Reimagining disability: Is inclusion a macroforce that will shape Asia and the Pacific for the next 20 years?

Dian Tjondronegoro, Elizabeth Kendall, Shawn Hunter and Elena Mayer-Besting



2025

POLICY BRIEF

Introduction 1 The current situation 1 The role of megatrends 2 Inclusivity as macroforce: Opportunities and challenges for Asia and the Pacific 4 Recommendations for policymakers 7 Conclusion 9 Notes and references 10

ABOUT THIS PUBLICATION

The Griffith Asia-Pacific Strategic Outlook policy briefs are a publication of the Griffith Asia Institute, Griffith University, Queensland, Australia. These briefs serve as a platform for disseminating initial research outcomes pertaining to sustainable development within the Asia-Pacific region. The findings, interpretations and conclusions expressed in this paper are those of the author(s) and should not be attributed to Griffith University or affiliated organisations. For more information, email gai@griffith.edu.au or visit our website at griffith.edu.au/asia-institute.

Cover image: Shutterstock

© 2025 Griffith University

All rights reserved.

To be cited as: Tjondronegoro D, Kendall E, Hunter S and Mayer-Besting, E, "Reimagining disability: Is inclusion a macroforce that will shape Asia and the Pacific for the next 20 years?", *Griffith Asia Pacific Strategic Outlook* 2025, Griffith Asia Institute, Queensland, Australia, DOI: 10.25904/1912/5785

Introduction

Disability inclusion is not just a moral or social imperative—it is essential for the success of economic growth and development in the Asia–Pacific region. As nations navigate rapid demographic, technological, and environmental changes, an inclusive approach must be embedded in every aspect of policymaking and economic planning. Excluding people with disabilities from this process will not only undermine social progress but also limit the effectiveness of responses to major megatrends shaping the region's future.

People with disability are overrepresented amongst the poorest and most marginalised people globally, ¹ disproportionately affected by health threats such as the COVID-19 pandemic² and increasingly at risk from the growing impacts of the ongoing climate crisis. ³ The Asia-Pacific region is home to an estimated 700 million people with disability, nearly 1 in 6 citizens in the region, requiring that disability should be a prominent issue to be addressed in future. ⁴

Achieving growth and development in the Asia-Pacific region is crucial for long-term economic stability and prosperity for all citizens, particularly people with disability, as it can lead to increased employment opportunities, better social services, improved infrastructure and accessibility, and greater access to assistive technology. However, for these benefits to be realised, policymakers and businesses must actively integrate disability inclusion into their strategies.

The region's future will be defined by the megatrends or long-term patterns that will shape our future economic, technological, and social systems. By understanding these long-term patterns, policymakers and businesses can adapt strategies that leverage emerging opportunities, address challenges, and ensure sustainable development. Disability inclusion is essential for the region as it will determine the success or failure of any responses to the megatrends. As Asia-Pacific nations increasingly navigate rapid demographic, technological, and environmental changes, an inclusive future will need to underpin and be embedded within each of these shifts. Inclusion is not just a peripheral concern but an overarching macroforce with the potential to accelerate or undermine social and economic progress across the region. Its status as a macroforce makes inclusion even more crucial to the region's future than the identified megatrends.

The current situation

Despite impressive economic growth in Asia and the Pacific over the past few decades, the region remains marked by high levels of inequality, particularly for people with disability. The region's richest 10 per cent control more than half of the total income and the gap between rich and poor, rural and urban, and between different ethnic and social groups continues to widen. These inequalities are further compounded by the region's insufficient efforts to address the unique challenges faced by people with disabilities, particularly in terms of accessibility and inclusion.

Regional efforts to address disability have not addressed persistent barriers to accessibility, employment, and social inclusion. Countries with weaker governance, economic instability, and deep-rooted stigma continue to face major challenges in ensuring disability rights and inclusion. Significant disparities remain, especially in rural areas where access to education, healthcare, and assistive technologies is limited. The inequalities are exacerbated by natural disasters that disproportionately impact people with disability, the lack of accessible evacuation plans, higher rates of both communicable and non-communicable diseases, a heightened risk of pandemics, such as COVID-19, and poorer healthcare access. These challenges are exacerbated by discriminatory attitudes, inadequate infrastructure and underrepresentation in policy and development discussions.

Nevertheless, trends indicate slow but positive progress in policy frameworks, with more countries adopting disability-inclusive legislation and ratifying the UN Convention on the Rights of Persons with Disabilities (CRPD). While this is positive, policy adoption must be only a first step followed by effective implementation. Unfortunately, in many contexts, even where disability laws exist, policy implementation gaps often result in weak enforcement, limiting their impact. Similarly, although digital inclusion is improving with access to assistive technologies, implementation is inconsistent across countries and districts in the region.

As the region continues to work towards sustainable and inclusive growth, there is a critical need for greater focus on disability inclusion, ensuring that people with disability are fully integrated into the development agenda and that their rights and potential are recognised and supported. Investing in disability inclusion can reduce the long-term costs associated with inequality, such as increased reliance on social welfare programs and healthcare services;8 and, by ensuring equal access to both economic and social resources, policymakers can tap into a valuable pool of talent and innovation, driving economic growth and resilience for the whole society. Societies that are more inclusive of people with disability benefit from higher levels of productivity, as diverse workforces bring a range of perspectives and skills that contribute to better problem-solving and decision-making. 9 There is increasing recognition that people with disability bring unique strengths to society and diversify the workforce. For example, neurodivergent individuals may excel in in-demand fields such as big data analysis, entrepreneurship, innovation and creativity. 10 As the global population ages – especially in Asia-Pacific, where demographic shifts are accelerating, ensuring that people with disability can fully participate in society is not only a moral imperative but a smart economic strategy for sustainable development.¹¹

Despite these trends, disability is still largely seen through a "deficit" mindset and often as the cause of additional burden (e.g., to provide accessible spaces or to address the health burdens of supporting impairments and chronic illness). Although disability inclusion can be viewed as an added cost, reframing it as a strategic investment can unlock its transformative potential as a driver of broader societal and economic progress.



Founded by Alina Alam (front row, second from right), Mitti Cafe runs a chain of cafes in India managed by persons with disabilities, many of whom come from low-income communities. (Image: Mitti Café Facebook)

The role of megatrends

A megatrend is a collection of observable patterns of economic, social, or environmental activity that will transform the way people live in the foreseeable future. They are often concrete changes that can be tracked historically, are relatively predictable over time and can be harnessed in positive ways. There are six key themes of megatrends synthesised from five global trends reports published over the last decade covering current and emerging issues for the next two decades until 2040. 12 These megatrends focus on six themes (1) climate and energy, (2) health, (3) geopolitics, (4) digital transformation, (5) Al and automation, and (6) governance. Each of these trends is shaping the future in profound ways—climate and energy focus on the growing need for sustainable solutions; health emphasises advances in healthcare and the challenges of aging populations; geopolitics highlights shifts in global power and relations; digital transformation reshapes economies through connectivity; AI and automation redefine labour markets, decision-making, productivity, and innovation; and governance examines how institutions adapt to these changes.

These key global megatrends that are expected to shape the world over the next two decades are shown in Table 1. The Table highlights how these trends align and diverge according to different analyses, providing insights into the common themes and challenges that are likely to drive future policy and innovation. By comparing these perspectives, the table also illustrates how different influential organisations approach critical issues like climate change, technological disruption, and geopolitical shifts. To guide the megatrends towards a sustainable future in the Asia-Pacific region, it is important to confront them from an inclusive foundation.

Table 1: Six global megatrend themes for the next two decades (2023-2040)

тарте т	Six global megatrend themes for the next two decades (2023-2040)				
Dimension of trends	CSIRO's seven megatrends (for the next two decades, 2043) ¹³	ESPAS' the game changers (global trends to 2030) ¹⁴	OECD's global trends government innovations (2017) ¹⁵	National Intelligence Council's Global trends 2040. ¹⁶	Ipsos Global trends 2023 – six macroforces and key themes ¹⁷
Climate and energy	Adapting to climate change: natural disasters and unprecedented climate events. Leaner, cleaner and greener: resource constraints, advanced recycling, and net-zero energy transition.	Save the planet: Climate-related decisions determine the future of economies and societies.	Case study on use of innovative tools in extreme weather (forecasting, prediction, and detection of sandstorms) and disaster mapping (real-time floods)	Climate change effects are intensifying, with disproportionate impacts on developing and poorer regions. Urgency to reach zero green-house emissions.	Environmental emergencies: Climate change, the push for greener thinking and the risks of over development.
Health	The escalating health imperative: respond to health risks and improve health outcomes.	Health of life: improve ageing, such as morbidity compression to reduce cost of age for health and long-term care. Radical healthcare policy choices to address obesity and stop smoking.	Case study for next-gen personalised services: the Wellbeing project	Major demographics shifts (global population growth slows and the world rapidly ages).	Societies in flux: ageing population, migration, greater diversity, identity fluidity, and life stage evolutions. Well-rounded and wellbeing: growing mental health crisis, health system inequality, health technology integration.
Geopolitics	Geopolitical shifts: growth of global trade, geopolitical tensions, and cybercrime.	Bold vision for humanity, reject violence and ready to defend it, use defence as a main tool for conflicts at home and abroad	Case study on use of blockchain technology for electoral processes to participate in a plebiscite on peace treaty.	Conflict-prone and volatile geopolitical environments and global economic trends, e.g., fragmentation and competition on economic, cultural, and political issues. Less likely leadership/domination by one regions/state.	Political splintering: plateau of globalisation, increased geopolitical conflicts, and inequality.
Digital	Diving into digital: the pandemic-induced rise of digitalised business, telework, telehealth, online shopping, and digital currency.	Shape the digital ethics, agile regulatory for ongoing race of digital leadership and innovation. Decisive actions to new technology and counter technology developments that undermine democracy and human rights.	Rethinking government's machinery (new materials, production tech and new ways of work), delivering innovations, such as digital services, preventative healthcare, internal mechanisms that enable innovations. Innovation tools are presented in case studies across themes.	Faster pace of innovations using technology that can offer solutions to problems.	"Tech-celeration" (technological advances is accelerating): pervasive and immersive tech, AI and quantum computing.
Al and automation	Increasingly autonomous: the explosion of AI discoveries and use.	Pre-empt disruption of automation to labour market by retraining	Pairing human knowledge with innovative tools, such as big data analytics, drones, and social networks.	Technology leads to rapid transformation and disruption of human capabilities and experiences, such as job displacements.	"Tech-celeration": increased automation and toll of technology.
Governance	Unlocking the human dimension: trust, transparency, and fairness in decision making, social, and environmental governance.	Protect democracy and our way of life: closing the gaps between citizens and their governments, strengthening law against populist erosion. Achieve equality of participation and opportunities for better preparedness to face future societal challenges.	Scaling government, redefining citizen-government boundaries (citizens as expert), next-gen service delivery, experimental (agile and adaptive) government to harness strategic investments.	Governments and institutions are increasingly strained due to less trust on meeting individual needs. People increasingly prefer likeminded groups.	Political splintering: rethinking institutions Inequalities and opportunities: employee power shift, generational wealth disparities, inflation impacts and different value structures.

Source: Authors.

Inclusivity as macroforce: Opportunities and challenges for Asia and the Pacific

The purpose of identifying these trends is to ensure that they can be addressed promptly through necessary policy reforms and facilitate better quality of life and resilience for all citizens. However, if inclusivity is left unaddressed or insufficiently considered in conceptualising the trends, policy responses will only further widen the gaps and barriers for people with disability across the region. Importantly, the impact of these gaps and barriers is not experienced equally. People with disability who also belong to other marginalised groups often face compounded disadvantages. For example, women with disability are particularly vulnerable to genderbased violence, which is known to increase during crises such as natural disasters, where accessibility barriers further limit their ability to seek safety and support. 18 Similarly, people with disability from low-income backgrounds face heightened economic insecurity due to employment discrimination, inadequate social protections, and limited access to essential services. 19 These intersecting inequalities mean that the risks associated with exclusion—whether in health, employment, or governance—are amplified for those at the crossroads of multiple marginalised identities. Without a deliberate intersectional approach to inclusion, policy responses risk reinforcing these disparities rather than addressing them, further entrenching systemic inequities. Therefore, inclusivity must underpin and be integrated into the conceptualisation of policies and mechanisms addressing these global megatrends, so that we can create a future that is equitable and accessible for all.

A region's ability to navigate the identified megatrends over the next 20 years will depend on its commitment to inclusion as a macroforce. A macroforce is a deep, systemic driver that can shape entire societies, economies, and industries over long time horizons (often centuries or millennia). Macroforces have been discussed across various disciplines, including physics, economics, and sociology, in reference to core underpinning or overarching processes that affect entire structures, populations, and industries rather than being contained in their impact. They are high-level, abstract influences that may not be immediately visible but shape multiple megatrends and determine the way in which systems develop over time and across places. At the turn of the century, Olsen (1999) speculated about four macroforces that would underpin the future; globalisation, the knowledgebased economy, the quality demanded from service systems and the desire for improved well-being. These macroforces have altered the way society works across the world and have influenced the way in which megatrends are harnessed or experienced in different countries.

Over the past few decades, the concept of inclusion has evolved from a niche social movement into a central pillar of policy-making, education, and corporate governance worldwide. The momentum for inclusivity has been driven by international legal frameworks, strong advocacy groups, and

increased awareness of stark social inequalities. Inclusion for all citizens is now a macroforce worthy of considerable resistance from those who hold privileged positions in society. Systems seeking to benefit from the megatrends must facilitate the active participation of all parts of society, particularly people with disability. The experiences and needs of people with disability must be at the forefront of development to ensure equitable opportunities and civic engagement of all citizens. In contrast, the exclusion of people with disability - or any other group - from economic and social opportunities not only violates their human rights but also hinders the overall socio-economic progress of the region. Disability inclusion is inherent to the creation of an equitable and just society, particularly in the diverse and dynamic Asia-Pacific region, where people from varied cultural, ethnic, and socioeconomic backgrounds often struggle for equal access to opportunities and resources. Achieving inclusion is, therefore, both a moral imperative and a strategic necessity, essential for achieving positive outcomes from the other megatrends that impact the region.

The macroforce status of inclusion has not been acknowledged directly across the major trend documents. Instead, disability and inclusion are addressed only indirectly. For instance, CSIRO explores themes like demographic shifts and digital transformation, implicitly touching on inclusivity without explicitly referencing disability. Similarly, ESPAS and the OECD discuss broader societal and economic challenges, such as inequality and ageing populations, which could encompass disability inclusion but do not foreground it. The National Intelligence Council focuses on governance and inequality, implying but not explicitly addressing disability inclusion. IPSOS refers to diversity and social attitudes but does not make disability inclusion a central theme. However, concepts such as equity, fairness, and equality clearly underpin the various trends. The narrative refers to the known challenges of health system inequality and the significant health disparities for some segments of the population. It emphasises the importance of achieving equality of participation, calling for trust, transparency, and fairness in decision-making, protecting democracy, concerns about equity in public services and the impact of differing political ideologies. Economic inequalities are also referenced, including employment gaps, generational wealth disparities, and differential inflation impacts. A closer inspection of the megatrends confirms the overarching importance of inclusion within each megatrend.

Climate and energy

Any attempt to adapt to the climate crisis in the Asia-Pacific region must accommodate those most vulnerable to the negative impacts of natural disasters and extreme weather events, including people with disability. In addition to being more likely to live in geographic regions that are prone to floods, cyclones, and fires, people with disability are often highly dependent on supply chains and human services that are immediately disrupted by natural disasters. This issue is particularly critical for Asia and the Pacific, the most disaster-prone region in the world, where increasing weather, climate, and water-related hazards intensify the risks faced by people

with disabilities.²⁰ People with disability often face severe difficulties during and after disaster events, as accessibility and specialised support services are often not considered in disaster response plans.²¹ The importance of integrating accessibility into climate change adaptation efforts is now widely recognised. Yet, despite this awareness, many adaptation initiatives in the Asia-Pacific region still fail to address accessibility issues adequately. As the region becomes more vulnerable to climate-related disasters, it is crucial that adaptation policies include specific provisions for people with disability to ensure their safety and resilience in the face of future climate challenges.

The drive toward living leaner, cleaner, and greener lives is an important trend for environmental protection and sustainability, especially as countries in Asia and the Pacific strive to meet net-zero emissions targets. However, this push for sustainability can significantly impact people with disability, particularly due to their unique needs and resource constraints. Many people with disability rely on disposable products such as straws, continence aids, and personal protective equipment, which may not be readily available through sustainable alternatives.²² In India, where millions of people live with disability, the lack of disposable sanitary products has been shown to exacerbate health risks and hinder participation in social and economic activities.²³ Efforts to build greener, more energy-efficient infrastructure—such as retrofitting buildings to reduce energy consumption or installing renewable energy systems—can inadvertently create new barriers for people with disability. In cities like Phnom Penh, Cambodia, where rapid urbanisation and infrastructure changes are ongoing, the eco-modification of transport systems has been found to increase costs or limit access to services for people with disability.²⁴



A disabled woman affected by floods is standing in front of a temporary shelter. (Shutterstock)

Health

The escalating health imperative to reduce health risks and improve health outcomes is particularly relevant to people with disability in the Asia-Pacific region, who face additional health challenges and significant barriers to accessing healthcare. People with disability in this region experience disproportionately higher rates of chronic illnesses, such as diabetes, cardiovascular disease, and respiratory conditions, which require ongoing medical care and support. For

instance, in countries like Thailand and Vietnam, people with disability are often unable to access essential healthcare services due to physical and social barriers, including inaccessible clinics and discrimination from healthcare providers. 25 In addition, in remote areas of countries such as India and Nepal, a lack of trained healthcare professionals and specialist services for people with disability further exacerbates health disparities.²⁶ These challenges are even more pronounced for women with disability, who often face compounded discrimination in healthcare settings, are less likely to have their health concerns taken seriously and are significantly underrepresented in medical research and policy planning.²⁷ Social and environmental factors, such as discrimination, poverty and lack of access to appropriate healthcare services, often prevent disability-inclusive health promotion initiatives from meeting the needs of this vulnerable group. By addressing the unique health requirements of people with disability through inclusive policies and improving access to services, we can enhance health outcomes not only for people with disability but also for society, fostering a more equitable and inclusive healthcare system in the region.

Geopolitics

Geopolitical shifts, such as the growth of global trade, armed conflicts, increasing tensions, and cybercrime, can have significant implications for people with disability in the Asia-Pacific region. For example, during times of conflict, such as the ongoing armed conflict in Myanmar, people with disability are disproportionately disadvantaged as access to essential services—such as specialised medical care and assistive devices—becomes disrupted. In many instances, people with disability face greater difficulty fleeing conflict zones due to mobility restrictions or lack of assistive devices such as specialised healthcare or equipment tailored to support their needs.²⁸ Additionally, conflicts often lead to the breakdown of social and legal protections, increasing the risk of genderbased violence, which disproportionately affects women with disability who may already struggle to access justice and support services.²⁹ In some cases, conflicts can also limit access to critical healthcare facilities and trained professionals, exacerbating health challenges for people with disability. 30 Cybersecurity threats targeting digital infrastructures can jeopardise the privacy and security of personal medical and other data, leaving people with disability particularly vulnerable, especially as they often rely on digital services for essential support (Edwards, 2024; Samar Raja, 2016). The supply chains for goods and services, including medications and digital tools that people with disability rely on, can be severely disrupted by global instability. For example, during the COVID-19 pandemic, people with disability in many countries across the region experienced inadequate access to healthcare, exclusion from education, increased poverty, and significant levels of abuse associated with the response to this crisis.31

Digital

The dependence on digital services in the Asia-Pacific region has surged since the pandemic, with significant implications—both positive and negative—for people with disability. Advanced digital technologies can greatly enhance access to essential services, education, and economic opportunities but can also introduce new barriers if not designed with accessibility in mind. The expansion of remote work and telehealth in many Asia-Pacific countries has opened doors for greater workforce participation and healthcare access for people with disability. However, persistent disparities in digital infrastructure and affordability, particularly in developing economies, continue to shape who can benefit from these advances. Access to assistive technologies—such as screen readers, speech-to-text software, and adaptive hardware—remains highly uneven. with people with disabilities in rural and low-income communities more likely to face access barriers. 32 The reliance on online shopping and digital payment platforms has also grown, providing convenience and broader access to goods and services. Yet, these platforms often lack features that accommodate assistive technologies such as screen readers, captioning, and accessible web design. 33 As a result, many people with disability across the region face exclusion from the emerging digital economy. Expanding access to assistive technologies and ensuring that digital platforms are designed with accessibility in mind would not only enhance inclusion for people with disability but also unlock economic opportunities, foster workforce participation, and contribute to broader economic and societal benefits. Addressing this digital divide is crucial to ensuring equitable participation in the region's increasingly digital future.



Blind woman using a computer with braille display assistive device. (Shutterstock)

Al and automation

The explosion of artificial intelligence (AI) in the Asia-Pacific region has the potential to both empower and marginalise people with disability. On one hand, AI can be used to as an assistive technology to enhance independence and quality of life. For example, AI-powered prosthetics, speech recognition, and communication devices are increasingly enhancing mobility and enabling easier participation in daily activities. In countries like Japan and South Korea, advanced

robotics and AI assistive technologies are already being integrated into support services. ³⁴ However, AI-powered decision-making systems, such as automated recruitment tools or facial recognition software, can perpetuate biases against people with disability if they are developed using non-inclusive or unrepresentative datasets. In many Asia-Pacific countries, where AI regulatory frameworks are still evolving, there is an urgent need to address these ethical concerns and ensure that AI systems are designed and implemented equitably. Failure to do so could exacerbate existing social inequalities and further marginalise people with disability in the region's rapidly advancing digital landscape.



Prosthetic robot arm being tested by a Japanese Development Engineer. (Shutterstock)

Governance

The final megatrend emphasises the human dimension of trust, transparency, and fairness in decision-making processes, particularly in social and environmental governance across the Asia-Pacific region. These principles are vital for ensuring that people with disability are included in all facets of society. In countries such as Australia, Japan, and New Zealand, transparent and inclusive governance frameworks have been established, with varying success, to support people with disability to participate actively in societal decisions and access the services that affect their lives. Some countries have implemented quota systems to promote employment opportunities for people with disability in government-owned enterprises and public sector institutions. For example, Bangladesh reserves 10 per cent of public sector jobs for people with disability, Nepal has a 5 per cent quota, and Cambodia mandates a 2 per cent allocation.³⁵ However, in many developing nations within the region, systemic barriers and deeply ingrained ableism often hinder such inclusion. Without deliberate efforts to prioritise equity, accessibility, and inclusion in decision-makingwhether in urban planning, digital services, or healthcare policies—existing processes risk perpetuating exclusion. This leaves people with disability marginalised, unable to fully benefit from technological advancements and social developments. Addressing these governance gaps is crucial to creating an inclusive future where all individuals in the Asia-Pacific region can contribute, participate, thrive and realise the benefits of the megatrends.

Recommendations for policymakers

RECOMMENDATION 1

Applying universal design principles

To create the required framework conditions in which the identified megatrends will lead to benefits for all of society, Asia-Pacific Governments must adopt a universal design approach to ensure that responses "can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability" (CEUD, 2025). Universal design principles make all policies more effective for everyone, not just people with disability. Inclusive structures, such as universal design, benefit everyone – ramps, for instance, support not only people with disability but also those using pushchairs, carrying heavy loads, or recovering from injuries. Policymaking based on universal design principles is most likely to be achieved when diverse stakeholders, including historically marginalised groups, are part of policymaking processes, including in decision-making roles. Although universal design is considered the best-in-class approach for inclusion, in the absence of its full implementation across all policy areas, dedicated measures focusing specifically on the inclusion of people with disability are needed. Policymakers have an important role to play to thoughtfully integrate intersectional inclusion and universal design across multiple policy domains, to ensure that the megatrends contribute to inclusion and positive developmental outcomes rather than further exclusion and discrimination.

RECOMMENDATION 2

Recognising intersectionality

The impact of exclusion is magnified and compounded for people with co-existing marginalised identities. For example, women with disability in the Asia-Pacific region face the added impact of gender-based discrimination in workplaces and limited access to resources to support their economic potential. The World Bank's Women, Business, and the Law project estimates that only about 25 per cent of economies globally explicitly safeguard and support the rights of women with disabilities, further deepening these inequalities. To young people with disability face difficulties in securing meaningful employment due to skills mismatches and limited opportunities. The poor and elderly people with disability are particularly at risk of exclusion.

RECOMMENDATION 3

Addressing the polycrisis

The convergence of multiple global megatrends particularly climate change, health disparities, and geopolitical instability—has been termed a polycrisis, where overlapping crises exacerbate one another and create complex, often conflicting policy challenges. Policymakers can navigate this landscape by recognising and responding to the interconnections between these trends, such as how fossil fuel dependence and corporate interests contribute to environmental degradation, health inequities, and geopolitical tensions. In these complex contexts, the voices and solutions proposed by marginalised groups—such as people with disability—are often sidelined. Navigating the complexities of a polycrisis requires a fundamental shift toward intersectional, inclusive policymaking that acknowledges and acts on the compounded risks faced by different communities. By recognising how global megatrends compound vulnerabilities, governments can design responses that address the needs of those most affected, ensuring that inclusion and equity are at the core of crisis mitigation and long-term resilience strategies. There are many examples of the need to address inclusion at these intersections as shown below.

Inclusivity and intersectionality in emergencies, climate adaptation and geopolitical conflicts: Governments must develop comprehensive emergency preparedness and response plans that integrate disability inclusion and intersectional protections. Given that crises such as natural disasters, pandemics, conflicts, and climate change disproportionately impact those who are already marginalised, effective responses must incorporate tailored measures such as accessible warning systems, accessible and inclusive emergency shelters, and protections against secondary threats that arise in crises. Integration of accessibility considerations into disaster response plans, climateresilient infrastructure, and transport systems is essential. Exemptions or accommodations—such as access to essential disposable products despite environmental restrictions—must be built into climate policies to avoid exacerbating inequities. Social protection schemes should also be designed to enhance resilience for those at greatest risk. This requires broad-based comprehensive climate-related policymaking, as well as the adoption of targeted measures to specifically safeguard the well-being and resilience of people with disability in the face of the climate crisis. This could range from evacuation plans for people with disability in emergency situations, to the integration of disability requirements in climate-friendly infrastructure and transport systems development; and from allowing exemptions from climate-related measures, such as to enable access to essential disposable products, to broader measures that support resilience against shocks, such as disability-inclusive social protection schemes.

- 2. Universal design and inclusion, telehealth, Al and automation in health care: Universal design in healthcare addresses barriers and ensures that health care is accessible, understood, and used by all. This includes addressing physical barriers, such as those related to infrastructure or geography, as well as social barriers, such as biases and discrimination. Applying universal design principles to the design of health infrastructure, scaling up access to specialised services for people with disability and providing training for healthcare professionals on unconscious bias and inclusive service delivery are among the steps governments can take toward this end. The intersection between health, geopolitics, digitalisation and AI automation offers the potential of new assistive technologies and telemedicine that must be balanced against the threats of cybersecurity/cybersafety, unethical and biased applications of technology and the digital divide. Governments must put in place the required regulatory frameworks and systems to ensure that digital services are accessible and safe to all citizens. The benefits of technological advances must be shared equitably, but this will not occur without Government intervention. Similarly, governments can play an important role in guiding the private sector towards the meaningful application of AI to focus on critical challenges with positive societal outcomes, such as in health and inclusion-focused applications.
- 3. Access to ethical inclusive technology and digital opportunities: The absence of inclusive strategies risks creating tools that exacerbate existing biases, reinforce discrimination, and actively cause harm. Regulatory frameworks and AI "guardrails" are essential to ensure that AI is deployed in an ethical and equitable manner that does not inflict harm and promotes cybersafety of all users. If technologies are accessible to all, digital transformation can increase opportunities for previously marginalised groups. However, policymakers need to advance infrastructure development in inclusive ways, enhance digital education and skills-development for broad segments of the population, and expand access to assistive technology. By addressing current inequalities in the technology sector (e.g. capacity and representation of women, people with disability, older people), leveraging the unique talents of, for example, neurodivergent individuals and ensuring the protection of essential digital infrastructure and assistive technologies, Governments can ensure that all citizens benefit equitably from technological advances. Similarly, by overcoming bias, discrimination, and exclusion in start-up ecosystems and product design, and by encouraging the presence of diverse innovators, policymakers can enable locally developed, context-specific solutions that address broad-based needs.

4. Digital government and protection of disability rights: Digital transformation in governance offers a pathway to making public services more accessible for people with disability. Well-designed digital government platforms can reduce bureaucratic barriers, enhance civic engagement, and improve access to essential services. However, if digital services are not designed with inclusivity in mind, they risk further marginalising those who lack access to technology or face digital literacy barriers. Policymakers must ensure accessible e-government initiatives that build trust among people with disability by protecting their rights while also safeguarding democratic processes against misinformation, foreign interference, and discriminatory digital policies. An important driver of trust is the progress made in the Asia-Pacific region in adopting the principles of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), yet challenges remain in ensuring full implementation and enforcement. International standards to be proportionately applied in PICs wherever possible.

RECOMMENDATION 4

Collecting and democratising data on disability

High-quality data is essential for understanding the diverse experiences and needs of people with disability and for developing effective, inclusive policies and programs. However, countries from across the region face significant challenges due to inconsistent and limited data on disability. Therefore, renewed efforts to collect meaningful disability data across diverse regional contexts are needed. Australia's Disability Strategy (ADS) provides a valuable model, emphasising reliable, comprehensive data collection. The Royal Commission on Violence, Abuse, Neglect, and Exploitation of People with Disability, for example, highlights critical steps, including prioritising data reliability, establishing centralised data repositories, and involving people with disability in shaping data policies. Australia's National Disability Data Asset underscores the importance of collaboration across governments, service providers, researchers, and people with disability and integrating data from multiple sources to improve policy and service delivery. 37 Standardised tools, such as the Washington Group's disability questions, can help ensure internationally comparable data, fostering regional cooperation and benchmarking progress toward inclusion. These approaches offer valuable models for other countries in the region, where data infrastructure is evolving, and to ensure standardised and context-specific data collection practices.

Historically, data about people with disability has been controlled by governments, institutions, and researchers, often without direct input from those most affected. This lack of transparency and accessibility reinforces epistemic injustice, where people with disability are excluded from shaping the narratives and decisions that impact their lives. The Data Values Project is an excellent global example that highlights the importance of shifting power in data systems to create a fairer data future. The project's Data Manifesto advocates for inclusive data governance that prioritises equity, participation, and shared benefit. By making disability data more open, participatory, and inclusive—through initiatives like citizen-generated data, co-designed research, and accessible reporting formats people with disability and their representative organisations can advocate for evidence-based policies, challenge systemic inequalities, and drive more responsive and inclusive service design. Democratising disability data also enhances its validity, as it ensures that diverse lived experiences inform its collection, analysis, and application, ultimately leading to better outcomes for individuals and communities.

Conclusion

The failure to prioritise people with disability in developmental frameworks not only undermines the principles of equality and justice but also has far-reaching negative implications for society as a whole. As we navigate a world shaped by significant megatrends, it is essential to recognise that the inclusion of people with disability is not merely rhetoric. Inclusion is a fundamental component of sustainable development. Excluding people with disability from conversations about policy and resource allocation marginalises them but also deprives society of their unique perspectives and contributions, which are known to drive innovation and resilience. Overlooking their inclusion will restrict our ability in the region to capitalise on the recognised megatrends.

Prioritising the inclusion of people with disability in development strategies is not just a moral obligation; it is a strategic necessity that will contribute to more resilient and equitable societies. This is particularly true for the Asia-Pacific region, given its rich diversity and significant disparities. Inclusion drives innovation and productivity by ensuring that all individuals have access to opportunities, resources, and education. By connecting inclusion, socio-economic stability, and responsible management of the future, we can foster a more inclusive world where the rights and potential of all people are recognised and valued. Through this approach, Asia-Pacific countries can reduce poverty, enhance economic stability, and unlock greater wellbeing for its societies. Therefore, inclusion should become an overarching priority, viewed as the key to addressing the impact of the broader megatrends on the region and ensuring sustainable and equitable growth.

At Griffith University Inclusive Futures, our vision extends beyond Australia to envision an inclusive and healthy future for all in the Asia-Pacific—a world where disability is accepted, and everyone can access the latest treatments, technologies, and opportunities to thrive with dignity. 38 Through our interdisciplinary approach, driven by people with disability, we address key challenges that hinder inclusion across diverse socio-economic and cultural contexts in the region. This work aligns with the goals of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), which is the most inclusive intergovernmental platform in the Asia-Pacific region. The Commission promotes cooperation among its 53 member States and nine associate members in pursuit of solutions to sustainable development challenges. ESCAP is one of the five regional commissions of the United Nations. The ESCAP secretariat supports inclusive, resilient and sustainable development in the region by generating action-oriented knowledge, and by providing technical assistance and capacity-building services in support of national development objectives, regional agreements and the implementation of the 2030 Agenda for Sustainable Development. ESCAP also provides support to partners at the national level. ESCAP's national offer is rooted in and linked with the implementation of global and regional intergovernmental frameworks, agreements, and other instruments. Disability inclusive development is an important pillar of our work.

Notes and references

- Macanawai, S. and Edge, J., 2023. Beyond a seat at the table: towards disability equity in Asia-Pacific. Devpolicyblog. Available at: https://devpolicy.org/beyond-a-seat-at-the-table-towards-disability-equity-in-asia-pacific-20230907/.
- 2 Rechner, L. et al., 2023. How COVID-19 impacted people with disabilities: A qualitative study in Delaware. Public Health in Practice (Oxford, England), 6, p.100424. doi: https://doi.org/10.1016/j.puhip.2023.100424.
- 3 Pacific Disability Forum, 2022. Disability and Climate Change in the Pacific. Findings from Kiribati, Solomon Islands, and Tuvalu. Available at: https://pacificdisability.org/wp-content/uploads/2022/08/PDF-Final-Report-on-Climate-Change-and-Persons-with-Disabilities.pdf.
- 4 Economic and Social Commission for Asia and the Pacific (ESCAP), 2022. A three-decade journey towards inclusion: assessing the state of disability-inclusive development in Asia and the Pacific. United Nations. Available at: https://www.unescap.org/kp/2022/three-decade-journey-towards-inclusion-assessing-state-disability-inclusive-development#.
- 5 United Nations Development Programme (UNDP), 2024. 2024 Regional Human Development Report. Making Our Future: New Directions for Human Development in Asia and the Pacific.
- Global Facility for Disaster Reduction and Recovery (GFDRR), 2017. Disability Inclusion in Disaster Risk Management. World Bank Group. Available at: https://www.gfdrr.org/sites/default/files/publication/GFDRR%20Disability%20inclusion%20in%20DRM%20Report_F.pdf.
- Feconomic and Social Commission for Asia and the Pacific (ESCAP), 2018. Building Disability Inclusive Societies in Asia and the Pacific Assessing the Progress of the Incheon Strategy. [online] United Nations. Available at:
 - https://www.unescap.org/sites/default/files/publications/SDD%20BDIS%20report%20A4%20v14-5-E.pdf.
- Organisation for Economic Co-operation and Development (OECD), 2010. Sickness, Disability and Work: Breaking the Barriers A Synthesis of Findings Across OECD Countries. Available at:

 https://www.oecd.org/en/publications/2010/11/sickness-disability-and-work-breaking-the-barriers_g1g10adb.html.
- International Labour Organization (ILO), 2024. Putting the I in ESG: Inclusion of Persons with Disabilities as Strategic Advantage of Sustainability Practices for Corporates and Investors. Available at: https://www.ilo.org/sites/default/files/2024-11/Putting%20the%20I%20in%20ESG%20full%20guid e.pdf; Economic and Social Commission for Asia and the Pacific (ESCAP), 2023. Catalysts of Change: Disability Inclusion in Business in Asia and the Pacific. United Nations. Available at: https://www.unilibrary.org/content/books/9789213586471; United Nations, 2018. Disability and Development Report: Realizing the Sustainable Development Goals by, for and with Persons with Disabilities. Available at: https://www.un.org/development/desa/disabilities/publi cations/disability-and-development-report.html.

- 10 Pearce, K., 2024, 10 Facts About ADHD, Neurodiversity And Entrepreneurship, ADHD Flow State, Available at: https://www.adhdflowstate.com/facts-about-adhd-neurodiversity-and-entrepreneurship/.
- 11 Kaneda, T. and Matuszak, N., 2024. Like the United States and Europe, the Asia-Pacific Region Is Experiencing Low Fertility and Population Aging. Population Reference Bureau. Available at: https://www.prb.org/articles/like-the-united-states-and-europe-the-asia-pacific-region-is-experiencing-low-fertility-and-population-aging/.
- Commonwealth Scientific and Industrial Research
 Organisation (CSIRO), 2022. Seven megatrends that will
 shape the next 20 years. Available at:
 https://www.csiro.au/en/news/all/news/2022/july/seven-megatrends-that-will-shape-the-next-20-years;
- 13 Commonwealth Scientific and Industrial Research Organisation (CSIRO), 2022. Seven megatrends that will shape the next 20 years. Available at: https://www.csiro.au/en/news/all/news/2022/july/seven-megatrends-that-will-shape-the-next-20-years.
- European Strategy and Policy Analysis System (ESPAS), 2019. Global Trends to 2030: Challenges and Choices for Europe. Available at: https://espas.secure.europarl.europa.eu/orbis/node/1362.
- Organisation for Economic Co-operation and
 Development (OECD), 2017. Embracing Innovation in
 Government: Global Trends 2017. Available at:
 https://oecd-opsi.org/publications/global-trends-2017/
- National Intelligence Council (NIC), 2021. *Global Trends* 2040: A More Contested World. Available at: https://www.dni.gov/files/ODNI/documents/assessments/GlobalTrends_2040.pdf.
- 17 Ipsos, 2023. A New World Disorder? Navigating a polycrisis. Available at: https://www.ipsos.com/en-us/global-trends.
- van Daalen, K.R., Kallesøe, S.S., Davey, F., Dada, S., Jung, L., Singh, L., Issa, R., Emilian, C.A., Kuhn, I., Keygnaert, I. and Nilsson, M., 2022. Extreme events and gender-based violence: a mixed-methods systematic review. *The Lancet Planetary Health*, 6(6), pp.504–523. doi: https://doi.org/10.1016/s2542-5196(22)00088-2.
- Qiu, N., Jiang, Y., Sun, Z. and Du, M., 2023. The impact of disability-related deprivation on employment opportunity at the neighborhood level: does family socioeconomic status matter? Frontiers in Public Health, doi: https://doi.org/10.3389/fpubh.2023.1232829; Soltani, S., Takian, A., Akbari Sari, A., Majdzadeh, R. and Kamali, M., 2019. Financial Barriers to Access to Health Services for Adult People with Disability in Iran: The Challenges for Universal Health Coverage. Iranian Journal of Public Health, 48(3). doi: https://doi.org/10.18502/ijph.v48i3.895.
- 20 World Meteorological Ogranization (WMO), 2024. Climate change and extreme weather impacts hit Asia hard. Available at: https://wmo.int/news/media-centre/climate-change-and-extreme-weather-impacts-hit-asia-hard.
- Stein, P.J.S. et al., 2023. The role of the scientific community in strengthening disability-inclusive climate resilience. *Nature Climate Change*. doi: https://doi.org/10.1038/s41558-022-01564-6.

- 22 Anderson, K. and Sellwood, D., 2023. Banning straws might be good for the planet but bad for people with disability or swallowing problems. What is 'ecoableism'?. The Conversation. Available at: https://theconversation.com/banning-straws-might-be-good-for-the-planet-but-bad-for-people-with-disability-or-swallowing-problems-what-is-eco-ableism-199183.
- Prakash, S. et al., 2022. Correlates of access to sanitation facilities and benefits received from the Swachh Bharat Mission in India: analysis of cross-sectional data from the 2018 National Sample Survey. *BMJ Open*, 12(7), p.e060118. doi: https://doi.org/10.1136/bmjopen-2021-060118.
- 24 The Asia Foundation, 2023. Accessibility and Disability Inclusion on the Public Transport System in Phnom Penh. Available at: https://asiafoundation.org/publication/accessibility-and-disability-inclusion-on-the-public-transport-system-in-phnom-penh/.
- Chou, Y.-C. et al., 2024. Assessing disability rights in four Asian countries: The perspectives of disabled people on physical, attitudinal and cultural barriers. *Political Geography*, [online] 108, p.103027. doi: https://doi.org/10.1016/j.polgeo.2023.103027.
- 26 Morrison, J. et al., 2014. Disabled women 's maternal and newborn health care in rural Nepal: A qualitative study. *Midwifery*, [online] 30(11), pp.1132–1139. doi: https://doi.org/10.1016/j.midw.2014.03.012; Grills, N. and Wearn, J., 2024. Meeting people in their communities: Access to disability support and healthcare through Community-Based Inclusive Development training in India. *Asialink*. Available at: https://asialink.unimelb.edu.au/diplomacy/community-based-inclusive-development-india/.
- Hatherley, S., 2022. Hormonal, emotional and irrational: Is it really the case that women's health is taken less seriously than men's? Senedd Cymru Research.

 Available at: health-is-taken-less-seriously-than-men-s/; Bierer, B.E., Meloney, L.G., Ahmed, H.R. and White, S.A., 2022. Advancing the inclusion of underrepresented women in clinical research. Cell Reports Medicine, 3(4), p.100553. doi: https://doi.org/10.1016/j.xcrm.2022.100553.
- Yasukawa, L., 2021. Uprooted and overlooked: Why people with disabilities fleeing conflict and violence are among those most at risk. Internal Displacement Monitoring Centre. Available at: https://www.internal-displacement.org/expert-analysis/uprooted-and-overlooked-why-people-with-disabilities-fleeing-conflict-and-violence/.

- 29 La Vecchia, S., 2022. The protection of women and girls with disabilities in armed conflict: Adopting a gender-, age- and disability-inclusive approach to select IHL provisions. International Review of the Red Cross. Available at: https://international-review.icrc.org/articles/the-protection-of-women-and-girls-with-disabilities-in-armed-conflict-922.
- Human Rights Watch, 2021. Persons with Disabilities in the Context of Armed Conflict. Available at:

 https://www.hrw.org/news/2021/06/08/persons-disabilities-context-armed-conflict.
- 31 Kubenz, V. and Kiwan, D., 2021. The impact of the COVID-19 pandemic on disabled people in Low- and Middle-Income Countries: A literature review. *University of Birmingham*. Available at: https://disability-hub.com/wp-content/uploads/2021/04/Impact-of-COVID-19-on-disabled-people-literature-review.pdf.
- 32 Eide, A.H., Muller, S., Zhang, W., Khasnabis, C., Antypas, K., Blakstad, M. and Borg, J., 2023. Barriers for Accessing Assistive Products in Low- and Middle-Income Countries (LMICs). Studies in Health Technology and Informatics, pp.297–302. doi: https://doi.org/10.3233/SHTI230634.
- Botelho, F.H.F., 2021. Accessibility to digital technology: Virtual barriers, real opportunities. Assistive Technology, [online] 33(1), pp.27–34. doi: https://doi.org/10.1080/10400435.2021.1945705.
- 34 Ko, J. and Lee, E., 2024. Research team develops wearable robot for paralyzed patients. *Pulse*. Available at: https://pulse.mk.co.kr/news/english/11150062; Yokoi, T., 2022. Robots and machines making work inclusive. *Forbes*. Available at: https://www.forbes.com/sites/tomokoyokoi/2022/07/30/some-machines-are-making-work-more-accessible/.
- 35 International Labour Organization (ILO), 2019.
 Promoting Employment Opportunities for People with Disabilities: Quota Schemes (Vol. 2). Available at:
 https://www.ilo.org/publications/promoting-employment-opportunities-people-disabilities-quota-schemes-vol-2.
- World Bank, 2020. The Rights of Women with Disabilities: Pilot Research by Women, Business and the Law 2020. Available at: https://thedocs.worldbank.org/en/doc/51742160676715 2867— 0050022020/original/WBL2020DisabilityTopicNote.pdf.
- 37 National Disability Data Asset (NDDA), 2025.
 Connecting data to empower lives. Australian
 Government. Available at: https://www.ndda.gov.au/.
- 38 Griffith University, 2025. Inclusive Futures: Reimagining Disability. Available at: https://www.griffith.edu.au/research/inclusive-futures-reimagining-disability.

ABOUT THE AUTHORS



Dian Tjondronegoro

Professor Dian Tjondronegoro is Acting Deputy Director at Griffith Asia Institute and leads the "Live" theme at Griffith Inclusive Futures Beacon. His research focuses on reshaping urban living

spaces to be more inclusive, healthy, and technologically integrated. With 12+ years of collaboration in Australia's health sector, he has led impactful eHealth innovations using AI, IoT, and mobile-cloud computing. Working with an interdisciplinary team of world-class researchers and engineers, he develops cutting-edge systems that enhance healthcare and urban living. His work bridges technology and health, driving advancements in digital solutions for real-world challenges.



Elizabeth Kendall

Professor Elizabeth Kendall is a leading researcher in rehabilitation and service systems for people managing serious injuries, disabilities, or chronic conditions. She has led major health reform evaluations and collaborates with key

partners, including Queensland Health and the Motor Accident Insurance Commission. Elizabeth has secured \$50M+ in research funding, including nine ARC grants, and has 200+ publications in top journals. She has produced 65+ industry reports and supervised 18 PhD students. A former ARC College of Experts member, she chaired the Social, Behavioural & Economic Sciences panel, contributing to impactful policy and practice advancements.



Shawn Hunter

Dr Shawn Hunter is an Industry Fellow (APEC) and Director of Inclusive Growth Programs at the Griffith Asia Institute. He is an accomplished international development practitioner and researcher with over 15 years of experience designing and implementing

economic development programs across the Asia-Pacific region. His primary expertise is in financial inclusion and the digital economy. Much of his career has centred on researching inclusive economic development issues and facilitating capacity-building initiatives to support policymakers and regulators to achieve positive development outcomes. This includes over a decade of experience collaborating with government agencies and industry experts to progress initiatives within the Asia-Pacific Economic Cooperation (APEC) that promote regional cooperation and economic integration.



Elena Mayer-Besting

Elena Mayer-Besting is an Economic Affairs Officer at the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), where she advises policymakers, investors, and businesses on how to make the private sector in the region more inclusive and sustainable. Previously, she

was a Project Manager at the International Trade Centre (UN-WTO), overseeing projects on women's and youth entrepreneurship in West Africa and the Middle East. Before joining the UN, she worked with NGOs and conducted research on similar topics. Elena holds MAs in Economics and International Relations (University of Aberdeen) and Development Studies (IHEID, Geneva).

ABOUT THE GRIFFITH ASIA INSTITUTE (GAI)

Griffith Asia Institute (GAI) is an internationally leading partner for an inclusive, sustainable and prosperous Asia-Pacific. We build capacity and create positive impact through partnerships in sustainable economics and business, politics, international relations, security, and inclusive development.

Founded more than 25 years ago, GAI has 130 members and is the largest institute of Griffith Business School at Griffith University.

griffith.edu.au/asia-institute



Griffith Asia Institute

Griffith University Brisbane South (Nathan) Queensland 4111, Australia

Email: gai@griffith.edu.au

griffith.edu.au/asia-institute