Approaching rural road investments with a transport services perspective

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What happens to rural transport services when roads are rehabilitated or when they deteriorate?

A TRL team is researching how rural transport services respond to changes in rural road conditions in Africa and Asia. An integrated approach is needed to road building, road maintenance and transport services. The project is collecting evidence through literature reviews, stakeholder consultations and surveys that follow-up specific road investments. This will lead to guidelines to help road and transport authorities ensure road investments support transport services that are appropriate to the transport needs of rural communities.

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Road authorities should use transport services data in their planning

- Road authorities are not generally using transport services information to inform their investment planning
- Most impact studies on rural roads do not consider the mechanisms by which benefits are achieved. Of 56 impact studies reviewed, only 7 recorded transport tariffs and only 5 measured traffic volumes.
- Road authorities should collect ‘outcome indicator’ data (eg, transport volumes and tariffs) and store and use these within their road management databases.

Road use is changing: motorcycles are often the predominant vehicles using rural roads

In recent years in the ‘global south’ there has been an explosion in the use of motorcycles. In many countries they are now the dominant means of transport on rural roads, often accounting for 80% of passenger and freight movements. Traffic composition has changed massively over the past 10 years in very many countries in Asia and Africa. In Tanzania, motorcycles increased from 2,000 to 1,000,000 in 15 years.

In Liberia, motorcycles are now the main means to access health services, including maternity clinics.

Concrete strips may be suitable for 4-wheel vehicles, but they can be difficult and dangerous for motorcycles and 3-wheelers

Make investments appropriate to access needs

- In some countries motorcycles are only for private use, while in others motorcycle taxis are important for rural transport services.
- In either case, are the road designs, specifications and materials appropriate for large numbers of motorcycles?
- Some road designs (e.g. parallel concrete strips, if not well constructed and maintained) are dangerous for motorcycles.
- As motorcycles can travel on small trails, should motorcycle-trails be constructed to provide access to off-road villages?
- Research in Tanzania and Kenya showed that providing short distance access infrastructure to farms and villages usable by freight vehicles greatly increases market access for crops like pineapples.

This research is on-going, and the team would welcome additional information and ideas in this research area that can inform the final IMPARTS Guidelines.

Please take a flyer with our contacts or email
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