

Chapter 1

Overview of Disability, Inclusion, and Technology in the ASEAN Region

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Chapter 1

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1. Disability and Inclusion

People with disabilities are estimated to represent 15% of the world's population (WHO, 2021). This equates to about 690 million people in Asia and the Pacific (UNESCAP, 2018). The number of people living with disabilities is set to increase due to ageing populations, climate change-related natural disasters, and growing chronic health conditions. This important demographic – oft-cited as the world's largest minority – is highly heterogeneous in nature, encapsulating people living with physical, mental, intellectual, and/or sensory impairments, some of which are invisible. They are united by the significant societal as well as physical barriers that they face for equal participation and representation in all aspects of life – economic, political, and social.

Inclusion of people with disabilities is a key priority for the Association of Southeast Asian Nations (ASEAN). All 10 Members have ratified the United Nations Convention on the Rights of Persons with Disabilities (CRPD), and certain Members also adopted supporting national legislation. Building on these initiatives as well as the Incheon Strategy (UNESCAP, 2019), the *ASEAN Enabling Masterplan 2025* aims to 'contribute to the enhancement of the implementation of the CRPD at the regional level, building an inclusive community where independence, freedom of choice, and full and effective participation of persons with disabilities in all areas of life are realised and sustained' (ASEAN, 2018).

Despite such commitments, significant barriers to inclusion for people with disabilities persist – physical, communication, social, as well as legal and policy. People with disabilities are far more likely to experience poorer socioeconomic and health outcomes, inadequate access to education, lower employment, and higher poverty rates – not to mention the intersectionality with other factors for exclusion linked to race and sex.³ Better understanding of these barriers has been hampered by data collection on disability, which has historically been of variable quality, complicated by the different ways in which disability is defined and these data are collected (UNESCAP, 2018). As data collection improves, with countries increasingly integrating Washington Group questions⁴ and initiatives such as the Disability Data Portal⁵ and Disability Data Initiative,⁶ a clearer picture of disability in the region is emerging.

³ World Bank, Disability Inclusion, <https://www.worldbank.org/en/topic/disability#1> (accessed 10 June 2022).

⁴ The Washington Group on Disability Statistics promotes and coordinates international cooperation in the area of health statistics, focussing on the development of disability measurements suitable for census and national surveys. See Washington Group on Disability Statistics, Question Sets, <https://www.washingtongroup-disability.com/question-sets/> (accessed 1 June 2022).

⁵ The Disability Data Portal, <https://www.disabilitydataportal.com/> (accessed 12 June 2022).

⁶ Disability Data Initiative, <https://disabilitydata.ace.fordham.edu/> (accessed 12 June 2022).

The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) outlined key areas of exclusion for people with disabilities in the region. Of note:

- (i) **Poverty.** People with disabilities are more likely to live in poverty. Data are not available for all countries in the region, but in Thailand, the difference in poverty rates for people with disabilities compared to the overall population is 5.9% higher. In Indonesia, this figure is 4.3%.
- (ii) **Employment.** People with disabilities are two to six times less likely to be employed. Women with disabilities are also less likely to be employed than men with disabilities.
- (iii) **Decision-making.** Representation and participation of people with disabilities remain low, in terms of elected representatives and access to polling stations.
- (iv) **Accessibility.** Standards of accessibility vary across the region and often do not take into account the diversity of different impairments.
- (v) **Education.** Barriers to participation in education for children with disabilities result in a 52.7% drop in enrolment rates between primary and secondary school.
- (vi) **Data.** Available and comparable data to inform policy are lacking.
- (vii) **Rights.** Protection needs strengthening through enforceable anti-discrimination legislation.
- (viii) **Social protection.** These measures do not adequately cover the needs of people with disabilities (UNESCAP, 2018).

In addition, people with disabilities have been disproportionately impacted by the recent COVID-19 pandemic, which, in some cases, exacerbated their exclusion. Apart from increased health risk from the virus, people with disabilities experienced reduced access to routine health care, were excluded by the communication challenges of masks and inaccessible public health messaging (e.g. no sign language for key television announcements), as well as received inadequate support when living alone or when caregivers were self-isolating (Shakespeare, Ndagire, Seketi, 2021).

2. Rise of Digital Technology

The rapid rise of digital technology over the last 20 years – also known as the digital revolution – and its application to all aspects of our daily lives have significantly transformed the global economy and society. The internet of things (IoT); artificial intelligence (AI)-enabled technologies bringing about key innovations in health care, transport, and education; and blockchain are only set to continue at a continually breathtaking pace. By breaking down existing barriers to information and broadening access to new or existing markets and services, digital technology can promote economic inclusion (World Bank, 2016). However, it has also exacerbated inequalities, as ‘digital dividends co-exist with digital divides’ (United Nations Secretary-General’s High-Level Panel on Digital Cooperation, 2019).

On a basic level, the availability and affordability of information and communications technology (ICT) remain key barriers for many. UNESCAP has highlighted ‘large variations in

the availability and affordability of digital connectivity in the Asia-Pacific region' (UNESCAP, 2021). Internet use is high amongst the population in Brunei Darussalam (i.e. 95% in 2020) and Malaysia (90% in 2020), with lower penetration in countries such as Cambodia (33% in 2017) and the Lao People's Democratic Republic (34% in 2020).⁷ Infrastructure and coverage can be lacking, especially in rural areas (Marsan, 2022). Moreover, internet connection speeds can vary dramatically within the region – connection speeds in Singapore, for instance, are 15 to 16 times faster than those in Myanmar (Chen and Ruddy, 2020). As the economic impact of the pandemic took its toll, ICT became less affordable for many, just at the moment when it was needed the most (ITU, 2021).

Inclusiveness of online content and digital tools also remains a challenge – using captcha or text verification mechanisms, scanning a QR code, or ordering food via a touchscreen can be complicated for people who are visually impaired, for example. UNESCAP estimated that only 40% of government websites in the Asia-Pacific region are accessible (UNESCAP, 2018). Inclusive design – or, indeed, universal design – is therefore crucial, making content accessible and understandable for all. The English language dominates the internet, which can hamper inclusion for many in the ASEAN region whose English language skills are limited.

In addition, digital literacy is crucial for inclusion, impacting people with and without disabilities. Less than 30% of the population in Cambodia has basic digital skills, compared to 50% in Indonesia (te Velde et al., 2020). The Government of Indonesia has recognised supporting digital literacy as a key means of promoting accessibility to ICT – including for people with disabilities – and launched a national platform for a community-based and grassroots movement on digital literacy called Siberkreasi in 2017.⁸

While there is much discussion on addressing the digital divide and promoting digital inclusion in the ASEAN region, there has typically been a focus on demographics such as women or people living in rural areas. People with disabilities and their voices tend to be overlooked, beyond fleeting mentions of accessibility. With a shift towards digitalisation and automisation, the world of work is changing rapidly and with it the nature of the skills required for the workforce of the future. The Organisation for Economic Co-operation and Development (OECD) noted that South-East Asian countries have 'greater vulnerability to automation than their OECD counterparts' (OECD, 2021). Future success thus depends on possessing key digital skills, and people with disabilities cannot be left behind as the world adapts to this new paradigm.

⁷ World Bank Open Data, <https://data.worldbank.org/> (accessed 25 June 2022).

⁸ Siberkreasi, <http://siberkreasi.id/> (accessed 6 June 2022).