## AN OVERVIEW OF WOMEN'S TRANSPORT ISSUES IN DEVELOPING COUNTRIES

# THE CHALLENGES IN ADDRESSING GENDER DIMENSIONS OF TRANSPORT IN DEVELOPING COUNTRIES: LESSONS FROM WORLD BANK'S PROJECTS

Re-Submission Date: November 21, 2005

Word count: 7,465 words including 1 table and 2 figures (counted as 750)

### Authors:

John Riverson, World Bank, Lead Highway Engineer, Transport Unit, Africa Region 1818 H St. NW Washington DC 20433 tel: +1-202-473-4282 jriverson@worldbank.org
Mika Kunieda, World Bank, Consultant, Transport and Urban Department, physical address: c/o
World Bank Ethiopia Country Office PO Box 5515 Addis Ababa, Ethiopia
mkunieda@worldbank.org, tel: +251-91-1416141, fax: 251-11-6627717
Peter Roberts, World Bank, Lead Infrastructure Advisor, Transport and Urban Department, 1818
H St. NW Washington DC 20433 tel: +1-202-473-3482 proberts@worldbank.org
Negede Lewi, World Bank, Senior Operations Officer (Infrastructure), Ethiopia Country Office
PO Box 5515 Addis Ababa, Ethiopia tel:251-11-6176000 nlewi@worldbank.org
Wendy M. Walker, World Bank, Consultant, Social Scientist, Transport Unit, Africa Region
1818 H St. NW Washington DC 20433 tel: +1-202-473-4406 wwalker@worldbank.org

Disclaimer: The opinions expressed in this paper are those of the authors and do not necessarily reflect the views of the World Bank or any of its affiliated organizations.

#### **Abstract**

Women in most developing countries have very limited access to transport services and technology. This imposes severe constraints on their access to health, education and other social facilities and services, making them and their children more vulnerable to serious injury or death as a result of childbirth or another medical emergency. Understanding and responding to women's transport needs is essential for reducing poverty, reflected in the United Nations statement of the Millennium Development Goals.

Many governments and development agencies have learnt much from extensive field research and case studies about women's and men's substantially different patterns of mobility need. In recent years, the World Bank has integrated these gender concerns and needs in its policies and has encouraged borrowing countries to address the concerns of women in their national, regional and local level projects and programs. The Bank has developed corresponding guidance for the transport sector and encourages its application as appropriate in all the transport investments which it supports. This paper summarizes examples of good practice and illustrates its application in Ethiopia. However, the World Bank's Transport Sector is concerned that the outcomes for women of the interventions which it supports often continue to fall short of expectations.

This paper describes steps which are being taken to improve the effective meeting of gender needs. The paper also highlights the value of participating in a broad network of development specialist groups to share experience of effective good practice and to strengthen the scope for matching specific cultural and institutional conditions.

## Women's transport issues in developing countries

In the 1990s, it became widely recognized that women and men often have substantially different patterns of demand for transport services and that interventions in the transport sector usually did not respond well to the needs of women. This view was informed through the concern expressed, by some bilateral development agencies and many non-governmental organizations and endorsed by the United Nations [1] at the widespread neglect of gender issues, in developing countries. The extent of the challenge and opportunities was set in the context of poverty reduction [2] and the importance of addressing gender issues in international development was highlighted by the inclusion of those issues in several of the Millennium Development Goals [3] and the definition of the associated targets.

Innovative field studies in rural Sub-Saharan Africa [4,5,6] contributed to a clear acknowledgement of the considerable gender differences in people's livelihood strategies. The importance of ensuring that transport interventions are actually planned to take account of, and accommodate these differences, was reflected in the guidance which the World Bank issued for the preparation of transport components of national poverty reduction strategies [7]. This guidance has helped the understanding of gender-differentiated demands for transport services on the basis of analysis. In the light of the findings, further targeted studies have been undertaken by various specialist organizations as outlined below.

'Balancing the Load' was a worldwide study managed by the International Forum for Rural Transport and Development (IFRTD) [8], which drew together local level research funded by the UK Department for International Development (DFID) from 15 countries across Asia and Africa. The research reinforced previous findings on how gender roles affect men and women's access to transport, and what steps have been taken at community provider and policy levels to improve the situation. The case studies looked into the social roles in transport, the uneven gender-influenced access to transport facilities, and the impacts on women's lives of transport provisions which are insensitive to poverty, culture and gender. The study focused mainly on women's problems in transport but it started to reflect the general discourse of gender relations, focusing on women and men. The IFRTD went on to become instrumental in introducing the concept of mainstreaming gender in transport through its various activities and networks including the setting up of the Gender and Transport Network (GATNET), which is currently the most active information exchange network for women's mobility issues in developing countries. An exchange on GATNET in June 2005, and a roundtable conference hosted by the TRB in July 2005, however, clearly demonstrates that there is still much to be done for gender mainstreaming in the transport sector. The Sub-Saharan Africa Transport Policy Program (SSATP), which is a consortium of countries and development agencies including the World Bank and the UN Economic Commission for Africa, held its annual meeting from November 14-18 in Bamako, Mali, at which women in transport issues were discussed and in which the participants highlighted again, this shortcoming.

A growing network of transport and gender researchers are examining, for example, what inhibits mobility and accessibility of women and men, time and travel patterns of women, the relationship between transport and gender policies, the relationship between policy and on-the-ground projects, the potential of ICT in transport and gender projects, and how the lack of transport increases the risk of maternal mortality. This research responds to the realization that women and men have different travel patterns which result from different societal roles, in both industrialized and developing societies. McGuckin and Murakami [9] explained that the 'reproductive' responsibilities such as household care and child rearing require very different

travel patterns from the 'breadwinning responsibilities. Field level studies of travel and transport in Africa, conducted in the late 80s [4,5,6,10] to 90s, presented an overall image of rural isolation and unproductive use of limited resources. The studies confirmed the image of a farmer and his family having to walk to the fields and any social infrastructure, and very rarely visiting the world outside their village. The studies also showed that women were the main transporters within a predominantly rural society, transporting water and firewood for cooking, cleaning and washing. Women in rural Africa world were found to typically carry a 20 kilogram load over a distance of 1 to 5 kilometers, which translated into women spending 1 to a little more than 2.5 hours in transport or at least 65 percent of the household time on travel and transport. The burden of these essential transport tasks constrains allocation of female household labor resource to other more productive or socially beneficial activities.

The distances to sources of water and firewood are critical factors in determining the scale of transport tasks for women and the consumption of water tends to decrease when the source is more than 1 km away. Also, the greater the number of female adults in a household, the less the time and effort spent by each woman on transport. Daughters contribute to domestic transport work, particularly at times of peak labor demand, and this however prevents daughters from attending school. Since women do not travel out of the village or immediate vicinity of residence, they did not utilize the roads and public transportation means even if they were available [5]. The studies show that very few women have access to or use donkeys, mules, wheelbarrows or other intermediate means of transport to transport water, fuel, household goods and food, which would have lessened the burden of these women. Consequently the women experienced not only the physical burden of transportation by back loading and head loading but also the time burden as a result of the lack of transport [10]. Various studies on rural transport options have been carried out since [11].

Recently, all too real stories of how women are experiencing obstructed labor as a result of obstructed transport have come to light. Women transport firewood and water throughout their pregnancy, then give birth without any nurse, midwife, skilled attendant to provide support, travel great distances to reach any obstetric care even in emergencies and who might die or get injured and/or lose their babies in the process. Child birth injuries include obstetric fistula [12] which is a hole that forms in the vaginal wall communicating with the bladder (vesico-vaginal fistula) or the rectum (recto-vaginal fistula) as a result of prolonged (an average of 3.8 days) and obstructed labor of young often teenage mothers, who have been married off in their early teens. Dr. Catherine Hamlin, one of the founders of an Addis Ababa hospital specialized in the treatment of fistula, the Addis Ababa Fistula Hospital, is quoted as saying "Fistula is the result of obstructed labor and obstructed transport" and "Those mothers who failed to access a road to emergency obstetric care (EMOC) will easily access the road to death or disability" [13]. In reality, there are said to be three types of delays which lead to maternal and fetus death and fistulas. These are 1) the delay in decision making due to the low status of women amongst many other factors; 2) the delay in transportation to a health institution due to distance, poor roads, non-existing transportation system, lack of money for transportation or lack of communication means, a poor referral system or in other words the lack of access to EMOC; 3) the delay of care in a health institution, whereas, a Caesarean section could save the child and prevent a fistula and debilitating injuries. In addition to these delays, the causes of fistula are said to be: illiteracy, malnutrition and stunted growth, harmful traditions such as female genital mutilation (FGM) and poor access to reproductive health care services.

## **Studies and Initiatives in the World Bank**

The gender dimension of transport was noted within the World Bank in a technical paper on intermediate means of transport (IMTs) in 1991. This paper [10] hypothesized that significant time savings and productivity gains can be achieved by using IMTs ranging from wheel barrows to motorcycles and that this would have a significant impact on women. It predicted that the IMTs would increase women's responsibility and share of transport within the household and community. This was followed by several other case studies focusing on the role of women in rural transport such as the one on the role of women in rural transport which was published in 1994 [14].

Further travel surveys captured gender dimensions in Asia. For example, transport surveys in Ashgabat, Turkmenistan [14] found that use of transport services differed greatly by gender, with 28 percent of women walking to work, as compared to 14 percent of men. Women's waiting times were longer than men's, and their average total journey time was 10 to 15 percent longer. User survey and focus group discussions held in Dhaka, Bangladesh as part of the Urban Transport Program [15] found that women's exclusion from public transport due to overcrowded buses and inadequate sidewalks hindered access to the workplace. The Bank's Gender Unit has highlighted a best practice example of a gender dimension study in a Bangladeshi road project in the Study on Gender Dimension in Rural Roads and Markets Improvement and Maintenance Project II [16].

In 1999, the Gender and Rural Transport Initiative (GRTI) was established as part of the Africa Rural Travel and Transport Program (RTTP) and a component of the SSATP, supported by the Economic Commission of Africa (ECA), the World Bank and several other donors. The Initiative provided modest finance to enable individuals or organizations to test creative approaches to strengthen capacity of the national RTTP programs to integrate gender in the design of their rural transport programs. The results of this initiative are being compiled and should be available by December 2005.

In 2001, a study to integrate gender into World Bank transport programs, financed by the Japan Trust Fund (JTF), was contracted to IC Net Limited in consortium with gender and transport specialists from TRL Limited and IFRTD. This study reviewed the existing literature on transport and gender, identifying examples of transport projects with gender consideration implemented or financed by development agencies including DFID, CIDA, SIDA and IFAD. Ten case studies were conducted comprising four from Africa, five from Asia and one from South America. The studies showed that a gender-enabling environment (e.g., gender addressed in the constitution; gender focal points in the case study countries) did not necessarily result in concrete gender practice in the transport sector. Moreover, programs and projects which addressed gender in the project design were rarely implemented as intended, resulting in a gap between policy, program, project, and field level outcomes.

The case studies which were an integral part of this study are currently accessible through the World Bank Gender and Transport site. A workshop conducted during the JTF study, confirmed that the transport and gender problems identified were not necessarily transport sector specific and that they could be tackled with generic tools of Gender and Social Analysis. However, the need for materials targeted towards the transport sector with transport and gender specific examples and tools, was still very real and a basic gender training package for transport professionals was created. This is expected to be made available through the World Bank Transport and Social Responsibility Thematic Group and website [17].

At the same time, efforts were being made to mainstream gender into a rural roads project in Peru. A report of lessons learned [18] highlights the crucial role of institutional support from the project implementation unit as well as the Bank and the Inter-American Development Bank. It identifies the advantages of gender aware project design and the importance of capitalizing on available human and institutional resources to conduct social analysis, guarantee project ownership and sustainability, as well as the importance of having a gender champion on the team to highlight and sustain gender work. In a Bank loan for India's State Highways, a particular emphasis was put on gender and safeguard issues. It was found through consultations with women and men that women often had a different compensation preference. Men frequently preferred cash compensation for lost land or homes while women preferred support in kind, such as, replacement land, a new home or assistance in learning new skills [19].

In 2003, a Bank supported training session was held in Ethiopia on the social dimensions of transport projects. The objectives of this training were to create awareness of the range and importance of poverty/social issues in their programs, build capacity among local social scientists and relevant transport authorities to identify and address issues in the work of the Ethiopian Roads Authority (ERA) and to help create a constituency of advocates for these issues. As a result of the workshop, staff committed to integrating the health and transport sectors. They identified a project to empower communities to prevent fistula by strengthening emergency obstetric care with the involvement of the transport sector. Innovative pilots, such as the introduction of emergency access cards, are planned so that women who are in obstructed labor can be transported quickly to the nearest capable health facility [20].

The World Bank also plans to work with NGOs, the Red Cross, and technical schools to introduce IMTs to help transport emergency patients, to procure tools for communities to be involved in labor-based construction activities including culvert construction and maintenance to help ensure year round access. These transport activities are designed to complement the health and social activities which include information, education and communication (IEC) campaigns to help change cultural attitudes.

Following consultations between women participants at the 2004 SSATP annual meeting in Addis Ababa, the issue of women in transport was brought to the forefront of the November 2005 SSATP annual meeting. It has been agreed to create a Gender Thematic Group within the SSATP, and to implement the following activities as part of an agreed action program for 2005-2006: (i) a survey of ongoing transport projects to assess the inclusion of women related issues in the preparation, design and implementation beginning in 11 countries that have completed a review of transport sector strategies and their linkages to their national poverty reduction programs. The outcome of this would be, (ii) establishment of baseline data to be updated annually in order to ensure a continued focus and results in addressing the issue.

# Some Specifics: The Ethiopian Experience

The World Bank supported Ethiopian Road Sector Development Program (RSDP) [21]includes a component, the Ethiopian Rural Travel and Transport Program (ERTTP), which has a goal, to promote the development of community-based integrated rural travel and transport services. A Village Level Transport and Travel Study (VLTTS), conducted in 1999 to prepare this component, found that women spent almost twice as much time on household related travel, and that they expended three times more effort on tasks involving travel and transport.

The analysis of the travel and transport burden showed that 73% of the trips, 61% of the travel time or 93% of the transport effort were related to meeting household needs: the collection

of fuel, water (excluding waiting time at the source) and food. This domestic transport is largely done by women, and takes up between 20 to 25% of the adult women's working time. This meant that women spent, on average, 4 hours a day or 1,440 hours per year moving and carrying household goods. In addition to domestic transport, women travel to the local market (Figure 1) and health care facility – constraining their time for cooking, cleaning and childcare [22]. These results are comparable with earlier synthesis of village level transport and travel studies [5].



FIGURE 1 Woman transporter in urban market

The VLTTS also found that no household in the three study areas owned a conventional two or four-wheeled motor vehicle, and non-traditional IMTs, such as carts and bicycles were rare. In contrast, traditional modes like donkeys and to a lesser extent, mules and horses, were found in all study areas. Donkeys were very common and appear to provide the most widespread form of transport in rural Ethiopia. The ownership levels ranged from Bako, where a

quarter of households owned 73 donkeys, averaging 1.6 donkeys per household, compared to Boset, where 125 households (63%) averaged just under 1.4 donkeys each. One hundred and two of these animals were in off-road communities, where more than 75% of the households owned a donkey. Overall, transport means such as donkeys and mule carts and pack donkeys greatly reduced (sometimes by as much as 75%), the time spent on household transport tasks.

In Boset, with the largest transport ownership, women and men shared the transport burden; men participated in the collection of water and fuel wood, facilitating use of household transport by all. This, in a sense, confirms an earlier hypothesis on use of IMTs by women [10].



FIGURE 2 Filling the water bottle for transport.

From these surveys, RSDP planners and implementers sought to reduce the transport burden, particularly of women and children, by consulting the women and increasing their representation in transport planning and decision taking. Throughout its economic and social interventions, the program sought to sensitize policymakers and local people on gender aspects of transport.

Gender considerations were also addressed institutionally. The engineers of the Ethiopian Roads Authority (ERA) did not have the appropriate training or experience to conduct baseline studies, prepare concept papers on HIV/AIDS and other social issues. Therefore, an Environmental Monitoring and Safety Branch (EMSB) was established, comprising an engineer/environmentalist, an ecologist, a geologist, two sociologists and two HIV/AIDS prevention specialists (sociologist and nurse). The EMSB has given high priority to HIV/AIDS issues, prepared and implemented an institutional policy. The RSDP tried to provide equal

opportunity in road work employment for women needing income. However, retrofitting the transport sector contracts with international consultants and contractors did not achieve the intended impact as they did not have the social capital to implement the clauses or the know how to hire appropriate subcontractors to conduct the work. The ERA then reinforced its efforts to train and sensitize its contractors and consultants on social issues including gender and HIV/AIDS, requiring its contractors to provide reports on gender and HIV/AIDS activities, and for the supervising consultant to document the information in monthly progress reports [21]. This included a previously mentioned training session on the social dimensions of transport. The ERA also instituted a peer educator program, within its own ranks, training 247 persons in the years 2004-2005, of which 32% were females [unpublished internal report on ERA's HIVAIDS peer education training]. The above-mentioned ERTTP has a gender responsive monitoring and evaluation system in place [23]. In addition, ongoing pilot project activities in eight weredas (local districts), are exploring practical ways to address the gender dimensions of transport – increased women employment, consultation and involvement in project identification including transport and non-transport aspects, such as health clinics and schools location and construction, markets and food processing, etc.

These operational and institutional changes, which were initiated largely by the Bank Project Team, have made a significant difference in raising awareness, giving a higher priority to gender issues and establishing the basis for an operational response. Eventually, it has helped build the social consciousness of the implementing agency ERA [25], with encouragement is now reaching out of the traditional transport sector, partnering, for example, with the health sector on the issue of fistula and emergency obstetric care.

# Approaches and Tools to Integrate Gender and Social Concerns into Policies, Programs and Projects

As seen above, the World Bank Transport Group's understanding of gender issues has been informed by field studies [4,5,6,8] of travel and transport which showed how women in rural and urban households not only have very substantial and distinct mobility needs but also that they usually bear the major part of the household transport burden. Accordingly, studies on the potential of IMTs to reduce women's burden also played a large part in guiding thinking [10]. Subsequent pilot activities in gender and transport have focused on Africa, through the GRTI [26] technical grant facility.

Such activities were enhanced by improved techniques for assessing and analyzing the ways that individuals and families manage their lives. The UNDP took a lead in strengthening the understanding of sustainable livelihoods analysis and this was refined by extensive research and analysis by DFID [27] and ILO on gender, employment and transport, as well as by various academic institutions [28]. These techniques enabled the livelihoods of women and girls to be analyzed in the context of their households and communities so that their livelihood strategies could be assessed in relation to prevailing constraints, including those which limit their mobility.

At about the same time, the Bank's Gender Unit developed engendering approaches in all sectors by using analytical tools for each stage of project development, to establish checklists for project identification, project appraisal, project monitoring and evaluation. The Gender Unit cooperated with the Transport Sector to establish a web page [33] for sharing good practice with specialists, both outside and within the World Bank. They also cooperated in designing the study on integrating gender in transport interventions, which is mentioned above.

Recent research on the value of poor people's time has been undertaken by IT Transport, differentiating its findings by gender as well as by other personal characteristics such as age and income. The first study, which was carried out in Bangladesh [29], showed that rural women have their own substantial formal travel needs (albeit reported to be less than those of men). This has been borne out in similar studies carried out in Ghana and Tanzania [30] which have confirmed that, in general, women continue to be responsible for the great majority of domestic tasks as well as a substantial portion of the formal work undertaken, particularly in the poorer households. Despite being more 'time constrained' the women are reported to place a lower value on their time than do the men. This apparently reflects the lower ability of the women to pay for transport services as a consequence of the men's control of household income.

Although much of the field study of gender mobility promoted by the World Bank and others has focused on rural households, some research in urban areas has shown comparable findings [31, 32]. Women in poor urban households have substantial and differentiated transport needs in the course of their daily activities. They are generally equally 'time-poor' as their rural counterparts, sometimes more so. Moreover, they are far more likely to report various forms of abuse, harassment or neglect related to using transport services [34].

In 2004, the Transport Sector Board established the Transport and Social Responsibility (TSR) thematic group as the focal point within the World Bank for identifying good practice to address social dimensions of transport, such as gender, disability, and other issues of inclusion. It aims to strengthen understanding of social dimensions of the transport sector and develop guidance and good practice for optimizing the social benefits of the sector's policies and investments. The TSR manages a website which facilitates access to materials on social issues in developing countries transportation [17] and will now be responsible for updating the Gender and Transport page.

Guidelines for social analysis in the transport sector are being finalized on the basis of consultation between the Social Development and TSR Groups. These are being published as an annex to the Social Analysis Sourcebook [35] and will be available at the Bank's website. The same consultation is contributing to the definition of indicators for 'social' issues in transport as part of the Transport Results Initiative [36]. Regular survey and analysis of data in a disaggregated form to identify the transport demand of women, girls and other population groups is a significant indicator in respect of 'inclusion' and gender. Monitoring has to be designed in a similar disaggregated framework to determine the distribution of impacts. In effect, these conditions are prerequisite indicators for gender issues to be adequately addressed.

## Gender, Transport and the Millennium Development Goals

Whilst experience of addressing gender issues in transport evolved as described above, the international development agenda strengthened its focus on poverty reduction as framed by the Millennium Development Goals (MDGs) [3]. This was particularly significant for the Sub-Saharan Africa region. As a result, the SSATP has increased emphasis on poverty reduction. Several SSATP partner countries prepared case studies on transport connections with the MDGs and a report on Transport and the Millennium Development Goals in Africa [37] was prepared for the Africa Transport Ministers. A historic declaration by 18 African ministers of transport and infrastructure at the 2005 SSATP annual meeting reaffirmed their commitment to take into account the specific requirements of women in transport. The ministers also resolved to ensure that implementation activities and initiatives incorporated appropriate mechanisms which would associate women with the management of the sector and address their interests and needs [39].

The table in the report provided a basis for Table 1 below which highlights the gender aspects of the MDGs. MDGs 2 and 3 which are the goals on universal primary education and gender equality, MDGs 4 and 5, which are the goals on child health and maternal mortality, as well as MDG 6, the HIV/AIDS, malaria and other diseases goal, all have a gender and transport dimension. Whilst transport must make important contributions to achieve most of the Goals, it has particular responsibilities to address the gender issues which are inherent to accomplishing the above five MDGs, as is shown in Table 1.

TABLE 1 The Transport and Gender Dimensions of the MDGs

MDG	Transport and Gender Dimension
MDG 2 Universal Primary	Girl's lack of time for school and studying as they must help
Education	their mothers transport water, fuel and food. This leads to loss
Ensure that, by 2015, children	of opportunity or motivation to study. Girls face more gender
everywhere, boys and girls	related problems such as abduction and rape on their way to
alike, will be able to complete	school. Lack of transport means for teachers and education
a full course of primary	officials affects both genders, through teacher absenteeism,
schooling.	lack of education quality support and monitoring.
MDG 3 Gender Equality	Girl's lack of time for school and studying as they must help
Eliminate gender disparity in	their mothers transport water, fuel and food. This leads to loss
primary and secondary	of opportunity or motivation to study. The lack of public
education, preferably by 2005,	transport inhibits opportunity for both boys and girls to go to
and to all levels of education	secondary school.
no later than 2015.	, and the second
MDG 4 Child Health	Preference for boy infant over girl infant because of parental
Reduce by two thirds, between	discrimination and neglect. For example, girls may not
1990 and 2015, the under-five	receive adequate nutrition or be taken to the clinic as
mortality rate.	frequently as their boy siblings. Girl infants are trained to help
-	mothers from very early age. Lack of emergency transport for
	children's health emergencies. Lack of transport for health
	equipment and medicines at the health post leading to poor
	quality of health service. Constraints on access of health post
	users due to distance, cost, difficulty of travel due to terrain
	and weather, path conditions.
MDG 5 Maternal Mortality	High death rate for mothers and preventable injuries partially
Reduce by three quarters,	due to delay of decision to transport and lack of transport in
between 1990 and 2015, the	cases of emergency especially at childbirth.
maternal mortality ratio.	
MDG 6 HIV/AIDS, malaria	Transport sector workers such as long-distance drivers (mostly
and other diseases	men), seafarers are seen to spread HIV/AIDS along road
To halt and begin to reverse	corridors and ports. Female sex workers, roadside community
the spread of HIV/AIDS,	women with little control over reproductive health are most
Malaria and other major	affected, not only by the virus but also through the extra
diseases  Company Description Transport	burden of care for HIV/AIDS patients and orphans.

Source: Recreated from Transport Targets and Indicators related to the Millennium Development Goals (MDGs) [38]

# **Conclusions and Recommendations**

Gender is a key crosscutting theme for the MDGs. Transport, though not explicitly mentioned, is acknowledged as essential to achieve the MDGs. Over the past two decades much evidence has been gathered, appropriate techniques have been developed, and there is a widespread commitment to being inclusive in respect of gender in transport for developing countries. However, the successful interventions generally remain at a modest scale and it is clear that the

approaches have not yet been mainstreamed. At country level, a partnership of all stakeholders from different sectors, levels of administration, and civil society, is needed in order to ensure that barriers posed by knowledge, culture and customs that pose the greatest challenge, can be overcome.

As is described in this paper, there is extensive experience of identifying and responding to gender needs. The challenge now is to mainstream this experience in ways which are consistent and sustainable.

## Recommendations

Mainstream gender issues through broad, integrated measures. Most development interventions continue to be made through discrete projects in Transport and other sectors. If major cross-cutting issues such as gender are to be addressed effectively in such projects, this must be done in a coherent way which is consistent with policies and action in the wider socioeconomic context. This requires national agreement on a multi-sectoral framework for addressing gender with a need for cross support from social sectors through multidisciplinary teams.

A Transport Sector Wide Approach can provide a basis for implementing such a multi-sectoral framework. This enables agencies with a significant stake in the transport sector to ensure that the elements of the national approach are adopted consistently throughout the sector. Environmental and social units would help sector stakeholders to be accountable for inclusion. Social development skills should be employed to validate the measures which transport stakeholders have to implement effectively to mainstream gender in line with the framework.

The constraints which undeveloped transport services may impose on meeting gender needs in other sectors must be specifically identified (such as the delivery of pre-natal care by midwives or health assistants). Where there is a need for interaction between transport and another sector on a gender issue (e.g., facilitating community visits) this should usually be straight-forward. However, the problems imposed by working with very limited resources in low income countries may merit the further involvement of social development skills, including social and gender analysis and assessments.

Gendered measures of impact must be integrated into specific and routine monitoring processes. The aim should be that all routine measures of social factors are disaggregated by gender as well as by other key personal characteristics. Thus gender should be recorded in regular passenger surveys as well as in a detailed household survey focusing on transport issues to complement the Living Standards Measurement Survey. Where routine measures are not properly established or not adequately engendered, specific monitoring arrangements will be required. As far as possible these should be designed to assist in building the systems and capacity required for the routine application.

**Project-level good practice must be validated for scaling up and linked to key institutions and policy**. There are many examples of project level interventions but there must be a preference to build on good practice which is already established and adapted to local conditions. The references in this paper include several collections of good practice experience for

addressing gender issues at the project, institutional and policy levels. In addition, outputs from the SSATP action program on women in transport should be assembled and widely disseminated.

An active community of practice is important. A network of specialist sources is necessary to strengthen the match between the cultural and institutional context and appropriate good practice. Such a network should provide ready access to updated knowledge bases of proven practice for addressing gender issues in the transport sector, both for experienced practitioners and newcomers. It can also provide for the active exchange of experience which will help to identify the appropriate practice for prevailing circumstances. The TRB Committee on Women's Issues in Transportation can contribute to such a community of practice, complementing existing networks such as GATNET, the thematic group Transport for Social Responsibility and the soon-to-be created gender and transport thematic group within the SSATP

### References

- 1. United Nations 4<sup>th</sup> World Conference on Women, Beijing, 1995.
- 2. Department for International Development, UK. 'Poverty Elimination and the Empowerment of Women'. DFID, London, UK, September, 2000.
- 3. United Nations Development Programme. Millennium Development Goals and Targets. http://www.undp.org/mdg/abcs.html.
- 4. Barwell I and C. Malmberg Calvo. Makete Integrated Rural Transport Project: the transport demands of rural households. Findings from a village level travel survey. Employment and Development Department, International Labour Organisation, Geneva, Switzerland, 1989.
- 5. Barwell, I. Transport and the Village Findings from African Village-Level Travel and Transport Surveys And Related Studies, World Bank Discussion Paper No. 344, Africa Region Series, World Bank, Washington, DC. 1996 accessible from <a href="http://www.worldbank.org/afr/ssatp/Working%20Papers/SSATPWP23.pdf">http://www.worldbank.org/afr/ssatp/Working%20Papers/SSATPWP23.pdf</a>
- 6. Malmberg Calvo, C. Case Study on the Role of Women in Rural Transport: Access of Women to Domestic Facilities, SSATP Working Paper No. 11, Environmentally Sustainable Development Division, Technical Department, Africa Region, World Bank, Washington, D.C. 1994 Accessed July 28, 2005 <a href="http://www.worldbank.org/afr/ssatp/Working%20Papers/SSATPWP11.pdf">http://www.worldbank.org/afr/ssatp/Working%20Papers/SSATPWP11.pdf</a>
- 7. World Bank. 'A Sourcebook for Poverty Reduction Strategies; Volume 2 macroeconomic and sectoral approaches; Chapter 22 Transport'. World Bank, Washington, DC; 2002.
- 8. Fernando, P. and G. Porter (eds.) Balancing the Load. Women, Gender and Transport, Zed Books, London, 2002.
- 9. McGuckin, N, and E. Murakami. Examining Trip-Chaining Behavior Comparison of Travel by Men and Women. In *Transportation Research Record: Journal of the Transportation Research Board, No.1693*, TRB, National Research Council, Washington, D.C., 1999, pp.79-85.
- 10. Riverson, J., and S. Carapetis. Intermediate Means of Transport in Sub-Saharan Africa: Its Potential for Improving Rural Travel and Transport, World Bank Technical Paper No. 161, World Bank, Washington DC. 1991. (Winner of the Eldon J. Yoder Award for the most outstanding paper at the Fifth Low Volume Roads Conference of the Transportation Research Board.) accessed July 28,2005 <a href="http://www.worldbank.org/afr/ssatp/techpaper/TP161.pdf">http://www.worldbank.org/afr/ssatp/techpaper/TP161.pdf</a>

- 11. For example, Starkey, P. Local Transport Solutions People, paradoxes and progress: Lessons arising from the spread of intermediate means of transport. World Bank, SSATP Working Paper No.56, Africa Region, World Bank, Washington, DC 2002. <a href="http://www.worldbank.org/afr/ssatp/Working%20Papers/SSATPWP56.pdf">http://www.worldbank.org/afr/ssatp/Working%20Papers/SSATPWP56.pdf</a> Accessed July 29, 2005.
- 12. Hamlin, C. and J. Little. The Hospital by the River. A Story of Hope. Monarch Books, London, UK 2005 (paperback edition).
- 13. Walker, W., J. Osika and C. Sagna. Preventing Fistula: Transport's Role in Empowering Communities for Health in Ethiopia. Back to Office Report. 2004. Accessible from

http://siteresources.worldbank.org/INTPH/Resources/BTOTransportsrolinempoweringcommunitiesfoealthinEthiopia.doc

- 14. Kudat, A. et al. 1996. "Strengthening Ashgabat's Urban Transport System." in Cernea, M and Kudat, A. (ed.) Social Assessments for Better Development: Case Studies in Russia and Central Asia. Washington, DC: the World Bank, pp. 165 187 or <a href="http://www.socialassessment.com/documents/KudatWorks/1996/Ashgabat%20Transport">http://www.socialassessment.com/documents/KudatWorks/1996/Ashgabat%20Transport</a> %20-%201996.doc
- 15. World Bank Dhaka Urban Transport Project <a href="http://intranet.worldbank.org/servlet/main?pagePK=250315&piPK=250383&theSitePK=84829&menuPK=250337&Projectid=P009524">http://intranet.worldbank.org/servlet/main?pagePK=250315&piPK=250383&theSitePK=84829&menuPK=250337&Projectid=P009524</a>
- 16. Guidelines for Social Analysis in the Transport Sector Study on Gender Dimension in Rural Roads and Markets Improvement and Maintenance Project II: A Best Practice Example of a Gender Dimension Study To Assess the Impact of the Project <a href="http://www.worldbank.org/gender/analyticaltools/social assessments">http://www.worldbank.org/gender/analyticaltools/social assessments</a>. accessed July 27<sup>th</sup>, 2005
- 17. The Transport and Social Responsibility Thematic Group website <a href="http://www.worldbank.org/responsibletransport">http://www.worldbank.org/responsibletransport</a>
- 18. Ruiz Abril, M.E., Mainstreaming Gender in Rural Roads Projects: The case of the rural roads in Peru, 2002 Accessed October 2005

http://siteresources.worldbank.org/INTGENDER/Resources/PeruRRPFINAL.pdf Or

http://wbln0018.worldbank.org/lac/lacinfoclient.nsf/d29684951174975c85256735007fef 12/09831bdb46b8776c85256eb50082250e/\$FILE/Peru%20Roadswebversion.pdf

19. India State Highways Program,

http://siteresources.worldbank.org/INTINVRES/214574-

1115363218432/20480151/IndiaStateHighwaysProgram2.pdf

- 20. Unknown. Obstructed labor and obstructed transport
- $\frac{http://siteresources.worldbank.org/INTPH/Resources/Obstructed\_labour\_and\_obstructed}{transport.ppt}$
- 21. World Bank. Ethiopia-Road Sector Development Project Status accessed July 25, 2005

http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/ETHIOPI AEXTN/0,,contentMDK:20224220~pagePK:141137~piPK:141127~theSitePK:295930,0 0.html

- 22. I.T. Transport Ltd., Village Level Travel and Transport Study in Ethiopia Final Report and Annexes to Final Report, The Federal Democratic Republic of Ethiopia Ethiopian Roads Authority, 1999
- 23. Maramba, P, and M. Bamberger. Gender Responsive Monitoring and Evaluation System for Rural Travel and Transport Projects and Programs in Africa A Handbook for Planners, Managers and Evaluators, SSATP Working Paper No. 55, World Bank Africa Region, 2001 accessed July 28, 2005

http://www.worldbank.org/afr/ssatp/Working%20Papers/SSATPWP55.pdf

- 24. Bamberger, M. Developing Gender Sensitive Monitoring and Evaluation Systems for Rural Travel and Transport Projects and Programs Ethiopia Roads Authority, Addis Ababa 1999.
- 25. See for example World Bank, Africa Technical Transport Sector Unit (AFTTR). Taming HIV/AIDS on Africa's Roads. Africa Transport Technical Note SSATP note 35, World Bank, Washington DC, 2003.

http://www.worldbank.org/afr/ssatp/technotes/ATTN35.pdf accessed July 29, 2005

- 26. Gender and Rural Transport Initiative (GRTI) website: <a href="http://www.grti.org">http://www.grti.org</a> (site has not been updated since 2002)
- 27. Carney, D. 'Sustainable Livelihoods What can we do?' DFID, UK. 1999 http://www.dfid.gov.uk/pubs/files/poverty-elimination-ssr-2-1.pdf
- 28. WEDC, Loughborough University, UK (funded by DFID). Partnerships to improve access and quality of transport for the urban poor (R7786), 2003. <a href="http://wedc.lboro.ac.uk/projects/new\_projects3.php?id=129">http://wedc.lboro.ac.uk/projects/new\_projects3.php?id=129</a>
- 29. IT Transport, UK (funded by DFID). The Value of Time in Least Developed Countries. (R7785). 2002. accessible at www.transport-links.org.http://www.transport-links.org/transport\_links/projects/projects\_document\_page.asp?projecttitle=The+value+of+time+study+in+least+developed+countries%2E&projectid=139
- 30. IT Transport, UK (funded by DFID). The Value of Time in Least Developed Countries: The African Studies (R8307) on-going (accessible on <a href="www.transport-links.org">www.transport-links.org</a>). or <a href="http://www.transport-links.org">http://www.transport-links.org</a>). or <a href="http://www.transport-links.org">http://www.transport-links.org</a>).
- <u>links.org/transport\_links/projects/projects\_v.asp?keywords=time&themeid=0&projectnumber=&title=&projecttype=&projecttitle=The+Value+of+Time+in+Least+Developed+Countries%3A+The+African+Studies&projectid=329</u>
- 31. TRRL, UK (funded by DFID). Urban travel behaviour (R6018), 1996. (accessible at <a href="www.transport-links.org">www.transport-links.org</a>). <a href="http://www.transport-links.org/transport-links/projects/projects\_v.asp?keywords=time&themeid=0&projectnumber=&title=&projecttype=&projecttitle=Urban+travel+behaviour&projectid=253">www.transport-links.org</a>/ <a href="mailto:v.asp?keywords=time&themeid=0&projectnumber=&title=&projecttype=&projecttitle=Urban+travel+behaviour&projectid=253">www.transport-links.org</a>/ <a href="mailto:v.asp?keywords=time&themeid=0&projectnumber=&title=&projecttype=&projecttitle=Urban+travel+behaviour&projectid=253">www.transport-links.org</a>/ <a href="mailto:v.asp?keywords=time&themeid=0&projectnumber=&title=&projecttype=&projecttitle=Urban+travel+behaviour&projectid=253">www.transport-links.org</a>/ <a href="mailto:v.asp?keywords=time&themeid=0&projectnumber=&title=&projectid=253">www.transport-links.org</a>/ <a href="mailto:v.asp?keywords=time&themeid=0&projectnumber=&title=&projectid=253">www.transport-links.org</a>/ <a href="mailto:v.asp?keywords=time&themeid=0&projectnumber=&title=&projectid=253">www.transport-links.org</a>/ <a href="mailto:v.asp?keywords=time&themeid=0&projectnumber=&title=&projectid=253">www.transport-links.org</a>/ <a href="mailto:v.asp?keywords=time&themeid=0&projectnumber=&title=&projectid=253">www.transport-links.org</a>/ <a href="mailto:v.asp?keywords=time&themeid=0&projectid=253">www.transport-links.org</a>/ <a hre
- 32. TRRL, UK (funded by DFID). Planning for women and transport (R 6019). 1996 (accessible on <a href="www.transport-links.org">www.transport-links.org</a>). <a href="http://www.transport-links.org/transport\_links/projects/projects\_document\_page.asp?projecttitle=Planning+for+women+and+transport&projectid=254">www.transport\_links/projects/projects\_document\_page.asp?projecttitle=Planning+for+women+and+transport&projectid=254</a>
- 33. See for example the Gender and Transport site under the Gender Unit. <a href="http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTGENDER/EXTGEN
- 34. World Bank. Cities on the Move. World Bank, Washington, DC, 2002. <a href="http://siteresources.worldbank.org/INTURBANTRANSPORT/Resources/Chapter3.pdf">http://siteresources.worldbank.org/INTURBANTRANSPORT/Resources/Chapter3.pdf</a>

- 35. World Bank. Social Analysis Sourcebook. World Bank, Washington, DC, 2003. <a href="http://www.worldbank.org/socialanalysissourcebook/">http://www.worldbank.org/socialanalysissourcebook/</a>
- 36. Transport Results Measurement World Bank web page. http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTTRANSPORT/EXTTRM/0,,contentMDK:20283374~pagePK:210058~piPK:210062~theSitePK:515307,00.html
- 37. African Union, UN Economic Commission for Africa. African Development Bank, World Bank and the European Union. Transport and the Millennium Development Goals in Africa, 2005 pp.19-23 accessed July 28, 2005

http://www.worldbank.org/afr/ssatp/transport\_poverty/transport\_mdg.pdf

- 38. African Union et al. Transport Targets and Indicators Related to the Millennium Development Goals (MDGs) in Transport and the Millennium Development Goals in Africa 2005. <a href="http://www.africa-union.org/infrastructure/transport/Table-Contribution%20of%20the%20experts.pdf">http://www.africa-union.org/infrastructure/transport/Table-Contribution%20of%20the%20experts.pdf</a>
- 39. For more information, please refer to the SSATP website at <a href="http://www.worldbank.org/afr/ssatp/">http://www.worldbank.org/afr/ssatp/</a> Click on cross-cutting issues to find a section on gender and transport