### Rural travel and transport and economic development: Problems and prospects - examples from Malawi and Zimbabwe

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#### Abstract

The paper highlights some of the results and findings from several studies carried out in Africa and Asia to show how rural travel and transport could catalyse rural development.

The paper discusses the rural accessibility planning tool which has been developed by ILO and gives detailed insight on gender and rural access problems related to distribution of transport workload among rural households.

Case studies from Malawi and Zimbabwe have been used to show some possible interventions which can reduce the transport burden and provide means of transport that are suitable to women.

#### Introduction

As close as a decade ago, it was widely believed that roads could catalyse rural development if there were enough good ones to ensure access to inputs and evacuate agricultural surpluses to markets. Consequently, rural transport planning directed large amounts of investment aimed at rural development towards providing roads. The failure of this strategy to make an impact on rural development inspite of massive investment, led to research efforts to understand what was actually taking place.

The findings of several studies carried out in Africa and Asia show that people move around in rural areas for a variety of reasons which range from subsistence to socio-economic needs. The largest transport burden on households often takes place within the village, mostly required for the transport of water and firewood. This burden is often undertaken by head and hand loading by women. Footpaths and footbridges are the transport infrastructure often used by rural households; mostly on foot and occasionally with animal-drawn carts and bicycles for the economically more fortunate ones.

Availability of means of transport and of transport services condition the movement of goods into and out of communities. When facilities for basic services are difficult to reach, the time and efforts to go and get them takes away the time needed for other productive and social activities. Consequently, the household could experience labour shortages at critical times on the agriculture calendar and in other economic sectors. Lack of access not only produces isolation, it actually becomes a real constraint on productive activities and contributes to factors that cause poverty.

### Rural transport defined in terms of provision of access

The studies give an insight into ways in which transport can be seen as a "facilitator" and as part of a coherent and integrated set of measures to contribute to economic and social development. The heart of the problem is "accessibility" which encompasses both "mobility" of people and "locations" of different services or facilities. Accessibility is therefore defined in terms of provision of access and the ease

(expressed in spent time, efforts and cost) with which a need can be satisfied. Hence, a more appropriate definition for transport is "the movement of people and goods by any conceivable means for any conceivable purposes".

# Linkages between rural access, poverty and development in sub-Saharan Africa

Almost a third of people in developing countries live in poverty and their poverty is reflected in some basic indicators of lack of access to basic services. The World Bank studies have shown a clear association between poor access to basic services and per capita income. Poor access is one of the characteristics of poverty and it has its effects at the most basic level of living. Lack of access to basic and social services, employment, technology, land, information and credit contributes to factors such as poor health, low skill, poor education, low investment and limited opportunities. These lead to low productivity and income that in turn, perpetuate the vicious circle of poverty and hinders economic development.

The 1995 Human Development Report of the UNDP and the 1996 World Development Report of the World Bank indicate that:

... in sub-Saharan Africa, with the population of 572 millions and average GNP per capita income of US\$ 460, the access to health services is 54.9%, to safe water is 56% and to sanitation is only 36%. Poor access to basic services contributes to infant mortality rate of 92 per 1000 live birth and a life expectancy of 51.3 years in these countries. These access problems are even worse in rural areas of Africa where 90% of the Africa's poor lives. Only 49% of the rural population in sub-Saharan Africa have access to health services, 35% to safe water and 29% to sanitation. These figures are 78%, 73% and 59% for urban population respectively...

There is no doubt that transport is a key element in the process of economic and social development. However, it is crucial to be clear about the form in which the transport is made available - to whom, by whom and the extent that it is integrated into the development process. Since early 1980s there has been a great deal of evidence to suggest that the major investment programmes in rural roads have not achieved the hoped for increases in agricultural production and in living standards of rural population.

The UN Commission on Human Settlements (Habitat) in its 1982 reports indicates that:

"...the ability of the poor to engage in economic activities is limited by inadequate facilities and services and is generally hindered by current transport policies..."

The current rural transport policies should be reformulated to reflect the actual needs and transport pattern of rural population. Thus, it is necessary to look closer at the access needs and priorities of the rural population and to develop a co-ordinated, integrated set of interventions to meet their needs.

#### Rural accessibility planning

To improve rural access effectively, an appropriate (simple and relatively cheap) planning tool has been developed, with the ILO technical assistance, through pilot projects in Asia and Africa. This involves communities and local organisations to identify their access problems and proposes solutions for improvement of their access to services and facilities. The rural accessibility planning focuses on the poor access measured in terms of the time spent to get access. Because of poor access, a lot of time is being wasted by rural households to transport themselves and their goods in order to meet their needs. The underlying principal of accessibility planning is to

reduce this wasted time, hence have more time available for other social and economic activities.

The first stage of accessibility planning is to carry out a situation analysis that identifies the access problems in target areas; both regarding the mobility of the population and the location of services and facilities. The local communities, organisations (government and NGOs) and individuals are involved in this process in terms of providing the needed information and carrying out the survey. This information is processed to produce the access profiles of target The access profiles are discussed in a workshop with the target local communities and organisations in order to prioritise the access problems and find different options to solve those problems. The same local communities and organisations are involved not only in planning but also participate and contribute to implementation and maintenance of what has been planned.

#### Gender and rural access

Studies carried out by the World Bank and ILO over the last decade in Africa (Ghana, Zambia, Tanzania, Burkina Faso, Malawi and Zimbabwe) have provided detailed insights into both access problems and the corresponding magnitude and distribution of the transport workload among rural households. In general, the transport responsibilities of women and men are quite separate, being influenced by culture, custom and the overall household responsibilities. Transport consumes a major part of the household's time and involves a major physical burden.

In Africa in particular, women's traditional role as the bearer of loads often means that they are saddled with a huge transport burden. This is particularly evident in female-headed households which tend to be the poorest. It is also suggested as one of the reasons for young girls dropping out of school in higher numbers than boys. Studies carried out in the above mentioned countries show that the female contribution to household transport in rural areas ranges from 75 to 85% of the total transport burden.

One approach in reducing the above mentioned transport burden is to involve women in the local level planning process and take account of the clear distinction between the sexes in terms of transport needs and patterns. In doing so, the women's perspective and needs will be incorporated into the planned interventions and the burden of transport may be reduced for both sexes.

Equally important is making note of the access interventions that address specific needs of women such as providing a better access to women for intermediate means of transport through a better access to credits and a more gender sensitive design for means of transport. This is because traditionally, women's access to any form of intermediate means of transport has been limited by their role in the households, their lack of access to money and often by cultural restrictions.

In general, interventions which reduce the transport burden by bringing basic services such as water supply and health clinics closer to the users, and affordable means of transport that are suitable to women and their daily work are more likely to reduce their transport burden.

#### Examples of Malawi and Zimbabwe

#### Malawi

Malawi is classified as a least developed country with an estimated GNP annual per capita of US\$ 230 in 1995. The transport sector has consistently been the high priority in development planning in Malawi, accounting for up to 30% of public sector investment. The emphasis in road investment has been on primary routes and not much for rural infrastructure such as footpaths, tracks and bridges which are used by over 80% of the rural population.

Motorised transport services are concentrated in and around large urban centers and on long distance main routes. Local level and medium range transport services for goods and passengers around rural centres to supply the district level needs, are seriously limited. The problems in having limited rural transport services are compounded by the limited availability of the non-motorised means of transport (NMT) such as bicycles, bicycle trailers, animal-drawn carts, pack animals, wheelbarrows and water carrying devices in the rural areas. This is caused by the high retail cost and lack of credit facilities to purchase these intermediate means of transport.

The majority of rural people spend long hours (3 300 hours per household per year) and walk long distances to reach the crop marketing points, farm input supply centres, health clinics, schools, grinding mills, sources of water and firewood and other facilities and services that they need in their daily lives. These access problems impede the goal of the Government to make the basic socio-economic services available to the rural population and undermines the efforts to reduce poverty and expand economic opportunities.

In view of the above, the GoM (Government of Malawi), United Nations Development Programme (UNDP) and ILO engaged in a series of consultations during 1988-90 to find a holistic approach that can address the rural accessibility problems in rural Malawi. This effort gave birth to a pilot project with the objective of planning and implementing measures that improve, with an integrated approach,

accessibility of rural people to basic social and economic services that facilitate development in target areas. The emphasis was on "mobility" of population through better access to NMT; especially bicycles and bicycles trailers, and improvement of rural infrastructure. This project was completed in 1977 with successful results that included better access to and availability of NMT (focusing on bicycles and bicycle trailers), improved rural infrastructure and better capacity at the local level for planning and implementation.

#### Zimbabwe

Although Zimbabwe with a population of 11 million and per capita GNP of US\$ 629 is considered a relatively industrialised country in Sub-Saharan Africa, a large proportion of its population (72%) still lives in rural areas. The investment in transport sector is similar to the pattern in Malawi and the motorised transport services follow the same trend. The use of NMT is limited in rural areas due to the high retail cost, poor maintenance, lack of available and affordable spare parts, difficulty in getting credits and poor rural infrastructure.

In 1997 the Government of Zimbabwe completed a Rural Transport Study (RTS) that examined the travel and transport burden on rural households, with a view to reassessing rural needs in light of the broader issue of accessibility. The RTS, undertaken in co-operation with the ILO and with financial support from the Swedish International Development Co-operation Agency, was carried out in three of the country's 57 districts. The survey identified a number of problems similar in character to those found in Malawi and other rural communities across Africa.

It was made clear that walking and head loading - not motorised movement - was the primary mode of transport in the rural areas. An average rural household spends between 60 and 70 hours a week gaining access to water, firewood, grinding mills, markets, clinics and schools. Most of this is done by walking and head loading (77% of which is borne by women).

It became apparent that most rural transport and travel - as well as the needs associated with them - are focused within and around villages. Therefore, the availability of formal roads doses not appear to be the key factor in determining rural transport patterns and levels of community access to services. The proximity of those services is rated by rural people as being much more significant. The study showed that a great deal of time (3 200 hours per household per year) is being wasted in getting access to basic daily needs due to poor mobility and inconvenient location of services.

In general, the RTS results underlined that poor access reduces the effectiveness of services in reaching communities. It deepens the "isolation" of rural households, undermining their opportunities for better education, health facilities, job opportunities, markets - and better income. On the other hand, the RTS found that the efficiency, productivity and quality of life in rural communities could be greatly enhanced by improving access, through the better location of services and facilities, the development of rural infrastructure, improvement of mobility and NMT maintenance and other interventions aimed at reducing the need for travel and transport. The RTS has been followed by projects that include activities

- meet these constraints and contribute to poverty alleviation efforts and development in rural areas. This is achievable through proper local planning and appropriate interventions that improve rural access.
- A conducive environment to provide appropriate, affordable and sustainable Intermediate Means of Transport and credit scheme to improve mobility, offer the rural households and small holder farmers more time and options for productive works and better livings.
- National transport policies must be inclusive of rural transport issues relevant to needs and requirement of rural population in order to support and complement the local efforts for economic development in rural areas.
- The private sector, small scale entrepreneurs and local companies, should be provided a conducive environment within which they can operate and complement the efforts of rural communities

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aiming at "mobility" of rural population through better access to NMT and improved rural infrastructure.

# Findings of experiences in Malawi and Zimbabwe on "mobility"

- The lack of accessibility to basic goods and services is a constraint to rural development and contributes to the low productivity of land and labour observed in rural areas. The above mentioned experiences, offer a viable tool to
  - regarding the needed skills and supply of NMT that improves rural mobility.
- There is a felt need for research to find appropriate designs of NMT suitable for the daily needs of the rural population; women in particular. There are already, prototype designs developed for bicycle ambulances (pilot project in Kenya, bicycle trailers for different loads and purposes); addressing the rural needs for short distance trips. However, more work is needed to expand the range of these NMT designs and move from pilot projects to a higher level where they can be commercially marketed at prices affordable and accessible to rural population.
- It is important to increase or strengthen the technical and institutional capacity in the rural areas to guide and assist the local communities for interventions that improve their access to basic needs and socio-economic facilities or services
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