AN ASSESSMENT OF GENDER SENSITIVITY IN A SELECTION OF TRANSPORT SURVEYS

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ABSTRACT

Through the evolvement of gender and development theory, a recent shift can be observed away from specific projects for women towards the integration of gender analysis in all research and planning. Developments in engendered transport research theory reflect this shift, and yet much needs to be done to mainstream gender into quantitative transport data collection. This paper presents a case study making inroads towards gender integration strategies in quantitative transport research, through a project aimed at assessing the gender sensitivity of a selection of transport surveys.

KEY WORDS

Gender, transport, mobility, survey instrument

INTRODUCTION

"Gender analysis and gender methodologies have to move from the activities of marginal policy activists to mainstream professional practice" – Grieco & Turner (1997)

The above quote reflects a growing pressure to mainstream gender into transport planning and research activities, with a view to entrench parity and equity in accessing socio-economic opportunities and address male biased traditional approaches. It also reflects a recent shift away from specific projects for women towards the integration of gender analysis in all research and planning. This paper presents a case study making inroads towards gender integration strategies in quantitative transport research, through a project aimed at assessing the gender sensitivity of a selection of transport surveys. First, gender and transport research is briefly introduced within the ambit of the gender and development arena. Thereafter, the framework informing the project and the principle findings of the case study are sketched.

GENDER AND TRANSPORT: AN EVOLUTION OF THEORY

Introduction

Gender and development theory has evolved and diversified for many decades. Gender and transport research, in particular, have largely been relegated to the margins of gender and development research, and for many transport planners and researchers alike, gender as an analytical concept for application in research and planning is still relatively foreign. Yet, gender and transport research has been undertaken for at least three decades and is now increasingly asserting itself as an emerging policy and research area, or as Margaret Grieco (1998) termed it, "a policy area on the move".

Work undertaken in gender and transport has been influenced by gender and development theories evolving over the past few decades, and as such it is the aim here to introduce some of the key gender and development theoretical shifts that have informed work aiming to transform "gender blind" transport surveys into "gender sensitive" surveys.

Gender and Development

Gender and development theory, while still widely contested amongst feminist theorists, activists and development specialists alike, has largely embodied a shift in analytical values and conceptions around the relationship between and meaning of "women" and "gender". Early analyses tended to focus on *women* and their relation to development processes, with initiatives including compensatory measures to include women in development endeavours. This approach is commonly known as the Women in Development (WID) approach, and has since been roundly criticized (March et al, 1999). However, key components of this approach still remain in certain development institutions' approaches despite rhetorical shifts.

Theoretical and empirical research and critiques of the WID approach have resulted in the development of analytical frameworks that focus not only on "women" as a social group, but also on the *processes* and *relations* that recreate and reinforce inequalities between men and women. These frameworks draw on a Women and Development (WAD) approach, which has in turn been progressed by some theorists towards a Gender and Development (GAD) approach (March et al, 1999), taking the relational aspects of the WAD approach further and critiquing not only women's position in society, but manifestations of gender in structures, procedures, institutions, and ways of thinking.

While the boundaries between these three approaches are by no means discrete, a general shift has been observed from a largely biologically informed approach to development (involving, primarily, the introduction of "women" into development, implicitly homogenising "women") towards an acknowledgement of the complex social nature and manifestations of "gender" in development processes.

Gender and Transport

Infrastructure provision has until recently generally been dominated by a "top-down" planning approach, concentrating on technical requirements and goals (Masika & Baden, 1997). The importance of social relations in the uptake of what are implicitly regarded as "neutral" technological developments have, however, increasingly come into focus as technologically sound investments fail to achieve their intended goals.

Observations and research indicate that activities, resources and opportunities are significantly influenced by socio-economic and cultural aspects, particularly those related to class and gender. In rural Africa, travel and transport burdens are largely shouldered by women and girls, whose gendered roles and status, combined with class restrictions, constitute a lack of access to appropriate transport resources to fulfil their significant gendered transport roles. These observations have led to an increasing awareness of the need to meaningfully incorporate gender into travel and transport surveys.

In developed countries, research into women's travel patterns and needs has been undertaken for several decades (Venter et al, 2006), following in part from the identification, and increased awareness, of the divergent social and economic roles performed by men and women, and consequently the gendered nature of travel and mobility needs and constraints (Wachs, 1997). While research in gender dimensions of transport has been gaining currency in developing countries (Venter et al, 2006), the need to exert pressure and agitate towards changes in policy and practice, and the need for better methodological tools adapted to different contexts, cannot be overemphasised.

Incorporating Gender into Transport Surveys

Most transport investment decisions are based on quantitative data gathered through various methodologies, especially those quantifying travel patterns and needs. Travel surveys play an important role in the planning process, and the integrity of such surveys - in terms of their ability to accurately reflect the diversity of issues and constraints facing all members of a rural community - directly affect the type of projects and policies that are likely to emerge. In short, problems that are not perceived can not be addressed. Survey instruments therefore need to be designed to reflect gendered transport dimensions in rural communities (Mashiri, 2001). Furthermore, where gender is not explicitly stipulated in the conceptualization and adoption of policies, programmes or projects, gender issues are likely to be marginalised at best, completely omitted at worst (Mashiri, 2001).

The starting point for engendering transport data has generally been to gender-disaggregate figures and analyses in transport surveys (ibid). Gender differences in time spent on travel and transport, as well as socio-economic and health costs relating to transport, have thus far primarily been highlighted in gender-disaggregated quantitative transport data (Venter et al, 2006). Gender-disaggregated travel time data has, in particular, raised awareness of women's significant transport burden.

However, many transport surveys still do not incorporate gender-disaggregated data effectively. Furthermore, traditional transport data pertaining to traffic flows, passenger volumes and so on are insufficient to assess the transport needs of various stakeholders (Peters, 2002), since this data firstly reflects travel patterns rather than travel needs, and secondly since it prioritises paid work associated with masculine roles and responsibilities, largely omitting the work undertaken by women. Furthermore, transport surveys have been identified as largely lacking information regarding access to, control over and use of transport related *resources*, a critical issue given the impact of social relations on material access.

CASE STUDY

Objectives of the Study

This paper is based on work that the authors undertook for the Gender and Rural Transport Initiative (GRTI) of the Africa Rural Travel and Transport Programme (RTTP) (Mashiri, 2001). The GRTI's mandate was to pursue gender equity through capacity building within national RTTP programmes effecting gender-responsive transport policies and strategies. The case study undertaken was premised on the understanding that the reduction of transport burdens on rural women can only be accomplished through unravelling the gendered nature, distribution and needs associated with this burden (Mashiri, 2001). Thus, the need to incorporate gender-disaggregated data related to gendered roles and access to resources was accounted for in the gender analysis framework selected for the project. The terms of reference for the study revolved around the need to:

- Consider to what extent projects undertaken by the RTTP and other programmes in Africa consider gender issues in the data collection and analysis phases of the projects, with specific reference to a selection of rural transport studies; and
- □ Identify examples of good practice with regard to gender sensitive data collection, and make recommendations on how the quality of rural travel and transport surveys with respect to gender sensitivity can be improved.

Four main aspects of each survey were considered, namely: [i] stated objectives, motivation and problem statement in terms of the gender dimension [ii] data collection issues, with particular regard to gender differentiation [iii] content of the surveys especially in regard to the attention paid to gender differences in the division of labour, income, ownership and control of assets, decision-making, and travel and transport needs and patterns [iv] incorporation of gender sensitivity in the analysis and conclusions/recommendation. Seven reports were assessed in terms of a gender analysis framework explicated below to determine gender sensitivity as indicated in the table below. The reports were selected from studies undertaken in the last decade (thus after gender issues started to enter rural transport discourse and practice), from a range of Sub-Saharan African countries. They were intended to be exemplars of the types of surveys undertaken during this period, rather than a statistically representative sample.

REPORT TITLE	COUNTRY	DATE	ORGANISATION
A Transport Provision Strategy for			National Department of
Rural Communities	South Africa	1995	Transport, Pretoria
Rural Transport Development:			National Department of
Lessons for South Africa	South Africa	1996	Transport, Pretoria
Improving Mobility and Accessibility			
for Developing Communities		1997	National Department of
	Zimbabwe		Transport, Pretoria
Towards a Rural Accessibility			
Planning Framework	South Africa	1998	CSIR: Transportek,
			Pretoria
Rural Travel and Transport in			Transport Studies Unit,
South-Western Nigeria	Nigeria &	2000	Ibadan, and RTTP Nigeria
	Ethiopia		
Rural Travel and Transport Demand			
and Supply in Selected Districts in			Transport Research
Malawi	Malawi	2000	Laboratory, United
			Kingdom
Village Travel & Transport Project:			
Poverty Impact Monitoring	Tanzania	2001	VTTP, Tanzania
Workshop			

A gender analysis framework

Gender mainstreaming necessitates the development of appropriate tools and technical capabilities to integrate gender in policy design and implementation (March et al, 1999). March et al (1999) argue that the application of gender-analysis frameworks can entrench a culture of gender-awareness, exposing inequalities, providing a basis for better understandings of gender relations and promoting appropriate solutions.

The gender analytical framework applied in the study drew heavily on the Moser framework, developed by Caroline Moser. The Moser framework essentially incorporates key tools, four of which were employed in this study, to be deployed as road maps and sign posts to analyze gender sensitivity in institutions, programmes and projects (Moser, 1993, cited by Mashiri, 2001). Essentially, the Moser framework aims to unpack the various types of work performed by women and men as well as the incentive structures within which they operate (Mashiri, 2001), thereby integrating critical aspects of gender relations and gendered access to resources.

Moser Tool 1: Gender roles identification

This tool is applied in research and projects to identify different forms of (gendered) work, and to sensitise researchers and practitioners to the need to incorporate work often performed by women yet seldom recognised or valued as "work". The three types of work include:

- □ **Reproductive work** (preparing food, childcare, collecting wood and fuel, healthcare, etc.);
- Productive work (production of goods and services for consumption and trade in employment or self-employment); and
- □ *Community work* (collective organization of social events and services ceremonies, celebrations, funerals, weddings, activities to improve the community, etc.).

Moser Tool 2: Gender needs assessment

The second tool involves the interrogation of different gendered needs and interests, including:

- □ **Practical gender needs**, involving needs related to current activities and immediate needs such as access to water and healthcare provision, employment opportunities and the provision of basic services; and
- □ **Strategic gender needs**, involving needs that would enable women to transform existing imbalances of power between men and women with a view to achieving equity.

It should be noted that strategic gender needs cannot be rigidly divided from practical gender needs. However, as Venter et al (2006) have pointed out, this tool "encourages planners to begin thinking beyond [immediate needs], and to look towards setting up longer-term, sustainable solutions that not only address these immediate needs, but also build towards improving the position of women in society" (Venter, 2006: 132).

Moser Tool 3: Disaggregating control of resources and decision-making within the household

This tool assists survey design through the interrogation of issues of access to, control over and ownership of resources, and encourages the following kinds of questions to emerge:

- □ Who controls access to different vehicles in the household?
- □ Who decides who controls what and when?
- □ How are decisions and bargaining processes undertaken?

Moser Tool 4: Planning for balancing the triple role

This tool is aimed at sensitising researchers to the multiple tasks and roles rural women perform, and in so doing seeks to avoid increased work burdens for women through projects that aim to

encourage productive work among women without considering reproductive and community work performed by women. Thus, this tool involves consideration of the need for a balance between competing demands for reproductive, productive and community work (Mashiri et al, 2001).

Overall degree of gender sensitivity achieved in the surveys assessed

The following table summarizes the degree of gender sensitivity achieved by each of the studies as assessed. What is immediately apparent is the wide variation in the extent to which the selected studies considered gender issues related to the gender analysis tools.

DEGREE OF GENDER-SENSITIVITY ACHIEVED									
Study Location	Respondent Identification	Household Composition	Household Head	Asset Ownership/ Income	Division of work	Travel & Transport needs & patterns			
KZN: SA [1995]	Respondent not recorded	No [gender not asked]	Not asked	No [gender not asked]	Not asked	No [gender not asked			
Mineworkers: SA [1996]	Yes [assumed male]	Yes	Not asked	Not asked	Not asked	Asked only for respondent			
Gutu: Zimbabwe [1997]	Respondent not asked	Yes	Not asked	No [gender not asked]	Not asked	Yes [only gender sensitive w.r.t. bicycle use			
Limpopo Province: SA [1998]	Yes	Yes	Yes	No [gender not asked]	Yes [work trip recorded by gender]	Yes [trip survey]			
Malawi [2000]	No [gender not asked]	Yes	Yes	Yes [only income, not expenditure]	Yes [only formal work]	Yes			
Nigeria [2000]	Yes	Yes	Yes	Unknown	Yes [activity survey]	Yes [trip survey]			
Tanzania [2001]	Yes [headman - assumed male]	Yes	Yes	Yes	Yes	Yes			

In general, a progression is evident from the earlier studies that almost completely excluded gender analysis from the study, to the latest studies, which are relatively rich in gender sensitivity. Rather

than explicate the details of specific surveys reviewed under the study, certain key findings and issues relevant to engendering transport surveys as unveiled during the study will be presented here.

Moving Beyond Gender Disaggregation

Gender disaggregation as a necessary, but not sufficient, first step in engendering transport surveys (Peters, 2002) was reiterated through the study. However, the study revealed that without consistent gender disaggregation of all data obtained as well as the application of gender analysis on this data, the gendered insights emerging from the survey would be significantly limited.

There is also a need to move beyond merely gender-disaggregating traditional transport surveys, towards engendering the content of surveys. In this sense the Moser framework provides researchers with tools highlighting content and analysis issues in transport surveys through the interrogation of not only different types of work performed, but also of access to, control over and ownership of resources. In one of the studies reviewed, gender differences in both the ownership and use of intermediate modes of transport (IMT) vehicles were captured by recording the number of male headed and female headed households separately for each type of IMT mode, as well as the main uses if IMT by each type of household.

Understanding general socio-economic and gendered household characteristics is also important, given that these questions talk to issues of poverty, access to resources and decision making around resources. One survey incorporated data on household income, expenditure, transport problems and proposed solutions, availability and use of transport modes and travel times, yet did not disaggregate these questions by gender, bypassing potential issues related to the feminization of poverty and gendered decision-making around household resources. Importantly, the study revealed that gendered resource access should not be limited to motorised vehicles, but include IMTs such as bicycles. One survey failed to gender disaggregate the responses and views of women, which could have added to the analysis by offering information on possible consistencies and inconsistencies in the views of women and men in regard to access issues. It should be noted, too, that gender disaggregation should ideally occur in conjunction with age disaggregation, since gendered roles, identities and powers commonly manifest differently at different ages or even depending on the position in the household.

Finally, with respect to modifying the content of transport surveys, it cannot merely be assumed that gendered differences in current travel patterns and work are sufficient to understanding gendered access. Instead, there is also a need to look at gendered travel needs, which are seldom captured in transport surveys. This requires open ended questions and interviews with both men and women to identify unmet gendered travel needs.

Participation in determining priority project areas

In many of the surveys reviewed, the objectives of the surveys excluded explicit gendered objectives, while a few incorporated gender issues in their objectives. It was noted during the study that differences in the views of men and women with regard to the need for road improvements should be captured by asking, for example, which roads/paths the community would like to see improved, as seen by men, and as seen by women. However, not only should this be incorporated into the data collection and analysis phases, but gender should also form an explicit part of all survey objectives, to ensure that gender dimensions are mainstreamed and not relegated to the margins of the study. The point is that the needs and constraints of men and women are often so different that the very effectiveness of mobility or poverty alleviation interventions depend on the extent to which they respond to gender differences, rather than being aimed at some gender-neutral (and non-existent) beneficiary.

Undertaking of surveys

The process of undertaking surveys also has an impact on their outcome, as well as the integrity of the research process. Reaching all household members for a household survey is seldom possible, and researchers thus tend to interview "household heads", the majority of which are male (Peters, 2002). Thus, an unintended bias can be reflected in the data collected, where the perspective of a particular, male household member is given primacy. Even where female headed households are prevalent, without ensuring that gender information is carefully handled in relation to what is known as the "household head", findings in terms of gender can easily become skewed. Furthermore, age and other factors intersecting with gender within the household constitute differences in travel needs and constraints, and should thus be accounted for in transport surveys. A recent study revealed, for example, that children experience unique transport issues that are seldom reflected in adult-focused transport research (Mashiri et al, 2005).

The study also highlighted the importance of the consideration of gender in sampling, and of the explicit and transparent communication of sampling methods and gender composition of samples in survey reports. In a number of the surveys reviewed, gender disaggregated details of the samples obtained were not stated, and the background and gender of the researchers conducting interviews were not explicated. Communicating these dynamics can go a long way to sensitizing researchers around them, and challenges in gender mainstreaming data collection should rather be noted than sidestepped.

While undertaking interviews with all household members is not always possible, significant effort should be made to access information relevant to women as well as children and the youth, for example by surveying a male and female household member and/or by triangulating household survey data with focus group discussions or in-depth interviews with women community members. Accessing women for surveys is also a recognised issue due to cultural and time-related factors. For example, a study undertaken in Dhaka stressed that a greater effort needed to be made to access women garment workers for interviewing, 60% of whom walked to and from work, since their daily schedules required interviews set at special times to include them in the household

survey (Peters, 2002). In this regard, there was a need for researchers to integrate the gendered schedules of research participants into the design of data collection processes.

CONCLUSION AND RECOMMENDATIONS

Overall, the study revealed that while progression could be noted in certain transport surveys reviewed in terms of gender mainstreaming, there is still much work to be done in this regard. A common issue related to inconsistent gender mainstreaming, where gender disaggregation, for example, was in place but gender analysis not undertaken. Thus, many gaps exist in terms of gender mainstreaming, and where it occurs, it is often superficial or runs into methodological challenges.

Many policy makers and planners assume their work to be gender neutral, having similar impacts on all community members. They thus need to be sensitized to gender issues to enable them to pro-actively seek to generate corrective measures to mainstream gender. Invariably, this begins with an institutional analysis from a gender perspective followed by capacity building highlighting specific measures to involve and enhance women's participation at all levels. Where gender is not specified explicitly in the conceptualization, development and implementation of policies, programs or projects, the likelihood that it will either be afforded scant attention, or be omitted altogether is very real. Clearly, mainstreaming gender concerns are pivotal to the success of development endeavours.

The study culminated in the following recommendations:

- □ Gender-sensitivity issues should be mainstreamed into every aspect of an organization's/program's/project's priorities and procedures (including survey instruments).
- Gender sensitivity training should be imparted to policy makers and planners to ensure gender mainstreaming in all project cycles.
- Given that the planning, development and conducting of gender mainstreaming surveys can be complex and expensive, it is important to generate clear methodologies uniquely geared toward the transport environment and its gendered issues.
- □ Gender-sensitivity training should be imparted to interviewers (men and women).
- A good practice typical questionnaire that can be adapted to fit specific circumstances should be developed and disseminated to institutions charged with rural development. Exploration of activity-based survey methodologies may be rewarding in this regard.
- □ A gender-sensitive manual for training enumerators should be developed and implemented on a pilot basis.

References

Grieco, M. (1998) *Gender and Transport: An African Policy Area on the Move - Key Issues for Consideration in Malawi's Gender and Transport Policies*. Briefing notes: Discussion with Malawi Rural Travel and Transport Program (MRTTP), Ministry of Local Government, Malawi and Ministry of Women, Community Services and Youth (Gender Policy and Program Development) on behalf of the Rural Travel and Transport Program (UNECA and World Bank).

Grieco, M. & Turner, J. (1997) *Gender, Poverty and Transport: A Call for Policy Attention*. Presentation notes: Talk delivered at the UN International Forum on Urban Poverty (HABITAT), 'Governance and participation: practical approaches to urban poverty reduction. Towards cities for the new generation', Florence, November, 1997.

Available: http://www.geocities.com/transport_research/gender.htm (2 August 2006)

March, C., Smyth, I. & Mukhopadhyay, M. (1999) A Guide to gender-analysis frameworks. Oxfam

Mashiri, M., Buiten, D., & Zukulu, D. (2005) *Improving children's mobility & access through a participatory child-centred approach*. Contract Report CR-2005/34, DFID

Mashiri, M. & Venter, C. (2001) Gender & transport surveys: An assessment of gender neutrality and/or bias in a selected sample of transport surveys. Gender & Rural Transport Initiative (GRTI), World Bank

Masika, R. & Baden, S. (1997) *Infrastructure and Poverty: A Gender Analysis*, Report prepared for the Gender Equality Unit, Swedish International Development Cooperation Agency (Sida) Report No. 51. Institute for Development Studies.

Peters, D. (2002) Gender and Transport in Less Developed Countries: A Background Paper in Preparation for CSD-9. Background Paper for the Expert Workshop "Gender Perspectives for Earth Summit 2002: Energy, Transport, Information for Decision-Making". Berlin, Germany, 10 - 12 January 2001

Turner, J., Apt, N., Grieco, M. & Kwakye, E. A. (1998) *Users Not Losers: Gender Representation in Transport Design and Operation*. Paper presented at WCTR, Antwerp, July 1998

Venter, C., Buiten, D. & Mashiri, M. (2006) "Engendering Mobility: Towards Improved Gender Analysis in the Transport Sector", in van Merle, K. (Ed.) *Sex, Gender, Becoming: Post-Apartheid Reflections*. Pretoria: University of Pretoria Law Press (PULP)

Wachs, M. (1997) The Gender Gap. 20(2) ITS Review 1