Policy brief

"Promoting Inclusive Access: Encouraging G20 Cooperation for Affordable Assistive Devices and Technology for Persons with Disabilities"

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1. Key Messages

a. Persons with disabilities encounter formidable challenges that impede their complete participation in any development agenda and access to basic services, such as education, health, and employment. The lack of affordable tools tailored to various disabilities leaves them without the necessary support for their daily activities.

b. Around 1 in 3 people, which is approximately 2.5 billion individuals globally, need assistive devices due to lifestyle changes, aging populations, health issues, and the impact of climate change leading to more natural disasters in various countries. In 63 countries, about 10% to 69% of the population requires assistive devices. As the world's population continues to age, the need for assistive technology is expected to rise significantly, reaching about 3.5 billion by 2050.

c. The policy of providing adaptive and affordable assistive devices are yet to implement optimally, especially in many developing countries.

d. The G20 countries' governments should come together to establish agreements regarding tax relief and formulate policies for technology transfer from member nations that produce these products to countries that lack the capability to manufacture devices and assistive technology, particularly for individuals with disabilities.

2. Introduction

Assistive technology refers to a broad term for assistive products and their related services and function to maintain or enable functionality of persons with disabilities in a day-to-day life setting. Assistive products enhance performance in various domains like communication, hearing, vision, and self-care. And such products can be either in physical items such as wheelchairs, hearing aids or digital tools like software and apps. Moreover, adaptations to the environment, like portable ramps and grab-rails, also fall under this category. For persons with disabilities, assistive technology can support access to education, employment, health care, sports, and broader social and civic participation. Access to assistive technologies is a precondition for equal participation and opportunities, and thus access to assistive technologies is a human right.

Yet, it is still difficult for people with disabilities across the globe to access assistive technology, due to lack of public awareness, policy to support, as well as unavailability and high-cost products. Today's disability population globally reaches 1.3 billion people, representing 16% of the global population (WHO, 2023). Also, one in three people in the world or over 2.5 billion globally need at least one assistive product for daily activity purposes. Such a number also is projected to steadily increase to 3.5 as in 2050, due to the rise in noncommunicable disease and global aging population (WHO, 2022). However, the accessibility for assistive products remains a challenge for persons with disability due to lack of research and assessment to support policy formulation coupled with limited funding which result in unavailability and high-cost products. The situation is aggravated especially in developing or least-developed countries where only 5–15% of people requiring assistive technology have access to it (Borg et al, 2017).

The purpose of assistive technology is not to "correct deficiencies" as in the medical disability model. Instead, it serves as an empowering factor, enabling individuals to fully participate in broader opportunities similar to the social model of disability. Accordingly, incapability of persons with disability to access assistive technology to be able to socially economically participate creates proportionately economic consequences, either for the family, community, even a country. Excluding persons with disabilities from labor forces can result in GDP losses ranging from 3-7% annually (ILO, 2010). A study in Indonesia also finds that unavailable assistive products hamper persons with disability to gain wider job options,

3. Global Agreement in Ensuring Accessibility of Assistive Technology

The international community recognizes the critical significance of providing assistive devices and supporting technologies for individuals and groups with disabilities, ensuring their active participation in a life that upholds dignity and worth. Specifically emphasized in Article 9 and Article 20 of the UN CRPD, the state's role in granting access to assistive devices and technology facilitates an improved quality of life with enhanced mobility for persons with disabilities. These tools and technologies also play a pivotal role in achieving the Sustainable Development Goals (SDGs) and advancing Universal Health Coverage (UHC). Furthermore, each country has its own regulations concerning Assistive Devices and Technology (AD/T).

Article 9 (2) of the UN CRPD urges countries to ensure that individuals with disabilities have access to various supporting facilities, including appropriate assistive devices and communication technologies that are both available and affordable, tailored to the specific type of disability. Notably, Article 9 (2.h) underscores the importance of promoting the design, development, production, and distribution of accessible information and communication technologies and systems from an early age, while ensuring affordability. Meanwhile, Article 20 highlights the state's responsibility to ensure mobility for the independence of persons with disabilities by providing mobility aids that align with their preferred methods and timing, maintain good quality, and are complemented by mobility skills training for individuals with disabilities and specialized staff. The article also extends encouragement to manufacturers of mobility aids and related technologies to encompass all facets of mobility concerning individuals with disabilities.

In the broader context of global development, assistive tools and technology play a pivotal role in advancing the SDGs, particularly concerning the inclusion of persons with disabilities. Tebbutt et al. (2016) succinctly highlight the alignment between the SDG Goals (Goals 1-17), emphasizing that without adequate access to Assistive Devices and Technology, the SDGs may risk being discriminatory and challenging to achieve, notably concerning goals related to equity (Goal 1) and UHC (Goal 3). While some countries have adopted commendable practices by incorporating the provision of assistive devices and technology for persons with disabilities and the elderly into social security or health social assistance schemes, there often exists a stringent requirement that these devices and technology must be directly linked to health issues rather than functional limitations. As a result, the cost of acquiring assistive devices and technology becomes a significant out-of-pocket expense for persons with disabilities (Tay-Teo et al., 2021). A similar situation arises in the Jaminan Kesehatan Nasional (JKN) program in Indonesia, where coverage for assistive devices and technology is considerably limited and confined to "medical indications" (Aktariyani et al., 2020).

HEALTH DEVICES	TARIFF (IDR)	RULES
Glasses	- PBI/Class 3: IDR 150,000	• Given every 2 years at the soonest
	- Class 2: IDR 200,000	• Minimum medical indication; spherical 0.5D and cylindrical 0.25D
	- Class 2: IDR 300,000	• Given every 5 years at the soonest based on medical indication
Hearing aids	Maximum IDR 1,000,000	Prosthetic mobility aids: legs, arms/ hands
Prosthetic mobility	Maximum IDR 2,500,000	Given once every 5 years at the soonest based on medical indication.
Prosthetic teeth	Maximum IDR 1,000,000	Given every 2 years at the soonest based on medical indication for the same tooth
		Full prosthetic teeth based on medical indication
		Each jaw a maximum of IDR 500,000
Spinal corset	Maximum of IDR 350,000	Given every 2 years at the soonest based on medical indication
Collarneck	Maximum of IDR 150,000	Given every 2 years at the soonest based on medical indication
Crutches	Maximum of IDR 350,000	Given every 5 years at the soonest based on medical indication

Source: PKMK UGM, 2020

In Indonesia, the legal and regulatory framework for disability protection revolves around two main laws: Law Number 19 of 2011, which concerns the ratification of the Convention on Persons with Disabilities, and Law Number 8 of 2016, which specifically addresses the rights and protection of Persons with Disabilities. As of December 2021, there have been 7 Presidential Regulations (PPs), 2 Presidential Decrees (Perpres), and 1 Minister of Social Affairs Regulation (Permensos) that have been enacted as implementing regulations for Law 8/2016. However, the draft Presidential Regulation on Concessions and Incentives, designed to enforce the provisions of Article 114 paragraph (2) and Article 86 paragraph (2) of Law No. 8/2016, is yet to be ratified as of the aforementioned date (Bappenas, 2021).

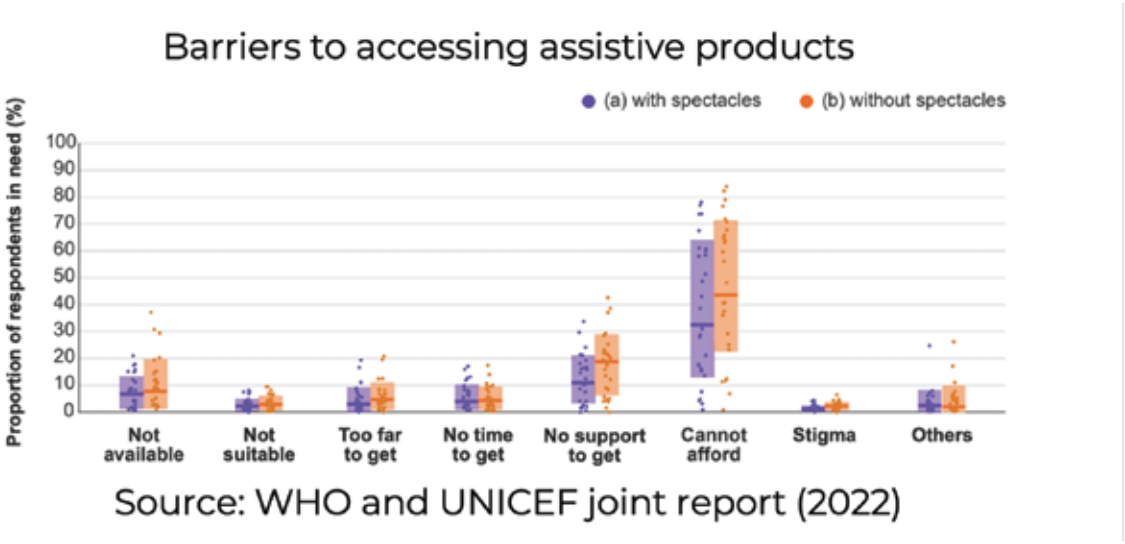
Regarding fiscal and Assistive Devices and Technology (AD/T) aspects, the Indonesian government has taken significant measures to support persons with disabilities for at least the past two decades. They have provided exemptions on import duties and Value Added Tax (VAT) for assistive devices intended for persons with disabilities. A recent development, Presidential Regulation No. 49 of 2022, includes provisions in Chapter VI, governing the import of Goods for Special Purposes (BKP) that are exempted from import duty or not subject to VAT collection. This category encompasses goods intended for persons with disabilities, research goods, and personal goods for passengers. Specifically addressing goods for persons with disabilities, Article 28 Paragraph (3) Letter C outlines the relevant regulations. This Government Regulation supersedes previous ones, such as the Regulation of the Minister of Finance PMK-198/2019, which pertained to amendments to the Decree of the Minister of Finance No. 231/KMK.03/2001 concerning the treatment of tax on luxury goods on the import of taxable goods exempted from import duty.

The article highlights a crucial provision stating that social agencies or institutions can import assistive devices for persons with disabilities without being subject to import duties and Value Added Tax (VAT). This exemption is significant as there is still a shortage of domestically produced aids that meet high-quality standards, and subpar quality could pose risks to persons with disabilities (PwD). Additionally, the need for adaptability to individual needs, such as body size or type of disability, further underscores the significance of this import facilitation. However, it also reveals a broader challenge that requires attention – the necessity to enhance domestic production capabilities and promote the transfer of technology to address these limitations effectively.

4. Barriers to accessing assistive technology

Cost of assistive technology has become lingering and overriding issues for persons with disabilities across the globe. One of the main causes of such issue is the market of assistive technology is relatively small with limited scope of product distributions, ranging from national or regional only, which in turn generate low economic scability. Moreover, the market of AT also not as open as other technological appliances, in a sense that end users have limited options to choose.

Decisions for type and quality are also predominantly taken by intermediary entities like insurance companies, government, and donor-driven organizations, leaving users with minimal direct involvement. Consequently, this creates limited information for supplier about the demand of product clearly from the end users while the purchasing power of end users are never being discussed in production process. In a long run, such situation can lead to the unsustainable market for assistive product. Focus Group Discussion (FGD) with almost 20 disability organizations in Indonesia hold by OHANA and The PRAKARSA found that people with rare diseases, including neuromuscular disease (diseases that affect the nerves and muscles), need a lot of medical aids to maintain a good quality of life, inter alia: breathing aids such as ventilators, cough assist machines and suction machines to collect mucus, corsets, etc., found those are still expensive Indonesia, even though these are needed essentially for everyday use.



Moreover, the accessibility and availability of assistive technology pose a significant challenge for individuals with disabilities. The intricacies of production processes, coupled with fluctuating exchange rates among nations, have made the procurement of assistive devices and equipment an increasingly complex chain. Due to limited domestic manufacturing capabilities, the majority of assistive technology, along with its accompanying spare parts, must be imported. Accordingly, the supply chain for these essential products encounters delays, which, in turn, escalate product costs. Although importing assistive products remains a viable and cost-effective option, insufficient purchasing power, even in bulk quantities, stands as a formidable obstacle to bolstering national supply.

Additionally, the lack of seamless communication between end-users and the manufacturing companies further exacerbates the situation. As a result, unsuitable products may be acquired, extended waiting periods may be incurred, and certain products may simply be unavailable, corroborating the observations made in the aforementioned image referenced from the joint report by the WHO and the UNICEF. Furthermore, the issue of repairing and maintaining available and appropriate assistive products proves to be another challenge, leading to the prevalence of unsustainable solutions. A pertinent illustration can be found in a study evaluating HandyHelper, a product developed in a European country with a nationalized healthcare system, designed to support the elderly in remaining in their homes for longer durations. Although the program itself functioned adequately, the product's sustainability was compromised due to limited input from users regarding innovations and their unfamiliarity with the underlying technology (Hallewell & Fitzpatrick, 2017).

Certain countries have implemented progressive measures to enhance the accessibility of assistive products for people with disabilities. For instance, Brazil has successfully integrated these products into its national universal health coverage (UHC) system. This integration has effectively addressed the issue of financial burden for individuals with disabilities who need access to assistive technology. However, such integration can also give rise to challenges, particularly when assistive technology is classified under health products. In the case of Indonesia, the Ministry of Finance removed the levied tax on assistive products. Nevertheless, since these products are still categorized as medical items, they sometimes incur exorbitant luxury taxes, amounting to 200% of the product's price. This situation poses a significant hindrance to the affordability and accessibility of assistive technology for individuals in need.

Recommendations:
The issue of availability, affordability, and quality of assistive products have shown that those are multilateral issues and need cooperative actions to address. Thus, we propose several recommendations as below:

1. We urge the G20 leaders to recognize the importance of establishing a technology transfer policy from product-producing G20 member countries to nations that currently lack the capability to manufacture devices and assistive technology, particularly for individuals with disabilities. This initiative is aimed at addressing the challenges faced by people with disabilities, who often need to acquire multiple assistive devices, such as the JAWS software for computers, which comes at a significant cost of USD 1000 per license. By facilitating technology transfer, the G20 aims to enhance accessibility and affordability of these vital supporting technologies for people with disabilities, promoting greater inclusivity and equitable access to essential tools worldwide.

2. The collaboration among G20 leaders is crucial to establish tax policies, particularly regarding import duties, that cater to the requirements of persons with disabilities. For instance, individuals with rare diseases may necessitate specialized assistive devices like a respirator/ventilator, which aids in breathing and expelling phlegm from the throat. Currently, people with disabilities often have to bear the cost of purchasing such devices on their own, and in the case of Indonesia, it can be notably more expensive compared to other countries like China and the USA. By developing supportive tax policies, the G20 can help mitigate the financial burden for persons with disabilities, ensuring greater affordability and accessibility to essential assistive devices worldwide.

3. The G20 leaders must collaborate with startups and industries to develop augmentative alternative communication tools, both low-tech and high-tech, that cater to the needs of persons with disabilities like cerebral palsy or speech and communication disorders. These tools should be based on local languages to ensure accessibility and effectiveness in different countries. By fostering this cooperation, the G20 can promote inclusive and innovative technologies, empowering persons with disabilities and enhancing their social inclusion and quality of life worldwide.

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