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ASSISTIVE TECHNOLOGY LANDSCAPE IN AFRICA

EXECUTIVE SUMMARY

In partnership with

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Clinton Health Access Initiative

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This brief was developed in the context of the Assistive Technology Landscape Study, produced in partnership with the Mastercard Foundation. The views expressed do not necessarily represent those of the Foundation, its staff, or its Board of Directors.

Introduction

The report provides the most comprehensive evidence-based mapping to date of the Assistive Technology (AT) landscape in Africa, with a specific focus on youth inclusion, skills development, employment, and entrepreneurship.

The Mastercard Foundation works with visionary organizations to empower young people to access meaningful, dignified, and fulfilling work. Through its Young Africa Works strategy, Mastercard Foundation seeks to enable 30 million young people across Africa to access dignified and fulfilling work by 2030, with a focus on young women, refugees and displaced persons, and people with disabilities.

Documents including 185 scientific studies and 338 grey-literature, covering all 54 countries, were reviewed to address three strategic questions:

- What are the priority AT needs, **access** barriers, and context-specific enablers for equitable access across Africa?
- What does the national and regional **policy landscape** reveal about legal frameworks, AT strategies, implementation gaps, and opportunities to strengthen disability inclusion and access?
- What employment, entrepreneurship, **innovation, and manufacturing** opportunities exist within Africa's AT ecosystem, particularly for young persons with disabilities, and how can these be scaled sustainably?

Key Findings

1. Assistive Technology Access

Across Africa, young persons with disabilities remain structurally invisible within AT systems. Fragmented information pathways, limitations in data systems, stigma, and poor coordination across health and community sectors prevent early identification of need and disrupt transitions from school to work. Most AT services are urban based, making access costly, slow, and unrealistic for rural youth. Abandonment of AT, exclusion of youth, and lack of education about AT further compound these challenges. As a result, access to AT often depends on chance, personal networks, or digital connectivity rather than predictable, rights-based systems.

AT provision remains heavily skewed toward mobility devices, while communication, cognitive, learning, and digital AT, critical for educational attainment and employability, are routinely overlooked. Affordability is the most binding constraint, with high out-of-pocket and recurrent costs making sustained AT use unattainable for most young people. Evidence consistently shows that youth-centred, decentralised, digitally enabled, and peer-based models offer the strongest pathway to equitable access and scale.

Youth-centred approaches respond to the distinct realities of young persons with disabilities, whose AT needs are linked to education–work transitions, identity formation, and digital participation. Engaging young people as users, peer navigators, and active shapers of the AT ecosystem, rather than passive beneficiaries, plays a critical role in reducing stigma, improving continuity of use, and creating direct pathways into skills development and employment.

2. Policy and Governance

AT policy activity has accelerated significantly since 2016, following the operationalisation of the World Health Organization's Global Cooperation on Assistive Technology (WHO-GATE) initiative, with at least 38 countries adopting AT-specific strategies aligned with this and other global frameworks. However, implementation maturity lags far behind policy intent. Many policies lack operational detail, enforceable standards, financing, and monitoring systems.

Governments, primarily Ministries of Health, retain leadership, increasingly using Technical Working Groups (TWGs) to coordinate multi-stakeholder policy development. While promising, coordination across education, labour, industrial development, and youth systems remain ineffective. Youth with disabilities are widely recognised as beneficiaries but are rarely engaged as policy co-creators, limiting responsiveness and demographic leverage. Financing is the weakest link: few countries include costing, return-on-investment analysis, or dedicated budget lines, leaving systems donor-dependent and fragile.

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3. AT Ecosystem and Stakeholders

Africa's AT ecosystem is transitioning from fragmented, donor-led provision toward multi-actor systems, but progress is uneven. East and Southern Africa demonstrate the strongest coordination, driven by academic leadership, social enterprises, and policy–practice linkages. West and Central Africa remain more donor-dependent, with less institutional integration.

Ecosystem maturity correlates strongly with stakeholder diversity. Families, community-based workers, organizations for persons with disabilities (OPDs), and youth peer networks consistently enhance relevance and uptake; however, they remain insufficiently institutionalized. Ongoing coordination challenges across stakeholders continue to constrain sustainability and scale.

4. Products, Production, and Innovation

AT provision across Africa remains device-centred rather than participation-centred. National assistive technology portfolios are largely concentrated on mobility devices, while communication, cognitive, self-care, and digital technologies remain limited. This imbalance affects continuity of use for youth as they transition through education and into employment.

Local AT production exists but is uneven. East Africa hosts the most dynamic production and innovation ecosystems; Southern Africa offers stable fabrication capacity; West Africa remains early-stage; North Africa contributes advanced technical expertise in biomedical engineering, orthotics and prosthetics manufacturing, rehabilitation robotics, digital assistive devices, and standards-based medical device production, driven by stronger university industry linkages and engineering capacity.

Over 85 percent of AT products are imported, exposing systems to supply-chain and funding shocks. Importantly, repair, refurbishment, and maintenance already underpin service delivery in many contexts and represent scalable, lower-capital employment pathways for youth.

5. Market Dynamics

AT need across Africa is extremely high and growing, yet rarely quantified or used for planning. It is estimated that 200 million Africans require at least one assistive device. Fulfilled AT need

remains critically low, typically ranging from 10 to 25 percent across African countries, with youth-specific access levels consistently lower and often undocumented. Limitations in data systems constrain effective procurement, financing, and accountability.

Critically, the African AT market is scale-constrained rather than supply-constrained. Innovation and manufacturing capacity exist, but growth is limited by low demand, fragmented procurement, regulatory gaps, lack of certification systems, and dependence on donor funding. As a result, the AT market remains a major untapped opportunity for inclusive growth and youth employment.

6. Economic Opportunities for Young Persons with Disabilities

Young persons with disabilities already participate in the AT ecosystem as users, repairers, innovators, and entrepreneurs, but systemic constraints limit scale and sustainability. Digital AT innovation expands roles beyond fabrication into design, software, logistics, and service coordination. However, youth leadership remains peripheral in AT governance, access to finance is limited, and linkages between AT systems, training institutions, and labour markets are poorly integrated. Without deliberate systems integration, AT access will not reliably translate into sustained employment outcomes.

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STRATEGIC IMPLICATIONS FOR FUNDERS AND POLICYMAKERS

The evidence is clear: AT can be a productivity- and employment-enabling investment if the African AT ecosystem is strengthened. While policy foundations largely exist, the greatest opportunity now lies in implementation, innovation, and market shaping. By investing in youth-inclusive AT implementation; local production; skills and workforce pipelines; broader fields linked to AT such as finance and data science; digital and decentralised service models; and stronger data and financing systems, AT can be positioned as a catalytic platform for youth employment, entrepreneurship, and inclusive growth across Africa.

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