

# INTEGRATED, INNOVATIVE STRATEGIES TO IMPROVE THE ACCESSIBILITY AND SUSTAINABILITY OF DEEP RURAL AREAS

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## Introduction

The dilemma facing South Africa with respect to rural transport is more difficult to address if one's approach is not developmental in nature and orientation. Following a common realisation that inadequate rural transport infrastructure and lack of accessibility and mobility pose important constraints to rural development, one tends to look for an enduring "marriage" between land-use and transport planning. But because of the challenging conditions in South Africa's rural areas, it becomes a mammoth task to bring this marriage to the fore.

Because of their isolation, caused partly by the distorted road investment policies under apartheid, it is generally speaking very difficult and costly to deliver services, improve accessibility, or establish viable resource-processing enterprises in remote or "deep" rural areas. Given this challenge, innovative, integrated strategies are needed to improve the general accessibility of these areas, and create sustainable livelihood opportunities.

The paper describes the results of past and ongoing, case-study-based work to develop and test these strategies. The main deliverables of the most recent work, undertaken as a joint venture between the National Department of Transport and the CSIR:Transportek, were:

- A concise overview of the core rural access and transport problems in South Africa's deep rural areas, and recommendations about appropriate policy and strategy responses;
- Guidelines on procedures, support systems and intervention options;
- A case-study based verification of the problems, and concept plans illustrating some of the proposed interventions.

## Points of departure

The general point of departure is that there is a need both to contribute to the development and implementation of the ISRDS (Integrated and Sustainable Rural Development Strategy) and to develop a specific Rural Transport Development Strategy which is developmental in nature and orientation. According to Buthelezi (2000) the objectives of such a strategy should be:

- To promote transport planning which is developmental in nature and orientation.
- To encourage transport planning which promotes accessibility, mobility, sustainability and cohesion.
- To encourage integration and linkages between national roads, provincial roads and rural roads.
- To encourage transport planning which is orientated towards investments.

The next point of departure is that the strategy, and the implementation thereof, should satisfy the following principles (Buthelezi, 2000):

- Affordable and convenient **access** – to markets, employment, economic activity, health care, welfare services, communication system, retail services and social activity;
- **Sustainability** – economic, social, political, institutional and environmental;
- **Cohesive**, well-integrated structures and networks – ranging from social networks to the hierarchy of roads and central places.

## Core problems and issues

In accordance with most international approaches to rural transport, the appropriate perspective for the analysis of the “core” rural transport issues in South Africa should, in the first instance, be a *developmental* one. In terms of this perspective, there is a need to identify and address wide range of rural *access* issues, rather than merely focussing on *transport* problems and issues.

Seen from such a developmental, access-oriented perspective, there are nine clusters of core problems and issues to which rural transport policies, strategies and related interventions should ideally respond:

- Inadequate customisation of policies and programmes in accordance with the wide diversity of rural areas, characterised, in the first instance, by a combination of seemingly entrenched, *structural* differences between the former white *platteland* and the former *homelands*
- Rural poverty, and the associated inaccessibility and spatial-economic marginalisation of (especially) deep rural areas from the economic mainstream.
- Spatial dispersal of investment of central place or nodal facilities (e.g. schools, clinics, multi-purpose centers) transport and telecommunications, leading to threshold problems (inability to satisfy minimum demand threshold for an economically viable service).
- Historical backlogs and continuing under-investment in rural transport and related access infrastructure.
- Bias towards roads, motorised transport and male-defined travel needs, and the corresponding relative neglect of “off-road infrastructure” such as paths and tracks, non-motorised transport (bicycles, donkeys, etc.) and the mobility needs of woman.
- Unclear ownership and responsibilities, combined with weak local capacities (in the majority of cases).
- Inadequate consideration of HIV/Aids imperatives in the development and implementation of rural transport strategies and programmes.
- Insufficient encouragement of public participation and bottom-up community involvement in the identification of rural access needs and priorities.
- Inappropriate technical standards (e.g. appropriate construction / rehabilitation / maintenance standards), which are inhibiting labour-based poverty alleviation in rural areas.

## A two-pronged response

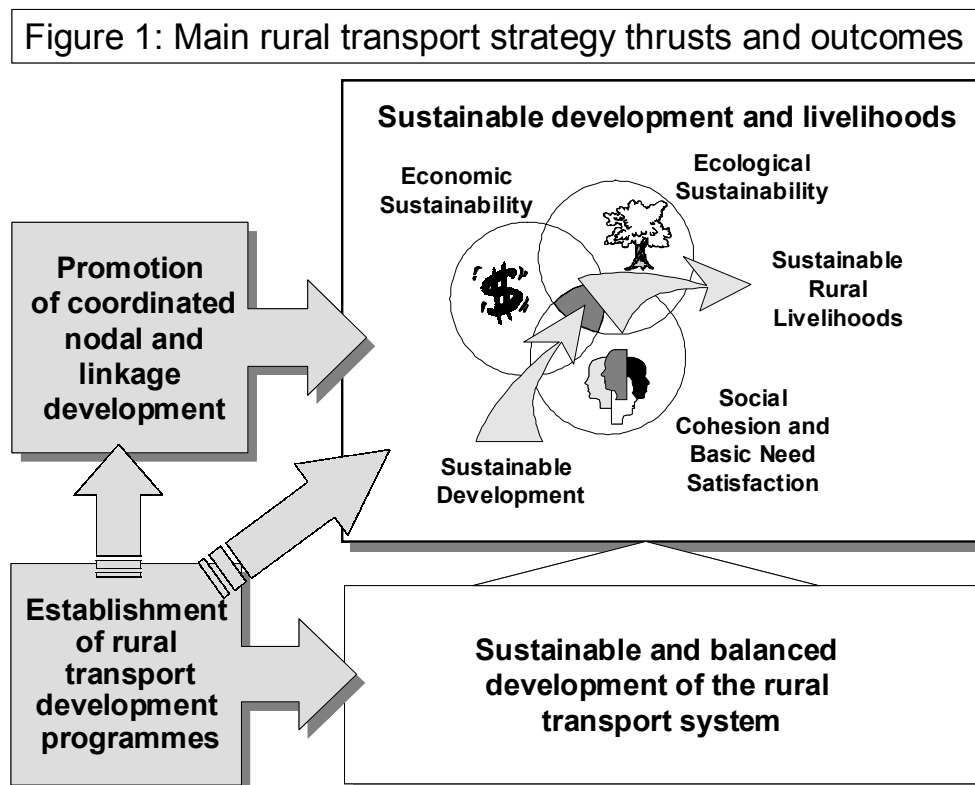
In accordance with the need both to contribute to *integrated development initiatives* – in particular the ISRDS and the various district-level integrated development planning (IDP) processes – and the need also to develop *transport-specific* strategies and interventions, a two-pronged strategic response is being developed.

In the first instance, there is a need to promote *coordinated nodal and linkage development in rural areas*. This can be defined as a strategic development policy and investment coordinating initiative involving a cluster of *linkage infrastructure and service sectors*; mainly comprising roads and transportation, telecommunications, public works, postal services and other logistical support services; and a cluster of *point-based service delivery sectors*, mainly comprising health, education

(in the broader sense of the word, including various adult training programmes), population registration and welfare, police and fire protection services.

From a procedural point of view, this cluster of sectors should ideally establish coordinating mechanisms, and undertake joint planning, at national, provincial and district-council levels. However, instead of creating yet another set of integrated planning processes, one of the main aims should be to work with, and in fact, strengthen the ISRDS and various provincial and district-level IDP processes.

As indicated by the following diagram, the intended outcome of coordinated nodal and linkage development is to establish (more) sustainable rural development processes and livelihoods.



The second policy thrust – namely to establish rural transport development programmes – is intended to achieve the sustainable and balanced development of the rural transport system. Some of the key guiding principles of these programmes would be to:

- Support initiatives aimed at coordinated nodal and linkage development;
- Establish contextually appropriate programmes, depending on the types of rural environments (in particular the frequency and extent of commuter interactions with urban work complexes);
- Develop special institution- and capacity-building interventions to correct the bias towards well-institutionalised, road-focussed projects and programmes;
- Develop appropriate funding mechanisms;
- Establish “omnibus” rural passenger and freight transport services, as well as other specially contracted services in support of periodic markets, training and other activities at multi-purpose centres.

Because of the tremendous variation in different types of rural environment in South Africa, customised programmes would need to be developed in each province, and for each (predominantly rural) district council. And because of the possible “urban bias” of current land transport legislation, special enabling legislation may need to be created so that there is equilibrium.

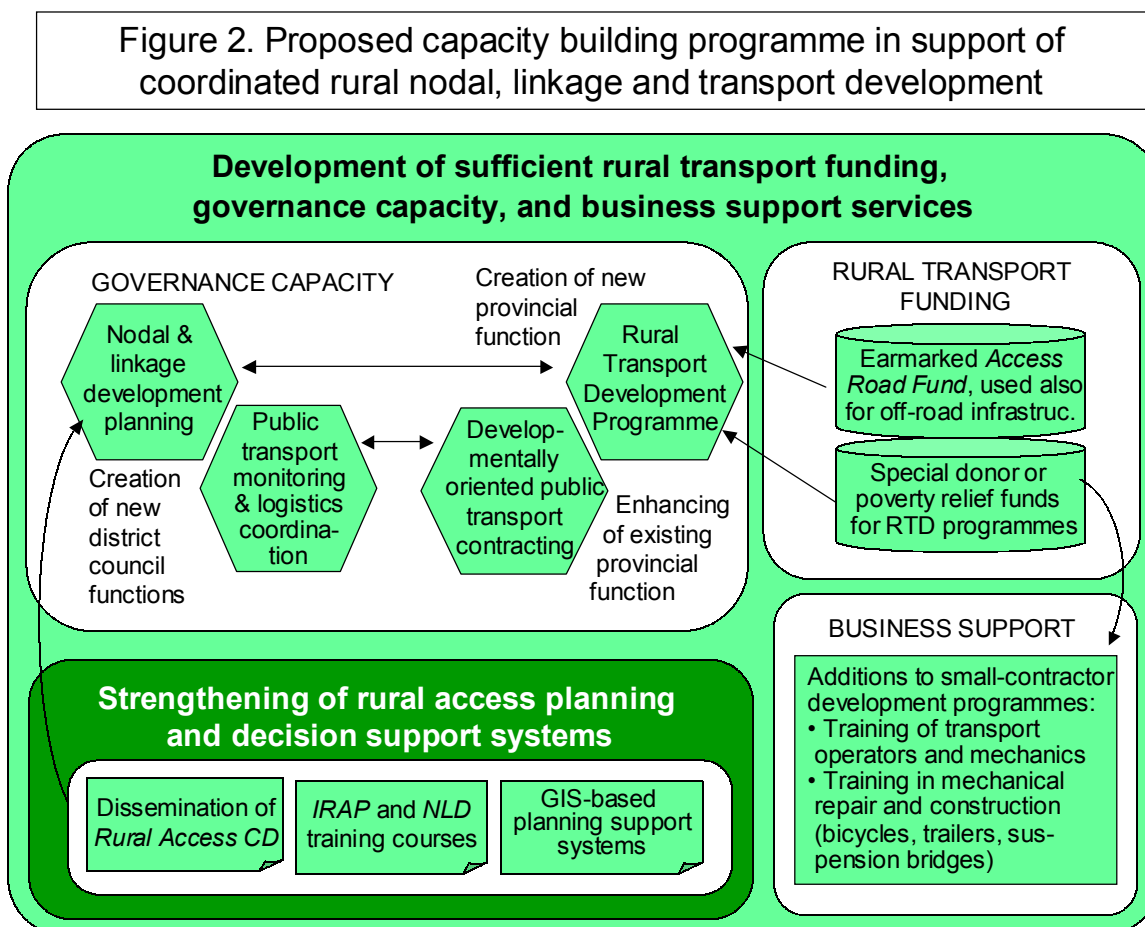
## Capacity building

There is a growing body of internet-based knowledge on appropriate rural transport and access planning procedures. This is being developed and hosted, inter-alia, by the World Bank, Britain's DFID, the ILO and special forums such as the IFRD (International Forum for Rural Transport and Development). However, in South Africa, the level of awareness of, and involvement in these knowledge exchanges is, comparatively speaking, below that of many other Sub-Saharan countries.

One of the deliverables of the aforementioned joint venture between the NDOT and the CSIR is specifically aimed at helping to bridge the gap, and making relevant local as international knowledge much more accessible. This is the *Rural Access CD* (compact disk), which contains a rich body of case study material and guides on coordinated nodal and linkage development, as well as more specific transport related rural development interventions. Most of the contents of this paper has been drawn from the CD, in particular the section dealing with the relevant policy and action agenda for South Africa.

Besides the dissemination of this CD to the provinces and district councils, there is a need for a training programme for NGOs, public sector officials and elected officials. In other words, there should be a dedicated training-fund that would among other things, encourage exchange programmes preferably with those countries of the same socio-economic level as South Africa.

These and other elements of the proposed capacity building programme are illustrated by the following slide.



## Conclusions and way forward

The paper has provided an overview of strategies and examples of interventions that can help to achieve the following.

- Planning of roads, transport and other potential accessibility improvements as part of an integrated development planning process, which in turn, should be aimed at improved social cohesion, ecological sustainability, and the creation of sustainable livelihoods.
- Planning and prioritisation of investment in terms of a logical hierarchy of rural activity nodes, where the emphasis should be to establish viable rural anchor projects, market centres, educational resource centres, and/or clusters of associated activities with good logistical linkages to external markets and suppliers.
- Effective utilisation of rapidly expanding and cheapening communications and information networks to introduce viable, innovative service delivery and economic interaction arrangements (e.g. periodic, telecom-linked service centres and markets)
- Coordinated planning and development of “linkage infrastructure and services” (postal and welfare payment services, rural telecommunications, information and e-commerce services, passenger transport services and freight transport services) so as to provide affordable and effective access to an expanding range of local as well as mainstream supply chains, business support services and markets.