

Session 7.3: Notes

Road Safety Issues in Ghana

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Learning Objective

This session provides an overview of the global road safety issue, including statistics from Sub-Saharan Africa.

1. Road Safety

(Source: Lisinge, 2011)

This article is a reflection on the special challenges of road safety in Africa's rural areas. It examines the complex relationship between the rural transportation system and national road safety rules and regulations, and explores the implications for rural livelihoods. It also examines recent efforts to mainstream rural concerns in road safety policy at national and regional levels, and provides insights on ways of cushioning negative impacts of enforcing road safety measures on rural mobility.

Poor road conditions, old vehicle fleets, excessive overloading and mixed traffic are major risk factors in rural areas

All the components of the rural transport system in most African countries – road infrastructure, vehicles, and road users – contribute significantly to road crashes. Generally, the continent's road transport network is inadequate compared to other regions of the world, notably in terms of density, distribution in relation to the population and quality. The situation is worse in rural areas, where existing roads are predominantly narrow, unpaved and in bad condition due to lack of regular maintenance. Many of these roads are very slippery during the wet season and thus dangerous for driving, especially those without side protection and constructed on terrain with steep hills and deep valleys. Some bridges are in a state of disrepair and dangerous for use by vehicles. In addition, encroaching vegetation has further narrowed numerous rural roads, making them unsafe for both drivers and pedestrians. Many of the existing paved roads are also very narrow and in bad condition. A number of African countries, such as Ethiopia, are implementing ambitious road sector development programmes to address some of these issues, and are already recording improvements in the coverage and quality of their networks. However, significant reduction in rural road infrastructure gaps remains a long-term prospect.

Generally, African countries also have very old vehicle fleets. In Ethiopia, it is estimated that vehicles imported to the country are on average 20 or more years old, and that the age of the national vehicle fleet is 30 or more years. In Tanzania, the average age of vehicles is reported to be 15 years. Overall, it is the worst of these old vehicles that are used for providing transport services in rural areas. This is a direct result of the appalling condition of most rural roads, which raises vehicle-operating costs and discourages transport operators from using relatively new vehicles to provide services. To maximise profits, the few operators that serve rural areas tend to modify their vehicles to increase carrying capacity. Vehicles are also modified to withstand the rough conditions of rural roads. Such modifications may affect the structural integrity of the vehicle, thus creating enormous risks to the safety of drivers and passengers.

Overloading of vehicles is common in rural areas as a result of very low traffic levels. In a passenger survey undertaken in Cameroon for a type of vehicle

designed for a maximum passenger capacity of five, 50% of the surveyed vehicles carried 8 or 9 passengers. It was observed that some of the cars carried up to 15 passengers. It was also noted that operators allowed desperate commuters to sit on the roofs of moving vehicles, which is dangerous as the roads are bad and some of the drivers are reckless.

Another phenomenon in rural areas that raises concern is that of mixed transport of people, goods and animals, notably cattle, in the same vehicle. This is mostly the case in cattle rearing areas, where movement of cattle along highways is also rampant and a major cause of crashes. In Ethiopia, animal strikes are actually reported as being one of the leading causes of road accidents. In general, mixed traffic is common in Africa's rural areas – with cars, motorcycles, bicycles, horse and donkey carts, as well as pedestrians all sharing the same narrow pavement. In Tanzania, efforts are made to erect signs indicating cattle crossing locations, but these signs do not last for long due to road furniture vandalism. The resulting absence of such signs exposes drivers to serious problems at cattle crossings.

Wildlife crossing roads in rural areas also endanger drivers and passengers, in addition to the animals themselves.

Recent efforts to improve rural road safety are encouraging

Efforts are ongoing at national and regional levels to improve rural road safety in Africa. For instance, fences have been constructed and are regularly maintained along roads such as the N4, which links Maputo in Mozambique with Witbank in South Africa, to prevent animals from entering the carriageway. Overhead bridges have also been constructed to facilitate the movement of pedestrians and, in some cases, cattle. Furthermore, telephones, linked with ambulance and emergency services, and other relevant authorities, have been installed along the N4. In Ethiopia, road safety consciousness in rural areas is increasing as a result of targeted awareness raising campaigns. Regional transport bureaus and traffic police are also controlling excess loading of public transport vehicles.

At the regional level, the Economic Commission for Africa (ECA) has spearheaded efforts to mainstream the special needs of rural areas in Africa's road safety agenda. In that regard, the Commission and several partners organised the African Road Safety Conference in Accra, Ghana, in February 2007, during which the specificities of rural road safety were extensively discussed. The Conference noted that road safety dimensions in rural areas were different from those in urban areas. It recommended that First Aid training be provided to rural drivers and villagers; that community data collection systems should be introduced; mixed transport regulated; and support provided for research on issues related to rural transport safety.

ECA has developed a framework for monitoring and evaluating progress in implementing the recommendations of the Accra Conference. This framework was adopted at a seminar organised in 2009 by the Commission, in collaboration with the FIA Foundation for the Automobile and Society. It provides the following

performance indicators for measuring progress in rural transport safety: percentage (%) reduction of rural road users involved in fatalities; % reduction in animal strikes; and % of countries with community data collection systems.

Road safety measures should be comprehensive and should not threaten the livelihoods of the rural population

Strict enforcement of national road safety rules and regulations would adversely affect mobility in rural areas. For instance, applying roadworthiness standards would disqualify most public transport vehicles in rural areas from operating because they are likely to be below national standards. However, taking these vehicles off the road would further compound the mobility problem in rural areas, as the supply of transport services is already quite low. Therefore, enforcing roadworthiness standards in rural areas would have a negative impact on the livelihoods of the population if this were not accompanied by other measures such as improving the condition of the roads with a view to attracting better vehicles. Similarly, preventing overloading of vehicles would severely constrain rural mobility if the supply of transport services were not increased.

Overall, given the choice between mobility and safety, most rural dwellers will chose mobility, which in most cases is necessary for their livelihoods and even survival. This is illustrated by their willingness to take desperate measures such as sitting on the roofs of moving vehicles or sharing the same space with animals. Therefore, for a rural road safety programme to be effective and accepted by local communities, it should be comprehensive and not at the expense of mobility. This calls for research into developing methodologies for determining the optimal mix of road safety measures in rural areas – one that minimises the negative impacts on mobility. Such research should take into consideration factors such as the demand and supply of transport services, the availability of alternative modes of transport and the state of road infrastructure.

2. Traffic Accidents and Road Safety

(Source: Porter, 2010)

As young people's mobility increases, inevitably traffic accident rates are also likely to rise. Coverage of children's road safety issues has been surprisingly sparse in the literature on African transport, given that accident rates in some African countries (albeit still underreported) are among the highest in the world. Epidemiological trends in developing countries show that mortality rates of childhood infectious diseases are declining while rates of traffic injury-related death and disability are increasing (Mock et al, 1999), especially in urban areas, to the extent where Nantulya and Reich (2002) argue that this public health crisis needs policy makers' immediate attention. In 2002, deaths due to road traffic accidents were 20 and above per 100,000 children aged 0–14 years across most of sub-Saharan Africa: the highest level worldwide (WHO, 2004: 31).

A small study of child accident victims in Ilesa, a town in south-west Nigeria

(Adesunkanmi et al, 2000), found that the majority (89 per cent) were pedestrians and mostly over 5 years: 60 per cent of these child pedestrians were injured either while hawking at the roadside or on an errand. Motorcycles were involved in 20 per cent of the cases.

In Nigeria, the continued expansion of motorcycle-taxi businesses, usually operated by young men, and commonly associated with risky driving styles, is likely to lead to a significant rise in injuries to drivers, passengers and pedestrians. Drawing on substantial household surveys (which provide a better assessment of rates than official statistics due to under-reporting) in rural Brong Ahafo and urban Kumasi, Mock et al (1999) emphasise that, in both rural and urban Ghana, children have a particularly high exposure to accidents. In rural areas, 46 per cent of injured pedestrians and 30 per cent of injured cyclists were children (up to 15 years), while in Kumasi 52 per cent of injured pedestrians and 33 per cent of injured cyclists were children.

Road safety problems of poorly maintained public transport, driven by poorly trained drivers over poorly maintained roads, are also likely to be a major issue (Potgeiter et al, 2006 for Eastern Cape, South Africa). Adequate disaggregation of data by gender is often missing in work on African road safety, but a recent review of published and grey literature on road traffic injury among children and adolescents (≤ 19 years) for urban areas of sub-Saharan Africa suggests that males are twice as likely to be involved as females (Hyder et al, 2006).

Despite the level of traffic injuries sustained by children in Africa, most receive little road safety training, though efforts have been in progress in a number of countries to promote road safety within the curriculum (in Uganda and Ghana, for instance, with support from DFID-funded TRL projects and in Ghana from DANIDA).

References:

Adesunkanmi, A. R. K. Oginni, L. M. Oyelami, O. A. and Badru, O. S. (2000). Road traffic accidents to African children. *Injury* 31: 225-228

Hyder, A. A. Labinjo, M. and Muzaffar, S. (2006). A new challenge to child and adolescent survival in urban Africa: An increasing burden of road traffic injuries. *Traffic Injury Prevention* 7: 381-88

Lisinge, T. (2011). Road safety versus mobility: the dilemma of managing rural transport in Africa. *IRF Bulletin Special Edition: Rural Transport Volume 2*. Geneva: International Road Federation

Mock, C. N. Forjuoh, S. N. and Rivara, F. P. (1999). Epidemiology of transport-related injuries in Ghana. *Accident analysis and prevention* 31: 359-370

Nantulya, V.M. and Reich, M.R. (2002). The neglected epidemic: Road traffic injuries in developing countries. *British Medical Journal* 324: 1139-41

Porter, G. (2010). Transport planning in Sub-Saharan Africa III: the challenges of meeting children and young people's mobility and transport needs. *Progress in Development Studies* 10: 169

Potgieter, C-A. Pillay, R. and Rama, S. (2006). Women, development and transport in rural Eastern Cape, South Africa. HSRC Press

WHO (2004). Atlas of children's health and the environment. Geneva: World Health Organisation