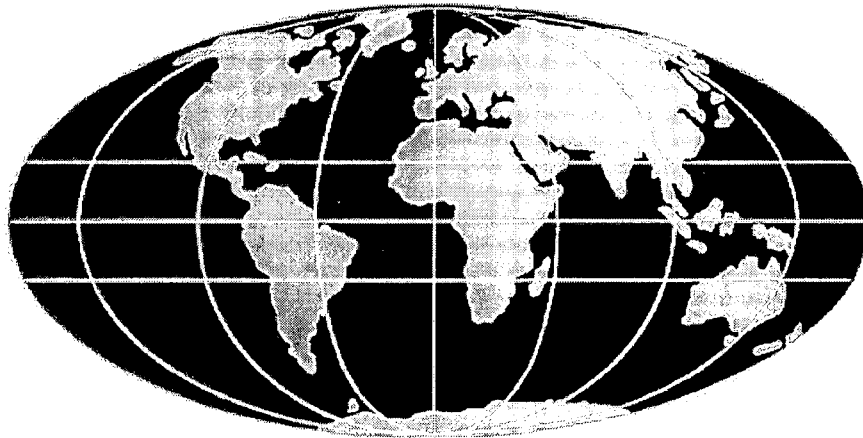


**TITLE:            Mobility in the Livelihoods of  
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# Mobility in the livelihoods of poor people

Mobilité pour les pauvres

Mobilidad para la gente pobre

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**ABSTRACT:** This paper examines the transport constraints of the urban poor, and reviews interventions that have been targeted specifically at these problems. Hence it identifies how transport contributes to the sustainable livelihoods of the urban poor, and what transport policy actions and initiatives can be implemented in support of urban poverty relief programmes.

**RÉSUMÉ:** Cet article analyse les problèmes de déplacements des pauvres urbains, et évalue les interventions qui visaient à atteindre ces problèmes. Il démontre le contribution de transport en la vie durable des pauvres urbains, et des politiques et des stratégies de déplacements urbains pour réduire la pauvreté.

**RESUMEN:** En este artículo se presentan las limitaciones del transporte de la gente pobre en regiones urbanas y se examinan las medidas que se han tomado. También se enfatiza la importancia del transporte para la vida del este sector de la población y las acciones necesarias para aligerar los problemas.

## 1 INTRODUCTION

The British Government's policy on international development underlines a commitment to the elimination of poverty, in line with internationally agreed development targets (DFID, 1997). The strategy adopted by the Department for International Development (DFID) to achieve this aim has three main components:

- Policies and actions which promote sustainable livelihoods
- Better education, health and opportunities for poor people
- Protection and better management of the natural and physical environment

A sustainable livelihoods analysis is particularly useful for targeting poor people's needs. This approach is centred on people and their assets, and seeks to identify strategies by which they can improve their livelihoods through better access to basic needs and opportunities. A multi-sectoral approach is required to understand a community's livelihood strategies (based on their assets and opportunities) and the livelihood outcomes they are struggling to achieve. Transport is but one component in this

framework, and its application may vary greatly with developments in other sectors.

In order to ascertain the best means of improving the transport network to the benefit of the urban poor the following issues need to be considered:

- The problems which the urban poor face regarding their access and mobility (including factors such as availability of transport, cost, safety, frequency of service, etc.), and how these impact on their livelihoods.
- The role for transport development as a means of benefiting the poorer members of society, and the experience in adopting these means.

Thus this paper examines the particular transport constraints of the urban poor, and assesses interventions that have been targeted specifically at these problems. Hence, it identifies how transport contributes to the sustainable livelihoods of the urban poor, and what transport policy actions and initiatives can be implemented in support of urban poverty relief programmes, and to what effect.

## 2 THE CHALLENGES

'Urban development can be a very positive element in a country's overall economic and social development.' Furthermore 'opportunities [in development] may be easier to take up in urban rather than in rural areas, whether because of economies of scale or because urban society is more fluid, less fixed in its ways, or more modern.' 'The success of many of the key objectives of development strategy are tied up in our approach and follow-through on urban issues.' (Various speakers from 'Cities in the 1990s', Harris, 1992.)

Urban areas are growing rapidly in the developing world. However, much of this growth is among the poorer sections of the community, many of whom have moved to the city in order to obtain employment and improve their living standards. In reality both migrants and indigenous urban poor are faced with the prospect of bleak livelihoods, and they may be forced to live in peripheral areas with few basic amenities and poor services. With continuing urbanisation it is likely that the sector of society known as the urban poor will increase substantially.

Within this context of increasing urbanization, the agenda for urban development contains three key challenges (Cohen, 1992), namely:

- Ameliorating poverty
- Enhancing productivity
- Protecting and improving the environment.

Ameliorating poverty requires an increase in the demand for labour (perhaps through encouraging labour intensive measures), investing in health and education, and providing 'safety nets' and compensatory payments to redress transitional problems. Enhancing productivity is constrained in the extent and provision of urban infrastructure, the enabling (regulatory) environment for the provision of infrastructure and services, the administrative capacity of local government, and the sourcing of finance. Safeguarding the environment, including aspects such as road safety, is of concern because it impacts directly on individual performance and productivity, and is clearly connected to urban poverty. Longer-term issues such as global climate change are also a major concern.

Improvements in access to employment opportunities, health-care, schools and other basic amenities are one means of addressing this urban agenda. As Gannon and Liu (1997) note, most direct policy-targeted interventions (schools, health clinics, social services, etc.) are dependent upon transport for their effectiveness. They argue that there is a need to strengthen the direct role of transport policy intervention in order to help reduce poverty.

The World Bank (1996) have suggested that the transport problems of the poor, particularly the urban poor, need to be addressed through:

- Directly targeting these problems
- Improving physical access to jobs and amenities and reducing "excessive" walking times.
- Reducing barriers to informal supply of transport (subject to reasonable safety levels).
- Enabling greater use of non-motorised transport by eliminating fiscal and financing impediments to vehicle ownership and improving infrastructure.
- Eliminating gender biases by integrating the transport needs of women into the mainstream of transport policy and planning.

More recent work to understand poverty, eg for the World Bank (1999), has underlined the need for employment. It has also stressed the importance of cost reduction and of greater security in eliminating poverty.

## 3 THE CONTEXT

Third World cities present a range of development characteristics, dynamic growth patterns, transport infrastructure and operations, and social customs that defy all but the broadest generalisations. Even so, it is important to understand the processes and interactions that drive transport demand if transport planners are to contribute positively to the general debate about urban development.

As cities expand travel demand grows at a disproportionately higher rate, mostly from the urban poor. It is also evident that trip movements become focused on corridor travel feeding into the city centre; once a city reaches a population of about 2-3 million, corridor flows may reach up to 20,000 passengers per hour per peak direction. Corridors and city centres which have to handle this level of demand are prone to endemic and prolonged road traffic congestion, because of the inadequate capacity of the infrastructure to carry both private and public vehicle flows. Public transport is potentially the most efficient carrier and that which serves the majority of travellers, but it cannot deliver an effective service in these conditions; journey times and waiting times become long and unreliable. In addition to the reduced productivity of vehicles, resulting in lower revenue earning potential, the financial position of operators is often weak. In these circumstances the prospect for improved public transport services is grim; operators cannot afford new investment when they can scarcely cover the depreciation on existing stock.

From the traveller's viewpoint the main concerns are adequate access to facilities in reasonable time at an acceptable service standard and at an affordable cost. Even in the short-term, transport planners and operators are struggling to satisfy these needs. In doing so they face mounting costs as central area access and congestion problems worsen with increasing city size.

The urban poor are very much at the centre of this environment, because they are so dependent on public transport for their access and mobility. They have little option but to suffer the deteriorating service whilst all the resulting costs are disproportionately high for poor people in relation to their very limited assets. The very poorest of the urban poor, together with other transport disadvantaged like women and children, may not even have access to public transport to meet their access and mobility needs.

This situation will only deteriorate further as cities grow and options for further infrastructure development are limited by available finance and environmental concerns. Ultimately, if the transport system cannot respond to these pressures, then other land-use developments may take control, leading to unstructured and diffuse city growth, and even the atrophy of the city centre.

Various transport policy options have been adopted by different cities to address these issues, though there is little empirical evidence as to what effects these measures have had, particularly with regard to the travel needs of the urban poor. In any case, it is not always evident what the objectives are in introducing these measures, and hence it is difficult to judge their effectiveness.

#### 4 IMPROVING THE ACCESSIBILITY OF THE URBAN POOR

There is a range of measures that could be adopted, either individually or as a package, to meet these objectives. They broadly fall within the categories of supply-side techniques (influencing the capacity and efficiency of services and infrastructure) and demand-side management (influencing travellers' demand and use of the available services).

##### 4.1 *Public transport deregulation and liberalisation*

Many authorities have suggested that tight regulatory control of the public transport sector restricts competition and choice. These measures, which may specify market entry qualifications, route allocation, and prescribed fare levels, are often imposed to pro-

tect a publicly owned incumbent. The resulting monopoly service is likely to be inefficient and financially unsound. However, some form of regulation may still be helpful in order to rationalise the use of infrastructure capacity in relation to the demand level of different routes (White 1990).

##### 4.2 *Institutional and ownership issues*

By-and-large, it is now generally agreed that publicly owned transport operators are likely to be particularly inefficient, and there has been a world-wide movement towards privatising such capacity. However, privately run concerns are equally prone to corruption, monopolistic practice (and resulting inefficiency) and to generally bad operating practice which is not in the users' interest. Examples abound of the monopolistic powers of union-organised public transport (e.g. Fouracre et al, 1994), and the power of such groups to curtail market entry and force up tariffs (e.g. Darbera, 1993). Maunder and Mbara (1996) argue strongly for some form of regulation and control, even within a liberalised operating environment, to safeguard the interests of users.

Community participation in bus operations has long been tried and tested in rural communities of the developed world. A few interesting developments along these lines are beginning to emerge in developing cities like Faisalabad and Lahore in Pakistan (Russell and Anjum, 1998), and Cape Town (Cronje, 1998).

##### 4.3 *Public transport fare subsidy*

A common policy where the urban public transport system is publicly owned is to encourage artificially low fares, as a means of supporting the urban poor. This may be achieved in some cases by cross-subsidy from more profitable routes, or more likely, and more directly, from government (local or central) sources as a blanket subsidy. However, artificially low fares result in problems such as overcrowding, loss of revenue from better-off passengers, reduced incentive to operate competitively and lack of vehicle replacement, because of insufficient investment provision (Parker, 1983).

Many observers (e.g. Gannon and Liu, 1997), have noted that public transport subsidy can be open to abuse, and is a source for encouraging inefficiency within the bus industry. If subsidy is justified on policy grounds, then careful design and monitoring are required to ensure that the policy objective is achieved. (Brazilian cities have a novel system, *vale-transporte*, whereby employers must, by law, buy

and distribute public transport tickets to their employees. Employers can, as an alternative, provide staff transport. They can also withhold up to 6 per cent of salary to help defray the cost of purchasing the tickets.)

#### 4.4 *Investment in public transport*

Investment in urban public transport has a recent history of high financial risk, and a strong likelihood of loss making. Operating conditions within the urban environment restrict the possibility of high vehicle output, and the level of fares is equally restricted (usually for political reasons), discouraging investment. Where private capital is invested, risk is minimized by focusing on high demand routes, or on contracted routes and services (for which local authorities guarantee a subsidy) and also by avoiding or neglecting weak markets (which might well include the communities). Private entrepreneurs will also be attracted where capital investment is minimal (the price of an old saloon car, say) and operating costs can be contained by using very cheap and often untrained labour, as for example in setting up the many paratransit services on offer.

The capital costs of many of the mass transit systems which require substantial dedicated infrastructure are usually high and therefore may not present a viable option in improving accessibility for the urban poor. This is particularly true of Light Rapid Transit (LRT) and Metro schemes, which have been used in developing cities, but need to be targeted at higher income areas, where the necessary high fares are affordable.

#### 4.5 *Improving public transport output*

Rationalising the use of the capacity of existing road and bus networks requires relatively modest capital investment and will usually constitute a much more economical investment than new high cost schemes such as LRT. Possibilities include bus priority measures and segregation. Busway transit has also been used in a number of developing cities. Its performance can equal that of most LRT systems and many metros.

These measures deliberately resolve the conflicts for the inadequate capacity of the main urban routes in favour of public transport. This can improve transport in several ways:

- efficiency and capacity of public transport operations are substantially improved.
- disadvantages to private traffic are significantly or wholly offset by the more organised regime.

- reduction of congestion brings major environmental benefits as well as operating economies.

#### 4.6 *Investment in infrastructure*

A large proportion of the population of developing cities depend upon walking, cycling or using public transport, and hence it seems appropriate to target investment towards these forms of transport. The World Bank (1975) stated that in order to improve accessibility, making "better use" of the existing network is more appropriate than building more roads.

Many have noted that traditional non-motorised transport (NMT) modes such as bicycles, carts and rickshaws have been ignored by transport planners in favour of more costly modes, when non-motorised transport may provide a more appropriate solution to some transport problems (Replogle, 1991). Experience has not always matched expectation. For example in Pune, India, there is a segregated cycle-only lane, but it is used more by motorcyclists than cyclists. Cycleways are also provided in Harare, Zimbabwe and again they are not very well utilised. This is because culturally, cycling in Zimbabwe as elsewhere in Africa, appears not to be a socially acceptable mode of transport.

#### 4.7 *Integration of transport and land-use planning*

There is a continuing debate as to the preferred nature of urban development and also the contribution that transport development can make in this context. There have been very few successful examples of transport planning being integrated with urban development. One such is that of Curitiba in Brazil (Fouracre, 1975), with its high density development spines built around public transport corridors.

That the city should be managed to influence travel has long been advocated. Dodoma, the new capital city of Tanzania is an example. However, its development has been exceedingly delayed, and so it is difficult to comment on the impact of the design on travel demand. Chandigarh in India is another, earlier example of planned development whose transport effectiveness has not been seriously analysed.

Aside from building new towns, there is the question of whether, how and to what purpose established cities can be restructured. Restructuring seems to be a particular concern of many South African cities, trying to redress the inequities caused by apartheid planning. Cape Town, for example, is developing an integrated Metropolitan Spatial Devel-

opment Framework (MSDF), which sees as one key plank the intensification of development at selected commercial and residential activity nodes and along connecting activity corridors (Naude and Crous, 1998).

## 5 THE WAY FORWARD

'Much remains to be learned about the dynamic links between transport and poverty, particularly in the areas of regulation, subsidy and cost-effectiveness of transport interventions compared with other sectoral interventions (for example, in education and health care). A systematic effort is needed to undertake case studies to improve our understanding [of the direct impact and final incidence of net benefits of transport projects].' (Gannon and Liu, 1997)

The literature demonstrates very clearly that there is a problem in respect of the access and mobility of the urban poor. The empirical evidence indicates the nature of the problem in terms of unacceptable travel conditions, high expenditure, and long and unreliable journey times. There is some evidence of interventions that have been adopted by authorities to try to redress these travel problems of the urban poor. These range from subsidies (in various forms) to sector restructuring, and from transport infrastructure investment to new town development. What is largely missing from the literature, however, is an explicit examination of how these and other urban planning and transport developments have impacted on the urban poor. Neither does the literature examine how the poor continually adjust over time to a changing living and working environment, and how transport adjusts in response. As a result, the literature is not particularly instructive in what measures could be adopted to support the accessibility of the urban poor, and what are the likely implications of these measures, based on case-study evidence.

Main areas of research which would contribute to policy development, fall into two categories, namely:

- A basic understanding of activity patterns of individuals, households and communities;
- Impact studies of transport interventions.

### 5.1 Activity patterns

- There is a need to better understand the activity patterns of the urban poor, relating these to household attributes, as well as to different patterns of social organisation and urban structure. The aim would be to identify how access and mobility needs are related to differences in these attributes, and hence the

extent to which policy initiatives (e.g. different approaches to health care provision) influence travel generation.

- Urban-rural linkages are important aspects of urban livelihood. There is a need to understand these linkages in the urban context, and to examine the role of transport in supporting them.

- Sustainable livelihoods analysis is being assessed for urban development; within this approach the role of transport must be clear.

### 5.2 Impact Studies

- Impact of urban restructuring (eg development of new towns and satellite cities, or internal restructuring directly aimed at the urban poor. There are many examples of such developments, but little awareness of the role of transport and with what the impact. Even less clear are the dynamics of urban poor settlement, and how transport reacts to these changes over time.

- Impact of major infrastructure development (e.g. a metro, a major urban road or perhaps a bicycle network). DFID has funded a impact study of the Cairo metro impact on the travel of the poor, but this is an isolated example of such an enquiry concerning a major urban transport development. Despite financial concerns over metro development, there is continual pressure from city authorities (particularly the larger cities) to invest in such schemes. The benefits to the urban poor of these capital intensive projects need verification. Likewise, the benefits of less costly schemes that may be better targeted at the urban poor, like bicycle paths and pedestrian facilities, need to be objectively assessed.

- Impact of public transport restructuring (such as the privatisation of an urban bus sector). TRL has earlier looked at the initial impacts of structural changes in the bus industry that have taken place in Harare (Zimbabwe). These changes initially involved public intervention in a privately run bus company. More recently other changes have been taking place including deregulation (to allow private sector competition from paratransit), and now there are proposals for returning the bus company to the private sector. The latter developments are now more typical of world-wide trends in transport operations, and could have significant impacts on the travel conditions of the urban poor.

- Impact of policy and operational interventions (such as subsidies or new services) directly targeted at the urban poor. DFID is supporting research in this field in Karachi, Pakistan, where a community-based transport programme is being developed by an

NGO. Other measures, like the Vale tariff subsidy system in Brazil, also deserve examination.

## 6 CONCLUSIONS

Transport can make important contributions, both direct and indirect, to reducing urban poverty. To do this effectively improvements in transport services need to be associated with other investments and key policies which will:

- Increase security of land tenure for the urban poor to underpin their benefits from targeted measures;
- Optimise labour employment in the delivery of key services and provision/maintenance of infrastructure, for example through public-private partnerships.
- Facilitate local markets, which can supply basic household needs.
- Strengthen basic health-care and education services for the community.

DFID is using a sustainable livelihoods approach to better understand how policies related to the delivery of transport and other services affect the lives of poor urban people. This work is informing DFID's policy for human settlements and is contributing to the World Bank's current review of urban transport strategy.

The paper has drawn attention to opportunities for increasing the availability of transport for poor people by giving priority to public transport in the use of available road space. When matched by appropriate measures to restrain private vehicle use such an approach can deliver significant overall benefits through reductions in congestion. Field assessment is required to validate good practice for implementing such measures and to confirm their impact.

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