

## RURAL TRANSPORT POLICY DEVELOPMENT PROCESS

D. Robinson; and G. Banjo, World Bank (1999)

### Objectives of the Paper

#### Abstract

Rural transport plays a central role in the economic development of any country. Large numbers of passengers and large tonnage of goods are moved by road; industry, agriculture and commerce rely on road transport for both inputs and outputs, and their production relies to a large extent on effective and efficient transport operations. At the local level, rural communities rely on transport to meet their daily needs for water, firewood and access to farms. Yet, there is substantial evidence to suggest that rural roads are badly planned and under funded, and that transport services are infrequent, unsafe and expensive.

It is therefore important that road networks and rural transport are managed effectively and efficiently, for which an effective policy framework is necessary. This paper aims to give an account of policy requirements for rural transport provision including infrastructure, transport means, legal requirements and issues of sustainability etc. Issues concerning management and finance of rural roads are investigated further in Module 3.

#### Key issues

The general issues for national-level policy discussed in this paper include:

- Access and mobility
- Sustainability
- Infrastructure provision and management:
  - responsibility
  - sectoral organisation
  - legal framework
- Technology
- Means of transport:
  - personal transport
  - transport services

#### Key topic areas

- The nature of policy
- National level policy
- Infrastructure provision and management
- Policy measures for provision of means of transport

## 1. THE NATURE OF POLICY

### 1.1 Framework for Decision Making

Policy lays down the basic rules and requirements that can guide all decisions and actions that need to be taken with regard to rural transport infrastructure and transportation. In particular, it provides a framework within which professional and technical decisions can be made. If policy is well defined, then there are clear guidelines for taking decisions. Without a policy, actions can be haphazard, inconsistent, and biased. Normally, a policy is broad in scope. Procedures and practices can then be derived from the broad policy which can then be used to guide day-by-day decision making.

### 1.2 Public Administration

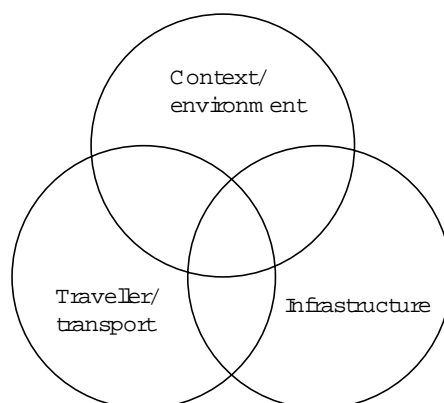
Policy is, by its nature, set by public administrative bodies rather than by the private sector. Aspects of rural transport policy can be set by national, regional and local government administrations. The policy will provide the basis for determining issues such as the distribution of budgets, about priorities, and all other administrative functions related to the aspects of rural transport that are the responsibility of the particular administration. To be really effective, there needs to be a consistency of policy between all levels of government, and this requires that the policy formulation process is well co-ordinated between the various public administrative bodies concerned.

### 1.3 Inter-relationships

Policy provides a framework that enables the following different things to be considered together, as conceptualised in Figure 1:

- The traveller and mode of transport
- The infrastructure on which the travel takes place
- The physical, social and political context or environment in which the travel takes place

**Figure 1: Conceptualisation of Policy Relationships**



The various inter-relationships can lead to confusion about the nature of policy in any particular area. This is often not helped because the structure of government does not follow the structure of sectors or of required policies. One of the aims of the policy formulation process is to ‘make sense of this confusion’ by tying all of the disparate aspects of policy together in a coherent manner

## **2. ADDRESSING ISSUES THROUGH TRANSPORT POLICY**

To be effective, transport policy must satisfy three main requirements. First it must ensure that a continuing capability exists to support an improved material standard of living. This corresponds to the concept of economic and financial sustainability. Second, it must generate the greatest possible improvement in the general quality of life, not merely an increase in traded goods. This relates to the concept of environmental and ecological sustainability. Third, the benefits that transport produces must be shared equitably by all sections of the community. This can be termed social sustainability.

### **2.1 National Level Policy**

#### **2.1.1 Required approach**

Characteristically, the poor lack mobility and access to vital goods and services. In the poorest countries, the majority of the population are non-users of motorised transport, and their rural travel needs are not addressed by an approach to policy and planning that is concerned predominantly with the provision of road transport infrastructure. Conventional approaches are top-down, reflecting the development of motorised transport outwards from the centre, with the establishment of primary links, to secondary and then tertiary connections. Similarly, motor vehicle ownership starts with the wealthy, and then trickles down through decreasing income strata of society. In the least developed countries, the scarcity of the road network and extremely low levels of vehicle ownership implies limited relevance of such processes to the poorest. Their travel needs can only be met by policies which work from the bottom-upwards.

#### **2.1.2 Access and mobility**

Policy measures to improve physical access involve either increasing the mobility of rural people to reach a particular facility, or bringing the facilities closer to rural communities. Specific measures could include:

- Establish achievable national targets, based on levels of accessibility, for provision of water supply, rural health centres and educational facilities, and to prioritise the location of new facilities on the basis of degree of improvement in access that would result
- Give priority to reforestation, and include the establishment of sustainable and accessible sources of firewood as part of this policy
- Adopt a spatial planning approach to maximise improvements in accessibility
- Make funding available for the improvement and maintenance of local footpaths
- Ensure that commercial practices do not inadvertently cause transport and distribution problems; for example, the provision of fertiliser in bags that are too heavy for carrying on foot

### 2.1.3 Economic Sustainability

- Investments in all aspects of transport should be subject to rigorous cost-benefit analysis that encompasses social aspects and environmental considerations
- Priority for funding should be given to maintenance
- Proclamation of the network should be restricted to those parts for which adequate maintenance funding can be made available
- Commitment to disposal by government of loss-making transport parastatals, except where they serve a social purpose for which a subsidy can be made available

### 2.1.4 Social Sustainability

- Addressed by policy measures aiming to provide access and mobility, and that give emphasis to
  - pedestrian travel
  - reducing the physical burden of transport
  - reducing the travel and transport requirements of women
- Measures for policy formulation that combine top-down requirements from central government and bottom-up requirements determined from the participation of stakeholders, including the rural poor and women

### 2.1.5 Environmental Sustainability

- Introduction of environmental protection legislation, including requirements for environmental impact assessment in appropriate situations. For further information on environmental impact assessment, refer to Section 5:4:a in Module 5 of the Rural Transport Knowledge Base.

## 2.2 Infrastructure Provision and Management

### 2.2.1 Sectoral Organisation

#### *Enabling environment for decentralisation:*

Provision of rural transport infrastructure must be viewed within the broader context of rural development and rural service delivery. An arbitrary shift of responsibility for rural roads to weak local governments is unlikely to be successful. Strengthening local institutions through effective decentralisation is the centre-piece of rural development and implies building local capacity in both public and private sectors. To do this, an enabling environment of sound policies, incentives, effective management structures, democratic control of local governments and trained and motivated people is needed.

#### *Fiscal decentralisation:*

Effective decentralisation (devolution) hinges on a balance of political, institutional and fiscal responsibilities. The allocation and control of finances lies at the root of decentralisation. Many decentralisation efforts are only partial: administrative responsibilities are assigned to local governments, whereas central governments remain in control of fiscal instruments. Partial decentralisation risks perpetuating weak local governments and causes central government to take back or temporarily assume local government responsibilities due to poor performance.

**Organisational options:**

The strengths and weaknesses of different organisational models for managing rural roads are discussed in Box 1. For further information on issues of local level management (3:1:a) and general road management issues (3:2:a), refer to Module 3 of the Rural Transport Knowledge Base.

**Box 1 Models and options for managing rural roads**

Two common organisational models for the management of rural roads are: i) legal responsibility assigned to one ministry or specialised road agency; or ii) responsibility assigned for main and rural roads to different ministries or levels of government. Within the second model, there are further options depending on whether a centralised or a decentralised approach is adopted.

**Model A: Roads managed by same ministry**

Three varieties of this model exist:

- Separation of network management function (separate rural and main roads departments)
- Separation of management by road standard (paved road and unpaved road departments)
- Management of main roads and rural roads together

**Model B: Roads managed by different ministries or different levels of government**

In this case, the institution legally responsible is, most frequently, a local government or rural district council. The agency responsible for overseeing roads at central government level may be the main road ministry, local government ministry, the ministry of agriculture, the office of the prime minister or the president. The overseeing agency advises on policy and standards, and has responsibility for planning, guidelines, technical and financial oversight, and resource allocation. Some countries have no co-ordinating ministry.

One of the main challenges for managing proclaimed rural roads is the mobilisation of local capacity to plan and programme physical works adequately, and to award and manage contracts. Four common options for this draw on both the centralised Model A (Option 1) and the decentralised Model B (Options 2, 3 and 4):

**Option 1: Central government rural roads department**

A typical organisation has a national headquarters in the capital and branch offices in provincial centres and, possibly, area office in some districts. The functions of headquarters are to advise on policy, formulate guidelines and provide technical support to branch offices on planning and contract management. Area offices are in charge of day-to-day management of the network and supervision of works. Area offices may liaise with local government administrations, but they report ultimately to central government which is the source of funds. Where the rural roads department is attached to the sector ministry of roads, there is the advantage that technical support and guidance are received from the parent ministry. Co-ordination at various levels of the network is also facilitated. The disadvantages include ensuring sufficient attention to local priorities and local consultation on planning.

***Option 2: Local government management through contract management agency***

Local governments purchase the services for which they lack capacity through a contract management agency. The agency can then hire consultants to work with local government staff for drawing up development and maintenance plans, and for contract design and bidding. In Francophone Africa, these agencies are known as AGETIP. These have proved to be highly successful in reducing bureaucracy, particularly in ensuring prompt payments to contractors. Drawbacks include the monopoly over contract management for public agencies, heavy reliance on donor funding, although there is no reason why agencies should not operate for profit in a private market. Other challenges include: (a) the existence of able contract management firms; (b) the ability of local government to deal with the contract management agency; and (c) scale, because small networks and small funds result in small contracts. There is limited experience of this management option for rural roads and, although highly efficient in the management of individual contracts, the arrangement does not really solve the problem of network management or funding.

***Option 3: Local government management through joint services committee***

A group of local governments can form a special purpose district for management by a joint services committee (JSC). This can achieve sufficient scale to procure services competitively from the private sector for road works. Creation of a JSC reflects the fact that needs and demands of an area within an administrative district may not necessarily follow jurisdictional patterns. JSCs may provide a wide range of public services other than roads and are typically organised as commissions or task forces. Members of a JSC are commonly elected representatives and technical officers of the relevant local governments. It is also common to include representatives of special interest groups, such as transport operators and road users. The bodies need only exist for the time necessary to complete the tasks for which they are charged, possibly appointing a lead agency for specific projects, or they can be set up as an independent agency charged with the responsibility for the joint programme. Physical works are normally let to the private sector. Key determining factors for success are the ability and willingness of the originating jurisdiction to innovate, and the degree of motivation to co-operate. This may be influenced by common history, economic stress, or public or political pressure. Advantages are that local governments can still set their own priorities, but gain economies of scale. In addition, where there are differences in tax incidence and needs for development between different jurisdictions, JSCs provide the opportunity for cost-sharing formulae to balance inequalities. Some governments provide incentives for JSC arrangements by making it easier to attract grants. The main disadvantage is the existing rigidity of local government arrangements that may give administrative and legal difficulties. Technical assistance may still be required from central sector ministries.

***Option 4: Local government management through private consultants***

Use of consultants enables local governments with small networks to determine their own priorities while procuring selectively the services they require from the private sector. It should result in better quality of work at lower cost. Changing to this model requires that local governments currently operating in-house works units need to develop the skills to become a client; and the private sector may need to learn the skills to undertake new types of services and works.

The centralised and decentralised models each have strengths and weaknesses. The challenge with Model A lies in ensuring adequate local input to planning; with Model B it is to ensure that local government road departments are technically competent. Thus, the first model is more suitable for countries with centralised governments and limited technical capabilities at local level; the second is more suitable where there are decentralised administrative systems. Both models should, however, attempt to decentralise operations through the active involvement of local constituencies in priority setting and planning, and have a strong central unit responsible for co-ordination, guidance and oversight.

*Source:* Malmberg Calvo 1998

### ***Policy requirement***

Sectoral organisational structures, based on the above and appropriate to local conditions, should be implemented as a policy measure.

## **2.3 Legal Framework**

### ***Proclamation***

A coherent legal framework needs to be developed for the management of both local government and community roads and paths. This needs to include the procedures for proclaiming roads, as described in Box 2. Legal instruments may be needed to delegate ownership to communities and other interest groups.

### ***Box 2 Establishing the legal status of roads***

Roads fall into two main legal categories. They are either proclaimed or unproclaimed. Terminology varies from country to country, and other terms like declared/undeclared and adopted/unadopted are also used to describe legal status. When a road is proclaimed, the act of proclamation is published in the Gazette, or other official journal used to record acts of government, in a formal notice. This cites the Act under which the road is to be proclaimed, its location, the road administration responsible, and the functions delegated to the administration. In the case of access roads, the Act cited may be the Roads or Road Traffic Act, or its equivalent, or a variety of other Acts, including the Local Government Act, the National Parks Act, or the Private Street Works Act.

Once a road has been proclaimed, the road administration responsible is expected to mark out the road reserve physically, which defines the land holding of the road administration, and to take responsibility for the various functions delegated to it in the Gazette (such as with regard to drainage). Roads that are unproclaimed belong simply to the adjoining land-owners, who are solely responsible for maintaining them. However, under certain circumstances, government may channel funds through a designated road administration to meet part of the costs of maintenance. When a private road is built to a certain specific standard, or is improved to that standard, the government will usually proclaim it and assign it to a legally constituted owner.

*Source:* Heggie and Vickers (1998)

### ***Inventories***

Knowledge of which roads are to be managed requires that inventory records are kept of roads. The minimum legal requirement should be for road administrations responsible to keep an up-to-date gazetteer, which provides a basic record of all roads that have been proclaimed. A more stringent requirement would be to keep detailed maps and inventories of the network of roads, tracks, trails and paths. However, the requirement for such inventories should be simple, avoiding the costly collection of large amounts of data.

### ***Community ownership***

Institutional frameworks and incentives can be adopted to encourage citizens who live alongside unproclaimed roads to become effective owners and managers of the specific roads. Ownership of private roads requires a legal framework that permits communities and non-governmental entities to assume management responsibility. In many cases, a specific private roads law is necessary. Granting legal ownership to a community engenders a vested interest than can be translated into effective management. The legal framework also needs to allow for change in ownership. Procedures for this need to be explicit and prompt to allow change where existing legal owners can no longer cope with road management.

## **2.4 Technology**

### ***Road standards***

The aim should be to optimise resources over the network rather than to provide predetermined widths and speeds for just a few selected roads. Design standards should be based on reliability and durability, and should recognise that all-year vehicle access may not always be necessary. Standards where 'economic road access' is required should be concentrated on essential access, spot surface improvements in critical sections, on surface drainage and essential structures, rather than on geometric characteristics determined by design speed. For the provision of 'social road access', road standard should relate to the frequency, seasonal timing, and type of services that will operate. Lowering standards normally enables more roads to be built for the same money.

### ***Use of contractors***

Rationalising and reducing demands on local government in-house capacity involves two basic steps:

- Contracting out the physical works to the private sector
- Contracting out the key management functions to local consultants

Execution of physical works by contract allows local governments to focus on what kinds, quantity and quality of infrastructure to provide, and how to finance its construction and maintenance. Although contract operations should normally be preferred, this may not always be straightforward. A policy decision in favour of using contractors is necessary and specific measures to encourage and assist the development of the local contracting industry may be necessary. This will require providing an enabling environment which makes labour-based works execution commercially attractive to contractors, as in Box 3. An option may include offering



IMT as a means of payment, thus providing provision of infrastructure and promoting the use of IMT.

### ***Box 3 Policy requirements for the use of contractors***

For the efficient and effective management of roads by private sector contractors, the following conditions are required:

- Steady funding must be ensured by
  - political and economic stability to establish a climate of confidence and co-operation among operatives
  - provision of a predictable workload
  - timely payment for works carried out
- Adaptable bidding procedures and contract documents to suit the nature of works to be undertaken
- Accountability and transparency of bidding
- Application of incentives and sanctions as applicable
- Continuous monitoring and evaluation

*Source:* Lantran 1990-93

### ***Works technology***

The employment of local labour for road works can provide additional income for local people. Labour based methods should be considered the normal choice for rural roads works, although conditions may be inappropriate for this in very sparsely populated areas, and also for specific tasks such as long distance haulage. Requirements for this can be embodied within policy.

## **3. MEANS OF TRANSPORT**

### **3.1 Personal Transport**

#### **3.1.1 IMT**

Policy should be designed to encourage the user of IMT, through measures such as (Barwell, 1996):

- Reducing the price and increasing the supply of bicycles through
  - review of tax and duty structure
  - elimination of constraints on availability of foreign exchange for import
  - elimination of any price fixing or business licensing constraints to the operation of a competitive market in the supply and distribution of bicycles and spare parts
- Encouragement, where feasible through policy and fiscal measures, of local manufacture of components and spare parts
- Using government, parastatal or NGO systems to market bicycles where a private sector distribution system is lacking; this should be implemented to complement rather than constrain and private sector activity in this area

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- Agricultural policies and extension services to
    - develop ox training in areas that are appropriate for ox transport or on-field tasks
    - promote the use of donkeys both as hauliers and pack animals, in areas where they are not prone to serious endemic diseases, through provision of training and extension services
    - address constraints imposed by diseases on the use of work animals
  - Using IMT for official travel by government personnel in rural areas, where appropriate, both to increase the mobility and effectiveness of many officials, and for demonstration purposes
  - Promoting the use of IMT by women through mass media communication, demonstration and community development initiatives, working closely with women's organisations

### ***Critical factors***

Three factors are critical to success:

- A long term perspective is important to the introduction of IMT to a new area
- The intervention and demonstration should be on a sufficient scale to make a significant impact
- It may be necessary to adapt IMT designs for use by women

### ***Credit***

The availability of credit can be a significant constraint on the use of IMT, and should be addressed through policy measures including:

- Provision and encouragement of access to credit by rural women, including groups of women for the purchase of IMT
- Encourage savings, and both NGOs and the private sector in the provision of credit
- Discourage subsidised interest rates which can damage the chances of establishing safe, responsible, private credit; however, grant elements could be used to promote IMT

## **3.2 Transport services**

### ***Rural transport services***

The following policy measures may be appropriate (Barwell, 1996):

- Remove unnecessary regulatory constraints to the provision and development of transport services by the private sector; regulations should focus on safety and insurance measures, and should not inhibit
  - the types of vehicle used
  - the routes on which they operate
  - the type of service operated - passenger, goods or both; fixed or flexible route
  - the fare rates charged

- Eliminate unnecessary constraints on the import of vehicles and, most importantly, spare parts, and by developing capability for vehicle maintenance and repair
- Support and promote innovative schemes for the operation of services targeted at local level needs, including services provided by ‘non-commercial’ operators such as local development associations; this support might involve
  - measures to encourage the financing of services, but only if there is clear evidence that the transport operation is financially viable
  - provision of training in transport management
  - the adoption of a regulatory and licensing framework that facilitates innovative services, for example, using motorised IMT

## **4. POLICY IMPLEMENTATION**

### **4.1 Basic Steps of Policy Development**

The policy development process needs itself to take a structured approach to policy formulation. Once a policy statement has been agreed and adopted by government, policy frameworks can then be put in place in the various levels of the administration and other public sector bodies that are involved in the sector.

### **4.2 Government Policy Statement**

Government needs to draft a mission statement stating its general aims for rural travel and transport policy. Where the policy is very different to the existing situation, it may also be appropriate to have a vision identifying the strategic directions in which the organisation needs to move in order to deliver the policy. Objectives may need to be set in key areas; perhaps defining levels of accessibility to the road network, and the like. This drafting will normally be undertaken by a ‘lead ministry’ on behalf of government, but should involve consultation with a wide range of stakeholders.

### **4.3 Bodies Responsible for Implementing Policy**

Once a statement of government policy is available, sector organisations charged with implementing the policy on behalf of government need to draft a mission statement, and possibly a vision, stating their own aims. Note that these must be entirely consistent with those put forward by government. For each area of the mission statement, the organisations need to set objectives to enable their performance to be monitored and measured; they may also need to draft standards to support these objectives with detailed information.

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