PILLAR

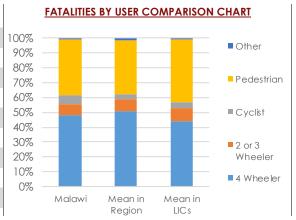
THE SCALE OF THE ROAD SAFETY CHALLENGE Ref. 1,2,3,4,5



Cost of Fatalities and Serious Injuries, 2016:\$ 4.99 billion

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Cost as % of country GDP, 2016:10.0%



Percentage of Road Crash
Fatalities and Injuries in the economically productive age groups (15 - 64 years.)

Ratio of Male to Female Fatalities with the 15 - 49 year age group being most vulnerable to fatalities

605 life yrs.

affected due to disability from road crash injuries per 100,000 people

POSITIONING OF COUNTRY IN THE REGION (COMPARED TO COUNTRIES WITH THE LOWEST TRAFFIC FATALITIES IN THE REGION AND GLOBALLY)

| | 2016 WHO Estimated Road Fatalities | 2016 GBD Estimated Road Fatalities | 2016 WHO Estimated Fatality Rate/ 100,000 pop. | 2016 GBD Estimated Fatality Rate/ 100,000 pop. | % Trend in Fatality Rate/100,000 (2013 - 2016) | Motorization Registered Vehicles/100,000 population | |
|------------------------------------|---|---|---|---|---|--|--|
| Tanzania | 16,252 | 5,496 | 29.2 | 10.5 | -3.6% | 3,893 | |
| BEST PERFORMING COUNTRIES IN | REGION | | | | | | |
| Mauritius | 173 | 168 | 13.7 | 13.2 | 4.4% | 40,224 | |
| Nigeria | 39,802 | 19,710 | 21.4 | 9.9 | 0.8% | 6,309 | |
| BEST PERFORMING COUNTRIES GLOBALLY | | | | | | | |
| Switzerland | 223 | 334 | 2.65 | 3.89 | -5.4% | 71,182 | |
| Norway | 143 | 215 | 2.72 | 4.09 | 2.4% | 75,544 | |
| Singapore | 155 | 197 | 2.76 | 3.53 | -4.9% | 16,604 | |
| Sweden | 278 | 390 | 2.83 | 3.88 | -3.2% | 62,037 | |

ROAD SAFETY MANAGEMENT Ref: 1

To produce positive road safety outcomes, strong management in all aspects of road safety is key. Presence of a funded lead agency to guide the national road safety effort and implement a Safe Systems approach is recommended.



Tanzania has a lead agency present, National Road Safety Council (NRSC), Ministry of Home Affairs, which isn't funded in the national budget but has a road safety strategy which is partially funded. The functions of the agency include coordination, legislation and monitoring and evaluation of road safety strategies. The country only has a fatal road safety target, to No with a timeline of No.

SAFE ROADS AND ROADSIDES Ref: 1,4

Improved infrastructure provides solid and well understood crash and injury reduction outcomes and are critical for long term and sustainable trauma reduction in line with the Safe Systems Approach. The International Road Safety Assessment Programme (iRAP) provide a business case for safer roads and road star ratings which give a simple and objective measure on the level of safety which is 'built-in' to the road for the road users. 5 Star roads are the safest while 1 star roads are the least safe.

Road Infrastrucure Star Rating Results - Tanzania

Surveyed Road Statistics: 96% with no formal footpaths; 99% with no pedestrian crossings; 100% undivided with veh. speeds > 80 kph

Vehicle Occupant Travel: 3 billion km; Pedestrian Travel: 2.3 billion km; Motorcyclist Travel: 135,710,468 km; Cyclist Travel: 1 billion km



Business Case for Safer Roads

Infrastructure and Speed Management Investment required: \$ 1.12 billion

Annual Investment as a % of GDP (2019-2030):

2030): **0.17%**

Reduction in fatalities per year: 7,157

Approximate reduction in fatalities and serious injuries (FSI) over 20 years: 1,570,000

Economic Benefit: \$ 26.65 billion

B/C Ratio: 24

SAFE SPEEDS Ref: 1,6,7,8

Speeding is a major risk factor for road crash injuries, contributing to both crash risk and crash consequences. A 5 % cut in average speed can result in a 20 % reduction in the number of fatal road crashes. Effective speed management measures such as establishing and enforcing speed limit laws, traffic calming through roadway design and other measures, and vehicle technology need to be widely implemented.

MAXIMUM SPEED LIMITS AND ENFORCEMENT

| ✓ | 50 km/h | Not Known | Not Known | Manual |
|--|---------------|-------------|-----------|---|
| NATIONAL SPEED LIMIT LAW | urban roads | RURAL ROADS | MOTORWAYS | SPEED ENFORCEMENT |
| Difference with Recommended Safe Systems Speeds | + 20 km/h | - | - | Potential Decrease in Fatal Road Crashes from |
| | 4 times lower | - | - | Enforcement of Safe System Speed Limits |

MAJOR SPEED CALMING MEASURES BEING IMPLEMENTED IN TANZANIA:

| × | NARROWING | | | |
|----------------------------|-----------|--|--|--|
| Include lane narrowings by | | | | |
| extending sidewalks, curb | | | | |

extensions, pedestrian refuges etc.



Include speed bumps, humps, cushions, tables, raised pedestrian crossing, variation in ride surface etc.

HORIZONTAL DEFLECTION

Used to make vehicles swerve slightly, include chicanes, pedesrian refuges, chokers etc.

BLOCK OR RESTRICT ACCESS

Include median diverters, closing streets to create pedestrian zones, cul-de-sacs etc.

SAFE VEHICLES Ref: 1,8

Universal deployment of improved vehicle safety technologies for both passive and active safety through a combination of harmonization of relevant global standards, consumer information schemes and incentives to accelerate the uptake of new technologies will reduce road crash fatalities significantly.

VEHICLE REGISTRATION, STANDARDS AND IMPORT REGULATIONS COUNTRY COMPLIANCE TO THE UN VEHICLE SAFETY REGULATIONS 2,163,623 59.3%

TOTAL REGISTERED VEHICLES AS OF 2016

MOTORIZED 2/3 WHEELERS AS OF 2016

FRONTAL AND SIDE **IMPACT** (Reg. 94, 95)

MOTORCYCLE ANTI-LOCK BRAKING SYSTEM (Reg. 78)



PEDESTRIAN PROTECTION (Reg. 127)

STABILITY CONTROL (Reg. 140)

ELECTRONIC

ANCHORAGES (Reg. 16, 14)

SEAT BELTS AND



Regulated





Yes

No

REGULATION OF IMPORT OF USED VEHICLES

IMPORT AGE LIMIT

TAXATION BASED LIMITS

IMPORT INSPECTIONS

PERIODIC INSPECTION

SAFE ROAD USERS Ref: 1,8

The key behavioral risk factors for road crash injuries are drunk driving, non-use of helmets, seat-belts or child restraint, and speeding. Establishing and enforcing laws to address these risk factors is effective in reducing road crash fatalities and their associated injuries.

NATIONAL SEATBELT, DRINK DRIVING AND HELMET LAWS (WHO, 2018)

















Not restricted



18 yrs.

NATIONAL SEATBELT LAW DRIVER

FRONT BACK

MOTORCYCLE HELMET LAW

HELMET **STANDARDS**

MOTORCYCLE OCCUPANT AGE RESTRICTION

LEGAL MINIMUM DRIVING AGE

≤0.08

≤0.08

Approx. 1.0%

NATIONAL DRINK DRIVING LAW

IS LAW BAC BASED?

GENERAL **POPULATION** YOUNG **DRIVERS**

PROFESSIONAL DRIVERS

0.00

RANDOM DRINK **DRIVING TESTS**

% OF ROAD CRASH FATALITIES INVOLVING ALCOHOL

BLOOD ALCOHOL CONCENTRATION (BAC) LIMITS (g/dl)

POST CRASH CARE Ref: 1,8,9

Good post-crash care reduces deaths and reduces disability and suffering for road crash survivors. The emergency medical care system elements and processes need to be effective to attain this objective.

Partial Coverage NATIONAL EMERGENCY CARE ACCESS NUMBER

Subnational TRAUMA REGISTRY SYSTEM

COUNTRY HEALTH COVERAGE INDEX - SDG Target 3.8; Target - 100

EXPENDITURE ON HEALTHCARE AS % OF 39

GDP

Tanzania has several emergency numbers. These are 999 (General); 112 (Police); 114 (Ambulance).

REFERENCES

1. Global Status Report on Road Safety 2018. World Health Organization; 2. Institute for Health Metrics and Evaluation (IHME). GBD Results Tool. Seattle, WA: IHME, University of Washington, 2015; 3. Serious injuries have been calculated assuming a ratio of 15:1 (15 serious injuries for every death). This estimation broadly falls in the range of 30:1 in high income countries to 10:1 in low- and middle-income countries as crashes tend to be more fatal in the later context. 4. Vaccines for Roads, International Road Assessment Programme (iRAP). Available from https://www.vaccinesforroads.org/; 5. World Bank Databank for Development Indicators; 6. M.H. Cameron, R. Elvik. 2010. Nilsson's Power Model connecting speed and road trauma; 7. Austroads. Balance between harm reduction and mobility in setting speed limits; 8. UNEP-ITC Background Paper on Used Vehicles Globally and Various Media Sources (Wikipedia and vehicle import websites); 9. 2018 World Health Statistics, WHO.