Social Exclusion and Rural Transport: Gender Aspects of a
Road Improvement Project In Tshitwe, Northern Province, South Africa (Chapter 2)

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INTRODUCTION

Developing communities in rural South Africa face a daily transportation burden that limits their participation in the mainstream economy, entrenching their isolation. The problem is not transitory. Socio-economic and political relations in South Africa are characterised by dualism between urban and rural areas, developed and developing rural areas and between women and men. This dualism is endemic and does not merely reflect a necessary gradualism that will allow one sector to catch up with the other. Unless there is radical intervention it is likely that rural South Africa will continue to reproduce individuals who are socio-economically deprived.

Research indicates that the socio-economic and cultural aspects of being female or male significantly influence activities, resources, and opportunities in rural South Africa. The transport burden is largely shouldered by women (Marais 1987, Mashiri 1997). The
reduction of this burden is an indicator of the success of interventions aimed at improving the quality of rural life. It can only be accomplished by unravelling the nature of this burden and by understanding how responsibilities for transport are distributed between men and women, who has the greater burden and how this creates special gender-specific needs.

Rural communities perceive transport not as a problem in itself, but always as part of a far more general socio-political and economic problem (Tarrius, 1984). Decision-makers have grossly underrated the significance of understanding the needs of rural communities as a basis for generating innovative solutions to rural transport and development. The analysis of transport systems has largely excluded the study of rural household transport characteristics, even though the household is the locus of the transport demand (Bryceson and Howe 1993). This has been exacerbated by the fact that innovative integrated planning has largely been sacrificed for sectoral planning despite the many short-comings associated with the latter.

The poor, who are largely women, experience the greatest access problems. Conventional transport policies, however, tend to treat communities as homogeneous without recognising that women and men could have widely varying mobility and accessibility needs. They also tend to equate their current travel patterns with their needs. Where there are gross inequities in income distribution such as in South Africa, effective demand alone is nowhere near describing the real needs of communities. (Mashiri et al 1998). Very often those who might be expected to have the greatest need for transport, given their rural socio-economic conditions, are also those who ask for nothing, or whose voices are not heard. This is a critical problem for techniques such as origin-destination surveys and activity logs. The techniques must enable non-demand from this disadvantaged social strata to be interpreted. There is therefore a need to
revisit the traditional definition of transport to mean (Bryceson and Howe 1993, Alinejadfard 1997):

“....the movement of people and goods for any conceivable purpose, including the collection of water or firewood, by any conceivable means, including walking and head loading....”.

Three strands of thought support this definition. - [i] the mode of travel used need not necessarily be motorised or conventional [ii] the choice of mode needs to be catered for in planning no matter how unimportant it may seem to planners [iii] trip purposes should not be disregarded at the discretion of planners (Bryceson and Howe, 1993) This paper uses this overarching definition of transport as it relates to gender issues against the backdrop of the Tshitwe road upgrading project.

This paper aims to make a case for reorienting the way rural transport needs are perceived, planned and provided for, with a view to better targeting interventions, particularly those addressing the mobility and accessibility needs of rural women and children. It also means to critically appraise the sustainability of poverty alleviation attributes of labour-based road works, and their impact on women. It also briefly explores the role that non-motorised modes of transport could play in reducing the transport burden of the Tshitwe community.

In aiming to improve the material conditions of rural women through improved access, the first step is to understand women’s travel needs, and the extent to which lack of access constrains the fulfilment of those needs. It is also critical to investigate how gender and gender relations affect transport deprivation and how more appropriate and more gender-sensitive interventions can help reduce this deprivation.

Although the conventional definition of transport as referring to roads and vehicles has been found to be inappropriate for rural areas where most travel and transport is on foot
and away from roads (Dawson and Barwell, 1993), it is still used in the transport sectors of many provinces in South Africa, and was employed in the planning and implementation of the Tshitwe project. Consequently, although women in Tshitwe are responsible for most of the transport demand, they were not recognised by policy makers as transport stakeholders. In assessing the level of transport demand and resources, women’s, and indeed the community’s, needs were ignored. The Tshitwe community’s current travel patterns were confused with their travel needs. Where data has been collected on the travel and transport burden experienced in the rural areas of the Northern Province, it has tended to be highly generalised and aggregated.

The Tshitwe community

The village of Tshitwe, situated in the far north of the Northern Province of South Africa, is typical of the settlements in the province. The Northern province is one of South Africa’s least urbanised. More than eighty-three per cent of the total population of 4.8 million live in rural areas. This province has the highest poverty levels in South Africa (Baber, 1996) and it incorporates three former homelands, which were characterised by graft, corruption and abject poverty.

Tshitwe is situated in the former homeland of Venda and is relatively remote, characterised by relatively high population density, an underdeveloped and inadequate agricultural base, and high levels of out-migration. The nearest higher order settlement is forty kilometres away at Makhado. Tshitwe is bounded by the perennial Njelele River eight kilometres on its western side. This river is a formidable barrier to access to other villages and schools in the rainy season. To access vans driving up to Makhado and

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1 A high order settlement is used in this paper to refer to a settlement which has a number of shops (including restaurants) of various types selling urban goods such as furniture, sometimes a post office, a church or churches, reticulated sewerwage and water, electricity, clinic, pension pay out point, high school etc.
beyond, Tshitwe residents have to walk about 10 kms and cross the river. With heavy rains, the river becomes a monster and the path that crosses the river becomes impassable.

The study involved structured interviewer-administered questionnaire surveys, unstructured interviews, observations and discussions. Base data was collected from adult household members of 140 households, yielding a total sample of about 1000 persons. A target group approach to data collection (Zils, 1987) was used to effectively include rural women in the sample. Unstructured interviews were targeted at women and general discussions involved both women and men. The study also used an activity-based approach, different to conventional demand-based analysis of travel behaviour. This approach treats travel explicitly as a derived demand, and was designed to be indicative of the community’s travel patterns and its transportation needs as they relate to access to socio-economic opportunities.

**The Tshitwe road upgrading project**

The Tshitwe road upgrading project commenced in March 1997 with a budget of approximately US$300 000 to upgrade fifteen kilometres of road. The project recruited 47 women and 67 men on a rolling basis, largely from within walking distance of the road. It aimed to engender a sense of community participation and ownership, reduce costs and institute equity in the distribution of employment opportunities. Women’s tasks on this project were non-technical and largely menial, such as carrying stones. Men undertook all tasks remotely resembling elementary technology. Men were also paid much more than women. These men and women upgraded the road from a not so well-engineered gravel road to a bitumen surface of mostly four metre paved width.
The Tshitwe road upgrading, especially its projected year-round operability and substantially lower costs of operating freight and passengers vehicles, was expected to benefit the agricultural economy in the area through higher farm-gate prices, lower costs of delivering productive inputs (fertilizer, seeds, etc) cheaper, more reliable availability of trucking services and better accessibility to agricultural extension services. However, overall levels of agriculture activity and land productivity have not improved. Off-farm employment, except for food vending that ended with the project’s closure, has not been sufficiently stimulated. The supply of road passenger services has not improved at all - as there are no buses or combi-taxis - only occasional vans passing by. The access time to markets and other socio-economic activities has not changed because no significant additional transport services have been attracted to the road. The long-term prospects of the road given its location on the slopes of the mountains which form natural boundaries of Tshitwe, is suspect. In addition, maintenance is likely to be a problem given that other than carrying stones, women, who would be expected to help in the maintenance exercise, did not learn any skills that could become handy for maintenance.

Demographic, social and economic characteristics of Tshitwe community

The greater majority of the study respondents, were female heads of households. Women are either de facto household heads because their husbands are migrant workers, or employed and resident in urban areas, or de jure household heads because of separation or divorce. A significant number of women-headed households were banished from other populous Venda villages and deported to Tshitwe after being suspected of witchcraft [a phenomenon largely associated with women]. Female headed households had less financial assets than male-headed households and particularly the
de jure female-headed ones, were more often than not, on the extreme end of the poverty spectrum.

The greater majority of the households had between five and eight members, which suggests a relatively high dependency ratio. The age-sex distribution shows a preponderance of school-going youths. The relatively limited agricultural pursuits (dry land cropping and animal husbandry), pension income and the relatively meagre remittances have combined to positively influence the relatively high school attendance ratio. However, the drop-out rate, especially of girls, is high for a variety of reasons including distance to schools and affordability. The schools are unable to attract quality teachers and the quality of education is poor. The presence of students in a household implies regular travel demand as well as greater demands on the household’s disposable income. The greater majority of the trips generated in Tshitwe are school-related. While a considerable number of pupils walk upwards of five kilometres to a primary school, secondary school students travel much longer distances.

The study indicated that some households had at least one member who earned a regular income, largely as a migrant worker. The presence of income-earning members in a household implies regular travel demand. Many villagers thus depend on an external economy, as it is extremely difficult to produce consistently for their subsistence needs. A significant number of Tshitwe households however depend entirely on subsistence agriculture for survival. Women sometimes barter their crops or livestock for daily necessities at the local corner shop. Villagers, especially women also supplement their incomes through the sale of beer, crops, livestock and livestock products; remittances from migrants; local employment; non-farm activities; pension and transfers from
household members. Inevitably, most households find it extremely hard to make ends meet. Their travel and transport is largely limited to procuring subsistence living.

The study established that many villagers owned wheelbarrows and animal-drawn vehicles as well as bicycles and donkeys. These non-motorised vehicles are largely used for carrying goods. Although women own and use these modes, especially the wheelbarrow and the donkey, the majority of owners, especially of the more expensive bicycles and carts, were men.

Walking is by far the dominant mode of travel. Tshitwe residents have to walk upwards of eight kilometres just to access motorized transport and then pay US$2 round trip to Makhado, which is expensive for most households. Some pupils walk relatively long distances especially to high schools. Save for serious illnesses, regular visitations to health centres, the nearest one of which is ten kilometres away, is rare. Rural health centres have become conduits for the dissemination of vital development information since the advent of the new political dispensation. The Tshitwe community is missing out on this information.

**Gender Issues in accessibility and mobility**

Tshitwe women’s gender roles have a powerful influence on their travel and transport patterns. The women engage in a range of activities that require transport, [i] *domestic* - fetching water and firewood (in larger households, women have to repeat these trips several times); cooking; caring for children and the elderly, trips to the grinding mill [ii] *economic* - marketing goods and services at pension pay points and other places; tilling, sowing and weeding the fields and gardens; harvesting and carrying harvests from the field to the homestead or market; sewing; brewing beer; and so on [iii] *social* - taking children to schools, taking sick people to health centres and babies to the clinic for
weighing and vaccination; attending funerals, religious meetings, societies and community projects. Fuel for both cooking and lighting is a major concern. While women and children walk upwards of five kilometres to collect firewood for domestic use, men usually use animal-drawn carts to collect wood for sale.

While women have both domestic and economic roles, much of their time, is spent in the transport component of those roles leaving little or no time for other productive socio-economic activities. A woman’s day in Tshitwe consists of more than eighteen hours of activities which sustain the household, but which are less central to the market, such as collection of water and firewood, subsistence farming, and informal sector activities. A steady decline of readily accessible firewood supplies through massive deforestation and a decline of reliable and potable water resources through recurring droughts have exacerbated the magnitude of these tasks. Commercialisation of firewood has also placed increasing demands on women’s labour-time for fuel wood collection.

The survey also indicated a clear differentiation by gender in terms of access to the means of production, such as land, agricultural implements, livestock and extension services, as well as finance, information, training and markets, which impacted negatively on women’s socio-economic pursuits.

Villagers perceived that poor accessibility levels and the lack of transport services have negatively affected them in many ways. Although the majority of respondents indicated that they would have liked to travel further to improve their livelihoods by marketing their products, services and labour to a wider and diverse market, and undergo further education and training, it was not always possible because of accessibility problems. This is particularly the case with women. This latent demand for transport that is invisible to market forces remains unfulfilled. In view of the inadequate access to socio-economic
opportunities, most respondents showed a willingness to permanently emigrate to other areas where these opportunities are perceived to exist.

Small, medium and micro enterprises constitute a link between traditional and modern, between rural and urban and between those who ‘have’ and those who ‘have not’. The lack of adequate roads and transport services makes travel too cumbersome and time-consuming for women to profitably engage in enterprises involving travel. Consequently they often lack access to markets and are unable to participate in wage labour or trade. Enterprising Tshitwe women were able to sell various goods and services to local and foreign personnel working on the project because much start-up capital was not required. But they are unable to access credit to undertake small enterprises beyond petty food vending or for agricultural inputs for a variety of reasons. This includes the fact that Tshitwe women are functionally illiterate; lack financial education; are unable to present projects in a way acceptable to financial institutions; are not used to banking language and requirements; and are bound by restrictive family regulations. These factors have conspired to elevate informal sources of credit, such as family borrowing, savings, savings clubs, friends, unscrupulous money lenders, to favoured status.

Tshitwe women generally have limited savings because they often spend most of their meagre resources on the daily necessities of the household. This heavily compromises the affordability of labour-saving devices and limits their ability to afford and access transport. In many such households, children, particularly girls, became, of necessity, labour resources from an early age. Women’s potential to participate in socio-economic activities is influenced and ultimately limited by the inadequate opportunities resulting from their isolation.

Women’s ability to utilize family savings, (even savings they might have accumulated themselves), and to access credit for financial investment is limited because their
creditworthiness, in the eyes of formal institutions, is either weak or non-existent. The traditional land tenure system discriminates against women by allocating land in communal areas to male members of the household. Divorced women have no right to the land they had been cultivating whilst married. Without the financial inputs necessary to leverage meagre cash holdings and to purchase inputs, women continue to work at inefficient levels. It is thus critical to encourage and strengthen financial clubs dominated by women, which could be used as a substitute for collateral; finance long-term investment in agriculture and the informal sector; provide a cushion for economic down turns and income gaps; and serve a function similar to a line of credit to provide for liquidity.

**Conclusions and recommendations**

A functioning infrastructure is a precondition to the access of inputs and information and for the sale of market produce in areas that are characterised by small-scale agriculture, such as Tshitwe. Developing a minimum infrastructure is a precondition for the implementation of a poverty-oriented development strategy because it frequently presents the only opportunity in the short run for additional jobs with consequent multiplier effects. However, the choice of response measures is critical to the success of intended rural projects.

This study shows that the provision of infrastructure in remote, sparsely populated and economically disadvantaged areas can be cost-inefficient, and can result in only marginal improvement to the economies of these settlements, without maximising the value-for-money concept. Road investments are only likely to induce a response in production when the costs of moving produce to the market are reduced and higher farm-gate prices obtained. They are unlikely to have much effect if they merely improve
the quality of the road surfaces and all weather capabilities as peak transport demand
occurs in the drier periods of the year (Hine, 1984). The upgraded Tshitwe road has not
and is also not likely to, improve the school goer’s transport problem because what
school goers’ need is not a high quality road surface but the introduction of an efficient
transport service.

Priority should be given to ensuring continuous and hardened tracks and paths to enable
efficient cart and bicycle transport to the nearest major road. Investments in building
minor, low level and foot bridges, minor drainage works and other small scale remedial
spot improvements which extend vehicle access and keep routes open to motor vehicle
traffic, are likely to be more cost-effective (Hine, 1993; Howe, 1997). Increasing the use
of non-motorised transport, such as bicycles, and the provision of credit facilities to
purchase non-motorised transport modes could provide an efficient transport service.

The labour-based road upgrading project alleviated, temporarily, the financial problems
of Tshitwe women and men. To this extent, one of the objectives of the project has been
fulfilled, but the financial windfall was short-lived. In most cases, men spent their wages
on consumer goods from the urban areas, with no redistribution of those resources back
to the rural sector. Women used their savings to purchase local goods and services. And,
because more men were employed on the road upgrading and their remuneration was
much higher than that of women, there was no positive impact on the balance of
payments of the village. Not much money from the project was circulated in the
community and therefore the multiplier effect that was expected was insignificant.

What is of interest in terms of spatial reorganisation though, is that a significant
proportion of the Tshitwe population is willing to give up its current life to settle in areas
with better opportunities. Without reading too much into such an opinion, it may well be
that spatial reorganisation of the rural communities with a view to matching the resource
base of the province with the population distribution could be implemented with the support of the communities.

Tshitwe women share specific problems related to their unequal access to resources and services and relatively limited participation in public life. Their responsibilities as custodians of basic household livelihood predominate. The extent to which women’s tasks would be eased by the road depended on the flow of services following the upgrading work. However, it is clear from this study that services do not follow automatically unless they are specifically planned for. In addition, there was no effort made to integrate the project with other existing sectoral development strategies. The poor, largely women and children, still walk great distances. Although agricultural practice is characterised by small volumes of modern inputs, such as extension services and fertilizer, access to these inputs, is still limited. The transport burden has not been reduced at all. In fact, where higher agricultural yields are achieved, it has increased as the majority of head loading chores that women and children perform, remain. And, because these (women’s) activities are invisible, particularly to the policy makers women, many of whom are the sole household bread winners, invariably suffer. In rural South Africa, more than sixty-three per cent of women live in poverty and so it is critical to classify women as an explicit target group for purposes of instituting specific measures (Larcher and Dikito, 1991) and to develop strategies tailored to women’s specific needs and circumstances. It is therefore necessary to develop policy guidelines and strategies for the various levels of government to include women in the assessment of their own transport needs and to improve gender sensitive planning, dissemination, and implementation of transport solutions.

Conventional transport planning with its unambiguous emphasis on roads as the panacea for all transport problems, is thus, at best, an incomplete response. The need to
pay greater attention to the examination of the *real* access needs of rural dwellers differentiated by gender, cannot be over-emphasized. There is need to complement road investment with other measures which address, in a more holistic manner, the totality of communities’ accessibility needs. Non-motorised transport modes have been found not only to have synergistic linkages with other transport modes, but could, in the short-term, ameliorate the transport burden of Tshitwe women and men and ultimately act as a catalyst for sustainable long-term socio-economic development (Mashiri, 1997).

The Tshitwe road upgrading project reflects a preoccupation of policy makers with high technology fixes and efficiency rather than the thorough examination of the needs of the beneficiary communities, which could have resulted in a different, less expensive, but more sustainable gender-sensitive solution to the same problem. It is thus critically important to realise that ignoring, underplaying or misunderstanding gender differences in the economy of the household, and by extension of the village, could lead, to expensive and irrelevant development projects. It is also necessary to target interventions not only with regard to improvement of the physical infrastructure [where the roles of all types of infrastructure are recognised], but also on the means of transport [including non-motorised transport modes], and the quality of services. This should be done within the ambit of an integrated rural development framework by way of a multi-sectoral and gender-sensitive approach which starts with the condition of the poor, their resources, aspirations and problems.

**Information about the Book - Balancing the Load. Women, Gender and Transport**

The *Balancing the Load* book is the culmination of a networked research programme that began in 1998 when only a few pioneering studies existed on the subject of gender and transport. Today there is a growing body of knowledge and an increasing number of transport initiatives that seek to reduce the unequal burden of transport tasks, improve women’s participation in transport activity and to encourage women’s access to
transport services and means of transport. You can find further discussion of the issues and links to relevant initiatives by clicking on the gender link at http://www.ifrtd.org/new/issues/issues.htm

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