THEMATIC BRIEF

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humanity &inclusion | Advocacy

Inclusive urban mobility and getting to school safely in developing countries[1]

HI aspires to a world of solidarity and inclusion, enriched by our differences, where everyone can live in dignity, including persons with disabilities and the most vulnerable.

Current global trends suggest that by 2050, cities will be home to two third of humanity[(2)], including 15% of persons with disabilities. Places of prosperity and opportunity throughout history, rapidly growing cities now concentrate and exacerbate overwhelming challenges in terms of poverty, inequalities, safety and pollution. These factors engender additional exclusion of the most marginalised and vulnerable members of communities, including persons with disabilities; all the more in developing countries.

Considering these global trends, we believe that the global commitment to leave no one behind cannot be achieved without empowering and mobilising all development actors, from local to international level, to address inclusion and safety issues in the urban context.

Through appropriate measures to improve safety and accessibility, cities in developing countries have the transformative potential and the leverage to reduce inequalities in society and contribute to the realisation of human rights for all. This can make a significant difference in the well-being of the most vulnerable, including persons with disabilities.

Why is it important?

According to global estimates, persons with disabilities comprise approximately 15% of the world's population.[(3)] 10% of persons with disabilities are children.[(4)] In most developing countries, **out of school rates for children with disabilities are still extremely high: 9 out of 10 do not go to school**.[(5)]

The Convention on the Rights of the Child (CRC) enshrines education as a human right and the Convention on the Rights of Persons with Disabilities (CRPD) requires States to "take all necessary measures to ensure the full enjoyment by children with disabilities of all human rights and fundamental freedoms on an equal basis with other children" (articles 7 and 24). All States have also have committed to leave no-one behind,

1. *The study was implemented by HI with the support of Andreas Beavor, Urban Emerge, Federico Batista Poitier and Dr. Victor Pineda, World Enabled. The editorial committee consisted of HI representatives, along with Jean-François Gaillet and Julie Delzenne, Institut VIAS, and Abner Manlapaz, Life Haven Center for Independent Living. The conclusions are based on literature review, lessons learnt from programmes of HI, CBM and Light for the World, as well as focus groups with persons with disabilities and their representative organisations, in several countries (Burkina Faso, Cambodia, Democratic Republic of Congo, Haiti, Kenya, Laos, Nepal, Senegal and Vietnam).*

2. *UNDESA (2014) World Urbanization Prospects.*

3. *85% of those living in developing countries (WHO).*

4. *WHO (2011) World Report on Disability.*

5. *UNICEF, (2015) Global Initiative on Out-of-school children.*

when working towards reaching the Sustainable Development Goal (SDG) 4, that is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. **Denying children with disabilities their right to education has long term consequences, impacting social and economic development for those with disabilities, feeding the spiral of poverty and exclusion**.

There are many reasons that explain the low school attendance rate of children with disabilities, including lack of accessible school facilities, prejudice and stigma. While one might think that lifting these enormous barriers – which is a huge work - would be sufficient, the expected result of getting children with disabilities into schools may be jeopardised by inadequate surroundings. **Indeed, the lack of safe and accessible roads and transports in many cities is an important factor in low school attendance rates, and it impacts the education levels attained and subsequent employment opportunities**. It also impacts other children as parents may find it difficult to let their child travel on dangerous roads.

Every four minutes a child is lost around the world owing to a road crash. For teenagers in developing countries, there is no greater threat to life than road traffic crashes: road crashes are the leading cause of preventable death of youth aged 15 to 29 years, and the second cause for those aged 5 to 14 years.[6] The risks are even higher for children with disabilities, who are also more exposed to non-fatal injuries from road crashes.[7] These children, living with different types of impairments, including physical, visual or hearing impairments and cognitive impairments encounter additional obstacles and barriers on their journey to school.

The CRPD requires countries to identify and eliminate obstacles and barriers and ensure that persons with disabilities can access their environment, transportation, public facilities and services, as well as information and communications technologies. **When interpreting this requirement, it is crucial to link accessibility and safety in order to improve safe mobility**[8] for all in the city. Without road safety for all, cities are not inclusive and accessible. Through SDG Target 11.2, all countries committed to provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

While improving road safety and enabling accessibility alone will not break down all disability barriers to employment, it is a central factor that can have a domino effect **towards enhancing an inclusive, peaceful and prosperous society that leaves no-one behind**. Indeed, safe mobility enables, from an earlier age, all components of our diverse societies, including persons with disabilities, to interact in ordinary life activities in the public sphere, such as schools, transport, work. Inclusive education ensures that schools and local education systems are responsive to the needs of all children, including children with disabilities. Inclusive education that addresses the needs of children with disabilities plays a positive role in helping address community stigma related to disability, demonstrating that children with disabilities can have a positive future and contribute to society. On the contrary when children with disabilities are unable to go to school, the entire family suffers from the economic consequences on the household,[9] as a caregiver has to stay at home. In most cases, women will be the ones impacted by the subsequent loss of revenue and work opportunities. Women and girls (without disabilities) are indeed usually the primary care providers for a family member with disabilities, which eventually limit their own opportunities for education and employment.[10]

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6. WHO (2015) Ten Strategies for Keeping Children Safe on the Road. Produced as Part of the Decade of Action for Road Safety 2011–2020. Website: www.who.int/roadsafety/decade_of_action

7. WHO (2011) World Report on Disability "People with disabilities are at higher risk of nonfatal unintentional injury from road traffic crashes".

8. Humanity & Inclusion defines "safe mobility" as the ability for a person to safely and reliably access preferred destination by navigating an environment considerate of his or her needs and preferences.

9. Banks, L. M., and S. Polack. (2014.) The Economic Costs of Exclusion and Gains of Inclusion of People with Disabilities: Evidence from Low and Middle Income Countries.

10. OECD Development Center (2014) Unpaid care work: The missing link in the analysis of gender gaps in labour outcomes.

Clearly, the resources needed to make urban environments safe and inclusive for everyone are relatively modest compared to the enormous cost of children and youth being excluded from education and life opportunities.

All stakeholders involved in the SDG implementation, especially States and local authorities must not fail to address the needs of persons with disabilities to enjoy their right to education and life-long learning, via safe and inclusive mobility. Action now to improve safe and inclusive urban mobility will ensure that inequalities and discriminations do not become further locked into poor urban design and inaccessible transport systems. A key solution lies in inclusive urban planning, that is to plan the city development with respect to the diversity of its inhabitants, including the needs of those with disabilities to fully participate in city life.

What are the urban mobility and road safety challenges?

> « I'm scared when I leave home to go to school. (...) There are a lot of cars and motorcycles going around. I am deaf, I cannot hear and there is no safe crossing point, so I take risks every time I cross the street. »
>
> *Sonia, schoolgirl, Burkina Faso.*

For children with disabilities and other vulnerable road users, the way to school in urban areas in developing countries is often overwhelmingly challenging.

Sidewalks are either non-existent or in poor condition. Vendors often congregate outside school gates, forcing children out into the road. There are very **few safe crossing points** over roads and where they have been installed, they are often blocked by raised kerbs, they are rarely traffic light controlled and the majority of vehicles do not stop for pedestrians unless they really have to, leading to many casualties. Children are particularly at risk while crossing the street owing to their small size and lack of awareness of road traffic rules.

For those with visual impairments, walking along trusted routes with the aid of tactile paving or audible crossing points is not an option in cities of low and middle income countries.
Bicycles, motorcycles and tricycles, some of the most popular forms of transport to school in developing countries, are also vulnerable to poor road design, lack of dedicated lanes and dangerous driving habits.

Collective transport is often the primary mode of transportation in low and middle income countries, especially for the poorest who cannot afford private transport means. However, formal public transport is often under-developed in developing countries, and co-exists with abundant informal collective transport systems, with both cases providing further challenges for pupils with disabilities. Persons with disabilities usually struggle to get onto buses, particularly with wheelchairs. They would often have to be carried by friends or fellow passengers and often pay additional fare for the space necessary to accommodate their wheelchairs. Where on-board spaces for wheelschairs or those with other impairments are provided, public awareness and understanding are often a barrier to their proper use.

In developing countries, collective transport usually comprises privately owned buses, with little incentive to stop for pupils with disabilities as it would imply fewer passengers, delays and less income. There are often no specific locations for bus stops, so those with limited mobility are unable to wait in a known place, further reducing their chances of boarding a bus. Less visible disabilities such as being deaf or having an intellectual disability such as autism are usually not recognised by the passengers or staff operating collective transport, often leading to misunderstanding and abuse. Girls and women with disabilities are particularly very vulnerable to

© Tim Dirven - Panos / HI. Road safety awareness campaign in Laos.

harassment and violence. Parents of pupils with disabilities are usually unable to afford private transport for travel to school and in any case often have to work very hard to earn an income to sustain their disabled children; they may not be able to afford the time to do a school run, especially in congested traffic.

These challenging experiences often turn pupils with disabilities away from travelling to school, thus further isolating them and constraining their opportunities for education and decent future employment.

The poor state of infrastructure between schools and where pupils live often negates the good work that is done to make school facilities (classrooms, toilets) and teaching material more accessible, not to mention the resources spent on training teachers to address the needs of pupils with disabilities. For example, since the 2015 earthquake in Nepal, many schools have been reconstructed. In Kathmandu, many of these have been designed to enable mobility for those in wheelchairs and with visual impairments. However, the infrastructure outside the schools remains very poor, with fragmented and unsafe sidewalks, very few safe crossing points and rough terrain. This contributes to keeping the numbers of pupils with disabilities able to attend school low. **Enabling a safe and accessible mobility chain between schools and wider infrastructure is crucial for universal access**.

Insights from countries

Safer access to school for disabled students in Kenya

Following ratification of the CRPD by Kenya in 2008, the National Kenyan Constitution formally recognised Disability Rights, helping to pave the way for better provisions in accessibility,

education and employment.[11] The policy environment for inclusive access is fairly well developed in Kenya, but transforming policy into action remains a challenge.

Secondary school rates show stark differences in access to education for those with disabilities; 49% of the general population hashas attended secondary school, compared to just 19% of those with disabilities.[12] This is due partly to entrenched stigmas around disability, but increasingly to blame, particularly in traffic-filled cities, is the lack of safe access to schools.

To address this, as part of a WHO and government-led initiative in the city of Naivasha, Kenya, local authorities have taken a number of steps to improve safety around schools. These steps include: **building pedestrian crossings, dedicated foot and cycle paths, and speed humps; reducing and enforcing speed limits of 30 km/h; increasing visibility through improved street lighting; enhancing the visibility of children by encouraging the use of reflective backpacks; and providing appropriate supervision by means of crossing guards**.[13] This programme has also implemented injury surveillance log books in schools; and developed Ministry of Education road safety guidelines for use nationwide, helping scale up the impact of the work across the country.[14] WHO has also engaged civil society to advocate for a comprehensive revision of Kenya's traffic laws and to increase the wearing of helmets through social media awareness and traffic police enforcement.[15]

In Nairobi and other large cities, it is very challenging for those with disabilities to access the small *matatus* that are the main form of transport around the city. For example, the tricycles used by many children and other people with mobility constraints are too large to fit inside. A road safety programme run by HI **in collaboration with local DPOs has carried out advocacy and training for government and key stakeholders like *Matatu* operators or owner associations to address the challenges faced by persons with disabilities**. As a result, *matutu* drivers have become much more aware of the needs of passengers with disabilities. The programme also promoted the potential of ICT solutions to road safety and mobility challenges, by for example allowing disabled pupils to send advance notification to bus drivers so that they can be picked up.

It was also found that road crash data collected by traffic police did not record individuals of under 16 years of age, let alone those with disabilities, leading to a poor evidence base for planning to enhance the safety of school children. With HI and other NGOs' advocacy, this is being changed to include appropriate details of those under 16 involved in road traffic crashes.

School access and pedestrian safety improvements in Democratic Republic of Congo

The Democratic Republic of Congo (DRC) has similar challenges in access to education for those with disabilities. DRC has 18 million school pupils aged between 6 and 18 years, representing 22% of the national population. 35% of the population lives in urban areas, which have a high growth rate of over 4% annually.

Road crashes account for a large proportion of fatalities and injuries in DRC and according to WHO projections, could significantly increase as more and more vehicles use the roads.[16] Very little public transport or school bus transport is available in cities such as Kinshasa, where it is typical for school pupils to travel along and cross over very busy roads on their way to school. The risks are even greater for those with disabilities. Focusing on improving the awareness of school pupils, the school code for road safety was

11. *Global Disability Rights, now! Disability in Kenya, https://www.globaldisabilityrightsnow.org/infographics/disability-kenya*

12. *Ibid.*

13. *WHO (2015) Ten Strategies for Keeping Children Safe on the Road. Produced as Part of the Decade of Action for Road Safety 2011–2020.*

14. *WHO (2013) Road safety in 10 countries.http://www.who.int/violence_injury_prevention/road_traffic/countrywork/kenya_2012.pdf?ua=1*

15. *Programme run from 2011-2015; initiated by WHO. It should continue through partnerships with government entities.*

16. *WHO (2015) Global Status Report on Road Safety.*

reviewed (didactic material on traffic regulations adapted to children): it had not been updated since its adoption in 1978, despite changes in road traffic, infrastructure and road signs.

Once the publication was updated and distributed to schools throughout DRC, awareness raising sessions with a focus on **safer pedestrian behaviour** were carried out in many primary schools in Kinshasa. **Road safety ambassadors** chosen in the schools helped to promote the message of road safety and to ensure that each school is doing the most it can to improve road safety risks in the locality. This includes awareness of traffic calming measures, safety barriers or safe pedestrian crossings. Pupils with disabilities were not forgotten and inclusive items such as tactile paving to guide those with visual impairments were put in place.[17]

Recommendations for improvements in policies and actions

1. Strengthening the policy and financial framework for safe and inclusive mobility, based on evidence and through participative processes

- **Place people at the centre of city development strategies** with a focus on improving the safety, accessibility, and sustainability of mobility infrastructures to guarantee the enjoyment of the city for everyone and foster greater inclusion and participation in all spheres of society.

- Urgently **step up efforts and investments** to implement concrete actions aligned with the five pillars of the Global Plan for the Decade of Action for Road Safety,[18] involving the different stakeholders, including road traffic victims associations and Disabled People Organisations.

- Acknowledging the fact that the objective to reduce by half global road traffic fatalities by 2020 will not be achieved, make it a priority to increase efforts and **extend the deadline of the SDG road traffic injury target 3.6 to 2030**, in line with most of other SDG targets and the WHO 2030 Voluntary Road Safety Targets.

- **Support actions for road safety implemented by Civil Society Organisations**, including road traffic victims associations, NGOs and Disabled People Organisations, recognising them as key actors for change and ensuring their access to funding mechanisms such as the new UN Global Road Safety Trust Fund.

- Promote an **integrated approach to safe and inclusive mobility** that considers road safety and accessibility as mutually reinforcing elements and essential components of a broader strategy to ensure equal opportunities and achieve sustainable, inclusive development.

- Ensure that the **inclusion of persons with disabilities** is a systematic, cross-cutting objective in all policy frameworks and international cooperation strategies relating to urban planning, road safety and mobility. **Systematically both mainstream disability and integrate specific measures targeting persons with disabilities and other vulnerable road users**, namely by adopting a rights-based approach to disability, that moves beyond considering persons with disabilities solely as victims of road fatalities, to take into account the diverse range of needs of persons with disabilities and the importance of safe mobility towards enhanced participation in society.

- Use a **gender lens**, and pay special attention to the specific and diverse mobility needs of women and girls, including women and girls with disabilities, emphasising the importance of safe and inclusive mobility towards equal participation of women and girls in society.

- **Facilitate the participation of all groups** represented in the city, including persons with disabilities, their representative organisations, in the design, implementation and monitoring of local and national policies and projects on urban mobility, in line with article 33 of the CRPD. Participatory planning is the only way to achieve universal mobility at the city scale. The earlier the consultation can start the better; DPOs should also be invited to test the finished product and help to improve the user experience.

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17. Project carried out by Humanity & inclusion since 2014.

18. In relation to improving road safety management, safety of road infrastructures, transports and vehicles, as well as improving road users' behavior and post-crash care.

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■ In order to develop evidence-based policies to improve urban mobility for vulnerable road users, **strengthen data collection methods** at local and national levels, including road crash data records.[19] Data must be disaggregated by age, disability, gender, income and geography. Use the framework of the Washington Group Short Set of Questions to adequately understand the diversity of disability in communities in developing countries.

■ **Support research and the production of evidence in general on barriers** to and the cost/gains of accessibility, safety, inclusion, with a focus on girls, boys, women and men with disabilities, and the effects that mobility and transportation infrastructure have on the access of marginalised groups to services, and other opportunities, like employment.

19. *The Road Crash and Victim Information System (RCVIS) enables the distribution of road crash and casualty reports to all local and international stakeholders involved or with an interest in road safety issues. See: https://www.handicap-international-road-safety.org/en/sections-3-intervention-methods-and-operational-tools/pillar-1-road-safety-management-increasing*

■ Effectively **monitor and report on the impact of national and local policies** relating to safe and inclusive mobility. Utilise the **targets and indicators on mobility** set out in Sustainable Development Goals, the New Urban Agenda, and the UN Decade on Road Safety through the lens of the Convention of the Rights of Persons with Disabilities, to create synergies between the different reporting processes and to ensure contextualised policies and implementation strategies that guarantee safe and inclusive mobility for all, including persons with disabilities.

■ **Engage in multi-stakeholders dialogue** and share knowledge and experiences on safe and inclusive urban mobility at all levels, and **bring these issues further up on the global agenda**, in different policy sectors, and as part of international cooperation strategies.

2. Removing the barriers to safe and accessible mobility, focusing on:

2.1 – The built environment

■ Promote a safe and accessible urban environment based on **Universal Design Principles**, providing accessible features for a wide range of impairments,[20] which represent cost-effective[21] and efficient measures to enhance rapidly safety and inclusion.

■ Around schools, **conduct safety and accessibility audits** to identify, and eventually eliminate, the situations that are not compliant with accessibility standards. Audits must be based on a participatory approach involving all stakeholders concerned and must consider the mobility chain as a whole, from the private space to the public space, from the residential areas to the schools. Identify the most popular routes and crossing points to the schools and prioritise those in order to make them safer and more accessible, including by the use of traffic signals, smooth surfaces, tactile paving and safety barriers.

20. *See for example:*
- CBM and World Enabled (2016) The Inclusion Imperative: Towards Disability-inclusive and Accessible Urban Development;
- HI (2016) Policy Paper: Road Safety

21. *When planned into new developments or infrastructure projects, a safe and accessible environment can be included from the start at very little additional cost..*

■ Encourage the introduction of **school safety zones**, in the road network around schools, that are easily recognisable. This can comprise safe crossing points, safety barriers along faster roads and directly outside schools gates, the use of traffic calming such as speed bumps and reduced speed limit zones.

■ Avoid locating new schools beside major roads, as often happens due to the rationale of easy access. A location set further away from large roads will offer the pupils a much safer environment outside the school gates.

■ Ensure that **public procurement** include mandatory standards on both safety and accessibility for any projects relating to mobility infrastructure or technology, including for international cooperation infrastructure projects, and ensure ex-ante and ex-post assessments of both safety and accessibility for these projects.

2.2 – Transport and vehicles

■ Plan for **multimodal transportation system** to allow people to choose from a variety of transportation modes. Multimodal transportation system increases the safe mobility of those who are unable to drive (e.g. children, persons with disabilities, older people). This generates also health benefits by encouraging walking and cycling and reducing pollution.

■ Among the transportation mix in cities, promote in priority **affordable, safe, accessible and reliable formal public transport** that meet the diverse range of needs required by persons with disabilities, including women and girls with disabilities. Encourage the development of **school buses** that are accessible to pupils with disabilities.

■ In order to **increase the offer of accessible transport services**, organise **trainings and information sharing** for all public, private, formal, informal transport operators on how to cater for the needs of passengers with disabilities, including those with less visible impairments; and put in place of a system of accreditation based on vehicle specifications and driver training.

■ Encourage the **development of ICT solutions** to accessibility challenges, such as disabled passengers being able to send pick-up requests to informal bus operators via SMS or an app, in the context where there are no designated bus stops.

2.3. People

■ Organise **awareness raising or specific road safety classes for all school pupils**, including those with disabilities on safe mobility and road safety, hazard identification and safe road crossing. This must be context specific to take into account the local habits and behaviours.

■ Provide **training on road safety and universal accessibility** for government staff, urban planners, engineers, public transport operators, traffic police, school teachers or business associations.

■ Develop **university curricula** in urban planning and design that include training on road safety and disability inclusion principles, especially Universal Design concepts. . This can be complemented by supporting students with disabilities to enrol at university, who will bring first-hand experience in mobility challenges and solutions.

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