Theme: Promotion of rural transport services and intermediate means of transport.

ABSTRACT

IMTs and Rural Transport Services
- ITDG experience

Author
Ranjith de Silva
Senior Transport Specialist
International Transport Programme
Intermediate Technology Development Group (ITDG)
C/o. ITDG-South Asia,
5 Lionel Edirisinghe Mawatha
Kirulapone
Colombo 5
Sri Lanka.

Tel: +94 1 829412
Fax: +94 1 856188
Email: ranjiths@itdg.slt.lk
Web site: http://www.itdg.org

Background

In developing countries, national transport policies do not address the travel needs of rural people. This is either due to lack of awareness or total ignorance of the national planners. The rural travel needs are different and can be categorized into two sections. That is “on farm” and “off farm”. Travel needs relating to on farm activities includes travel for domestic needs such as collection of water and firewood mainly performed by women along with farm related travel. Off farm travel is to access the markets and other services like schools and health centres.

Private sector operates public conventional transport in the rural areas. That does not solve the transport problems of the poor rural people as they have different needs before reaching a bus route or a motorable road. As a result, the markets, health centres, schools and other services remain inaccessible to them. The only available option is to walk long distances from villages to reach these services. This results in low productivity in the rural areas mainly dependent on agricultural produce. The supply to the market centres from the rural areas remain very low and the poor rural farmers hardly get any income beyond the “break even”.

The IMT can assist in these two consequences of the rural set up in order to reduce the transport burden of the rural isolated communities. The chart given below gives an outline of the pattern of rural transport. It shows that IMT plays a key role in both “on farm” and “off farm” travel.

Rural Travel pattern Chart
Problem

As mentioned earlier the transport needs of the rural poor communities are quite different from what is being assessed by the planners. Non-availability of services such as water and energy makes the rural people to travel long distances and spent long hours. Alternative solution for this could be either a non-transport solution like locating the services close to the community or to provide transport solutions to reduce the drudgery and save the time.

When the markets become inaccessible and too far, that directly affects their economy. There is no proper infrastructure and limited amounts of goods are often carried on head due to the lack of alternatives.

In many countries public transport does not serve the rural access roads. Even the frequency of public transport at the nearest motorable road (accessible only by walking at least about two to ten kilometres) is extremely low. The low volume of passengers in the rural areas affects their profit even after a subsidy given by the governments.

**IMT as an alternative**

An IMT is defined as a substitute between walking and motorized transport. In some countries, even after the construction of rural roads, people continued walking. The reason being non-availability of affordable and appropriate transport modes. The rural travel is usually done with goods. The IMT therefore should be dual purposed to carry both goods and the passengers.
Basis for the development IMTs by ITDG projects was first to study the existing travel patterns of the communities concerned. The locally available resources, social and cultural needs, types of economic and subsistence activities will have to be considered.

**Types of IMTs** Some of the IMTs promoted by ITDG were for different needs and types. Some are listed below.

**Categories of IMTs**

- **Bicycle-based modes**
  The bicycle is the most popular mode of rural transport. The bicycle is used to carry heavy loads but by pushing rather than peddling it.

  e.g. Cycle trailer, bicycle ambulances, elongated bicycle, improved panniers, improved tricycles, load carrying devices.

- **Motorcycle based modes**
  The bicycle trailer is not appropriate for longer distances. However, the safety is an important factor in these modes. They are normally used for goods and passenger transport.

  e.g. Motorcycle trailer, Motorcycle ambulance, motorcycle car, motorcycle side car.

- **Packed animals**
  Improved harnessing for packed animals is normally used for the transportation of goods and water.

- **Animal drawn carts**
  Carts increase the load carrying capacity of the animal.

- **Ropeways**
  One of the ideal alternatives for the transportation in the mountains. Low-cost 'gravity' operated' ropeways are being developed by ITDG in Nepal.

- **Tuin (River Crossing device on wire rope)**
  Wire rope (Tuin) is used to cross rivers. ITDG Nepal is developing a device where a person of any sex and age could easily operate the crossing device.

**Manufacturers**
In the promotion of IMT, the manufacturers play a very important role. ITDG has worked with small-scale manufacturers, workshops and blacksmiths in research and development of IMTs. The link between the small manufacturer and the community in the rural areas is very strong.
Affordability
The IMTs shall be affordable to the poor communities. It is also a challenge worldwide in the dissemination of IMTs. Affordability is mainly the initial investment on the transport mode and also the cost of maintenance.

Availability of credit schemes, group use, hire & own methods are some of the remedies to make IMTs affordable.

Rural Transport Services
The question of affordability can be answered by transport services. These rural transport services can be managed by either the community or individuals. The system provides employment and an affordable transport service to the poor communities. These services also make the link between, markets and the communities. ITDG has experiences in “Individually & Community Managed” Transport services.

Conclusion
There is no economic development unless the transport needs of the people are not addressed adequately and appropriately. The role played by IMT would be a major contribution, when it comes to the development of rural economy. Infrastructure development is not enough. There should be modes and systems of transport too, appropriately designed at policy levels to suit the context and the needs of the rural communities.