Safe and Sustainable Mobility in Tanga and Colima under the Botnar Child Road Safety Challenge

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The George Institute for Global Health

BOTNAR Child Road Safety Challenge

Managed by: Global Road Safety Partnership

How two International NGOs have been able to influence policy around safer and sustainable mobility in Tanga (Tanzania) and Colima (Mexico) under the Botnar Child Road Safety Challenge program.

Introduction

Safe roads are a fundamental human right. Children on their journeys to school where they learn and develop, should not be placed in harm's way. Ensuring they get to and from school safely should therefore be at the top of the road safety agenda in all countries, but particularly those who bear the brunt of the global road safety crisis – low- and middle-income countries. Involving civil society organizations in the development and delivery of evidence-based road safety initiatives is key to sustainable and effective program implementation. But not all NGOs have the capacity – human and technical – to undertake large, well-financed project. That's where a program like the Botnar Child Road Safety Challenge (BCRSC), hosted by the Global Road Safety Partnership (GRSP) with financial support from Fondation Botnar has been playing a leading role over the last five years.

Through the support of the BCRSC local actions around schools have been implemented. Making the difference in the life of many. It is important to sustain and scale-up the interventions into safer mobility policies. Ensuring long term and continuous road safety improvements.

This short case study tells the story of two of the grantees – an organization called Amend based Dar es Salaam, and with an office in Tanga (Tanzania) and World Resource Institute (WRI) – that have been able to influence policy around safer and sustainable mobility through a bottom-up approach involving tangible actions and capacity building.

Tanga (Tanzania)

Child Road Traffic Injuries

Tanzania

Road traffic injuries (RTI) kill over 1.35 million people around the world every year, and RTI is the leading cause of death globally for children, adolescents and young adults (ages 5 to 29 years). Africa has the world's most dangerous roads, and RTI rates are increasing as population growth and economic development lead to increased mobility.

The government of Tanzania had the following road safety policies and legislation in place in 2023:

SAFE ROAD USERS	
National speed limit law	Yes
Max urban speed limit	50km/hr
Max rural speed limit	No
Max Motorway speed limit	No
Local authorities can modify speed limits	Yes
Enforcement	0 1 2 3 4 5 6 7 (8) 9 10
Predominant type of enforcement	Manual

Table: Legislative context for roads in Tanzania (Global status report on road safety 2018, WHO 2018, ISBN: 9789241565684 available online *https://www.who.int/publications/i/item/9789241565684)*

Tanzania has a higher RTI death rate than the average for Africa: 29.2 per 100,000 people, compared to 26.6 as the average for Africa. In Tanzania, the vast majority of children walk to school (80-90%), usually unaccompanied by an adult, and in proximity to dangerous traffic. Amend's research has consistently shown that at high-risk primary schools in urban Tanzania over 1% of children suffer an RTI every year.

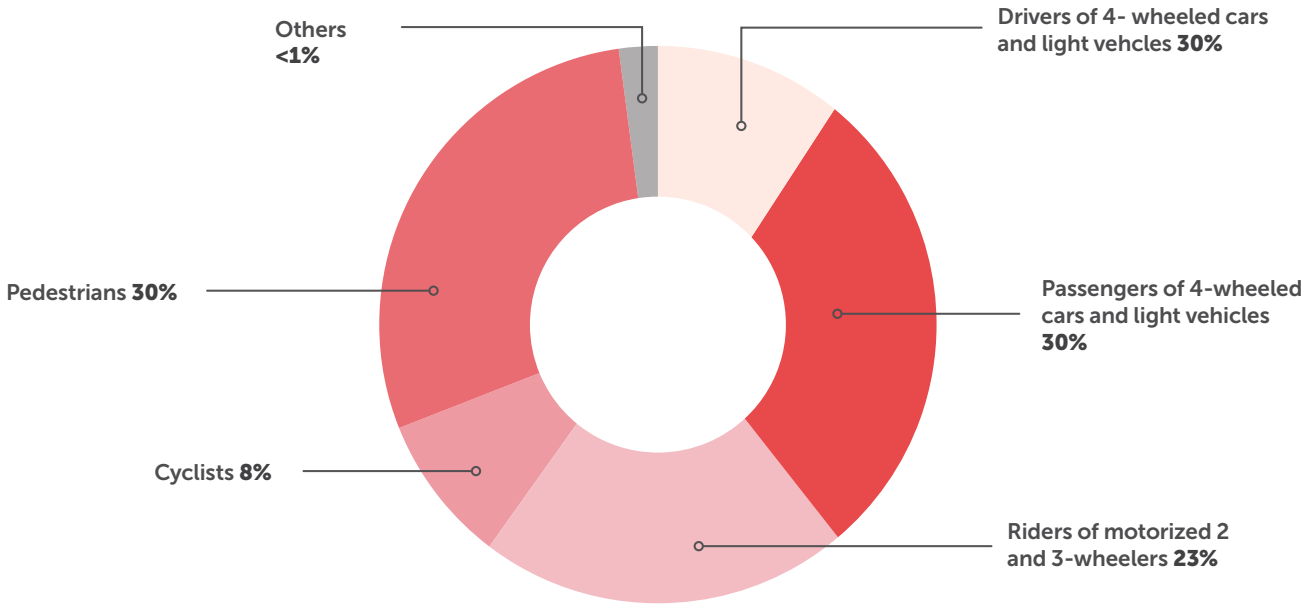

Figure: deaths by road user category in Tanzania (Global status report on road safety 2018, WHO 2018, ISBN: 9789241565684 available online *https://www.who.int/publications/i/item/9789241565684)*

Tanga

At almost 40% of primary schools in Tanga, Tanzania, at least one child has been injured in road traffic in past 12 months and an average of 3-10 have had mild to severe injuries

Further relevant details in regard to child road safety[1]:

- Travel to and from school was particularly dangerous for 6-12 year olds with almost half of children with RTI in this age group injured while traveling to school. Both of these findings are consistent with previous studies which have shown that children are more likely to be injured on small, unpaved side streets and face high risk of injury during school-related travel.
- For those children in or on a vehicle at the time of the crash, 54% were on motorcycles. This shows the importance of both working with schools and communities to discourage the use of motorcycles by children, and training motorcycle-taxi riders.
- For those children not in or on a vehicle at the time of the crash, 76% were struck by a motorcycle. This shows the importance of providing safe infrastructure for pedestrians, including keeping motorcycles off pedestrian footpaths and reducing motorcycle speeds in areas where there are child pedestrians, and training motorcycle riders.

Who is Amend?

Amend works with governments, communities, development banks, foundations, private-sector companies and others to deliver safe and healthy journeys in developing countries. Amend runs projects in more than fifteen countries, and with offices in Ghana, Mozambique, and Tanzania, our focus is on sub-Saharan Africa. Work involves everything from scientific research to the provision of safe infrastructure, engineering, education, training, advocacy, consulting and beyond. Amend has been active in Tanzania since 2009.

1 Paper published from Safe Journeys Study – Road traffic injuries in Tanzanian children and adolescents: A cross-sectional household survey

Amend and the botnar child road safety challenge

The overall purpose of the project support under the BCRSC is to enable children and adolescents to benefit from safer and healthier journeys to school. To achieve this, the project has three major objectives:

1. To undertake research in order to gain better understanding of transport and road safety among children and adolescents in Tanga.
2. To implement practical activities to improve road safety in Tanga in the short-term.
3. To engage local stakeholders and building local capacity to manage and scale up road safety activities.

Key activities and results

Since the start in 2019, highlights of the Safe and Healthy Journeys to School for Children and Adolescents in Tanga project to date have included:

- The creation of Safe School Zones around eleven schools, with infrastructure improvements including footpaths, a pedestrian footbridge, road signs, speed humps, rumble strips, zebra crossings, and more,
- Motorcycle rider training for over 320 motorcycle-taxi riders, with involvement of the Traffic Police and motorcycle-taxi association leaders,
- The implementation of Kids' Court at two primary schools,
- Road safety education for over 12,000 primary school children,
- Facilitation of training for Traffic Police,
- A road safety awareness campaign including a media campaign, messages through community development officers and messages through local politicians,
- Five workshops for stakeholders workshops with key stakeholders supported by key stakeholders such as the Lord Mayor, city director and former city director and the Tanga City Council, Regional Police Commander, the Regional Traffic Officer (RTO) and the Chairman of Road Safety Committee.
- Total engagement of 139 government officials, 14 educational institutions, 12,894 students, 128 teachers, 29 police personnel and 1220 drivers.
- The development of the Safe and Sustainable Transport Action Plan for Tanga.

Impact

The politically endorsed Safe and Sustainable Transport Action Plan for Tanga is perhaps the most important result which has fundamentally changed local governance and its approach to road safety.

Before this project there was a low level of action, coordination and commitment to tackle road safety as 'each agency was doing just their day to day work'. In the context of this project, it was the first time that different stakeholders and agencies were brought together sharing their views on road safety for the first time.

With the support of Amend the plan development was launched by the regional commissioner supported by the district commissioner. All relevant government bodies (district, city council, works and traffic police) were involved. The plan is the first ever in its kind for Tanga. It sets out a road safety vision for 2023-2030 and determines strategies for achieving this. It serves as a roadmap for Tanga road safety stakeholders both in policy development (city council) and implementation (both engineers and traffic police!).

Together with the development of the plan, the governance of the plan was established. It was agreed that the traffic police should be mandated to oversee the overall implementation of the plan.

Lessons learned

Ultimately, the sustainability of the road safety activities beyond the end of the project will depend on the political will, the will of government agencies to work together and cooperation with local stakeholders. The development of the Action Plan for Safe and Sustainable Transport has evidenced that it is possible to facilitate buy-in and meaningful commitments from all relevant government authorities.

So, what key lessons can we learn from this?

01 A series of continuous bottom-up actions, including a combination of street interventions, campaigning and capacity building has gradually created awareness and commitment among relevant stakeholders. This was the basis to grow support and buy in for the action plan ultimately. Lessons: the process requires continuous effort and lead time. Plan for this. Use tangible actions as a basis to get stakeholders involved and committed for more complex and strategic developments.

02 Operational staff were involved in the actions. E.g. engineers and traffic police were invited to observe traffic situations, to analyze and discuss together. By this means of co-creation additional insights were acquired that led to a better understanding of the road safety problems and how they could be resolved. Lesson: motivate staff to go outside to create a common understanding of problems and possible solutions.

03 The continuous effort from Amend and the careful attention for all stakeholders. Throughout the process, staff from Amend organized workshops and many bilateral meetings with all stakeholders to get everybody involved. Lesson: a personal and continuous approach sensitive to all stakeholders involved is key.

Colima (Mexico)

Child road traffic injuries

Worldwide, traffic accidents are the leading cause of death for the young population (people between 5 and 29 years of age). In Latin America and the Caribbean, the situation is no different, since road accidents are the leading cause of death among children between the ages of 5 and 14, and the second among young adults.

Mexico

Zooming from the region to Mexico. The government of Mexico had the following road safety policies and legislation in place in 2023:

SAFE ROAD USERS	
National speed limit law	Yes
Max urban speed limit	20-70km/hr
Max rural speed limit	20-90km/hr
Max Motorway speed limit	45-110km/hr
Local authorities can modify speed limits	Yes
Enforcement	0 1 2 3 (4) 5 6 7 8 9 10
Predominant type of enforcement	Manual and automated

Table: Legislative context for roads in Mexico (Global status report on road safety 2018, WHO 2018, ISBN: 9789241565684 available online *https://www.who.int/publications/i/item/9789241565684)*

Looking at deaths by road user category in Mexico, statistics show that the total share of vulnerable road users (pedestrian and cyclist) is at 40%, while motorcyclists and vehicle occupants represent equal shares of 30%. Drivers are not presented in this figure. In the Global Status report by WHO (2018) the share of this group is 8%.

Death by road user category

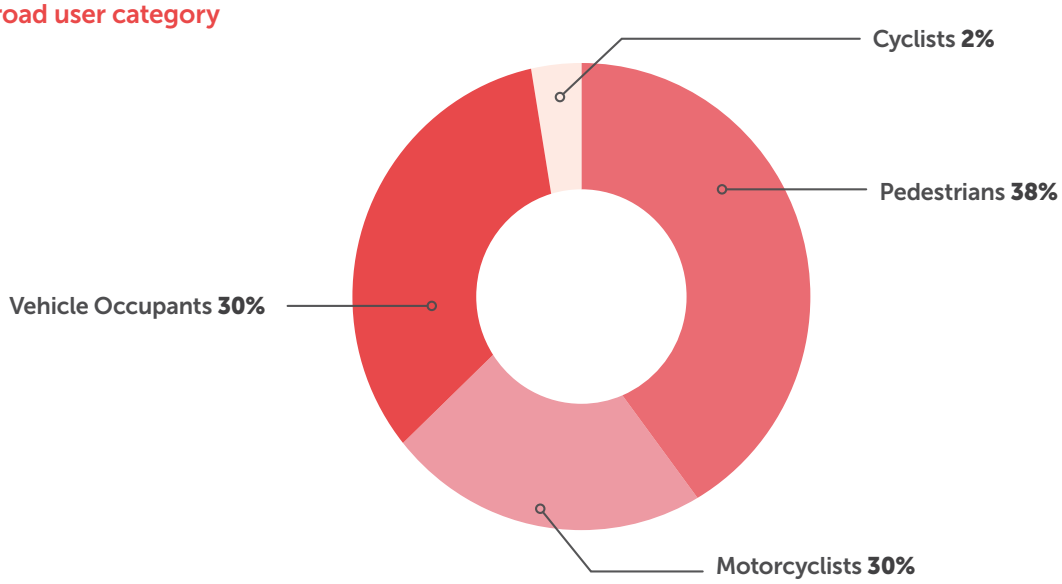

Figure: deaths by road user category in Mexico *(Road Safety situation report in Mexico 2021. The report consider data from 2020. *Without considering unspecified users)*

Death by road user category

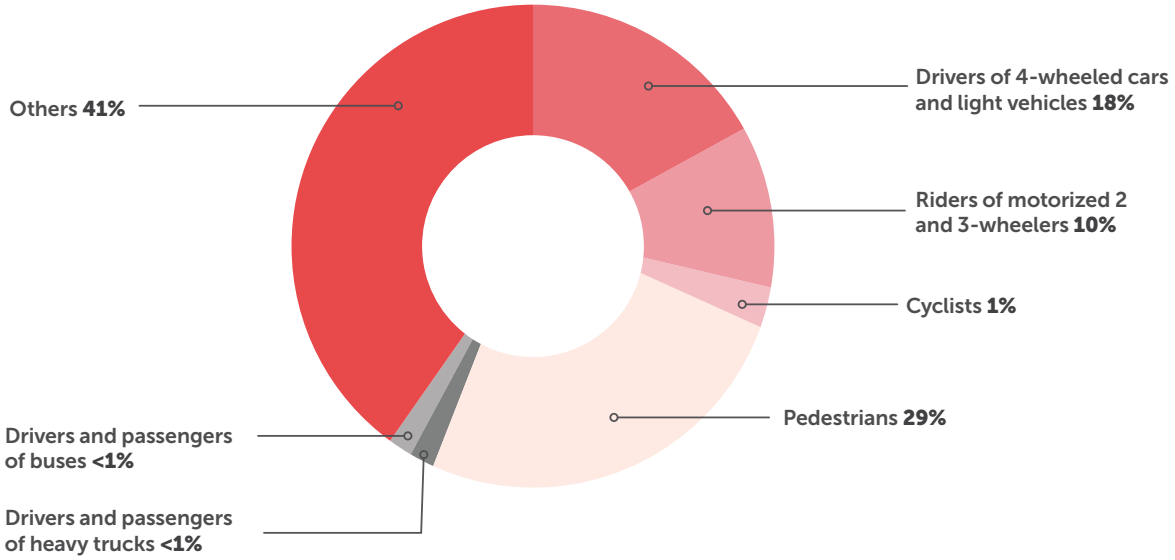

Figure: deaths by road user category in Mexico (Global status report on road safety 2018, WHO 2018, ISBN: 9789241565684 available online *https://www.who.int/publications/i/item/9789241565684*

Modal split

According to 2020 Population and Housing Census, 54% of students walk to school, while 2% of the total use a bicycle at some point of their commute. The case of the State of Colima, is similar: 46% walk to school, while just over 1% use the bicycle. The 2020 population census shows that 18% of the homes in the State of Colima have a bicycle as a mode of transportation. However, the recent origin-destination (OD) survey conducted to ISENCO & Bachillerato 33 and 34 students, has shown that the actual modal distribution is 28% school transport, 28% private motorized vehicle, 17% walking (9% walking the whole trip, and 8% walking to take another mode), 13% public transport, 8% carpooling, and 6% other (bicycle, motorcycle, taxi app, etc.).

Who is WRI Mexico?

WRI is a global research organization that spans more than 60 countries with 40+ years of experience, with offices in 8 countries. They have more than 1,700 experts and staff to turn big ideas into action at the nexus of environment, economic opportunity and human well-being. WRI helps to create accessible, equitable, healthy and resilient urban areas for people, businesses and the environment to thrive.

WRI has carried out projects to foster safer mobility for everyone in cities in low- and middle-income countries by improving planning, policy, and design to make streets safer for pedestrians and cyclists. Their road safety actions are on different levels: public policy and institutional development, infrastructure (safer streets), capacity building and coordination with decision makers, research, and publications.

WRI helps create accessible, equitable, healthy and resilient urban areas for people, businesses and the environment to thrive. Together with partners it enables more connected, compact and coordinated cities.

Coming from the EMBARQ-WRI program, WRI Mexico was established in 2016 to carry out the six critical issues, which represent the core of WRI's work: climate, energy, food, forests, water, cities and transport. For more than 10 years, WRI México has developed projects regarding Road Safety.

WRI Mexico and the botnar child road safety challenge

To achieve healthy, safer, and sustainable environments and well-being for children and youth in the municipalities of Colima or Villa de Alvarez, the main objectives of the project were twofold:

1. Sustainable mobility: Optimizing student's mobility through providing accessible virtual information to mobility alternatives
2. Road Safety: spread the use of the SIMOS tool, to improve evidence-based decisions in planning, operations, management & enforcement of road safety & mobility at the state and municipal levels.

Key activities and results

Mobility is the key axis to cover basic human needs, in this case, guaranteeing safe mobility for young people promotes access to education and contributes to social equity. Since 2018, the BCRSC in Colima has supported action in the field of infrastructure interventions, evidence base development, regulation and engagement.

An overview of some important activities and results:

- Speeding down one of the riskiest and most demanded school environments (where 2,500 students daily attend classes and where 46 road traffic crashes were registered annually). Jointly with the interest & support of public & private sectors, WRI Mexico showcased that transforming urban streets by starting with school environments through tactical urbanism intervention and implementing permanent infrastructure redesign is possible to lower speeds.
- WRI Mexico in coordination with the Undersecretary of Mobility, the National Institute of Statistics and Geography (INEGI), the Municipal Planning Institute and the Police Department of Colima, worked jointly to improve the road safety data and school transport information in the State of Colima, with the possibility to scale these data quality processes and tools nation-wide through INEGI. Including series of workshops and trainings for amongst others planning and enforcement professionals to strengthen the awareness of the importance of designing mobility an road safety programs based on evidence.
- A communications campaign was developed and implemented for a healthy, safe and sustainable school environments, including the set-up of a group of social promotors and (social) media outreach.

Impact

After 5 years working with both state and municipal agencies, decision makers and local communities in Colima, WRI Mexico has ensured that safe mobility has gained interest in the frameworks of policy making and legislation. In particular:

- Up till 2021, there was a poor evidence base around road safety statistics and no frameworks or protocols were available for relevant data collection. This project has developed tools and trainings for professionals involved to collect data, trust the data and use it for decision making. This has increased the understanding of road safety at decision making level.
- Due to the project, regulations were introduced, dictating a speed limits of 20 km/h around public places such as schools, hospitals and parks. These regulations were non-existing before the project.
- The establishment of a cross state working group on high level policy making level ensured continuous attention and knowledge exchange on road safety issues. This also made the road safety approaches more robust against changes in political terms.
- The governor of Colima has announced the development of a vision zero.

Lessons learned

The following lessons on influencing policy making for safer mobility can be derived from the project in Colima:

01 Expand the frame: translating road safety to benefits on other societal domains such as accessibility to education has helped to create broader commitment. Road safety can also contribute to sustainability, access to job and health. Support this by creating an evidence base to ensure that issues are understood.

02 Experiment to create evidence and build trust. The tactical urbanism project was a steppingstone in multiple ways. It showcased that it is possible to improve road safety through infrastructure treatments and speed management. By positioning it as an experiment (and the 'promise' that it could be removed if it wasn't working) made it possible to get the trust and commitment of decision makers and the local community.

03 Participation is key: WRI Mexico deployed a participatory process in which relevant stakeholders from scholars to professionals and decision makers in multiple levels were involved from the beginning of the project. In this way commitment grew. From smaller commitment on a single on-street action up to commitment for changes in policy making (announcement of vision zero) and changes in legislation (introduction of speed limit around public spaces)

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