-distributor stages).
- Global shocks (COVID-19 and supply-chain disruptions that affected trade flows between 2020 and 2021).

## 2. Current state of trade and tariffs across Africa

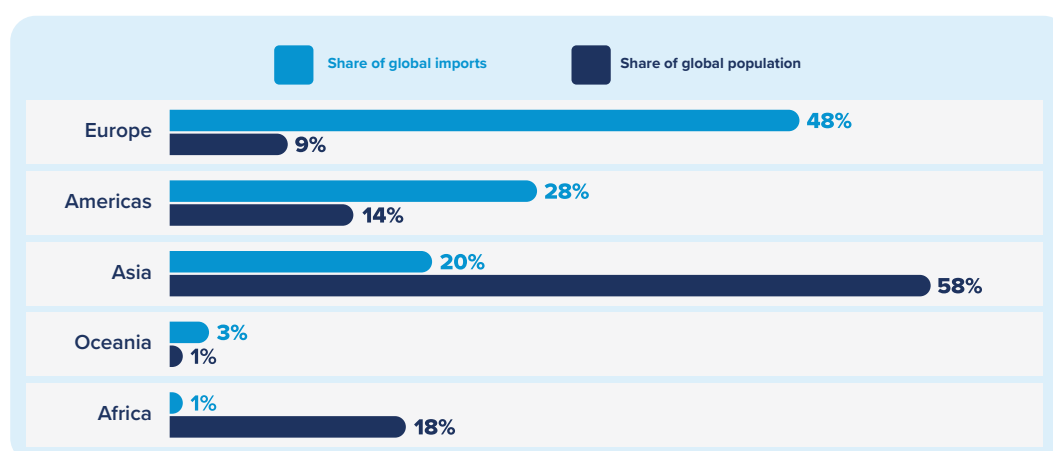
The first step in overcoming barriers to accessing assistive products is to obtain relevant information that can support and guide policymaking. However, in many low- and middle-income countries (LMICs), reliable data on trade and tariffs of assistive products remain limited. This section aims to address this gap by presenting and analysing data on trade flows, import tariffs, local taxes, non-tariff barriers and PTAs for assistive products in Africa.

### 2.1 Overview of assistive products trade in Africa

This initial subsection outlines relevant elements of international trade in assistive products across the African continent, offering essential context for understanding the region’s trade dynamics.

#### 2.1.1 The African continent accounts for the smallest share of global imports of assistive products

Between 2016 and 2023, African countries imported spectacles, hearing aids, prostheses and orthoses, and wheelchairs valued at a total of US\$ 6.5 billion. In contrast, global imports of these goods reached US\$ 606.3 billion during the same period, accounting for just over 1 per cent of global imports. Considering that Africa accounts for 18 per cent of the world’s population, the continent’s import levels of assistive products should be considerably higher. Figure 2 illustrates the share of global imports of hearing aids, prostheses and orthoses, spectacles and wheelchairs by region<sup>c</sup> from 2016 to 2023. It highlights a significant gap between demand and supply in the African continent.



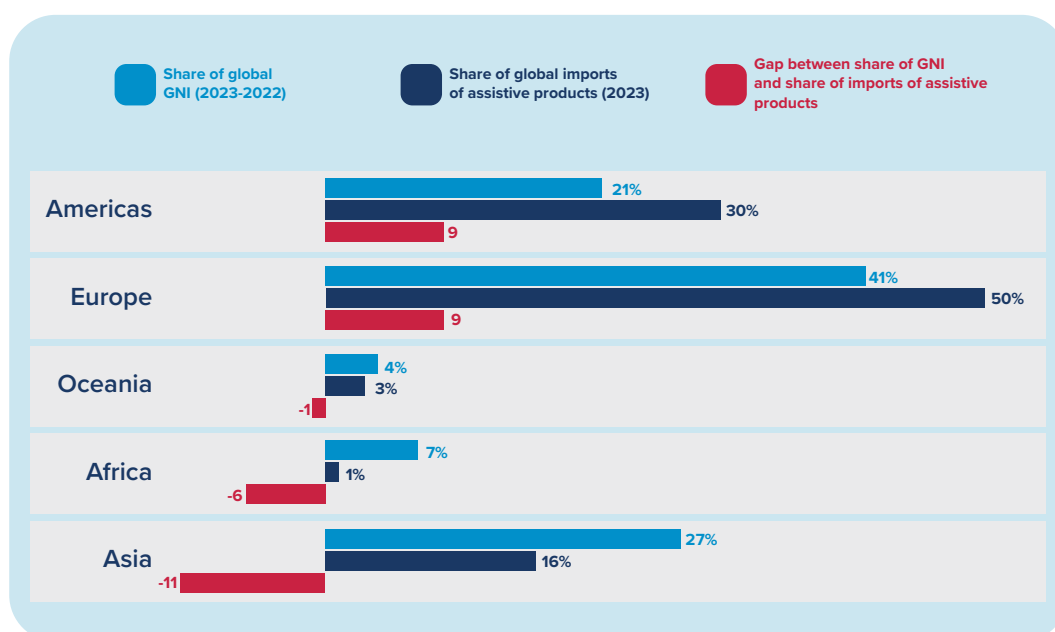
**Figure 2.** Share of global imports of assistive products (2016-2023) and share of global population (2024), by region (per cent of total).

<sup>c</sup> The regional classification follows the United Nations Standard Country or Area Codes for Statistical Use, commonly known as the M49 standard.

## 2.1.2 Africa’s imports of assistive products are below potential

The discrepancy between African countries’ imports of assistive products and those of the rest of the world becomes even more evident when considering the potential for such imports, based on each region’s income level. A comparison of the Gross National Income (GNI) share of each region with its share of assistive product imports in 2023 shows that Africa’s share of global imports is smaller than its share of global GNI. This suggests that the region’s import intensity could be higher relative to its economic size.

Figure 3 illustrates the gap between GNI and actual imports of assistive products. Africa’s negative gap is the second-largest, ranking just above Asia’s. It is important to note, however, that several factors influence import levels in each region, and this analysis does not aim to capture all of them. Nevertheless, it indicates that the African continent has the potential to increase imports of assistive technology, considering its income level in comparison to other regions of the world.



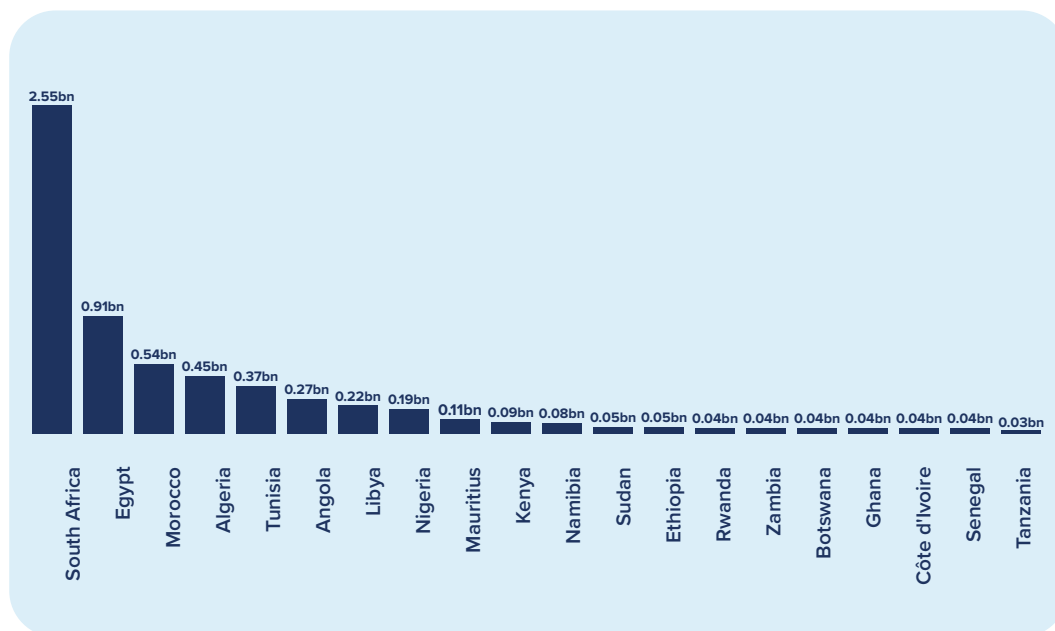
**Figure 3.** Import intensity of assistive products in 2023 by region.

## 2.1.3 South Africa is the leading importer of assistive products in the region

In Africa, South Africa emerges as the leading importer of assistive products, accounting for 39 per cent of the region’s total imports. Between 2016 and 2023, the country’s imports of hearing aids, prostheses and orthoses, spectacles and wheelchairs amounted to US\$ 2.55 billion<sup>d</sup>. This aligns with South Africa’s role as a central economic hub on the continent and its position as the largest importer

<sup>d</sup> Data reported by the importing countries was prioritised. However, when such data was unavailable, data reported by the exporting countries – commonly known as “mirror data” – was used instead. Chad, Equatorial Guinea, Eritrea, Somalia and South Sudan rely entirely on mirror data for all import years. Algeria, Burundi, Cameroon, Comoros, Djibouti, Ghana, Guinea, Guinea-Bissau, Liberia, Libya, Mali, Rwanda, Sierra Leone, Sudan and the Republic of the Congo have mirror data only for certain years.

across several other product categories. In 2024 alone, its imports accounted for 14.8 per cent of the continent’s total<sup>23</sup>. In addition, South Africa also has comparatively stronger disability-related legislation, policies and government support programmes than many other LMICs, which helps explain its leading position in imports across the continent<sup>24</sup>. Figure 4 illustrates the largest importers in the region.

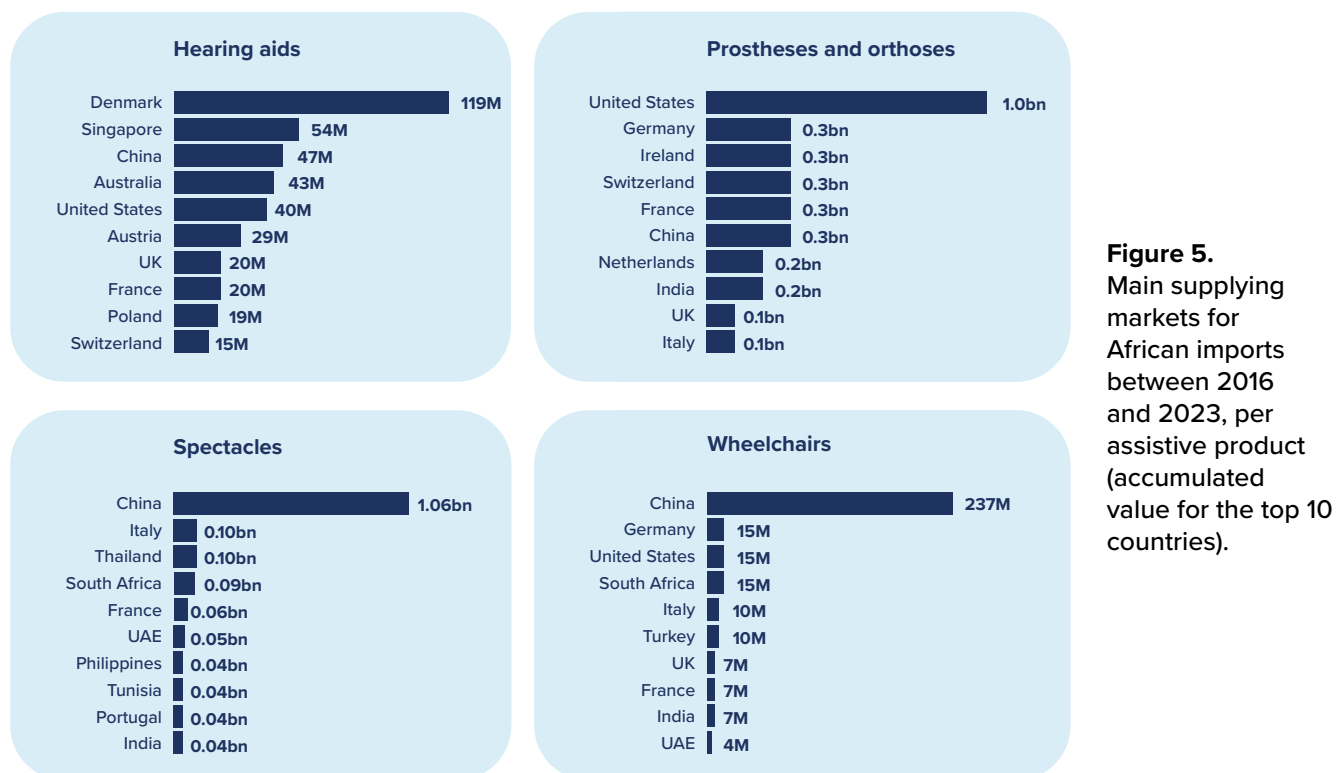


**Figure 4.** African imports of assistive products between 2016 and 2023 by country (accumulated value for the top 20 countries).

### 2.1.4 Africa relies on external markets for assistive product imports

Between 2016 and 2023, intraregional trade within the African continent accounted for only 3.6 per cent of total imports, with South Africa serving as the dominant regional exporter. The country hosts some local production capacity and also functions as a regional hub for major global manufacturers and suppliers, which helps explain its leading position. However, the majority of assistive products imported by African countries are sourced from outside the continent. China leads exports of both spectacles and wheelchairs to Africa, representing 56 per cent and 68 per cent of these markets, respectively<sup>e</sup>. In contrast, the United States is the primary supplier of prostheses and orthoses, with a 27 per cent share, while Denmark dominates the hearing aid market, holding 25 per cent of African imports. Figure 5 shows the largest exporters of assistive products to Africa during this time period.

<sup>e</sup> Taiwan, Province of China, is one of the key suppliers of spectacles and wheelchairs, having exported US\$ 36 million in spectacles and US\$ 15 million in wheelchairs to African countries between 2016 and 2023.



**Figure 5.** Main supplying markets for African imports between 2016 and 2023, per assistive product (accumulated value for the top 10 countries).

These figures are somewhat expected, as China, the United States and Denmark are all major global hubs for the manufacture of assistive products – Denmark alone is home to three of the “Big Six” hearing aid companies. However, this strong dependence on foreign production brings several challenges. Imported products are not always adapted to local contexts and many countries lack a sufficiently trained workforce to fit, maintain and repair them. Additionally, only a few large corporations have established local offices in Africa, while most global manufacturers operate through smaller medical product distributors.

## 2.2 Overview of tariffs and taxes applied to assistive products in Africa

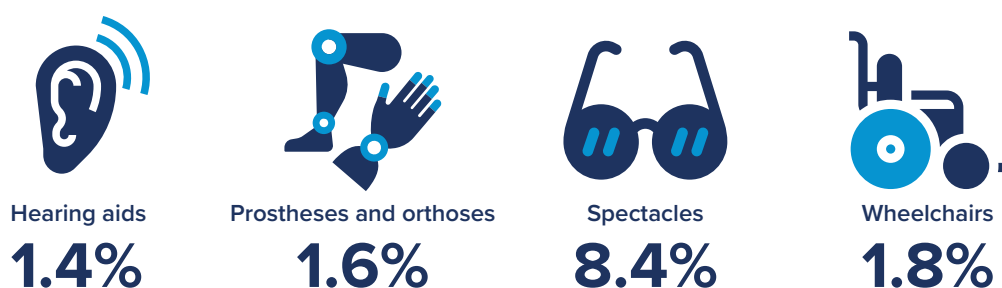
This technical report focuses on ad valorem tariffs and taxes, which are charges calculated as a percentage of a product’s value. These are not the only costs importers face, as many other country-specific fees and taxes may apply when importing products into a country. This report, however, concentrates on the most common and standardized charges: import tariffs and VAT. Import tariffs are paid by importers to the national government upon entry of goods into the country, whereas the VAT is a general consumption tax applied to goods and services at each stage of the supply chain. In most VAT-based systems, the importer is responsible for paying the VAT at the time of customs clearance. Frequently, the importer can recover the VAT if registered for VAT deduction. Consumers cannot recover it, as the VAT becomes part of the total costs of the imported goods. The next sections provide an overview of these charges and their impact on the final price of assistive products.

## 2.2.1 Import tariffs applied to assistive technology

Import tariffs are widely applied by most countries to goods entering their borders. These tariffs are generally used to make imported products more expensive than domestically produced ones, to protect local industries and to generate government revenue. They can take the form of either ad valorem charges (a percentage of the product’s value) or specific duties (a fixed amount per item or weight) and are paid by suppliers or their import agents at the time the goods enter the country. Most WTO members routinely report their import tariffs to the organization, helping ensure transparency and allowing a clearer understanding of tariff structures worldwide.

There are two main types of import tariffs: Most Favoured Nation (MFN) tariffs and preferential tariffs applied under trade agreements, such as bilateral or regional trade agreements, free trade areas or customs unions. MFN tariffs are the rates that WTO members apply to imports from all other members, except where preferential agreements are in place. In practice, MFN tariffs are often the highest – or most restrictive – rates charged among WTO members. When PTAs exist, import tariffs applied between partner countries may be lower than the corresponding MFN rates. This subsection discusses the general MFN tariffs applied to assistive products across the African continent and within the select countries.

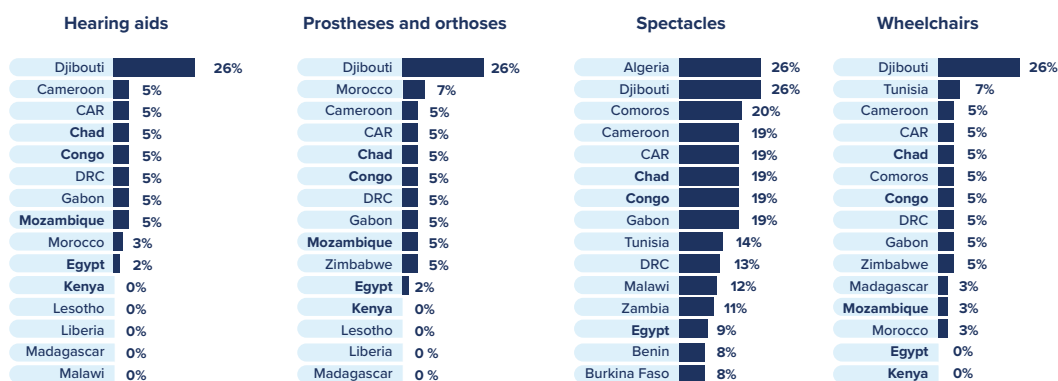
The average import tariff on hearing aids, prostheses and orthoses, spectacles and wheelchairs in Africa is 4.8 per cent. This average is mainly driven by tariffs on spectacles. While the average import tariff is 1.4 per cent for hearing aids, 1.6 per cent for prostheses and orthoses, and 1.8 per cent for wheelchairs, it rises to 8.4 per cent for spectacles.



**Figure 6.** Average import tariffs for assistive products in the African continent per product type.

While most countries grant tariff exemptions for hearing aids, prostheses and orthoses, and wheelchairs, many still impose duties on spectacles, lenses and frames – sometimes reaching up to 30 per cent. This disparity reflects the fact that spectacles do not receive the same fiscal treatment

as other assistive products. In several tariff schedules, spectacles are still classified as consumer or even luxury goods, whereas other assistive products are recognized as essential supports for persons with disabilities. This becomes particularly evident when compared with broader medical devices, as many African countries exempt or zero-rate medicines and certain medical supplies (especially since COVID-19), while spectacles continue to face higher duties<sup>25</sup>.



**Figure 7.** Average import tariffs across Africa per assistive product (Top 15 countries with the highest tariffs).

\*Mozambique (2 per cent tariff) and Kenya (5 per cent tariff) are not among the top 15 countries with the highest tariffs on spectacles.

There are, however, variations in the import tariffs applied across countries. Among the select countries, tariffs on hearing aids, prostheses and orthoses and wheelchairs range from 0 to 5 per cent, whereas tariffs on spectacles can go from 0 to 30 per cent. Even within the same product category, tariff rates may differ, as each HS code is assigned its own tariff treatment. When tariffs are zero-rated, importers are exempt from paying duties for that specific product category, an approach governments often use to encourage imports. This is the case for some assistive products in several of the select countries. Table 1 below presents the MFN import tariffs for the selected product categories and assistive products.

Product group	Description	Product HS code	Chad	Congo	Egypt	Kenya	Mozambique
Hearing aids	Hearing aids, excluding parts and accessories	902140	5%	5%	2%	0%	5%
Prostheses and orthoses	Orthopaedic or fracture appliances	902110	5%	5%	2%	0%	5%
	Artificial joints	902131	5%	5%	2%	0%	5%
	Artificial parts of the body	902139	5%	5%	2%	0%	5%
	Other orthopaedic appliances	902190	5%	5%	2%	0%	5%

**Table 1.** Import tariffs across the select countries per assistive product category.

Spectacles	Glasses for corrective spectacles	701510	5%	5%	5%	0%	7.5%
	Spectacle lenses of glass	900140	10%	10%	10%	0%	0%
	Spectacle lenses of other materials	900150	10%	10%	10%	10%	10%
	Frames and mountings for spectacles of plastics	900311	30%	30%	10%	10%	0%
	Frames and mountings for spectacles of other materials	900319	30%	30%	10%	10%	2.5%
	Parts of frames and mountings for spectacles	900390	30%	30%	10%	10%	2.5%
	Spectacles, goggles and the like, corrective, protective or other	900490	18.3%	18.3%	10%	5%	2.5%
Wheelchairs	Carriages for disabled <sup>f</sup> persons not mechanically propelled	871310	5%	5%	0%	0%	5%
	Other carriages for disabled persons	871390	5%	5%	0%	0%	5%
	Parts and accessories of carriages for disabled persons	871420	5%	5%	0%	0%	0%

However, reduced or zero-rated tariffs on paper do not always translate into lower costs in practice. The application and interpretation of HS codes largely depends on the knowledge and discretion of the local customs officer. When officials are not fully aware of what constitutes an assistive product, incorrect classifications may be applied, leading to tariffs that are significantly higher than those officially documented.

<sup>f</sup> "The term "disabled" is employed by the Harmonized System codes."

## 2.2.2 Tax structure for assistive technology

Across the five select countries, VAT systems share a broadly similar structure: a standard VAT rate applied to most goods and services, produced domestically or imported, complemented by a limited set of exemptions or zero-rated items typically linked to essential sectors such as health, education and basic foodstuffs.

While the standard VAT rate varies by country, it generally ranges from 10 per cent to 20 per cent, reflecting continental trends. In Egypt, Kenya and Mozambique, VAT systems are relatively established and operate under comprehensive national VAT laws and implementation codes, with periodic amendments and targeted exemptions. Both Chad and the Republic of the Congo implement VAT within the CEMAC framework, which harmonizes key features across member states. Despite this shared structure, the treatment of assistive products under VAT regimes remains inconsistent, with some products benefiting from full exemptions while others are taxed at the standard rate. This variation contributes to significant differences in the final consumer price.

Category	Chad	Congo	Egypt	Kenya	Mozambique
Standard rate	18%	18%	14%	16%	16%
VAT mechanism	Exemption	Exemption	Exemption	Zero-rate exemption	Exemption
Hearing aids	✓	✓	✓ ✓ ⚙️	✓	●
Prostheses and orthoses	✓	✓	●	✓	✓
Spectacles	● ● ▲	● ● ▲	●	● ● ▲	●
Wheelchairs	✓	✓	✓ ✓ ⚙️	✓	✓

**Figure 8.** VAT comparison chart on select African countries.

✓ Green = Zero-rated/Exempted (Most favorable)

● Yellow = Ambiguous/Partially covered

⚙️ Includes parts and pieces

▲ Includes more HS codes

Numerous African countries exempt or zero-rate medicines and some medical supplies (especially since COVID). Nevertheless, assistive products are not always included in those health exemptions and may be subject to standard VAT<sup>26</sup>. At a regional level, Sub-Saharan Africa's MFN tariffs on medical goods average 9.2 per cent, higher than those of advanced economies, which average 1.9 per cent.

Furthermore, assistive technologies often fall within medical device categories that aren't universally exempt – hence, in the absence of such exemptions, they may incur more taxes than medicines and, occasionally, other essential goods that benefit from temporary VAT relief (e.g., soap, sugar, cooking oil). Global policy guidance (WHO/UNICEF) flags taxes and tariffs as affordability barriers for assistive technology and urges governments to remove them, as assistive technology often does not receive equivalent tax status as health-related products<sup>27</sup>.

Hearing aids, prostheses and orthoses and wheelchairs are frequently exempt from VAT, whereas spectacles and spare parts are often taxed at the regular VAT rate in the African region. Some countries include general provisions in their disability rights acts that mandate tax law exemptions for materials, articles and equipment for persons with disabilities. However, the implementation of such provisions still relies on tax-law-specific listings, and these listings and taxation frameworks vary considerably across the five select countries. All jurisdictions provide VAT exemptions for some assistive products. Yet, the scope of exemptions, legal clarity and implementation differ.

### Customs duties

Customs duty is a broad legal term for the taxes levied by customs authorities on goods entering or leaving a country, of which tariffs are the main component. **It includes the tariff and may also cover other import charges**, such as anti-dumping duties, countervailing duties, or any other charges. Customs duties are **governed by the national customs code or a regional Common External Tariff**.

**All tariffs are customs duties, but not all customs duties are tariffs!**

### Taxes

A tax is a compulsory financial charge imposed by a government on individuals or entities to raise revenue for public purposes. Taxes typically refer to internal taxes, such as Value-Added Tax (VAT), Goods and Services Tax (GST), or excise taxes, that **apply to both imported and domestically produced goods** once they enter the domestic market.

The comparative analysis of VAT and customs duties for assistive technology across Chad, Egypt, Kenya, Mozambique and the Republic of the Congo reveals significant diversity in taxation approaches. Notably, Kenya distinguishes itself by uniquely differentiating between VAT exemption and zero-rating frameworks for goods and supplies. Meanwhile, the CEMAC member countries – Chad and the Republic of the Congo – frame their exemption lists according to the HS Code's classification, which reduces interpretation errors. Egypt and Mozambique apply more conventional exemption frameworks with varying degrees of specificity and clarity. What distinguishes Egypt's VAT exemptions, however, is the coverage of parts and pieces of wheelchairs and hearing aids.

The standard VAT rate in Egypt is 14 per cent, applicable to all imported goods, regardless of the purpose of importation, including personal use or special purposes<sup>28</sup>.

The VAT law offers clear legal recognition of certain assistive technology categories. Most products benefit from full VAT exemption under item 32 of the List of Goods and Services Exempted:

- Wheelchairs, separate parts and pieces
- Hearing aids for the deaf<sup>g</sup> and parts
- Prosthetic devices worn, carried or implanted into the body to remedy deficiency, inability, physical deformity<sup>h</sup> or parts and necessary accessories.

The exemption for parts and pieces of wheelchairs, hearing aids and prosthetic devices is distinctive from all of the other select countries.

The individual or entity designated as the importer in Egypt is entitled to deduct input VAT, provided they retain the required customs documentation. If the VAT-registered person is not the importer, they are not eligible to deduct VAT on imported goods.

Customs duties range from 0 to 60 per cent of CIF value for many goods. Egypt's Customs Law No. 207/2020<sup>29</sup> provides a list of exemptions under Articles 19-21 focused on imports by governmental and university hospitals, including medical devices and medical supplies. Assistive products may qualify for exemption.

Egypt has an advanced national single-window system and portal for foreign-trade facilitation ([nafa.gov.eg](http://nafa.gov.eg)), implemented by the Egyptian Customs Authority in collaboration with the Minister of Technology Services. Through the tariff-lookup module, users can search for tariff lines and VAT rates using the portal's "Tariff Items Inquiry" function. Examples of targeted HS codes illustrate that, despite the broad language of the VAT Law, there are nuances in effective exemptions. For instance, all three HS codes for wheelchairs and parts (HS 871310, 871390, 871420) are VAT-exempt. Some fracture appliances and

**Box 1.**  
Egypt: A structured but selective exemption model.

g The term "deaf" is employed by the Egyptian VAT Law.

h The terms "deficiency", "inability" and "deformity" are employed by the Egyptian VAT Law.

artificial joints are also exempt (e.g., HS 902131), while others are not (e.g., HS 902110). The same applies to spectacles-related HS codes: certain items receive VAT exemptions (e.g., HS 701510), whereas others do not (e.g., HS 902140).

**Mozambique’s standard VAT rate is set at 16 per cent.** This rate applies to domestic supplies as well as imported goods upon their entry into Mozambican territory, except in cases where goods enter under special regimes (e.g., free zones, bonded warehouses, temporary importation, or external or internal transit arrangements)<sup>30,31</sup>.

The importer pays the VAT when the goods are cleared into Mozambique. If the importer is a VAT-registered business under the “standard regime”, they can credit (offset) the VAT paid on import against their output VAT.

A reduced rate of 5 per cent was recently introduced for the provision of medical and health services by private hospitals, clinics, dispensaries and similar establishments, as well as for educational services. Input VAT incurred at the reduced rate of 5 per cent is not eligible for deduction.

Under the Mozambican VAT Code (Law No. 32/2007), assistive products that are explicitly VAT-exempt are listed under Article 9(1) (b). These exemptions apply to both domestic transactions and, per Article 12, to imports of the same goods.

According to Article 9(1)(b) of the VAT Code, the following assistive products are exempt:

- Wheelchairs and similar vehicles for persons with disabilities.
- Prostheses and orthopaedic appliances.
- Fracture-treatment devices.

**Box 2.**  
Mozambique:  
Broad medical  
exemptions  
but ambiguous  
wording.

- Assistive devices for blind persons<sup>i</sup>.
- Assistive devices for hearing correction.

For spectacles and hearing aids, the wording of the Code is less precise, being highly subject to administrative interpretation.

The VAT Code also explicitly exempts the **acquisition and importation of goods intended as donations** to certain beneficiaries:

- Goods donated to institutions of public interest (e.g., hospitals, rehabilitation centers, disability institutions, social protection entities), provided they are aligned with the institution's mission (article 14(2)(a)).
- Goods donated for disaster relief (e.g., floods, cyclones, droughts, earthquakes, etc. (article 14(2)(b)).
- Projects financed by the United Nations (article 14(2)(c)) are exempt if the agency is officially accredited in Mozambique and the goods are used exclusively for project implementation.

In Mozambique, customs duties vary from 0 to 20 per cent, depending on the product, its classification and whether preferential treatment applies.

### Regional harmonization under CEMAC

- The Economic and Monetary Community of Central Africa (CEMAC) establishes directives to harmonize VAT legislation among its member countries. Each member is permitted to choose its standard VAT rate within a range of 15 to 19 per cent and determine the list of goods and services eligible for exemption<sup>32</sup>.
- Regional harmonization under CEMAC supports consistency and predictability across member states.

**Box 3.**  
Regional  
harmonization  
under CEMAC.

<sup>i</sup> The term “blind” is employed by the Mozambique VAT Law.

- Explicit HS-code-based VAT exemptions reduce interpretation errors.

**The standard VAT rate in the Republic of the Congo is 18 per cent, plus a 5 per cent surtax with proceeds benefiting local communities<sup>33</sup>.**

The national list of VAT exemptions is classified under the Harmonized System (HS) Code, and covers the following assistive products:

- Wheelchairs and other vehicles for disabled persons (8713)<sup>j</sup>.
- Prostheses, orthoses (902110, 902131, 902190).
- Hearing aids (902140).
- Corrective glasses (900049) and glassware for glasses (701510).

The other codes for spectacles, lenses and frames (900140, 900150, 900311, 900319, 900390) are not exempted<sup>34</sup>.

Under the CEMAC Customs Code, assistive products often fall under Categories 2 (Raw materials and capital goods) and 3 (Intermediate goods), thus facing 10-20 per cent customs duty<sup>35</sup>. Trade within CEMAC is duty-free.

**Chad applies a standard VAT rate of 18 per cent<sup>36</sup>.**

The national law exempts the same assistive products as the Republic of the Congo, based on HS classification, including **corrective glasses** and **glassware for glasses**<sup>37</sup>.

CEMAC Customs Code and procedures also apply to Chad.

In both the Republic of the Congo and Chad, the importer may deduct input VAT, provided that the customs declaration includes the taxpayer's identification and a receipt is issued by the tax authority.

**Box 4.**  
The Republic of the Congo and Chad: Harmonized regional framework.

j The term "disabled" is employed by Congo's VAT Law.

**Kenya’s VAT system maintains a standard 16 per cent rate<sup>38</sup>.** VAT is also charged on the importation of goods into Kenya and is payable by the person who imports them (Section 6 of the VAT Act).

Kenya uniquely applies zero-rating – rather than exemption – on most assistive products. Under the Fifth Schedule (Part B), many assistive technology HS codes are zero-rated, meaning VAT is technically charged at 0 per cent and input VAT is fully recoverable by suppliers, reducing costs along supply chains. This distinction has important implications for price formation, cost recovery and supplier behaviour. Under an exemption regime, any VAT paid upstream on transport, logistics, parts, or services becomes embedded in the final price, creating “tax-on-tax” through VAT cascading. By contrast, zero-rating keeps the entire supply chain VAT-neutral and commercially more attractive, as importers and distributors can recover VAT incurred on freight, handling, warehousing, local distribution, spare parts, packaging and customs-clearing services. In countries relying on exemptions, these costs remain built into prices even when the assistive product itself is nominally exempt.

Some HS Codes applicable to spectacle frames remain taxed (HS 900311, 900319, 900390, 900490). Zero-rating also applies to supplies to foreign aid-funded capital projects.

Kenya’s decision to zero-rate many assistive products under the Fifth Schedule aligns with best-practice principles closer to OECD logic (zero-rate for welfare/social goods)<sup>39,40</sup>.

Recently, Kenya has added an additional layer, combining **two forms of VAT relief:**

- Zero-rating in VAT Schedule (depending on HS classification and schedule updates).
- VAT exemption for persons or organizations.

Under the Persons with Disabilities Act (2025), goods imported for the exclusive use of persons with disabilities or recognised institutions may be VAT-exempt (and duty-exempt). In this model, the importer must secure the necessary approval/certificate from the

**Box 5.**  
Kenya: Zero-rating model and exemption for disability-specific imports.

Kenya Revenue Authority (KRA) and also meet disability certification requirements via the National Council for Persons with Disabilities (NCPWD). For details on the new law tax incentives, see Box 5.

Customs duties in Kenya follow the East African Community (EAC) Common External Tariff, which sets 0 per cent duty for most assistive products, except for spectacle frames, which attract 10 per cent duties<sup>41</sup>.

The Persons with Disabilities Act 2025 (effective 27 May 2025) substantially strengthens Kenya's fiscal support framework for persons with disabilities, expanding exemptions and streamlining administrative processes compared to the 2003 Act.

#### **Income Tax Relief**

Section 56 allows any person with a disability who earns income to apply to the Cabinet Secretary for Finance for exemption from income tax and related levies. The Cabinet Secretary may grant full or partial relief and permanently exempt individuals with permanent disabilities from repeated assessments.

#### **Import Duty and VAT Exemptions**

The Act maintains existing exemptions for **materials, equipment and motor vehicles** used by persons with disabilities, but now extends relief to demurrage, port charges and other government levies. A new provision exempts from import duty and VAT the purchase, importation, transfer or donation of health materials or equipment related to persons with disabilities – previously limited to government agencies, now available to organisations and institutions.

#### **Incentives for Local Manufacturing**

The Cabinet Secretary may offer incentives on raw materials, inputs and imported capital equipment to manufacturers of assistive devices, encouraging domestic production and innovation.

**Box 6.**  
Key tax reforms under Kenya's Persons with Disabilities Act, 2025.

### **Employer Deductions**

Employers may deduct expenses incurred in accommodating employees with disabilities – such as workplace modifications, mobility aids and adaptive technologies – from their taxable income.

### **Postal Charge Exemptions**

Essential materials and devices, including braille literature and hearing aids, are exempt from postal charges, improving access for persons with disabilities

## **2.2.3 Import-related costs can drive the product price to 1.6 times the ex-factory price**

Giving a direct example of the total import-related costs of assistive products (or any product) is a challenging task. The import tariffs, local taxes and logistical costs outlined in the sections above vary widely depending on the product type, import quantity, country of origin, means of transportation and destination. Nonetheless, this section brings these cost components together to illustrate how they can dramatically drive up the final price of assistive products – and how tariff and tax exemptions, when effectively implemented, have the potential to significantly lower such costs.

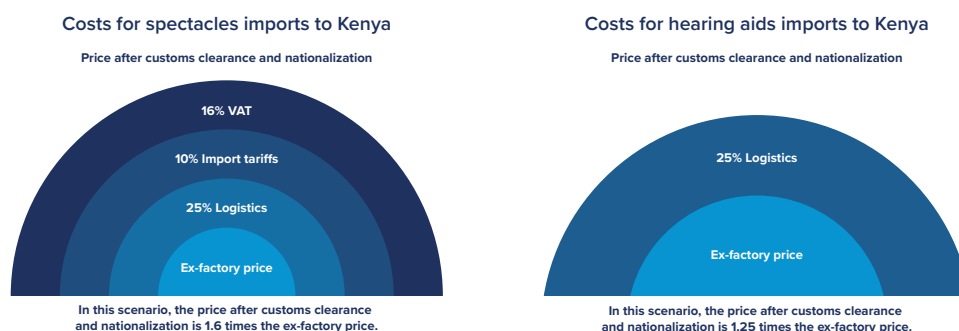
**“A product that initially costs two dollars may reach a final consumer price of around five dollars once tariffs and importation fees are applied. This price increase makes assistive products unaffordable, despite the originally low product price.”**

Stakeholder dialogue participant, Chad.

Among the select countries and selected product categories, a notable example of how tariffs, taxes and logistics inflate costs is the case of spectacle imports to Kenya. Frames and mountings for spectacles imported into Kenya are subject to an import tariff of up to 10 per cent and a 16 per cent VAT. Logistics costs are also significant, as transportation expenses can reach up to 25 per cent, and each day the cargo remains awaiting clearance at the destination may incur an additional cost of up to US\$ 500 in storage fees. Together, these represent an addition of up to 59.5 per cent to the product’s cost in tariffs, taxes and logistics alone. Distributor and retailer margins further escalate prices. In Uganda, for example, distributor and retailer margins for spectacles can reach 50 per cent<sup>42</sup>. In addition, service-related expenses add another layer of cost, further increasing the final price to consumers.

In contrast, if the same tariff and tax exemptions currently applied to hearing aids, prostheses and

orthoses, and wheelchairs in Kenya were extended to spectacles, the tax burden on import tariffs and VAT would be zero. Even then, there would still be considerable room for further cost reductions, particularly by addressing logistics and transport-related expenses, as well as distributor and retailer margins. For instance, simplifying the procedures required to obtain these exemptions, together with a more efficient customs system, could help reduce logistics costs by expediting the import process and lowering port storage fees. Figure 9 illustrates this point, showing how importation and nationalization costs accumulate and can drive the product price to 1.6 times the ex-factory price.



**Figure 9.** Estimated cost of importing spectacles and hearing aids to Kenya.

## 2.3 Non-tariff barriers

Non-tariff barriers (NTBs) are generally defined as “policy measures other than ordinary customs tariffs that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both<sup>43</sup>. Such measures may include domestic regulatory requirements, technical standards, conformity-assessment procedures, product registration processes and other internal administrative measures. Beyond the traditional definition of NTBs, lengthy procedures<sup>44</sup> and logistical factors<sup>45</sup> are also considered significant trade barriers.

This technical report does not provide a comprehensive assessment of all NTBs; instead, it offers indicative insights into logistical challenges and bureaucratic processes gathered from relevant reports and key informants. These qualitative inputs complement the tariff and tax analysis but should not be considered exhaustive.

Relatively high transportation costs place African countries at a considerable disadvantage<sup>46</sup>, sometimes amounting to one or two times the value of the imported products – often more than four times higher than in other global regions. These costs not only inflate the prices of imported products, making them less accessible to consumers, but also discourage potential suppliers from operating in the region and deter companies from establishing local production facilities<sup>47</sup>.

In Kenya, international transport costs to import a container of wheelchairs from China amount to US\$ 10,000, while the container itself holds products valued at US\$ 40,000 – meaning transport alone accounts for 25 per cent of the product value. In Chad, shipping hearing aids from France can incur international transportation fees of up to US\$ 2,500. These costs alone are often high enough to

make imports prohibitively expensive for low- and middle-income countries. Moreover, in many African countries, importers must rely on multiple intermediaries to manage logistics, with each intermediary adding its own margin to the product price, thereby further increasing final costs.

Many African countries fall behind in trade logistics performance. Infrastructure in African ports is considered inefficient, with outdated equipment and insufficient capacity to meet growing demand, resulting in high port handling costs and a low share of international trade. Road<sup>48</sup> infrastructure is also deficient, with only 30 per cent of the rural population in Sub-Saharan Africa having year-round access to roads<sup>49</sup>. This lack of infrastructure results in vehicle and cargo damage, inefficient transportation and high local transportation costs. On the customs side, congestion at border crossings, delays in processing and a complex bureaucratic process further hinder trade and increase costs<sup>50</sup>. Further discussion on this matter can be found in the customs procedures section below, which represents one of the main challenges to reducing tariffs and taxes on assistive technology.

## 2.4 Potential negative impacts of imports on local production policies

A central policy trade-off in expanding access to assistive technology in LMICs lies between importing products at lower costs and building local production capacity. Reducing tariffs and taxes can make assistive technology more affordable, but it may potentially weaken incentives to manufacture locally or invest in domestic supply chains<sup>51</sup>. In the short term, reducing import duties improves affordability and expedites access where domestic production is often limited. For instance, key informants from Chad and Mozambique noted that local production is almost non-existent, and where it does exist, it is typically limited to simpler, lower-quality items compared with imported ones.

An additional complexity in this trade-off concerns the taxation of raw materials, components and intermediate inputs used in local manufacturing. Even where finished assistive products benefit from reduced tariffs or VAT exemptions, the inputs required to produce them locally, such as metals, plastics, electronics, batteries and specialized components, are often still subject to import duties and domestic taxes<sup>52</sup>. Although this technical report does not directly assess input taxation, available evidence from comparable manufacturing sectors suggests that these layered costs can significantly erode the price competitiveness of locally produced assistive technology, increasing production expenses and weakening incentives for domestic firms to initiate or expand production.

More broadly, the prospects for local production of assistive technology in Africa are inseparable from the overall strength of national and regional industrial ecosystems. Assistive technology manufacturing depends on upstream industries (materials, electronics, tooling), reliable energy and transport infrastructure, skilled labour, access to finance, quality certification systems and predictable regulatory environments. In contexts where these enabling conditions remain weak, targeted assistive

technology policies alone are unlikely to generate competitive local industries<sup>53</sup>. As a result, efforts to promote domestic assistive technology production must be embedded within wider industrial development, small and medium enterprises support and regional value-chain strategies. Without systemic improvements, local manufacturing of assistive technologies will remain structurally constrained regardless of sector-specific incentives.

Another potential negative impact of imports is that reliance on external suppliers can introduce vulnerabilities, and products might not align with local needs, leading to abandonment when devices cannot be repaired or parts replaced<sup>54</sup>. Local production, on the other hand, can strengthen industrial capabilities, tailor products to local contexts and improve reparability, thereby fostering longer-term sustainability and economic development<sup>55</sup>. In Kenya, for instance, small-scale production and assembly of wheelchairs has helped adapt products to users' environments, improve access to maintenance services and reduce reliance on imports, as reported by key informants. However, limited infrastructure, high capital requirements and small markets pose obstacles, often requiring supportive measures that risk higher prices. Balancing these dynamics calls for mixed and phased strategies that combine temporary tariff relief with investment in local capacity.

### **Kenya - Imports vs. emerging local wheelchair production**

Kenya remains highly dependent on imported assistive products, ranking as the 10th largest importer in Africa, with imports of hearing aids, prostheses and orthoses, spectacles, and wheelchairs exceeding US\$ 94 million between 2016 and 2023. Imports are dominated by suppliers outside Kenya's preferential trade agreements, mainly China and the United States, exposing users to high logistics costs, supply vulnerabilities, and limited access to spare parts, which contributes to device abandonment when repairs are not feasible.

At the same time, small-scale local production and assembly of wheelchairs are emerging, supported by innovation initiatives. By 2021, 22 Kenyan assistive technology start-ups had received technical and financial support through the Innovate Now AT2030 programme, alongside the launch of Africa's first Assistive Technology Live Lab. According to key informants, locally assembled wheelchairs are increasingly adapted to rough terrain and rural use, and local workshops improve access to maintenance and repairs, reducing dependence on imports for basic servicing.

**Box 7.**  
Kenya's local  
production  
initiatives.

However, the scale remains limited. Local producers face high capital requirements, infrastructure gaps, restricted access to components and raw materials and small domestic markets. While the 2025 Persons with Disabilities Act authorizes fiscal incentives for local manufacturers, including on inputs and capital equipment, implementation is still incipient. As a result, locally produced devices often remain uncompetitive with imported alternatives.

Kenya’s experience illustrates the need for **phased policy strategies**: maintaining temporary tariff relief on imports to secure short-term affordability, while simultaneously investing in local production ecosystems to improve long-term sustainability, reparability and industrial capability.

## 2.5 The role of Preferential Trade Agreements (PTAs)

Preferential trade agreements and preferential tariffs have the potential to shape the affordability and availability of assistive technology, particularly in contexts where domestic production is limited. Africa is characterized by a high density of overlapping regional trade agreements<sup>56</sup>, making trade policy a central mechanism through which countries can reduce the cost of assistive technology by lowering or eliminating tariffs and taxes. Since most assistive technology used in African countries is imported, given the scarcity or absence of local manufacturing, regional and preferential trade agreements have direct implications for access.

Twelve applicable preferential trade agreements (PTAs) were identified<sup>k</sup> and reviewed based on their coverage of the HS codes associated with the selected assistive products<sup>l</sup>. Many African regional preferential trade agreements (AfCFTA, CEMAC, COMESA, EAC, and SADC Trade Protocol)<sup>m</sup>, inter-regional agreements (GAFTA and Agadir Agreement)<sup>n</sup> and agreements with other partners (EU-Egypt, EFTA-Egypt, SADC-EU EPA and SADC-UK EPA)<sup>o</sup> are eliminating tariffs on the key assistive products.

- 
- k To identify the PTAs, the ITC MacMap platform was used. However, some other PTAs were found after this mapping, such as the Egypt-Mercosur (2017) agreement, found in the Egyptian government’s database ([www.nafeza.gov.eg/ar/tariff](http://www.nafeza.gov.eg/ar/tariff)). Although this PTA was identified, the ITC MacMap does not show preferential tariffs between Egypt and Mercosur countries for the key assistive technology products. For this reason, we chose not to include it in the study.
  - l Each PTA was then classified according to the following categories: entry into force, parties, objectives/priorities, categories of goods, assistive product coverage, tariff exemptions, and “others”, which included legal provisions related to other forms of cooperation beyond tariffs (e.g., social, cultural, human rights, employment, or scientific cooperation).
  - m African Continental Free Trade Area (AfCFTA) (2019); Treaty Establishing the Economic and Monetary Community of Central Africa (CEMAC) (1994); Common Market for Eastern and Southern Africa (COMESA)(1993); East African Community (EAC) (1999); Southern African Development Community (SADC) Trade Protocol (1996).
  - n Agadir Agreement (2004); Arab Free Trade Area Agreement (GAFTA) (1997).
  - o Euro-Mediterranean Agreement (EU-Egypt) (2004); Southern African Development Community - European Union Economic Partnership Agreement (SADC-EU EPA) (2016 and 2018 for Mozambique); Southern African Development Community - United Kingdom Economic Partnership Agreement (SADC-UK EPA) (2021).

This means that, instead of using MFN tariffs<sup>p</sup>, these products can benefit from lower tariffs when traded under preferential agreements with a specific liberalization agenda.

Among the five select countries, participation in trade and regional agreements varies according to their geographic and economic integration strategies. Regional agreements include African and Middle Eastern nations, highlighting geographically focused integration efforts that have progressively expanded under the coordination of the African Union (AU). This process led to the creation of the AfCFTA, Africa’s most comprehensive integration agreement and a flagship project of the African Union’s Agenda 2063. Under regional trade rules, CEMAC already functions as a customs union and applies a single common tariff to goods coming from outside the bloc. COMESA, on the other hand, has created a common tariff on paper but has not yet fully put it into practice across all its members. In contrast, the EAC Customs Union is fully operational, and all its members, including Kenya, use the same common tariff when importing goods from countries that are not part of the agreement. Regional preferential agreements also contain a significant number of provisions related to cooperation beyond traditional trade areas, such as those with COMESA<sup>q</sup>.

Overall, Egypt is the country with the highest number of total agreements, whereas Kenya engages in the largest number of strictly African regional frameworks. Nevertheless, trade data shows a limited PTA impact on assistive technology trade. Most imports still come from non-PTA suppliers, especially China. Specifically:

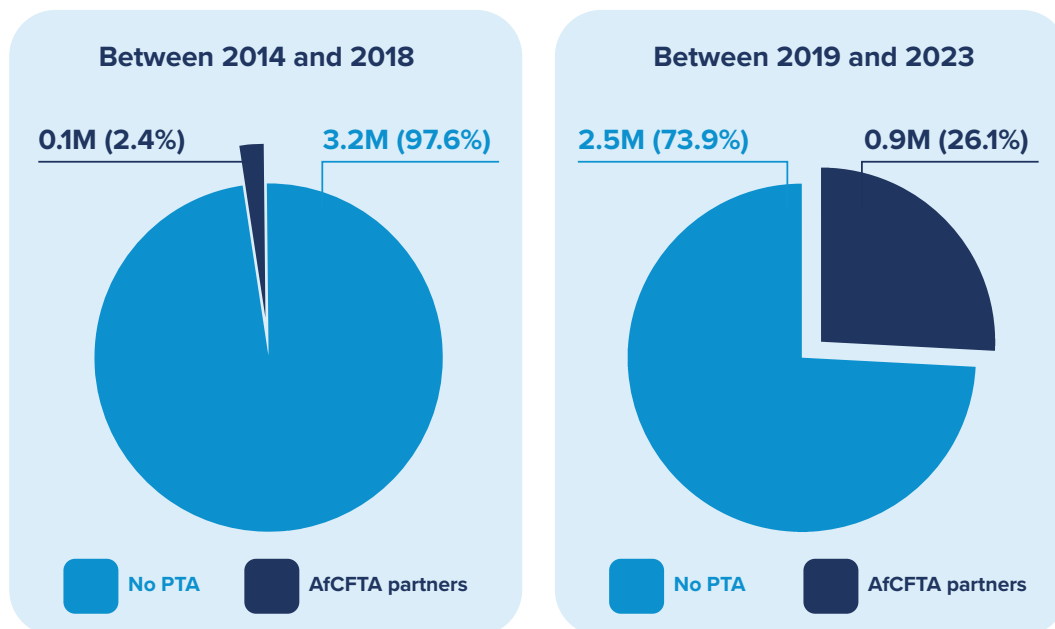
Chad and the Republic of the Congo				
PTA	Hearing aids	Prostheses and orthoses	Spectacles	Wheelchairs
CEMAC	0% since 2010	0% since 2010	0% since 2010	0% since 2010
CEMAC Common External Tariff	Capital goods (10%) or low transformation finished products (20%)	10%	Equipment (10%) or finished goods (20%)	Vehicles and parts (10%) or finished goods (20%)
AfCFTA	0% in 2030	10% in 2030	0% in 2030	0% in 2030

**Table 2.** Preferential tariffs by product and PTA of Chad and the Republic of the Congo, 2025.

<sup>p</sup> See Table 1 on import tariffs across the target countries per assistive product category.

<sup>q</sup> African regional preferential trade agreements, while primarily aimed at trade integration, also include broad provisions for economic and social development cooperation. The CEMAC treaty covers the harmonization of trade policies, customs procedures, investment regulations and cooperation in economic development. The COMESA Treaty, beyond establishing a Free Trade Area (FTA) in the 2000s, includes logistical protocols and provisions related to social and human rights affairs, such as Articles 4 and 143 (Cooperation in Social and Cultural Affairs, including facilities for persons with disabilities) and Article 84 (facilitation of the transport of goods). The EAC framework provides for the harmonization of standards and investment policies, as well as cooperation in transport, infrastructure and technology, supported by a strong legal foundation for social development (Articles 5, 6, 118 and 122, and programmes such as Digital REACH and MRH). The AfCFTA, in turn, incorporates institutional programmes that promote African sovereignty through regional integration grounded in human rights, democracy and inclusive development.

Chad and the Republic of the Congo have the smallest number of PTAs, each participating in only two agreements: the AfCFTA and CEMAC. This limited participation reflects both the structural constraints of these countries and their geographic position in Central Africa. Trade data reinforces this limitation: more than 94 per cent of Chad’s assistive product imports and 91 per cent of the Republic of the Congo’s come from countries with no PTA in place. Interestingly, the Republic of the Congo has shown a significant increase in imports from AfCFTA member countries since 2019 (from 2 per cent to 26 per cent), suggesting an anticipatory effect of the agreement even before the full implementation of tariff reductions.



**Figure 10.** The Republic of the Congo’s imports of assistive products from AfCFTA partners.

For Chad and the Republic of the Congo, the AfCFTA offers a critical opportunity to reduce trade costs, diversify suppliers and overcome structural barriers created by small domestic markets and high logistical expenses. Under the agreement, Chad and the Republic of the Congo must gradually eliminate tariffs on 90 per cent of their tariff lines by 2030, including key assistive products, which can significantly lower prices for consumers and humanitarian providers. More importantly, the AfCFTA’s commitments to removing non-tariff barriers, simplifying customs procedures and harmonizing fiscal policies are especially beneficial for these countries, where bureaucratic delays, misclassification at customs and long inland transportation routes consistently undermine access to essential products<sup>57</sup>.

Egypt				
PTA	Hearing aids	Prostheses and orthoses	Spectacles	Wheelchairs
COMESA	0% since 2000	0% since 2000	0%	0% since 2000
COMESA Common External Tariff	0%	0%	10% for non plastic spectacle frames and parts of spectacles and 25% for finished spectacles	0%
GAFTA	0% since 2007	0% since 2007	0% since 2007	Not covered
EU-Egypt	0% since 2007	0% (but only one HS code is covered, since 2007)	0% between 2013 and 2015	0% since 2007
AGADIR	Not covered	Not covered	0% since 2008	Not covered
AfCFTA	0% since 2025	0% since 2025	0% since 2025	0% since 2025
EFTA	0% since 2008	0% since 2014	0% since 2017	0% since 2008

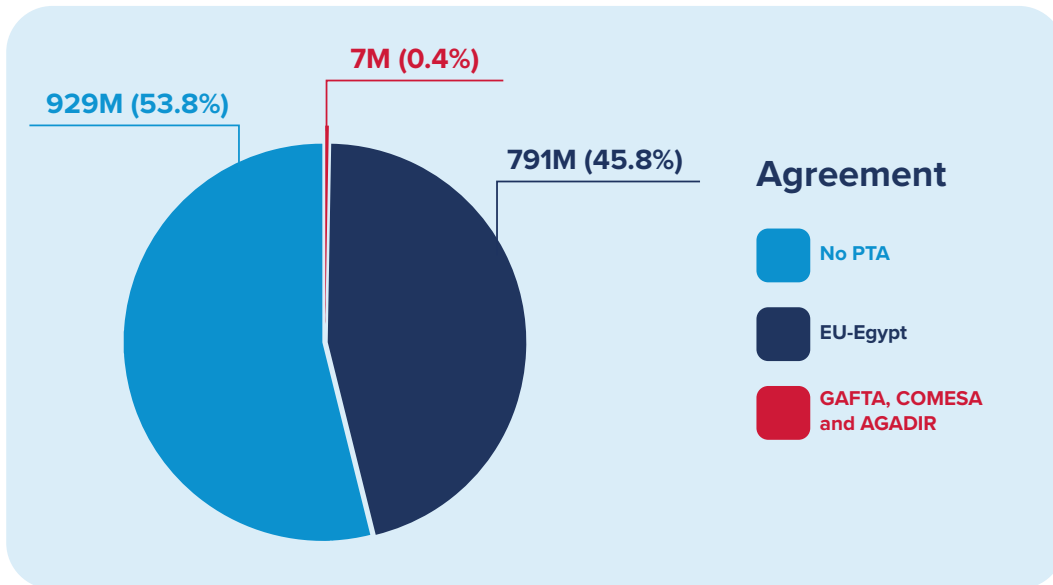
**Table 3.** Preferential tariffs by product and PTA of Egypt, 2025.

Egypt stands out as the country with the most diversified portfolio of PTAs, participating in six major frameworks: AfCFTA, COMESA, GAFTA, the Agadir Agreement, the EU-Egypt Association Agreement and EFTA-Egypt. This broad list of partners reflects not only its strategic position bridging Africa, the Middle East and the Mediterranean, but also a deliberate strategy of integrating into multiple trade networks. Within COMESA, Egypt plays a central role as one of the region's most significant trading hubs and investment destinations. Its main export destinations<sup>r</sup> include Libya, Sudan, Kenya, Tunisia and Ethiopia, while its key import sources are Kenya, Zambia, Sudan, the Democratic Republic of the Congo and Tunisia. Egypt also has the highest potential to expand intra-COMESA trade, estimated at US\$ 26.3 billion, and is the leading extra-COMESA exporter, accounting for 35 per cent of exports outside the region. Moreover, Egypt hosts the COMESA Regional Investment Agency (RIA), further

<sup>r</sup> Although the Covid-19 pandemic caused a sharp decline in 2020, exports to COMESA fell by 32 per cent (from US\$ 2.9 billion to US\$ 2 billion) and imports decreased by 33 per cent (from US\$ 1 billion to US\$ 699 million), the country remained a net exporter.

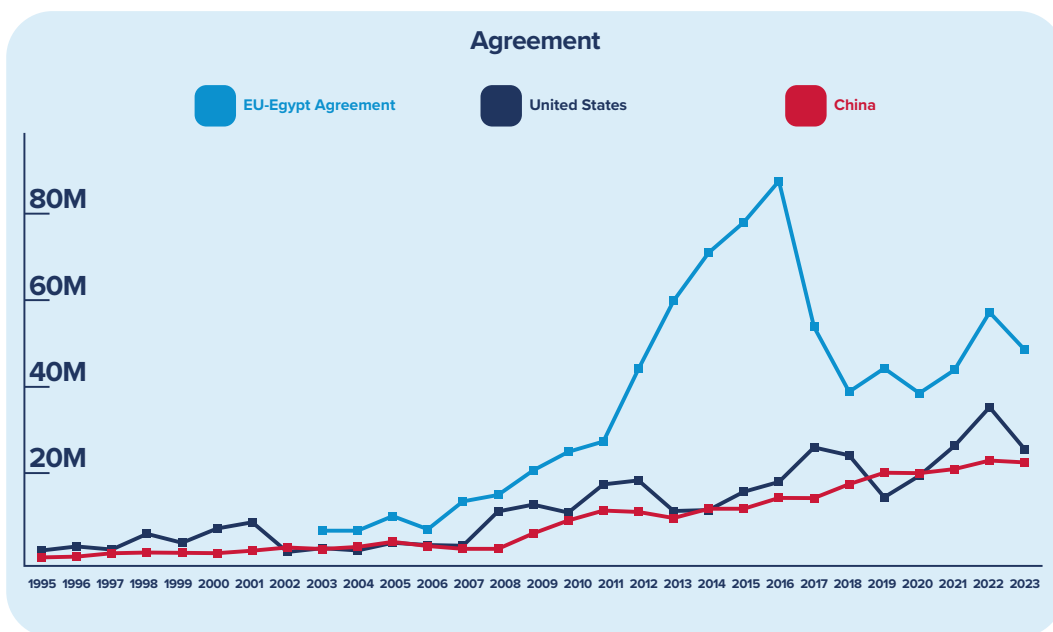
reinforcing its strategic role in shaping regional investment flows<sup>58</sup>. It is also one of the select countries that has fully implemented the tariff-reduction commitments under the AfCFTA.

Notably, the agreement with the European Union proved to be the most impactful, with 46 per cent of Egypt’s imports of assistive products between 1995 and 2023 originating from EU countries. Within this group, Germany was the main exporter, responsible for 33 per cent of Egypt’s imports from the EU.



**Figure 11.** Egypt’s imports of assistive products from PTA partners by agreement (1995-2023).

However, imports from EU-Egypt partners have declined since 2017, while imports from the United States and China (non-PTA partners) have increased.



**Figure 12.** Egypt’s imports of assistive products from EU-Egypt Agreement partners, the United States and China between 1995 and 2023.

Kenya <sup>s</sup>				
PTA	Hearing aids	Prostheses and orthoses	Spectacles	Wheelchairs
COMESA	0% since 2000	0% since 2000	0% since 2000	0% since 2000
EAC Common External Tariff	0%	0%	Finished corrective spectacles (900490): 10%	0%
EU-EAC EPA	0% since 2021	0% since 2021	Phase out schedule: currently 10%, reducing by 1% annually over 15 years, starting in 2024	0% since 2021
UK-EPA	0% since 2021	0% since 2021	Phase out schedule: currently 10%, reducing by 1% annually over 15 years, starting in 2024	0% since 2021
AfCFTA	0% in 2030	0% in 2030	0% in 2030	0% in 2030

**Table 4.** Preferential tariffs by product and PTA of Kenya, 2025.

Kenya has a predominantly regional trade profile, participating in five PTAs: AfCFTA, COMESA, EAC, the EU-Kenya EPA and the UK-Kenya EPA, in addition to the unilateral AGOA scheme granted by the United States<sup>t</sup>. Kenya's engagement is centred on African regional blocs (COMESA and EAC), complemented by bilateral agreements with the EU and the United Kingdom. This configuration reflects a strategy focused on African regional integration, although data shows that 95 per cent of assistive product imports come from countries with no PTA in place with Kenya, suggesting that the practical impact of these agreements remains limited.

China was Kenya's dominant supplier of assistive products, accounting for 37 per cent of the country's imports of hearing aids, prostheses and orthoses, spectacles and wheelchairs between 2016 and 2023, totalling US\$ 35 million in export value, followed by the US. This indicates that preferential

<sup>s</sup> Kenya is an original member of the COMESA Free Trade Area and simultaneously part of the EAC Customs Union, operational since 2005. In practice, Kenya relies on the EAC Common External Tariff, structured in four bands (0%, 10%, 25% and up to 35% since 2022), as its primary framework for setting import duties on goods from non-member countries.

<sup>t</sup> Kenya benefits from the U.S. African Growth and Opportunity Act (AGOA), a unilateral preference scheme that grants duty-free access to the U.S. market, though its continuity depends on periodic congressional renewal. Although Kenya and the United States launched negotiations for a bilateral Free Trade Agreement in 2020, the process stalled and was replaced by the more flexible U.S.–Kenya Strategic Trade and Investment Partnership (STIP), which promotes cooperation in areas such as trade facilitation, agriculture and digital trade, but does not include binding tariff liberalization.

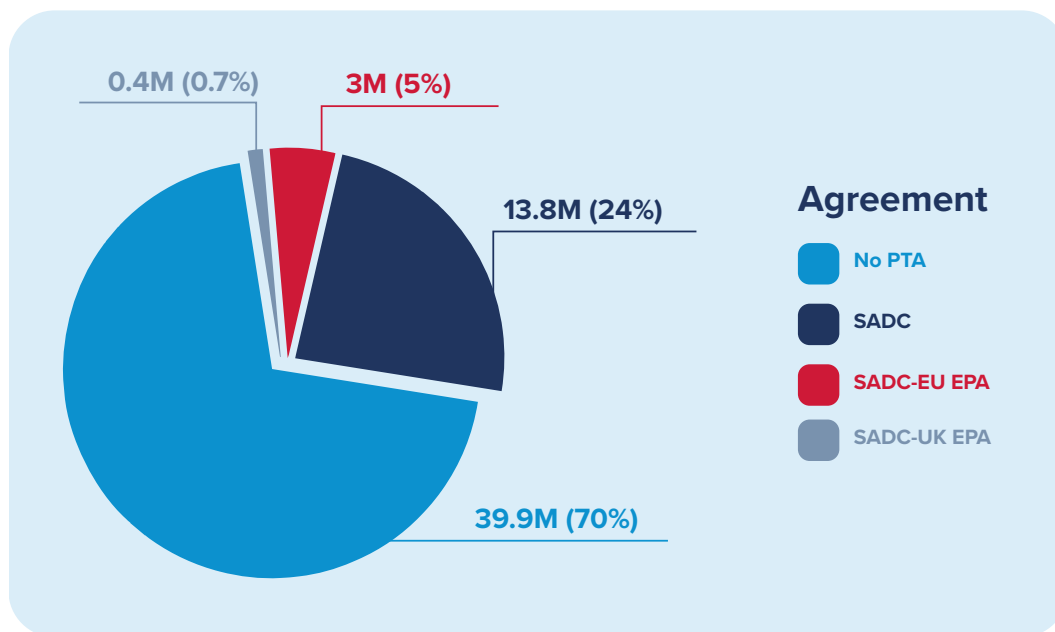
agreements have played a limited role in shaping the country's patterns of assistive technology imports.

Mozambique				
PTA	Hearing aids	Prostheses and orthoses	Spectacles	Wheelchairs
SADC Trade Protocol	0% since 2012	0% since 2012	0% since 2012	0% since 2012
SADC-EU EPA	0% since 2018	0% since 2018	0% since 2018	0% since 2018
SADC-UK EPA	0% since 2021	0% since 2021	0% since 2021	0% since 2021
AfCTA	0% in 2030	0% in 2030	0% in 2030	0% in 2030

**Table 5.** Preferential tariffs by product and PTA of Mozambique, 2025.

Mozambique participates in four PTAs: AfCFTA, the SADC Trade Protocol, the SADC-EU EPA and the SADC-UK EPA. Its trade profile is strongly shaped by Southern African regional integration, as 24 per cent of its assistive product imports between 1995 and 2023 originated from SADC member states. Within this group, South Africa is overwhelmingly the dominant supplier, accounting for 95 per cent of intra-SADC imports. The SADC-EU and SADC-UK EPAs also play a meaningful role, totalling 5 per cent of assistive technology imports during the period, with Portugal standing out as the main exporter within these agreements (77 per cent of Mozambican SADC-EU imports). More recent trade patterns show that, between 2016 and 2023, South Africa and China together supplied more than 60 per cent of Mozambique's assistive technology imports, underscoring both the importance of regional trade links and the continued influence of major extra-regional suppliers.

These analyses show that even when preferential tariffs or exemptions are legally established, their practical use is inconsistent. Procedures for claiming preferential tariffs or tax exemptions are often slow, complex and costly. The administrative burden and the risk of demurrage fees while awaiting



**Figure 13.** Mozambique’s imports of assistive products from PTA partners by agreement between 1995 and 2023.

approvals frequently lead importers to pay full customs duties (MFN rates) instead of pursuing preferential treatment. Additionally, importers’ limited awareness of existing exemptions and customs officials’ lack of understanding of what qualifies as an assistive product often result in product misclassification and the imposition of higher tariffs.

In summary, while the legal framework of Preferential Trade Agreements (PTAs) in Africa offers significant potential to reduce the cost of assistive technology through tariff exemptions, a notable gap remains between policy and practice. Despite the extensive coverage under agreements such as the AfCFTA and SADC, trade data reveals that import patterns in countries such as Chad and Kenya are still dominated by non-PTA partners, primarily China. While Egypt, Mozambique and the Republic of the Congo demonstrate that deep regional ties (with the EU, SADC and AfCFTA, respectively) can drive effective PTA utilization, widespread administrative hurdles frequently nullify these benefits. Consequently, realizing the full promise of these agreements to improve access to assistive technology requires shifting focus from tariff negotiation to the effective removal of non-tariff barriers and the streamlining of customs implementation.

# 3. Main challenges to reducing tariffs and taxes on assistive technology

There is an implementation gap in the existing reduced or preferential tariff schedules and tax exemption mechanisms. Although assistive products are generally subject to low duties and tariff and tax exemptions on paper in the select countries, importers often end up paying full duties in practice due to exemption procedures that are slow, complex and costly. This section discusses the main challenges that hinder the effective implementation of these exemptions. It also examines how the absence of trade data and specific HS codes, the lack of national-level information and limited trade expertise hinder the effective implementation of lower tariffs and taxes.

## 3.1 Lack of trade data and specific HS codes

Lack of specific trade and tariff data on assistive products remains a challenge in many LMICs. Numerous African countries either lack updated import and export data or do not share it. Of the 54 countries considered in this technical report, mirror data – reported by the partner country in the trade transaction – was required for 20 countries to compensate for missing national data. Regarding tariffs, some countries last reported updates to the WTO as far back as 2014-2017, but the majority updated their data between 2019 and 2023, with only a few doing so in 2024.

Misclassification further complicates the situation. Many HS codes used for assistive products are not exclusive to them. Data collection for the four targeted products – hearing aids, prostheses and orthoses, spectacles and wheelchairs – relied on 15 selected HS codes. However, most codes lack specificity, often leading to misclassification, as only the first six digits of HS codes are standardized globally. Codes for prostheses, orthoses and spectacles are particularly problematic, as they cover a wide range of products and include broad descriptors, such as “other”, resulting in the same product being categorized differently, depending on the country or customs officer’s interpretation. The same issue applies to raw materials used to manufacture or assemble assistive products, which are subject to the same lack of specificity.

## 3.2 The absence of national priority assistive products lists

In many LMICs, the classification of assistive products within national policy frameworks remains unclear. In most cases, assistive products are not formally recognized as essential goods and remain only indirectly covered by broader policies, such as those for medical devices. This lack of definition contributes to uncertainty in tariff exemptions, inefficient public procurement and limited policy prioritization, since assistive products are not explicitly acknowledged and do not receive prioritization in policy development and implementation.

While the WHO Priority Assistive Products List (APL)<sup>u</sup> can serve as a valuable reference in international and regional negotiations, the development of national lists of assistive products and the formal designation of assistive products as essential goods are crucial at the domestic level. In that sense, Zimbabwe offers a recent and compelling example: the development of its own national assistive products list strengthened the prioritization of assistive products within the national policy framework and supported efforts to reduce tariffs and taxes on imports.

### Zimbabwe: A recent example of advancing national prioritization of assistive products

In 2024, with technical assistance from the ATscale-supported programme and the Clinton Health Access Initiative, the Ministry of Health and Child Care of Zimbabwe conducted a national assessment of the country's policy framework for access to assistive products. The country began by establishing a multisectoral Assistive Technology Working Group, which later developed the National Assistive Technology Strategy for 2024 and 2025, outlining key goals and priorities.

Subsequently, Zimbabwe developed its own **National Priority Assistive Products List, comprising 55 priority assistive products.** To develop this list, the country adopted the 50 products from the WHO Priority Assistive Products List and added five additional products deemed essential for the Zimbabwean context – such as sunscreen lotion for albinism, smart canes and incontinence

**Box 8.**  
Zimbabwe's national prioritization of assistive products.

<sup>u</sup> WHO launched the Priority Assistive Products List (APL) in 2016, following the footsteps of the WHO Model List of Essential Medicines, a tool to raise public awareness, mobilize resources and stimulate competition in the market. The APL is similarly intended to be a catalyst in promoting access to assistive products. The APL includes hearing aids, wheelchairs, communication aids, spectacles, artificial limbs, pill organizers, memory aids and other essential items for older people and persons with disabilities to be able to live a healthy, productive and dignified life. It is not a restrictive list but aims to provide each Member State with a model from which to develop a National list of assistive products. A National list may then be used to guide other policy development related to assistive technology, including health coverage schemes and reimbursement. WHO, Assistive Product List.

products. The government also upgraded its data systems to improve data collection on assistive products. As a result of these efforts, the Minister of Finance, Economic Development and Investment Promotion announced the government's commitment to exempting several assistive products from import duties and taxes.

In parallel, organizations of persons with disabilities (OPDs) in Zimbabwe also played a key role in advancing the tariff and tax exemption process. During the 2024 national budget consultations led by the Ministry of Finance, these organizations highlighted the impact of tariffs and taxes on access to assistive products. In response, the Zimbabwe Revenue Authority conducted a high-level analysis of potential revenue losses associated with the introduction of duty concessions for assistive products. The assessment concluded that the revenue forgone would be manageable, particularly given that existing tax regulations conflicted with the government's social welfare objectives and risked undermining other national programmes if essential assistive products remained inaccessible. Consequently, in 2024, the government amended VAT regulations to eliminate import taxes on priority assistive products<sup>59</sup>.

However, challenges remain. At present, the exemptions apply only to registered OPDs. Other entities – such as companies and private organizations – are not eligible for this benefit. Therefore, although the exemption represents a significant step forward, its scope remains limited, and many importers of assistive technology continue to face full taxation – particularly those operating on a for-profit basis. Nevertheless, Zimbabwe's case provides an important and replicable example for other countries in the region seeking to strengthen access to assistive technology through fiscal policy reform.

### 3.3 Misalignment of tax and tariff regimes with national assistive technology strategies

Tax and tariff regimes for assistive technology are often designed without a clear link to broader national disability or assistive technology strategies. As a result, fiscal decisions on tariffs, VAT and exemptions are frequently taken without a systematic assessment of their economic, social and industrial impacts.

A coherent AT fiscal regime should be guided by a clear strategic intention for each product category. Where the national objective is to promote local production, this should be reflected in targeted incentives, such as duty-free inputs, VAT exemptions for manufacturers and carefully calibrated tariffs that support the domestic industry without inflating consumer prices (e.g., for selected wheelchairs, basic prosthetic components and low-tech mobility devices). Where local production is initially not viable (e.g., complex hearing aids, high-tech prostheses and advanced optical equipment), the policy choice should focus on ensuring affordability through lower import tariffs, VAT exemptions, or downstream subsidies to users.

Each of these instruments entails different trade-offs in terms of public revenue, administrative feasibility, market incentives and final prices for users. A structured cost-benefit analysis is therefore essential to compare these options and determine which mix of tariffs, taxes and subsidies delivers the greatest access impact per unit of fiscal cost. In practice, such assessments are rarely conducted. This often leads to suboptimal fiscal choices: tariffs that raise prices without supporting industry, narrow exemptions that benefit only a small share of users and fragmented incentives that neither stimulate local production nor guarantee affordable imports.

The case of Zimbabwe discussed above illustrates how a more systematic comparison of potential revenue losses against social welfare gains from targeted tax exemptions on priority products can inform more efficient and equitable fiscal design. Kenya also offers a positive example of high-level political commitment to disability inclusion translated into relatively coordinated fiscal and industrial policies for assistive technology. The Persons with Disabilities Act, which entered into force on 27 May 2025, elevated disability and assistive technology to the highest levels of national decision-making and introduced a comprehensive fiscal support framework that combines sound tax relief for users with explicit production-side incentives. The Act expanded income-tax exemptions for persons with permanent disabilities; extended import-duty and VAT relief to a broader range of health-related products; exempted demurrage, port charges and postal fees; and authorized targeted fiscal incentives for raw materials, inputs and capital equipment for local assistive technology manufacturers. At the market level, although Kenya remains highly import-dependent, it has chosen not to rely solely on import liberalization, but to pair tariff and tax relief with active support for domestic production where technically feasible (see Box 7 above on Kenya's local production examples).

### **3.4 Customs procedures as a bottleneck to assistive technology affordability**

Although the average import tariff (MFN) in the African continent is 1.4 per cent for hearing aids, 1.6 per cent for prostheses and orthoses and 1.8 per cent for wheelchairs, with most of the select

countries granting VAT exemptions for assistive products, many importers still report that import tariffs remain high and prohibitive. One important reason for this perception lies in customs procedures. The reduced tariffs and tax exemptions are not granted automatically. In most cases, importers, whether humanitarian organizations, civil society organizations or private companies, must obtain prior authorization from the government to benefit from these reductions. However, securing this authorization is often a lengthy and bureaucratic process, to the point that some importers prefer to pay the full tariffs and taxes rather than navigate the exemption process.

**“It is better to go through the normal process of paying taxes than to try to access the exemptions.”**

Key informant, Kenya.

The efficiency of the clearance process remains a challenge in most African countries. According to the World Bank’s Logistics Performance Index, which assesses logistics performance across 139 countries based on input from industry experts, the African continent scored an average of 2.3 out of 5 for the efficiency of border control agencies, including customs – measured in terms of speed, simplicity and predictability of procedures. Among the select countries, this score ranges from 2.8 in Egypt to 2.2 in Chad. Several factors influence this issue. On the governmental side, trade regimes are often perceived as unpredictable and lacking transparency due to limited cross-ministerial coordination, particularly between trade and social/health ministries on procedures and processes, and a lack of knowledge of government officials on assistive technology. The decision-making process for imposing tariff and non-tariff measures is often unclear and non-consultative. Moreover, clearance procedures typically involve numerous actors, resulting in unnecessarily complex documentation processes, while imports are subject to a wide range of taxes, levies and service fees imposed by multiple government agencies.

**“The AT focal point at the Ministry of Health does not fully understand the concept of AT.”**

Key informant, Chad.

On the customs side, frequent misclassification further complicates the import process. Customs officials often lack sufficient knowledge of what constitutes assistive technology, which products fall under this category and which items are eligible for reduced tariffs or exemptions. The absence of HS subheadings for assistive products further contributes to misclassification, preventing the correct application of tax exemptions and tariff reductions.

**“Customs agents recognize only basic assistive products, limiting exemptions for less familiar items.”**

Stakeholder dialogue participant, Chad.

On the importers' side, lack of knowledge about tariff and tax benefits appears to be the main issue. Many importers are unaware of existing tariff reductions and tax exemptions, as this information — and the procedures required to access them — is not clearly communicated by governments. As a result, importers are often unable to contest misclassifications made at customs.

**“Ordinary citizens, particularly at the local level, are unaware of the services and incentives available to them.”**

Key informant, Kenya.

These factors combined make an already complex and bureaucratic process even more challenging. Meanwhile, as procedures are carried out and documentation is reviewed at customs, imported cargo often remains held at the destination port until the exemptions are granted, incurring demurrage fees of up to US\$ 500 per day and further increasing import costs. This is yet another reason why many importers choose to forgo the exemption process altogether and pay the full duties to avoid additional expenses.

### **3.5 Fragmented governance undermining assistive technology policies**

The lack of institutional coordination or strategy on assistive technology is a central challenge, manifesting as a critical implementation gap in tariff-reduction policies, as highlighted by key informants.

**“[The governance of assistive technology] is not an issue for a single sector, but for various sectors.”**

Stakeholder dialogue participant, Chad.

In Kenya, the Inter-Agency Coordinating Committee brings together government, civil society and OPDs to support the implementation of the national assistive technology and rehabilitation agenda, alongside the National Council for Persons with Disabilities (NCPWD), which has representation from social policy, treasury and OPDs. This architecture facilitates cross-sector alignment between disability policy, health financing and fiscal instruments. In practice, however, implementation remains uneven and coordination gaps persist. In Mozambique, the National Council for Social Action was established to coordinate social protection and disability policy under the Ministry of Gender, Children and Social Action, but remains constrained by the absence of a dedicated budget and weak inter-ministerial authority. In Egypt, disability policy is overseen by national councils operating under the Prime Minister's office as part of the broader Vision 2030 governance structures, while trade, taxation and industrial incentives remain anchored in economic ministries. In Chad and the Republic of the Congo, disability governance remains institutionally weak and dispersed across ministries, with no

empowered inter-ministerial authority for assistive technology that links social policy to customs, taxation, procurement and industrial development frameworks.

The fragmentation of responsibilities across multiple government sectors (such as health, social welfare and trade) contributes to the absence of clear institutional ownership over assistive technology accessibility and affordability. This fragmentation is empirically confirmed by recent academic literature in the Kenyan context<sup>60</sup>. A 2024 network analysis of the Kenyan assistive technology ecosystem shows that while government ministries and organizations of persons with disabilities occupy central positions in the national assistive technology network, the strength of relationships remains concentrated at the level of awareness and communication, with limited deep collaboration across sectors. Innovation and training organizations, in particular, remain poorly integrated into the national ecosystem, weakening linkages between fiscal policy, industrial development and service delivery. The study concludes that Kenya's assistive technology ecosystem remains highly distributed and siloed, with central actors yet to exercise effective system-level coordination.

**“We already have many policies and laws in place, and what we need now is to implement them, not create new ones. The main challenge is how to bring people to the table and convince them that this is the way we need to go, because the options are good, but different sectors have their own ideas of how they want to do things.”**

Stakeholder dialogue participant, Kenya.

Limited transparency in institutional data further undermines coordination and accountability. In several countries, official government communications on institutional mandates are often incomplete or dispersed across ministries and agencies, making it difficult for stakeholders to understand their roles, attributions, decision-making authorities and the coordination among them.

### 3.6 Price and logistics outweigh trade preferences in assistive technology markets

Major suppliers of assistive products, particularly China and the US<sup>v</sup>, lack PTA coverage in the select countries, yet continue to dominate market shares. This suggests that price competitiveness, logistics performance, and supply chain dynamics may exert a stronger influence on sourcing patterns than tariff preferences alone. In parallel, some large import flows benefit from project-based fiscal facilitation and strategic, project-linked import facilitation under bilateral cooperation frameworks,

<sup>v</sup> The dominance of China and the United States is not specific to the African context. When looking at the global picture of leading exporters, China remains the dominant exporter of both wheelchairs and spectacles, while the United States continues to be the primary supplier of prostheses and orthoses. In the hearing aids category, however, Denmark falls to third place, and Poland emerges as the leading supplier.

including China-related cooperation arrangements. These mechanisms often apply to donor-financed, humanitarian, or flagship development projects, in which imports may receive special clearance treatment or exemptions from selected duties and charges.

In Mozambique, for example, UN agencies, NGOs and project implementers benefit from formal customs and tax exemptions under government agreements, yet these exemptions coexist with long clearance delays and complex administrative procedures, which continue to raise final prices even where statutory tariffs are formally removed. Similar forms of strategic, project-linked import facilitation exist in other countries: for example, Kenya zero-rates imports for designated foreign aid-funded capital projects; Egypt applies 0 per cent VAT to certain economic zone projects and investment-related equipment; and both Chad and the Republic of the Congo grant duty and tax exemptions to humanitarian organizations and UN agencies under special agreements.

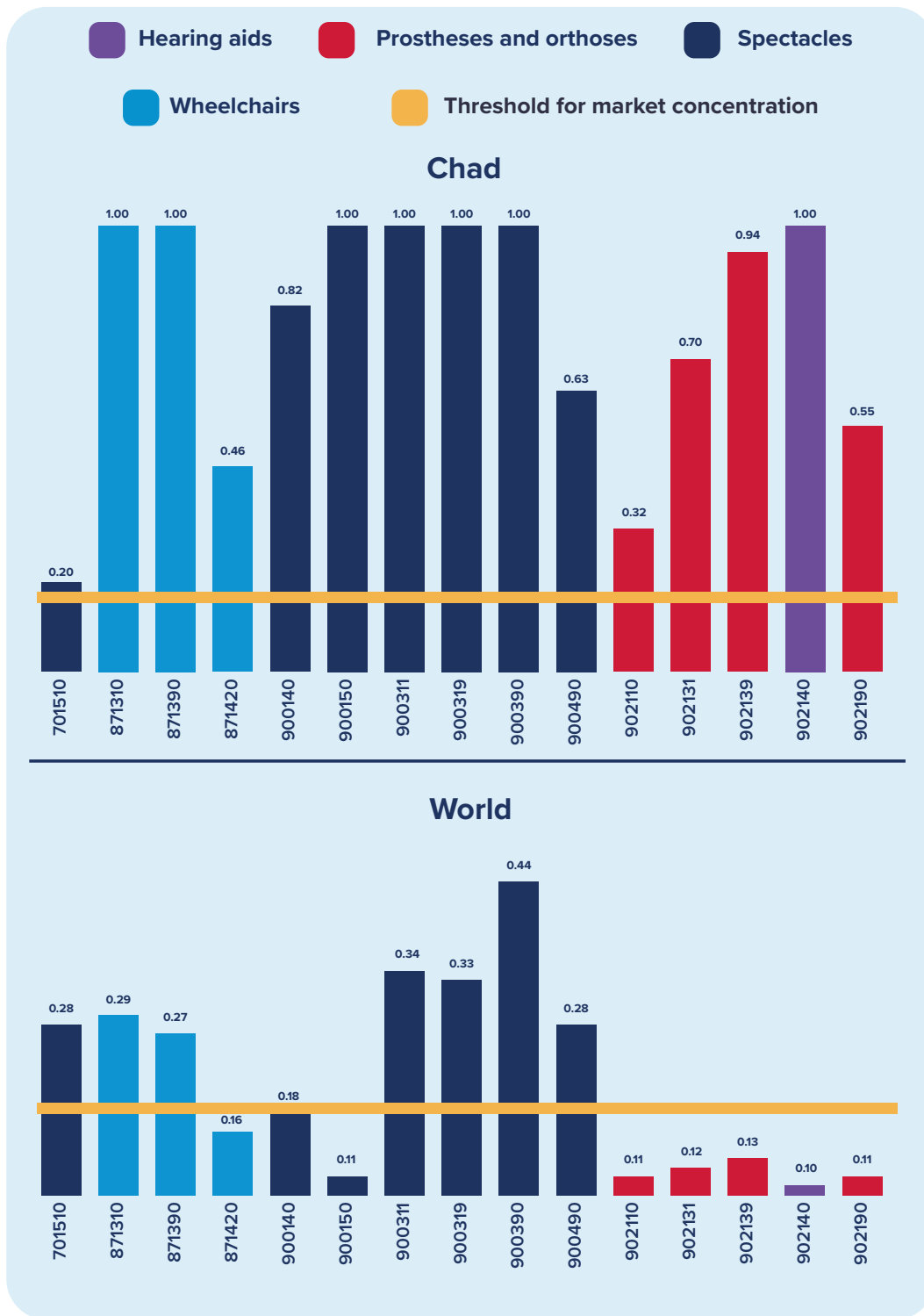
Together with China-linked cooperation frameworks, such as the Belt and Road Initiative, these arrangements illustrate how large, politically salient projects can receive preferential treatment that is not systematically extended to routine assistive technology imports. Collectively, these layered arrangements show that effective market access is shaped less by published MFN or PTA tariff rates and more by financing structures, donor and bilateral project pipelines, logistics costs and institutional capacity to process exemptions, reinforcing the limited role of tariff preferences in practice.

Trade data suggest that PTAs have had inconsistent effects on trade flows, with most countries remaining highly dependent on suppliers outside preferential blocs. Even in Egypt, which has a significant PTA with the European Union, data shows a decline in imports from EU partners since 2017, while imports from the United States and China have increased during the same period.

Additionally, the import market for assistive products in most select countries is classified as highly concentrated for almost all HS codes used here. Among the select countries, Chad presents the most complex case. Analyses show that all 15 HS codes for assistive products exhibit highly concentrated import markets, indicating that there is very little diversity among the countries supplying assistive technology to Chad. Market concentration was assessed using the Herfindahl Index, a measure that ranges from  $1/N$  (indicating perfect competition) to 1 (indicating complete monopoly). According to this index, values between 0.1000 and 0.1800 indicate moderate concentration, while values above 0.1800 indicate high concentration<sup>w</sup>. Figure 14 illustrates the Herfindahl Index for each HS code for Chad, alongside the global values for comparison. To enhance visualization, the threshold for market concentration (0.1800) and the four categories of assistive products analysed are colour-coded.

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<sup>w</sup> The Herfindahl Index is calculated by squaring the market share of each country in the selected market and then summing the resulting values. In the United States, federal antitrust authorities, such as the Department of Justice and the Federal Trade Commission, use the Herfindahl Index as a screening tool to evaluate the potential antitrust implications of proposed mergers (International Trade Center's Trade Map, 2024, at [exportpotential.intracen.org/en/about/export-potential-map](https://exportpotential.intracen.org/en/about/export-potential-map)).



**Figure 14.** Market concentration of assistive products imports by HS code (Chad and World, based on the Herfindahl index).

### 3.7 A narrow disability-centric framing limiting the political traction of assistive technology policies

According to key informants, the prevailing understanding of assistive technology in most African countries is that it serves only persons with disabilities. Even existing tax exemptions are often framed

within a disability-centric perspective. However, this perception can limit the political traction of policies aimed at improving access to assistive products, limiting access mechanisms or tax and duty waivers, by shifting the focus to individual disability certification or prescription.

**“The current understanding of assistive technology tends to frame it solely as support for persons with disabilities, which can limit policy traction. If assistive technology were instead positioned as relevant to the entire population across the life course, it could gain greater policy visibility and prioritization.”**

Key informant, Republic of the Congo.

Reframing assistive technology as beneficial to the wider population – for example, for those recovering from injuries, living with non-communicable diseases, ageing individuals, or people experiencing temporary impairments – and integrating it within wider frameworks, such as Universal Health Coverage, could help build broader political and public support and strengthen policy momentum. This is particularly relevant given the rapid increase in ageing populations in LMICs, where functional difficulties among older adults are expected to be more prevalent than in high-income countries in the coming years<sup>61</sup>. Such an approach could foster engagement from a larger share of the population, thereby enhancing the political traction of policies related to assistive technology.

### 3.8 Data blind spots undermining assistive technology policy design

Limited national data on functional difficulties represent a major constraint on effective planning and access to assistive technology. In many LMICs, the lack of reliable, up-to-date information on the prevalence and distribution of functional difficulties prevents informed policymaking and planning, as existing figures are often outdated, methodologically inconsistent, or not comparable across countries. Available statistics are widely considered as a systematic underestimation of real needs<sup>x</sup>. The absence of recent nationally representative surveys using standardized methodologies, such as the Washington Group questions or WHO data tools, has resulted in significant information gaps regarding the scale, types and geographic distribution of functional difficulties. This limited evidence base undermines the reliability of national statistics, constrains the precision of assistive technology demand forecasts and weakens the design of inclusive health, social protection and financing policies.

x Chad reports rates from 1.1 per cent (2009) to 14 per cent (2014), while Egypt estimates 12–15 per cent, with significant gender gaps and limited information on the use of assistive products. Mozambique's 2017 census found 2.7 per cent, likely an undercount, and Kenya's 2019 census recorded 2.2 per cent, mostly mobility and visual impairments, also considered conservative.

## 4. Key recommendations

Several challenges continue to limit the effectiveness of existing assistive technology trade policies and contribute to the overall low trade volume of assistive product imports into African countries. To address the challenges identified, these eight key recommendations focus on improving importation processes, legislative frameworks, capacity building and awareness-raising efforts.

### 1. Conduct a cost-benefit analysis of tariffs and taxes on assistive products

National governments should conduct a cost-benefit analysis of import tariffs and VAT applied to assistive products where these charges are high, particularly spectacles and related parts (current import tariffs on spectacles are up to 30 per cent in Chad and Congo, 10 per cent in Egypt and Kenya and 7.5 per cent in Mozambique, while VAT rates stand at 14 per cent in Egypt and at 16 per cent in Kenya and Mozambique), to align with other essential commodities. Such analysis should assess whether these charges may be working against broader national policies aimed at expanding access to assistive technology. Governments should map all import tariffs and VAT applied to HS codes; quantify government revenue collected from these tariffs and taxes; simulate revenue outcomes under alternative measures (e.g., full or partial VAT exemption, tariff reductions, targeted exemptions for priority items); identify alternative revenue sources or compensatory measures; and propose practical, evidence-based reforms.

### 2. Reduce effective tariffs and taxes on assistive products, particularly spectacles, where feasible

To strengthen immediate access to assistive products, it is necessary to reduce the effective cost borne by end users, thereby lowering the tariffs and taxes they face. This study highlights two of the most critical strategies for reducing effective tariffs and taxes, although several other approaches exist. Firstly, for products such as spectacles, the rates of both tariffs and taxes should be reduced. Secondly, existing exemptions for items such as wheelchairs must be enforced. To effectively implement existing exemptions, national governments should simplify and clarify procedures for accessing preferential tariffs and tax exemptions for assistive products, ensuring that these procedures are transparent, efficient and accessible to importers, customs officials and user groups alike.

**Transparency:** the list of eligible assistive products and corresponding HS codes, as well as the

step-by-step procedure for claiming exemptions, should be publicly available on official government platforms in clear, accessible language.

**Efficiency:** administrative procedures should be streamlined to reduce processing delays and minimize the number of institutional actors involved, preventing avoidable bureaucratic bottlenecks that deter applicants and delay clearance.

**Accessibility:** while digital submission and online consultation should be prioritized to simplify applications and follow-up, in-person support and submission channels must remain available to applicants without reliable internet access.

Moreover, the overall trade policy and related tariffs and taxes should be strategically aligned with the nation's broader ambitions for the assistive technology sector. Some alternative trade-related strategies are outlined below.

### 3. Introduce detailed and accurate HS codes for assistive products

There is a need for more detailed and accurate HS codes and national tariff-line extensions for assistive products to ensure proper classification at customs. Two complementary approaches could address this gap:

- National governments and regional blocs could engage with global bodies to support ongoing HS code revision processes and explicitly prioritize assistive products. HS codes are revised every five years by the WCO. The 7th Review Cycle ended in June 2025 and will enter into force in January 2028 (HS 2028, its 8th Edition). The HS 2033 Review Cycle extends until June 2030 and will lead to the HS 2033 Recommendation by the Harmonized System Committee.
- National governments and regional bodies could develop additional customs subcategories and national tariff-line extensions tailored to their priority assistive products. While only the first six digits of HS codes are harmonized globally, regions have already shown successful models for expanding classification. EAC uses an 8-digit system for its Common External Tariff, adding two digits beyond the international 6-digit level for greater specificity. The Economic Community of West African States (ECOWAS) goes even further, applying a 10-digit Tariff and Statistical Nomenclature, which allows for increased precision in tracking and regulating specific products.

## 4. Designate assistive products as essential goods

National governments are encouraged to develop national priority lists of assistive products and to formally classify them as essential goods, as this strengthens policy prioritization and improves access. This classification could grant them preferential treatment in customs, import procedures and fiscal policy. Applying the same logic to assistive products helps to elevate them from a marginal, under-recognized category of imports to a protected class of goods, central to public health and social inclusion.

Designating assistive products as essential goods brings several benefits. It reinforces their status as policy priorities, supports budget allocation for procurement and helps ensure supply continuity during emergencies or disruptions. It also signals to customs officers, ministries of finance and procurement agencies that these items require expedited processing and that unnecessary administrative or financial barriers should be minimized. Moreover, an official designation increases legal clarity and reduces ambiguity for importers, civil society organizations and service providers, who may otherwise face delays and inconsistent treatment at borders.

This classification can also directly reshape the tariff and tax structure. Essential goods are frequently exempt from import duties, VAT and other indirect taxes, or are subject to reduced rates under domestic fiscal policy. By formally placing assistive products in this category, governments can justify preferential tariff lines, simplified exemption procedures and the removal of fees that disproportionately increase final prices for users. When products are recognized as essential, customs officers are less likely to reclassify them into higher-duty categories or impose discretionary charges, reducing both delays and costs. Integration into national legislation ensures that these process improvements are binding rather than ad hoc. As a result, supply chains become more predictable, procurement cycles more efficient and end-users face fewer barriers to access.

A practical illustration of how this approach can be operationalized is provided in Box 8 above. This model demonstrates that adopting a structured list, grounded in international standards but adapted to domestic needs, is both feasible and beneficial. Periodic review mechanisms should also be established to ensure that the list reflects evolving technologies and demographic needs.

## 5. Conduct training on assistive technology classification and trade procedures

National governments should conduct targeted training programmes for customs officers and trade officials to improve the accurate identification and classification of assistive products at customs.

Training should also be provided for importers – including humanitarian organizations, civil society organizations and private companies – on existing trade rules and procedures to ensure they can fully benefit from available tariff reductions and exemptions. A best practice example is the Memorandum of Understanding between the International Trade Centre (ITC) and the University of Dar es Salaam Business School, which provides training for key stakeholders in the use of trademark and market access mapping tools. Target groups include government officials from the Ministry of Industry and Trade, as well as exporters, importers, entrepreneurs and producers. Such partnerships can help build local capacity and promote training opportunities within communities and universities.

## 6. Align trade policies with a regional production strategy to strengthen assistive technology supply chains

National governments should explicitly align tariff, tax and trade policy design with national and regional production strategies for assistive technology. Without this alignment, industrial policy, health policy and trade policy continue to operate in siloes, resulting in distorted incentives that favour overseas imports over viable domestic and regional value chains. A trade-aligned production strategy should clearly distinguish between:

- (i) products suitable for national assembly and servicing;
- (ii) products best produced through regional manufacturing hubs; and
- (iii) products that will remain dependent on global sourcing.

Trade data show that intra-African trade in assistive technology remains very limited (only 3.9 per cent of total African assistive technology imports between 2016 and 2023). Within this small share, South Africa accounts for 72 per cent of intra-regional assistive technology exports, confirming its role as the continent's most significant regional production and distribution hub. Egypt also plays a growing regional hub role, combining large-scale imports, selective exports of prosthetic and orthopaedic products and established health technology manufacturing capacity.

**This recommendation is fourfold:**

### **a) National assembly, repair and maintenance as the first layer**

Countries should prioritize: i) in-country assembly, repair and maintenance of assistive technology; ii) local production of customized components; and iii) duty-free treatment for imported inputs and components used in domestic assembly. This approach reduces shipping costs, shortens delivery times, secures access to spare parts and builds technical workforce capacity, without requiring full-scale industrial manufacturing<sup>62</sup>.

### **b) Regional manufacturing and distribution hubs**

Trade policy should formally support regional assistive technology production hubs by leveraging

existing agreements and infrastructure to expand intra-regional industrial and trade capacity. These hubs should be supported through preferential regional tariff treatment for assistive technology, regional distribution, quality-assurance platforms and standards harmonization to reduce regulatory duplication across borders. This allows smaller markets to access competitively priced regional supply without duplicating industrial investments.

**c) Regional procurement and trade facilitation**

Governments should enable regional pooled procurement, invest in regional logistics hubs to lower freight and storage costs, and reduce non-tariff barriers and regulatory fragmentation for assistive technology within Regional Economic Communities (EAC, COMESA, CEMAC). Trade policy must reinforce this architecture by granting duty-free and VAT-free treatment to production inputs for both national and regional manufacturing, preserving low tariffs and VAT exemptions for assistive technology that cannot be produced regionally.

**d) Preferential trade agreements:**

Africa's dense network of regional and inter-regional agreements already provides for gradual or full tariff liberalization on most assistive technology products. Yet, imports are dominated by suppliers outside existing PTAs. These allow countries to benefit not only from tariffs that are lower than usual MFN tariffs, but also offer the chance to set common external tariffs, address non-tariff barriers, simplify customs procedures and harmonize fiscal policies, all contributing to strategic regional integration goals.

## **7. Implement awareness campaigns on trade rules and tariff and tax exemptions procedures**

Implement awareness campaigns aimed at the general public and importers to promote understanding of existing tariff reductions and fiscal exemptions, including the procedures required to claim them. For example, Afreximbank's specialized AfCFTA<sup>63</sup> training programme was designed to empower African businesses through capacity building and knowledge sharing. Such initiatives could include national workshops, online training modules and information materials tailored to importers, customs officers and small enterprises. These campaigns should highlight practical steps to access tariff benefits, clarify eligibility and documentation requirements and foster public-private dialogue to ensure that fiscal incentives for assistive technology are effectively utilized and widely understood.

Regional bodies and regional trade agreements have an important complementary role in this agenda. Regional Economic Communities (RECs) such as COMESA, EAC, SADC and ECCAS, as well as continental frameworks under the AfCFTA, can develop harmonised training materials, shared guidance on classification and origin rules for assistive products, and joint awareness campaigns that reduce duplication and ensure consistent practice across member states. They can also support

the development of interoperable customs procedures, regional NTB reporting tools and digital certification systems that facilitate importers' use of the preferences provided by PTAs. In this way, national and regional efforts work together: PTAs provide the legal basis for tariff relief on assistive products, while coordinated awareness and training ensure that the legal provisions translate into tangible cost reductions and improved access on the ground.

## 8. Anchor assistive technology policies in cross-ministerial and interest groups coordination

National governments should establish (or reinforce) a formal coordinating body on assistive technology, with meaningful representation of assistive technology user groups. Additionally, they should involve economic ministries, particularly those of trade, industry and commerce, along with industry representatives when relevant.

Moreover, assistive technology policy cannot be implemented effectively if it remains limited to the social or health sectors alone: tariffs, VAT, customs procedures, industrial incentives, standards and procurement rules are all under the purview of economic ministries, making their structured engagement indispensable. Countries with more structured coordination arrangements demonstrate greater capacity to align tariff and tax exemptions, public procurement and support for local production and innovation.

Such a body could consolidate leadership, harmonize policy implementation, oversee national assistive technology strategies, enforce legal mandates and ensure consistent resource allocation. To operationalize this recommendation, governments should:

- Formally designate an inter-ministerial assistive technology coordination body, with mandatory participation of high-level officials of Health, Social Protection, Trade and Industry, Finance/ Revenue Authority, Public Procurement Authority, Standards Bureau, assistive technology user organizations, including organizations of persons with disabilities and industry representatives, where applicable;
- Assign this body a binding coordination mandate, specifically over tariff and VAT exemptions for assistive technology; customs clearance procedures; industrial incentives for assistive technology production; and government procurement rules;
- Ensure budget allocation for AT policy coordination and monitoring;
- Ensure meaningful participation of assistive technology users through mechanisms such as guaranteed voting seats and funded participation in technical committees.

## 5. Conclusion

While significant barriers constrain access to assistive technology in Africa, practical pathways for reform exist and can be implemented in several countries. The analysis of the five select countries – Chad, Egypt, Kenya, Mozambique and the Republic of the Congo – reveals that the primary challenge is the gap between policy and practice. Although most countries have established tariff and tax exemptions for wheelchairs, prostheses and orthoses, spectacles and hearing aids, complex procedures, limited awareness and fragmented governance often prevent these benefits from reaching importers and end users.

The path forward requires moving beyond policy adoption to effective implementation, aligning with the nation's ambitions for its assistive technology sector and ensuring access to assistive technology for all those in need. This involves not only reducing tariffs on paper but also ensuring that customs officers understand what qualifies as assistive technology, that importers can navigate exemption procedures efficiently and that preferential trade agreements translate into real cost reductions for end users. It also means recognizing that assistive technology serves not only persons with disabilities but also older persons, individuals with chronic conditions and anyone experiencing temporary functional difficulties.

Across the continent, the opportunity to expand access to assistive technology through trade and fiscal policy is clear. What is now needed is continued alignment among governments, regional bodies, international partners and civil society to translate existing policy frameworks into sustained implementation. Strengthening coordination, ensuring predictable investment and fostering regional and national cooperation will be essential to ensure that the 200 million Africans who need assistive products can access them affordably, equitably and efficiently.

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