Cadernos Brasileiros de Terapia Ocupacional
Brazilian Journal of Occupational Therapy

ISSN 2526-8910

Review Article

Assistive technology in the Brazilian Law for the Inclusion of Persons with Disabilities and in health and education public policies in Brazil: a textual review based on the Sustainable Development Goals

Tecnologia assistiva na Lei Brasileira de Inclusão e nas políticas de saúde e educação no Brasil: uma revisão textual à luz dos Objetivos de Desenvolvimento Sustentável

Carolina Maria do Carmo Alonso[a], Talita Silverio de Souza Silva[a], Larissa Leite Umbelino[a], Thamyres Crystine da Costa Abreu[a]

[a]Universidade Federal do Rio de Janeiro – UFRJ, Rio de Janeiro, RJ, Brasil.

How to cite: Alonso, C. M. C., Silva, T. S. S., Umbelino, L. L., & Abreu, T. C. C. (2026). Assistive technology in the Brazilian Law for the Inclusion of Persons with Disabilities and in health and education public policies in Brazil: a textual review based on the Sustainable Development Goals. *Cadernos Brasileiros de Terapia Ocupacional*, *34*, e4130. https://doi.org/10.1590/2526-8910.cto.418641302

Abstract

Introduction: Assistive Technology (AT) is essential to expand the functioning and social participation of persons with disabilities (PwD) and is recognized as a right under the Brazilian Law for the Inclusion of Persons with Disabilities (LBI). In the international context, the 2030 Agenda and the Sustainable Development Goals (SDGs) identify AT as a strategic element to reduce inequalities and ensure that no one is left behind. **Objective:** To critically analyze the normative documents that regulate the provision of AT in Brazil, with a focus on the LBI and public policies in the fields of health and education, in relation to the SDGs. **Method:** Systematic review of textual evidence, conducted according to the Joanna Briggs Institute methodology. In addition to the LBI, official normative and programmatic documents in health and education were analyzed. The synthesis was conducted using meta-aggregation, with thematic categorization of the findings and an assessment of alignment with the SDGs. **Results:** The documents were organized into three axes: (1) the LBI shows strong convergence with the SDGs by recognizing AT as a fundamental right linked to health, education, work, and mobility; (2) in the health field, the analysis revealed articulation with the SDGs, although regional inequalities, limited availability of specialized services,

Received on May 29, 2025; 1st Revision on Jun. 15, 2025; Accepted on Jan. 20, 2026.

and a biomedical focus on the provision of devices persist; (3) in education, despite normative advances, structural barriers remain that compromise the achievement of the inclusion targets set out in the 2030 Agenda. **Conclusion:** Barriers to the effective realization of the right to AT persist in Brazil. Investment in professional education, expansion of access, and strengthened intersectoral coordination are recommended to align public policies on AT with the SDGs.

Keywords: Self-Help Devices, Social Inclusion, Sustainable Development, Public Policy, Persons with Disabilities.

Resumo

Introdução: A Tecnologia Assistiva (TA) é essencial para ampliar a funcionalidade e a participação social das pessoas com deficiência (PCD), sendo reconhecida como direito na Lei Brasileira de Inclusão (LBI). No cenário internacional, a Agenda 2030 e os Objetivos de Desenvolvimento Sustentável (ODS) apontam a TA como elemento estratégico para reduzir desigualdades e garantir que ninguém seja deixado para trás. **Objetivo:** Analisar criticamente os documentos normativos que regulam a oferta de TA no Brasil, com foco na LBI e nas políticas públicas dos campos da saúde e da educação, à luz dos ODS. **Método:** Revisão sistemática de evidência textual, conduzida conforme a metodologia do Instituto Joanna Briggs. Além da LBI foram analisados documentos normativos e programáticos oficiais da saúde e educação. A síntese foi realizada por meio de meta-agregação, com categorização temática dos achados e avaliação do alinhamento com os ODS. **Resultados:** Os documentos foram organizados em três eixos: (1) a LBI apresenta forte convergência com os ODS ao reconhecer a TA como direito fundamental vinculado à saúde, educação, trabalho e mobilidade; (2) no campo da saúde, a análise revelou articulação com os ODS, embora haja desigualdades regionais, baixa oferta de serviços especializados e foco biomédico na dispensação de recursos; e (3) na educação, embora haja avanços normativos, persistem entraves estruturais que comprometem a efetivação das metas de inclusão previstas na Agenda 2030. **Conclusão:** Persistem barreiras à efetivação do direito à TA no Brasil. Recomenda-se investir em qualificação, ampliação do acesso e articulação intersetorial para alinhar as políticas públicas sobre TA aos ODS.

Palavras-chave: Equipamentos Assistivos, Inclusão Social, Desenvolvimento Sustentável, Políticas Públicas, Pessoas com Deficiência.

Introduction

According to the Brazilian Law for the Inclusion of Persons with Disabilities (LBI), also known as the Statute of the Person with Disabilities, Assistive Technology (AT) encompasses a wide range of products, devices, equipment, methods, strategies, practices, and services intended to enhance the functioning of persons with disabilities (PwD) (Brasil, 2015). While AT can also benefit other populations, such as older adults and people with chronic diseases, this study focuses on PwD and highlights how these technologies are essential to foster this population's independence and social participation.

In parallel, in the international context, the 2030 Agenda for Sustainable Development recognizes that the eradication of poverty and the promotion of equity will only be possible with the inclusion of PwD in all dimensions of sustainable development (Organização das Nações Unidas, 2015; Banks et al., 2020). Even though this document does not address

AT directly, AT is understood as a key element in ensuring equal opportunities, autonomy, and social participation. It is, therefore, considered a fundamental condition for reducing the inequities experienced by PwD (Organização Mundial da Saúde & Fundo das Nações Unidas para a Infância, 2022).

However, the global report on AT, developed jointly by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), indicates that although one billion people worldwide need AT, only 10% have access to these devices because of financial, social, and governmental barriers (OMS & UNICEF). This low level of access is particularly pronounced in low- and middle-income countries (Savage et al., 2021; Organização Mundial da Saúde & Fundo das Nações Unidas para a Infância, 2022).

The review by Matter et al. (2017) identified factors that contribute to restricted access to AT, including gaps in the production of evidence on the quantity and quality of AT, particularly in resource-limited settings and in low- and middle-income countries, as well as unequal provision across different types of devices. Along the same lines, the diversity of AT needs has received limited investigation, with a predominance of studies focused on eyeglasses, lower-limb prostheses, and wheelchairs, and an almost complete lack of evidence supporting the cost-effectiveness and feasibility of devices intended for education, communication, performance of activities of daily living (ADL), work, and leisure (Borg et al., 2011; Matter et al., 2017; Chakraborty, 2020).

Another problem is the lack of services focused on AT provision, which means that even when people living in low- and middle-income countries obtain access to the devices they need, these devices are delivered without appropriate instructions for use, education, adaptation, and maintenance (Borg et al., 2011; Matter et al., 2017; Chakraborty, 2020). In this situation, acquisition and post-delivery services generally fall to the user and the user's family, which undermines adherence to AT use and often leads to abandonment (Borg et al., 2011; Boger et al., 2017).

This restricted access to AT exacerbates the inequalities experienced by PwD by limiting their opportunities to participate in education, work, and civic life (Shi et al., 2022; Tebbutt et al., 2016). By undermining users' independence and autonomy, lack of AT tends to perpetuate existing cycles of social and economic exclusion. As a consequence, it increases reliance on family members or caregivers, which burdens both families and the public system (Shi et al., 2022; Tebbutt et al., 2016).

In Brazil, despite advances in public policies that seek to ensure access to AT, major challenges remain. Recent studies, such as those by Bastos et al. (2023), Domingues & Laplane (2024), and Manzini (2025), have contributed to mapping and problematizing these obstacles and have documented an AT supply characterized by institutional fragmentation, a focus on biomedical criteria for the provision of products and services, and substantial regional inequality. In particular, Manzini (2025) highlights the absence of continuous and systematic Federal Government funding, which underscores policy discontinuity and limited investment in the acquisition and development of assistive technologies in the country.

Given, on the one hand, the significant challenges that PwD face for inclusion in society and, on the other hand, the essential role of AT in mitigating inequalities and fostering greater social participation, this study proposes a critical analysis of AT as an instrument of equity, particularly in the Brazilian context. To this end, it adopts as an analytical framework the principles of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) of the WHO (Tao et al., 2020; Tebbutt et al., 2016; Magnusson & Bickenbach, 2020).

This study recognizes that disability-related issues and, consequently, AT are cross-cutting across all SDGs; however, it limits the analysis to two central axes: health and education. This choice is justified because, in Brazil, these are the main institutional fields responsible for AT provision, both in terms of regulation and operationalization of public policies.

The objective of this study is to identify and critically analyze the normative documents that regulate the provision of AT in Brazil, with emphasis on the LBI as the central legal framework and on the fields of health and education. The analysis considers the extent to which these documents align with the principles of the 2030 Agenda by examining the degree to which they converge with or diverge from the SDGs.

Method

This study consists of a systematic review of textual evidence, conducted according to the methodological approach proposed by the Joanna Briggs Institute (Pearson et al., 2024). This type of review is indicated for the analysis of normative documents, guidelines, and institutional texts that express technical or policy guidance relevant to practice, particularly in contexts where empirical studies are scarce or when the question of interest involves public policy analysis, as in the present study (Pearson et al., 2024).

The protocol for this review is registered with the Center for Open Science and can be accessed at: https://doi.org/10.17605/OSF.IO/SMXW5.

Review question

How do national normative and programmatic documents, with emphasis on the LBI, guide the provision of AT in Brazil, especially in the fields of health and education, and to what extent do these public policies align with the SDGs of the 2030 Agenda?

Eligibility criteria

To select the documents used in this textual review, eligibility criteria were developed and are presented in Table 1.

Table 1. Criteria applied to the selection of documents that composed the corpus of this textual review.

Criteria	Details
Inclusion criteria	Normative, programmatic, or technical documents that guide the provision of AT in the field of health and/or education in Brazil, that are in force and available online in full; texts published by government agencies, public institutions, or intergovernmental organizations (such as WHO or the UN) on the 2030 Agenda.
Exclusion criteria	Editorials, booklets, opinion articles, interviews, or individual speeches without a normative basis; documents focused on contexts other than the health or education sectors; texts that mention AT only tangentially, without detailing guidelines, recommendations, or governmental actions, or that are no longer in force.

Source: Prepared by the authors.

Population

This review considers as the population of interest PwD, as defined by the Convention on the Rights of Persons with Disabilities (CRPD), adopted by the UN and incorporated into the Brazilian legal system with constitutional amendment status (Organização das Nações Unidas, 2006). This definition includes individuals with long-term physical, mental, intellectual, or sensory impairments who, in interaction with various barriers, may have restricted full and effective participation in society on an equal basis with others. Accordingly, persons with physical, hearing, visual, intellectual, and psychosocial disabilities were included.

Concept

The central concept of this review refers to the guidelines and determinations expressed in official documents that guide the provision of AT in Brazil, including both normative instruments (laws, decrees, ordinances, and technical guidelines) and programmatic instruments (public policies and government programs). These documents are considered complementary forms of expressing public policy, provided that they have official status and the potential for direct impact on the inclusion of PwD.

Additionally, this review considers, as part of the concept, the relationship between these guidelines and the SDGs of the 2030 Agenda, with emphasis on the promotion of equity, inclusion, and sustainable development.

Context

The context considered in this review comprises the fields of health and education in Brazil because these are the two areas in which the provision and use of AT have the strongest normative and institutional support. Documents addressing AT within the Brazilian Unified Health System (SUS), the National Policy on Special Education, and other governmental strategies aimed at ensuring the social rights of PwD were considered. Documents restricted to other contexts, such as social assistance, culture, science and technology, or public security, were excluded, except when they had a direct articulation with the health or education sectors.

Search strategy and sources of information

The search strategy was developed in two stages. The first stage consisted of a manual search, conducted from October to November 2023, in official databases and repositories, with the aim of identifying normative documents consistent with the inclusion criteria previously described. The term Assistive Technology was used to search the websites of the Ministry of Health, the Ministry of Education, the National Secretariat for the Rights of Persons with Disabilities, and the National Council for the Rights of Persons with Disabilities (CONADE).

Given the dynamic nature of public policies and the possibility of normative updates over time, this search was later updated in December 2025, using the same portals, terms, and inclusion criteria, to ensure the currency and robustness of the review.

The second stage of the search, conducted in parallel with the first, occurred on the WHO and UN databases using the terms Sustainable Development Goals and 2030 Agenda. Document screening was conducted independently by two reviewers, TSSS and LLU, with mediation by a third reviewer, CMCA, in cases of disagreement.

Data extraction strategy

Data were extracted based on the methodological guidance established by the JBI for systematic reviews of textual evidence (Pearson et al., 2024). A standardized form was used, which included the following items:

Document type: classification of the text according to its normative or institutional genre (for example, law, decree, ordinance, national policy, technical guideline, institutional report, among others);

Document title: official full title of the normative instrument or programmatic publication.

Summary: overview of the document's general content and objectives.

Issuing institution: government agency, public body, or intergovernmental organization responsible for issuing the document.

Year: official publication date or effective date.

Scope: main thematic area addressed in the document (such as health, education, human rights, or intersectoral actions);

Key points on AT: identification and description of guidelines, provisions, or strategies related to AT.

Coverage/Highlights: scale of application of the document (national, regional, or sectoral), main target population, and innovative or structuring aspects for the public policy in question.

Relationship with the SDGs: correspondence between the document's provisions and the SDGs of the 2030 Agenda, with justifications based on the themes addressed.

For documents addressing the 2030 Agenda and the SDGs, information was extracted on target definitions and guiding principles, focusing primarily on strategies for PwD. This information served as the analytical basis to assess the degree of alignment between Brazilian normative documents on AT and international sustainable development commitments.

Synthesis of textual evidence

The synthesis of the data extracted in this textual review was conducted using the meta-aggregation approach, which is grounded in pragmatic and phenomenological assumptions and is based on the understanding that useful findings for practice can be generated from the systematic analysis of textual propositions, even in the absence of numerical or experimental data (Pearson et al., 2024).

The synthesis process was conducted in three stages: (1) extraction and classification of data from the documents that addressed the review question, with attention to their alignment with the SDGs; (2) grouping of data by similarity of meaning, resulting in thematic categories; (3) formulation of synthesized findings based on the aggregation of these categories to express the main normative axes identified. The synthesis was performed manually, with a record of conclusions, categories, and classification justifications.

Results and Discussion

The results of this textual review are organized into three thematic axes. In each axis, tables are presented that compile the documents included in the study. The first thematic axis focuses on the LBI, the primary normative framework for the rights of PwD in Brazil and examines its connections with the 2030 Agenda. The analysis highlights the role of AT in linking the principles of the LBI with the SDGs.

The second axis analyzes how public policies in the field of health address AT, whereas the third examines normative documents related to AT in the educational context. In both axes, the extent to which sectoral policies converge with or diverge from the principles established by the SDGs is examined.

AT and the reduction of inequalities: connections between the 2030 Agenda and the LBI in Brazil

This thematic axis analyzes the LBI, with emphasis on references to AT in relation to the SDGs of the 2030 Agenda. Based on a systematization of the information presented in these documents, the analysis seeks to identify the extent to which the LBI incorporates the principles and targets of the 2030 Agenda related to the reduction of inequalities, the promotion of inclusion, and access to AT resources. Table 2 presents general characteristics of the two documents included in this analytic category.

The Millennium Development Goals (MDGs), launched in 2000 by the UN, represented a global effort to reduce extreme poverty and promote the dignity of the most vulnerable populations (Gupta & Vegelin, 2016). Despite limited and uneven progress, the MDGs prepared the ground for the 2030 Agenda for Sustainable Development, adopted in 2015, which expanded the scope of global targets by incorporating the three pillars of sustainable development: social, environmental, and economic, and by affirming the principle that no one should be left behind (Organização das Nações Unidas, 2015).

Table 2. Characteristics of the LBI and the UN global action plan for sustainable development.

Document/ Year	Summary	Issuing institution	Scope	Key points on AT	Characteristics
Global Action Plan (2015)	Establishes global targets for the eradication of poverty, the promotion of human dignity, and sustainable development based on the principle that no one should be left behind	UN	International	Recognizes disability as a driver of inequality and highlights the importance of AT for inclusion within SDGs 3, 4, 8, and 10	Targets focused on equity, inclusion, and the full participation of PwD
Federal Law (2015)	Establishes the Brazilian Law for the Inclusion of Persons with Disabilities (LBI), based on the Convention on the Rights of Persons with Disabilities (CRPD), and adopts a biopsychosocial perspective on disability	Presidency of the Republic of Brazil	National	Recognizes AT as a fundamental right; links its provision to rights related to health, education, work, mobility, and communication	National scope; reference framework for inclusive public policies

Source: Prepared by the authors.

Inspired by proposals such as the concept of a safe and just space for humanity (Raworth, 2012), this agenda proposes balancing access to basic rights with the preservation of the planet's ecological boundaries. With respect to PwD, the SDGs establish an explicit commitment to this population by recognizing the interdependent cycle between disability and poverty (Organização das Nações Unidas, 2015; Banks et al., 2017).

This cycle is especially pronounced in low- and middle-income countries, where the precariousness of basic services, combined with environmental and social barriers, contributes to worsening inequalities (Trani & Loeb, 2012; Mitra et al., 2013). In addition, even in more economically advantaged contexts, PwD remain among the most vulnerable groups because of access barriers and disability-related costs (Pinilla-Roncancio & Alkire, 2017).

In this context, AT emerges as a strategic factor in ensuring equity and the full participation of PwD in social, educational, economic, and political life. For this reason, the international literature has highlighted the role of AT in achieving several SDGs, especially SDGs 3 (Good Health and Well-Being), 4 (Quality Education), 8 (Decent Work and Economic Growth), and 10 (Reduced Inequalities) (Tebbutt et al., 2016; Shi et al., 2022; Kamran et al., 2023).

In Brazil, this convergence between international frameworks and the national legal order is represented primarily by the LBI (Brasil, 2015). Based on the principles of the CRPD, incorporated with constitutional status in 2008, the LBI adopts a biopsychosocial perspective on disability and recognizes the interaction between impairments and social barriers as a determinant of exclusion (Organização das Nações Unidas, 2006; Brasil, 2015). Thus, at the national level, AT is treated as a fundamental right of PwD, and its provision is linked to several foundational rights, such as health, education, work, mobility, and communication. Table 3 summarizes the main provisions of the LBI that refer to AT and their relationship with the SDGs.

Thus, both international frameworks, especially the 2030 Agenda, and the LBI establish consistent normative foundations for recognizing AT as a right of PwD. However, translating these principles into sector-specific public policies remains challenging. The following sections analyze normative documents in the fields of health and education to assess the extent to which these public policies align with the SDGs.

AT in health: to what extent do Brazilian public policies align with the SDGs?

The systematization of the main normative and programmatic documents that structure the provision of AT in the health sector in Brazil today are presented in Table 4.

In Brazil, SUS is the primary institution responsible for ensuring access to AT (Maximo & Clift, 2015; Bastos et al., 2023). Although public policies aimed at addressing population needs in this field have advanced, especially over the past two decades, significant barriers to access to AT products and services remain (Bastos et al., 2023; Cruz & Emmel, 2015). These barriers are part of a broader context of structural underfunding of the health system, which has limited the SUS capacity to implement its policies since the 1990s (Funcia, 2019).

In addition, the literature on health federalism indicates that the provision of health actions is strongly conditioned by inequality in the fiscal and administrative capacity of municipalities, which are heavily dependent on federal transfers (Arretche, 2004; 2012). With respect to AT, these asymmetries are reflected in regional heterogeneity, with services concentrated in major urban centers and with care gaps, especially in the Midwest, North, and Northeast regions (Delgado Garcia et al., 2017).

Table 3. Mentions of AT in the LBI and its relationship with the SDGs.

Axis	Description of AT approach in the LBI	Relationship with SDGs
Definition	The LBI defines AT as resources that promote functioning for persons with disabilities (Art. 3, item XII), encompassing products, services, and strategies that facilitate performance of everyday activities and social participation.	SDG 10 – Reduced Inequalities
Education	AT is addressed within education (Art. 28, item XIII) and establishes that accessibility resources, such as accessible instructional materials, equipment, and other AT devices, must be provided to ensure the full inclusion of students with disabilities at all levels of education.	SDG 4 – Quality Education
Health and rehabilitation	In the field of health, the LBI establishes that the SUS must ensure provision of AT as part of the rehabilitation of persons with disabilities (Art. 18), including orthoses, prostheses, and assistive devices for mobility, hearing, and vision, among others.	SDG 3 – Good Health and Well-Being
Work and labor inclusion	With respect to work, the LBI (Art. 34) establishes that employers must adopt measures to facilitate the hiring and retention of persons with disabilities, including provision of AT resources, such as workplace adaptations and specialized equipment that supports task performance.	SDG 8 – Decent Work and Economic Growth
Mobility	Urban mobility is also addressed through the provision for AT use (Art. 46), either to ensure accessible public transportation or to facilitate safe mobility and circulation in public spaces.	SDG 11 – Sustainable Cities and Communities
Communication and access to information	The LBI reinforces the right to accessibility and communication by establishing that persons with disabilities must have access to AT to communicate and access information effectively and on an equal basis with others (Art. 63), including technology devices that support digital interaction and access to communication networks.	SDG 10 – Reduced Inequalities

Source: Prepared by the authors.

This context undermines the alignment of national policies with SDG targets related to equity, universal access, and the reduction of inequalities. It also underscores the need to review funding mechanisms and strengthen intergovernmental cooperation so that access to AT in Brazil becomes less inequitable and can fulfill its role in promoting PwD functioning and social participation.

At the operational level, studies on AT provision within SUS show that the process is based on a standardized, rigid, and outdated list, constrained by diagnostic criteria and insufficiently responsive to the functional needs of its users (Domingues & Laplane, 2024; Maximo & Clift, 2015). The list primarily includes orthoses, prostheses, insoles, hearing aids, and mobility aids, with limited possibility for customization (Brasil, 2021). As a result, devices intended for communication, performance of ADL, environmental control, or the needs of PwD with intellectual disabilities and cognitive deficits remain outside the scope of public coverage.

These limitations stem not only from the restricted composition of the list but also from the historical lag in the SUS reimbursement table. Insufficient updating has prevented diversification and the incorporation of more complex or customizable technologies (Domingues & Laplane, 2024). Inadequate SUS reimbursement values compromise the ability of services to acquire more up-to-date devices or to provide individualized adaptations, resulting in provision that does not meet the users' actual needs.

Table 4. Systematization of the main normative and programmatic documents that currently.

Framework / Program	How it addresses AT	Scope / Highlights
Brazilian Law for the Inclusion of Persons with Disabilities (Brasil, 2015)	Recognizes AT as part of the right to health and rehabilitation (Art. 18). Requires the SUS to provide orthoses, prostheses, mobility aids, and other devices that promote autonomy.	Legal framework that underpins the provision of AT within SUS. Applies nationwide.
Priority AT Product List (Brasil, 2021)	Guidance list for incorporating AT products into the SUS based on evidence and social relevance. Includes items such as communication boards, electronic canes, and environmental control technologies.	Tool to support decision-making in public policy.
Annex VI – Care Network for Persons with Disabilities (Brasil, 2023a)	Updates the organization of the RCPD by defining guidelines and functions of services for assessment, indication, adaptation, provision, and follow-up of AT. Reinforces user agency, the biopsychosocial approach to disability, and the linkage of orthotics and prosthetics workshops.	Central document for structuring care for PwD within the SUS. Strengthens CERs as strategic points for prescription, provision, follow-up, and maintenance of AT.
New Living Without Limits (Brasil, 2023b)	Relaunches the national interministerial plan with axes addressing health, education, accessibility, and technology. Promotes incentives for domestic AT production and expands the availability of specialized services.	Coordinated by the Ministry of Human Rights. Integrates health and innovation policies.
Amendment to the Brazilian Law for the Inclusion of Persons with Disabilities (Brasil, 2025b)	Addresses the inclusion of low-technology augmentative and alternative communication systems in public health services.	Amends Laws No. 10,098/2000 (Accessibility Law) and No. 13.146/2015 (LBI).

Source: Prepared by the authors.

In sum, access to AT within SUS remains characterized by organizational fragmentation, bureaucratic barriers, and substantial regional inequalities (Domingues & Laplane, 2024; Maximo & Clift, 2015). As a consequence, many PwD, especially those more socioeconomically vulnerable, have their right to AT compromised, which contributes to the reproduction of structural inequalities that have long been present in the country.

Another critical issue for access to AT in the field of public health in Brazil is dependence on imported products, which generates additional costs for users because of taxation or increases the burden on the State when tax exemptions apply. This situation intensifies the financial impact both for those who need to acquire devices outside the public system and for the State itself (Domingues & Laplane, 2024).

To illustrate this scenario, augmentative and alternative communication (AAC) devices, such as those in the Tobii Dynavox line, can exceed BRL 40,000. Although national alternatives exist, such as Colibri, developed with Brazilian technology and marketed at prices between BRL 7,000 and 10,000, these resources are not included on the SUS list of covered products and, because of their cost, are unlikely to be acquired by a large portion of PwD in Brazil. According to the 2022 Demographic Census, the mean per capita household income of PwD is less than 70% of that observed among persons without disabilities, and the proportion of individuals with disabilities living in poverty is substantial. This situation makes purchase with personal resources infeasible and also limits access to existing financing lines (Instituto Brasileiro de Geografia e Estatística, 2023).

Moreover, even when devices are acquired through public or private resources, the lack of qualified services for prescription, adaptation, and follow-up compromises appropriate use. As reported by Bersch et al. (2010) and Costa et al. (2015), the lack of a formal structure for AT services in Brazil, combined with a shortage of education and follow-up programs, contributes to device abandonment. Even when equipment is appropriately indicated and functionally adequate, lack of ongoing support and limited attention to users' subjective needs compromise intervention outcomes and perpetuate inequalities in access to and use of AT.

This gap contradicts both what is established in national legislation, such as the LBI and the ordinances that structure the Care Network for Persons with Disabilities, and international guidance, such as the WHO and UNICEF Global Report on AT (Organização Mundial da Saúde & Fundo das Nações Unidas para a Infância, 2022), which emphasizes the need for qualified services to ensure appropriate, safe, and sustained use of AT devices.

Regarding the education of professionals involved in AT provision, professional preparation remains insufficient, which reduces service quality and limits the capacity to fabricate or adapt devices to users' specific needs (Bersch et al., 2010; Domingues & Laplane, 2024). These weaknesses compromise the identification of problems and the development of appropriate solutions, resulting in prescriptions that often do not meet the functional and contextual demands of PwD (Domingues & Laplane, 2024; Maximo & Clift, 2015).

In this context, although the New Living Without Limits Plan (Brasil, 2023b) resumes the interministerial agenda on the rights of PwD, its AT initiatives remain limited and insufficiently integrated into the SUS network. The establishment of research centers and the strengthening of the National System of AT Laboratories (SisAssistiva-MCTI) represent advances in promoting innovation (Brasil, 2022), but they lack effective articulation with health services and with policies for professional education, which limits their capacity to expand universal access to AT.

These limitations indicate that, despite normative and programmatic advances, the current model remains far from ensuring equitable and comprehensive access to AT as a component of health care, as envisioned by SDG 3, which emphasizes strengthening health systems and universal access to essential technologies (Organização das Nações Unidas, 2015). Progress in this direction will require reformulation of the Brazilian model, with stronger incorporation of a biopsychosocial perspective on disability and closer alignment with the LBI guidance and 2030 Agenda commitments.

This will require updating and diversifying the AT products included in the SUS lists, including devices intended for communication, ADL, cognition, and environmental control, as well as addressing dependence on imports through incentives for domestic AT production. It will also require expanding the education of professionals and increasing the reach of rehabilitation services by ensuring multiprofessional teams capable of conducting assessment, prescription, adaptation, and ongoing follow-up. Health professional education should include specific content on AT and its social determinants to strengthen the provision of products and services within SUS and reduce the inequalities documented in this study.

Finally, for public policies to address population needs effectively, it is essential to establish effective mechanisms for identifying demand, coordinated with territorial and accessible service networks. Only by closer alignment with the lived realities of PwD in the country will it be possible to address, in a structured manner, the inequalities that continue to shape access to AT within SUS.

AT in the field of education: areas of convergence with and divergence from the SDGs

The incorporation of AT into Brazilian public education policies began in 2005, with the creation of the Program for the Implementation of Multifunctional Resource Rooms by the Ministry of Education, within the Secretariat of Special Education (SEESP/MEC). This program aims to structure education systems for Specialized Educational Services (AEE) through the provision of AT equipment and resources (Brasil, 2005).

In 2007, the Education Development Plan (PDE) was launched, and in 2008, the National Policy on Special Education from the Perspective of Inclusive Education was issued (Brasil, 2007, 2008). This guiding framework of the Ministry of Education consolidated AEE as a core strategy to ensure access, retention, and learning for students who are the target population of special education, and it highlighted the provision of AT resources as an integral component of this service (Brasil, 2008). Since then, AT has been recognized as essential to ensure pedagogical, communication, and physical accessibility in the school environment.

Table 5 presents a systematization of the main normative and programmatic documents that, starting with this inaugural policy, have guided the provision of AT in the field of education in Brazil. Among the frameworks presented, the Operational Guidelines for AEE, formalized by Resolution CNE/CEB No. 4/2009, deserve particular attention. These guidelines reinforced the importance of AT by establishing that specialized services should occur in Multifunctional Resource Rooms (SRM) structured with appropriate equipment and devices (Brasil, 2009).

Implementation of these guidelines was strengthened by a national program that enabled the delivery of resources such as screen magnifiers, screen-reader software, electronic magnifiers, communication boards, and accessible pedagogical materials to public education systems. However, because participation in the program is voluntary and depends on agreements between the Ministry of Education and regional education systems, inequalities in SRM implementation are observed across Brazilian municipalities. This situation increases regional disparities in access to AT and undermines equity in AEE implementation. In addition, maintenance and updating of SRM resources are the responsibility of education systems, which can affect service quality and continuity.

With the enactment of the LBI (Brasil, 2015), access to AT in the field of education was elevated to the status of a right. Article 28 of the LBI establishes the State's responsibility to ensure AT resources as part of promoting educational inclusion at all levels of education. This normative perspective aligns with the 2030 Agenda commitments by recognizing the importance of AT as a means of promoting equal opportunities, addressing educational barriers, and expanding the social participation of PwD.

The 2020 version of the new National Policy on Special Education, which proposed segregationist guidelines, received widespread criticism from experts and civil society organizations. In 2023(b), a new revision process began that sought to reestablish the foundations of inclusive education, with emphasis on strengthening general education classrooms and expanding support through AT resources. This reorientation was also presented through the Plan for Affirmation and Strengthening of the National Policy on Special Education from the Perspective of Inclusive Education, with an investment of BRL 3 billion. This normative shift reaffirms the principles of the LBI and the CRPD, particularly with respect to the promotion of equity and recognition of differences as part of human diversity.

Table 5. List and characteristics of the documents included in this textual review related to the education axis**.**

Framework / Program	How it addresses AT	Scope / Highlights
Multifunctional Resource Rooms Program (Brasil, 2005)	Provides AT equipment (screen readers, communication boards, magnifiers, etc.) to public schools, with technical and financial support.	Broad implementation in public schools. Voluntary participation by federative entities.
National Policy on Special Education from the Perspective of Inclusive Education (Brasil, 2008)	Integrates AT as a strategy for school inclusion. Relates AT to Specialized Educational Services (AEE) as a resource to support autonomy and learning. Recommends teacher education for AT use.	Guiding document of the MEC. Emphasis on inclusion in general education classrooms.
Resolution CNE/CEB No. 4/2009 (Brasil, 2009)	Defines AEE as a mandatory complementary service, ensuring the use of accessibility resources and AT in Multifunctional Resource Rooms (SRM).	Normative instrument with binding effect for education systems. Basis for AEE organization.
Brazilian Law for the Inclusion of Persons with Disabilities (Brasil, 2015)	Ensures access to AT as an educational right of persons with disabilities. Requires education systems to provide AT for school inclusion (Art. 28).	Applies to all levels of government. National legal reference framework.
National Policy on Special Education (Brasil, 2023b)	Proposes consolidating the principles of the LBI and the CRPD, with focus on AT, accessibility, and teacher education. Reinforces the right to inclusion in general education classrooms with appropriate supports.	Under development with public consultation. Substitute proposal for the 2020 version that was revoked.
Plan for Affirmation and Strengthening of the National Policy on Special Education from the Perspective of Inclusive Education (Brasil, 2023c)	Addresses investments of more than BRL 3 billion to strengthen the provision of AT and adaptations as an integral component of inclusion.	Focus on expanding access and improving the quality of inclusive education nationwide.
Amendment to the Brazilian Law for the Inclusion of Persons with Disabilities (Brasil, 2025b)	Provides low-technology augmentative and alternative communication resources to support Specialized Educational Services for students with significant communication difficulties.	Amends Laws No. 10.098/2000 (Accessibility Law) and No. 13,146/2015 (LBI).
Decree No. 12.686, of October 20, 2025 (Brasil, 2025a)	Establishes the National Policy on Inclusive Special Education (PNEEI) and the National Network for Inclusive Special Education, ensuring coordinated provision of AT as essential support for the educational process.	Current normative framework. Consolidates inclusive education principles, reinforces the role of AT, and standardizes national guidelines.

Source: Prepared by the authors.

With the issuance of Decree No. 12.686, of October 20, 2025, which establishes the National Policy on Inclusive Special Education and the National Network for Inclusive Special Education, Brazilian education policy now has an updated normative framework

that consolidates the commitment to an inclusive education system across all levels and modalities (Brasil, 2025a). The decree reinforces the provision of AT as a structuring element of educational accessibility, requiring its availability based on individual needs and integrating it into pedagogical assessment processes, the Specialized Educational Services Plan, and the Individualized Education Plan.

Additionally, it expands the Federal Government's responsibility for continuing education for teachers and support professionals, recognizing that the effectiveness of AT depends both on resource availability and on the technical capacity of school teams. These advances bring Brazilian education policy closer to SDG targets by emphasizing equity, accessibility, intersectoral coordination, and the reduction of inequalities, although challenges remain related to local implementation, SRM maintenance, and the infrastructure of education systems.

Despite normative advances, implementation of educational policies addressing AT use in school environments still faces substantial barriers in practice. In addition to the challenges already discussed, such as inequality in the distribution of SRM and AT devices across the country's regions, the absence of standardization and updating of the resources provided is also evident. Limited teacher preparation in the pedagogical use of AT and restricted participation of students and families in the selection of resources most appropriate to their needs have also been documented (Borges & Tartuci, 2017; Santos Calheiros et al., 2018).

Empirical studies support this perspective by showing that even when resources are available in SRM, teachers often do not recognize them as AT devices or do not use them appropriately, which indicates important gaps in education and in the conceptual understanding of the field (Borges & Tartuci, 2017; Biazus & Rieder, 2019). This limited understanding of AT compromises the identification and appropriate use of these resources, which are often confused with information and communication technologies or generic pedagogical materials (Borges & Tartuci, 2017).

Fachinetti et al. (2015) show that effective AT implementation requires not only resource availability but also articulation with individualized pedagogical assessments and collaborative teaching strategies. In addition, Marquezine & Lopes (2012) warn about the risk of SRM being treated as spaces for remedial instruction when they are not guided by pedagogical proposals grounded in inclusive education. These findings indicate that beyond normative instruments, the effectiveness of public policy depends on investments in teacher education, conceptual strengthening, and the creation of institutional conditions that ensure qualified and equitable use of AT in the school environment throughout the educational trajectory.

Furthermore, public policies have given limited attention to AT provision in technical education and higher education, fields in which accessibility support remains even more incipient and discontinuous. These barriers undermine policy effectiveness and limit the achievement of SDG targets, especially those related to quality education and reduced inequalities.

Final Considerations

This study critically analyzed the normative documents that regulate the provision of AT in Brazil, with a focus on the LBI and health and education public policies, in relation to the SDGs. The results indicate that although the country has a relatively robust legal framework, substantial challenges persist in the implementation of sectoral policies, including fragmented care within SUS, territorial inequality in service availability, outdated resources, and limited professional education.

In the educational field, inequalities in SRM distribution, the absence of guidelines for technical and higher education, and limitations in teacher education are evident. The articulation between normative frameworks and the SDGs represents a relevant contribution of this study by offering an integrated reading of policies and their potential convergence with global commitments to increased sustainability and reduced inequalities. Moreover, the use of a systematic textual review enabled the inclusion of official documents that are often absent from reviews based on empirical evidence.

As a limitation, the exclusive focus on normative documents in the fields of health and education may have excluded intersectoral initiatives or emerging policies in areas such as social assistance, science and technology, or digital inclusion.

Recommendations include investment in technical team education, expansion and diversification of the devices provided, assurance of territorial equity, and strengthened coordination between health, education, and science and technology.

References

Arretche, M. (2004). Toward a unified and more equitable system: Health reform in Brazil. In R. Kaufmann & J. Nelson (Eds.), *Crucial needs, weak incentives: Social sector reform, democratization, and globalization in Latin America*. Washington: Woodrow Wilson Center.

Arretche, M. (2012). *Democracia, federalismo e centralização no Brasil*. Rio de Janeiro: Editora Fiocruz.

Banks, L. M., Kuper, H., & Polack, S. (2017). Poverty and disability in low-and middle-income countries: A systematic review. *PLoS One*, *12*(12), e0189996.

Banks, S., Cai, T., De Jonge, E., Shears, J., Shum, M., Sobočan, A. M., Strom, K., Truell, R., Úriz, M. J., & Weinberg, M. (2020). Practising ethically during COVID-19: social work challenges and responses. *International Social Work*, *63*(5), 569-583.

Bastos, P. A. L. S., Silva, M. S., Ribeiro, N. M., Mota, R. D. S., & Galvão Filho, T. (2023). Tecnologia assistiva e políticas públicas no Brasil. *Cadernos Brasileiros de Terapia Ocupacional*, *31*, e3401.

Bersch, R. D. C. R., Moraes, H. S., Passerino, L. M., Batista, V., & Amaral, F. G. (2010). Fatores humanos em TA: uma análise de fatores críticos nos sistemas de prestação de serviços. *Plurais-Revista Multidisciplinar*, *1*(2), 132-152.

Biazus, G. F., & Rieder, C. R. M. (2019). Uso da Tecnologia assistiva na educação inclusiva no processo de alfabetização de escolares: revisão sistemática. *Revista Educação Especial*, *32*, 1-15.

Boger, J., Jackson, P., Mulvenna, M., Sixsmith, J., Sixsmith, A., Mihailidis, A., & Martin, S. (2017). Principles for fostering the transdisciplinary development of assistive technologies. *Disability and Rehabilitation. Assistive Technology*, *12*(5), 480-490.

Borg, J., Lindström, A., & Larsson, S. (2011). Assistive technology in developing countries: a review from the perspective of the Convention on the Rights of Persons with Disabilities. *Prosthetics and Orthotics International*, *35*(1), 20-29.

Borges, W. F., & Tartuci, D. (2017). Tecnologia assistiva: concepções de professores e as problematizações geradas pela imprecisão conceitual. *Revista Brasileira de Educação Especial*, *23*(1), 81-96.

BRASIL. Ministério da Saúde. (2005). *Programa Salas de Recursos Multifuncionais*. Brasília: Ministério da Educação. Recuperado em 29 de maio de 2025, de https://portal.mec.gov.br/seesp/arquivos/pdf/salas_recursos.pdf

BRASIL. Ministério da Saúde. (2007). *Plano de Desenvolvimento da Educação: Razões, princípios e programas*. Brasília: Ministério da Educação.

BRASIL. (2008). *Política Nacional de Educação Especial na Perspectiva da Educação Inclusiva*. Brasília: Ministério da Educação. Recuperado em 29 de maio de 2025, de https://portal.mec.gov.br/arquivos/pdf/politicaeducespecial.pdf

BRASIL. (2009, 2 de outubro). *Resolução CNE/CEB nº 4/2009: Diretrizes Operacionais para o Atendimento Educacional Especializado na Educação Básica, modalidade Educação Especial*. Brasília: Ministério da Educação.

BRASIL. (2015, 6 de julho). Lei nº 13.146, de 6 de julho de 2015: Institui a Lei Brasileira de Inclusão da Pessoa com Deficiência. *Diário Oficial [da] República Federativa do Brasil*, Brasília, seção 1.

BRASIL. (2021). *Lista de Produtos de Tecnologia Assistiva Prioritários*. Recuperado em 29 de maio de 2025, de https://www.gov.br/participamaisbrasil/pt-br/pt-br/consultas/lista-de-produtos-de-tecnologia-assistiva-prioritarios

BRASIL. (2022, 24 de junho). Portaria nº 6.033, de 24 de junho de 2022: Sistema Nacional de Laboratórios de Tecnologia Assistiva (SisAssistiva-MCTI). *Diário Oficial [da] República Federativa do Brasil*, Brasília, seção 1.

BRASIL. (2023a). Portaria GM/MS nº 1.526, de 11 de outubro de 2023: Anexo VI – Rede de Cuidados à Pessoa com Deficiência. *Diário Oficial [da] República Federativa do Brasil*, Brasília, seção 1.

BRASIL. (2023b). *Plano Nacional dos Direitos da Pessoa com Deficiência – Novo Viver sem Limite*. Recuperado em 29 de maio de 2025, de https://www.gov.br/mdh/pt-br/navegue-por-temas/pessoa-com-deficiencia/viver-sem-limite

BRASIL. Ministério da Saúde. (2023c). *Plano de Afirmação e Fortalecimento da Política Nacional de Educação Especial na Perspectiva da Educação Inclusiva (PNEEPEI)*. Recuperado em 29 de maio de 2025, de https://www.gov.br/mec/pt-br/centrais-de-conteudo/publicacoes/institucionais/pneepei.pdf

BRASIL. (2025a, 20 de outubro). Decreto nº 12.686, de 20 de outubro de 2025: Institui a Política Nacional de Educação Especial Inclusiva e a Rede Nacional de Educação Especial Inclusiva. *Diário Oficial [da] República Federativa do Brasil*, Brasília, seção 1.

BRASIL. (2025b, 3 de novembro). Lei nº 15.249, de 3 de novembro de 2025. Altera a Lei nº 10.098, de 19 de dezembro de 2000 (Lei da Acessibilidade), e a Lei nº 13.146, de 6 de julho de 2015 (Estatuto da Pessoa com Deficiência), para dispor sobre a instalação de sistemas de comunicação aumentativa e alternativa de baixa tecnologia em espaços públicos e abertos ao público, com vistas à promoção da acessibilidade da pessoa com necessidades complexas de comunicação. *Diário Oficial [da] República Federativa do Brasil*, Brasília, seção 1.

Chakraborty, S. (2020). Assistive technologies: addressing the divide between the developed and developing world. *Journal of Science Policy & Governance*, *16*(2), 1-7.

Costa, C. R., Ferreira, F. M. R. M., Bortolus, M. V., & Carvalho, M. G. R. (2015). Dispositivos de tecnologia assistiva: fatores relacionados ao abandono/Assistive technology devices: abandonment related factors. *Cadernos Brasileiros de Terapia Ocupacional*, *23*(3), 611-624.

Cruz, D. M. C., & Emmel, M. L. G. (2015). Políticas públicas de tecnologia assistiva no Brasil: um estudo sobre a usabilidade e abandono por pessoas com deficiência física. *Revista FSA*, *12*(1), 79.

Delgado Garcia, J. C., Galvão Filho, T. A., Santos, M. C. D., Roberto, M., Mendes, V., & Ribeiro, D. F. B. (2017). *Pesquisa nacional de inovação em Tecnologia Assistiva III (PNITA III): principais resultados, análise e recomendações para as políticas públicas*. São Paulo: Instituto de Tecnologia Social-ITS Brasil.

Domingues, C. D. A., & Laplane, A. L. F. (2024). Assistive technology in public policies: trends in the international debate and implications for Brazil. *Disability and Rehabilitation. Assistive Technology*, *19*(8), 2761-2773.

Fachinetti, T. A., Gonçalves, A. G., & Lourenço, G. F. (2015). Atendimento educacional especializado (AEE) e a oferta para alunos com deficiência física Ci. *Crítica Educativa*, *1*(2), 172-186.

Funcia, F. R. (2019). Subfinanciamento e orçamento federal do Sistema Único de Saúde: referências preliminares para a alocação adicional de recursos. *Ciência & Saúde Coletiva*, *24*(12), 4405-4415.

Gupta, J., & Vegelin, C. (2016). Sustainable development goals and inclusive development. *International Environmental Agreement: Politics, Law and Economics*, *16*(3), 433-448.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA – IBGE. (2023). *Censo Demográfico 2022: Características gerais dos domicílios e dos moradores – resultados do universo.* Recuperado em 29 de maio de 2025, de https://censo2022.ibge.gov.br/

Kamran, M., Siddiqui, S., & Adil, M. S. (2023). Breaking barriers: the influence of teachers' attitudes on inclusive education for students with mild learning disabilities (MLDs). *Education Sciences*, *13*(6), 1-14.

Magnusson, L., & Bickenbach, J. (2020). Access to human rights for persons using prosthetic and orthotic assistive devices in Sierra Leone. *Disability and Rehabilitation*, *42*(8), 1093-1100.

Manzini, E. J. (2025). Políticas públicas e tecnologia assistiva: um estudo com foco no financiamento governamental. *Revista Brasileira de Educação Especial*, *31*, 1-20.

Marquezine, M. C., & Lopes, E. (2012). *Atendimento Educacional Especializado (AEE). Atendimento Educacional Especializado no contexto da Educação Inclusiva*. Maringá: Eduem.

Matter, R., Harniss, M., Oderud, T., Borg, J., & Eide, A. H. (2017). Assistive technology in resource-limited environments: a scoping review. *Disability and Rehabilitation. Assistive Technology*, *12*(2), 105-114.

Maximo, T., & Clift, L. (2015). Assessing service delivery systems for assistive technology in Brazil using HEART study quality indicators. *Technology and Disability*, *27*(4), 161-170.

Mitra, S., Posarac, A., & Vick, B. (2013). Disability and poverty in developing countries: a multidimensional study. *World Development*, *41*, 1-18.

ORGANIZAÇÃO DAS NAÇÕES UNIDAS – ONU. (2006). *Declaração Universal: Convenção sobre os Direitos das Pessoas com Deficiência*. Recuperado em 29 de maio de 2025, de https://www.un.org/esa/socdev/enable/documents/tccconvs.pdf

ORGANIZAÇÃO DAS NAÇÕES UNIDAS – ONU. (2015). *Agenda 2030 para o desenvolvimento sustentável*. Recuperado em 29 de maio de 2025, de https://brasil.un.org/pt-br/91863-agenda-2030-para-o-desenvolvimento-sustentavel

ORGANIZAÇÃO MUNDIAL DA SAÚDE. FUNDO DAS NAÇÕES UNIDAS PARA A INFÂNCIA. (2022). *Global report on assistive technology*. Recuperado em 29 de maio de 2025, de https://iris.who.int/bitstream/handle/10665/354357/9789240049451-eng.pdf

Pearson, A., Jordan, Z., McArthur, A., Florescu, S., Cooper, A., Yan, H., Klugarova, J., Stannard, D., & Edwards, D. (2024). *S*ystematic reviews of textual evidence: Narrative, expert opinion or policy. In E. Aromataris, C. Lockwood, K. Porritt, B. Pilla & Z. Jordan (Eds.), *JBI manual for evidence synthesis*. Adelaide: JBI.

Pinilla-Roncancio, M., & Alkire, S. (2017). How poor are people with disabilities around the globe? A multidimensional perspective. *OPHI Research*, *31*(4), 206-216.

Raworth, K. (2012). *A safe and just space for humanity: can we live within the doughnut?* Recuperado em 29 de maio de 2025, de https://policy-practice.oxfam.org/resources/a-safe-and-just-space-for-humanity-can-we-live-within-the-doughnut-210490/

Santos Calheiros, D., Mendes, E. G., & Lourenço, G. F. (2018). Considerações acerca da tecnologia assistiva no cenário educacional brasileiro. *Revista Educação Especial*, *31*(60), 229-244.

Savage, M., Albala, S., Seghers, F., Kattel, R., Liao, C., Chaudron, M., & Afdhila, N. (2021). Applying market shaping approaches to increase access to assistive technology in low-and middle-income countries. *Assistive Technology : The Official Journal of RESNA*, *33*(Suppl. 1), 124-135.

Shi, G., Ke, S., & Banozic, A. (2022). The role of assistive technology in advancing sustainable development goals. *Frontiers in Political Science*, *4*, 1-6.

Tao, G., Charm, G., Kabacińska, K., Miller, W. C., & Robillard, J. M. (2020). Evaluation tools for assistive technologies: a scoping review. *Archives of Physical Medicine and Rehabilitation*, *101*(6), 1025-1040.

Tebbutt, E., Brodmann, R., Borg, J., MacLachlan, M., Khasnabis, C., & Horvath, R. (2016). Assistive products and the sustainable development goals (SDGs). *Globalization and Health*, *12*(79), 1-6.

Trani, J. F., & Loeb, M. (2012). Poverty and disability: A vicious circle? Evidence from Afghanistan and Zambia. *Journal of International Development*, *24*(S1), S19-S52.

Author's Contributions

Carolina Maria do Carmo Alonso supervised the study and was responsible for its design, definition of the manuscript structure, and critical review of the content. Talita Silverio de Souza Silva, Thamyres Crystine da Costa Abreu and Larissa Leite Umbelino actively participated in data collection and analysis, drafting of the text, and organization of the sources used. All authors approved the final version of the text.

Data Availability

The data that support the findings of this study are available from the corresponding author, upon reasonable request.

Funding Source

This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) – Finance Code 001.

Corresponding author

Carolina Maria do Carmo Alonso
e-mail: carolina.alonso@medicina.ufrj.br

Section editor

Prof. Beatriz Prado Pereira