



Gender and transport: A rationale for action

Transport can make a big difference in increasing women's productivity and promoting social equity. How best can transport policies and projects identify and respond to the needs of women?

Transport investments have consistently represented 15–20 percent of the World Bank's lending portfolio. In addition to its major contribution to economic growth, transport plays a crucial role in socially sustainable development by broadening access to health and education services, improving the exchange of information, and promoting social cohesion.

Because women are vulnerable members of society and their productive roles are sometimes not fully reflected in sector strategy, considering how transport policies and projects address women's needs is important for socially and economically sustainable transport policy. Yet little attention appears to have been paid to women's needs in transport projects. In fiscal 1997 just 4 percent of Bank transport projects included a gender component or gender actions—compared with 15 percent for water supply projects, 35 percent for agriculture, 44 percent for education, and 67 percent for population, health, and nutrition.

The burden of transport for rural women is well documented. In addition to their major productive roles—for example, women account for about 70 percent of agricultural production in Africa—women are almost exclusively responsible for household and child-rearing tasks, so they have numerous and diverse transport needs. For example, in rural Africa women transport more than three times as much as men (figure 1). Women also suffer the physical and health

burdens of headloading a large portion of fuel, water, and produce.

Yet women have less access than men to private vehicles and public transport. In urban areas public transport is generally less than satisfactory on nonradial and non-peak routes, on which women rely more than men. The combination of “multitasking” and poor service and vehicle access severely limits the time available for (and timing of) other activities.

While these patterns are disturbing, they are not a sufficient basis for policy. More knowledge is needed about the consequences of the transport burden for both rural and urban women's availability for employment and access to markets and social services—and about the economic losses that result. Little work has been done in urban or rural contexts on the most cost-effective interventions for gender-related transport problems. Making transport policy more responsive to the needs of women requires developing a structured approach to understand their needs, identifying instruments to address those needs, analyzing the costs and benefits of those instruments, and establishing an appropriate policy framework. To that end the PREM Network and the Transport Division are developing a toolkit—scheduled for release in 1999—that will help task managers identify, design, and assess gender-responsive transport projects.

Making transport
policy sustainable
requires paying
more attention
to women's needs

Reducing women's transport-related burdens will require new modes of analysis

Identifying women's transport needs

The growing use of household and public transport user surveys—as in current public transport projects in Europe and Central Asia—offers an excellent opportunity to improve basic data on the travel patterns of urban and rural women. Estimating women's latent (unsatisfied) travel demand is also important, although doing so requires that information be collected directly from women rather than from male heads of households. Reducing women's transport-related time burdens will also require new modes of analysis of this data—for example, exploring how women's time is allocated, or its availability is constrained, may contribute to the design of measures to reduce transport time.

In developing that analytical framework it is important to understand how travel patterns develop. In both urban and rural areas this requires analyzing intrahousehold dynamics with respect to control of household income, ownership and control of means of transport, disaggregation of transport demand among household members; and latent transport demand among women. Particular attention should be paid to the impact on women of urban transport policies and programs.

Identifying potential policy initiatives

A number of policy initiatives can help ensure that women benefit from road construction and maintenance projects:

- Promoting labor-based construction and maintenance, with incentives to hire women.
- Ensuring that women are represented in the planning and design of transport investments, including on user panels, road fund boards, and so on.
- Improving the dissemination of information on transport investments and related employment opportunities.

In recent years more attention has been paid to the institutions and regulatory frameworks in which services are provided and to the factors affecting the sustainability of projects. This approach raises the possibility of a new range of instruments specif-

ically directed to women's transport needs, such as better route planning or the provision of special buses or increased off-peak hours or services on less-traveled routes.

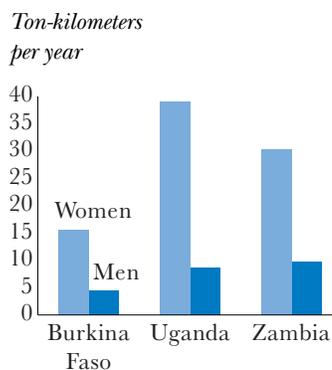
Where women are highly dependent on nonmotorized transport, studies in several countries suggest that the simplest forms of wheeled transport (such as wheelbarrows or handcarts) could halve the amount of time women require for local transport. Promising interventions also include widening roads to provide safer and faster passage or providing cycling and walking paths and teaching women and girls to ride bicycles.

Evaluating the benefits of gender-oriented efforts

Most transport infrastructure projects are subject to a cost-benefit analysis comparing the capital costs and incremental maintenance costs of the new infrastructure with the reductions in vehicle operating costs, accident costs, and time costs resulting from the project. For savings in travel time a distinction is usually made between working time and nonworking time. Where the division of labor in households involves men working in paid employment and women performing household tasks and unpaid productive activities, conventional analytical methods tend to undervalue the transport needs of women by not adequately reflecting the opportunity cost of their time. This includes time spent managing households and home-based economic activities, caring for children, transporting fuel, engaging in formal and informal economic activities, and so on.

Analytical approaches that require the valuing of transport time may be particularly difficult to apply in developing countries with high subsistence or semi-subsistence self-employment by both men and women, particularly in rural areas. In such cases valuation requires carefully reexamining the treatment of time savings to take into account such issues as the value of time saved in especially arduous tasks (such as carrying water), the value of time saved by women engaged in domestic activities, and the appropriateness of conventional willingness to pay approaches when household budgets are

FIGURE 1 WOMEN SHOULDER A MUCH HEAVIER TRANSPORT BURDEN THAN DO MEN



controlled by men and the opportunity cost of women's time is not easily measured.

There are other challenges to face. The tradeoffs between the private and social benefits of improved transportation services—for example, better access to health and education services, economic and social empowerment of women, social inclusion of marginal urban and rural populations—are also often not accounted for in evaluations of transport projects, especially urban projects. Nor are some of the broader issues relating to the case for public goods—for example, the impact of better transport on women's labor participation and wage rates, impacts on social standing and empowerment, and indirect impacts on family health, among others.

Evaluating the costs of gender-oriented efforts

About 80 percent of public transport is typically provided by the private sector on a commercial basis. Thus the crucial questions for transport projects are whether a service is likely to be considered commercially attractive by a private supplier and, if not, how the commitment of public funds to support the service should be appraised and, if warranted, financed.

In most cases the profit motive is sufficient to ensure the provision of any service that is potentially commercially viable. For example, specialized taxi rickshaws that transport schoolchildren in Bangladesh are an entirely private initiative. But in many countries the private supply of a public transport service is provided under a license or franchise that defines—and often limits—what the supplier can and cannot do. In such regulated systems self-interest may drive operators to focus on satisfying the planners, and thus not seeking to maximize profits by going beyond the provision of the regulated service.

This may mean facing a serious trade-off. Where there is some form of monopoly franchise it may be possible to secure unremunerative services (such as low-demand off-peak services or low-occupancy gender-specific services) through cross-subsidies. But this approach is not without

costs, because it tends to reduce the overall level or quality of service. Attempting to avoid this conflict by directly subsidizing gender-targeted services merely changes the question into one of deciding on the best uses for available finance.

Setting the policy stance

The limited gender focus in World Bank transport projects can be at least partly attributed to an emphasis on traditional transport planning objectives, which focus on ensuring that investments are economically efficient but typically say little about the distribution of project benefits. This approach raises the question of whether the gender impacts of transport should be treated primarily as an efficiency issue or an equity issue.

If the problem is seen as primarily economic, the issue to decide is whether the benefits of gender-specific interventions are worth their costs. This evaluation involves technical issues about how impacts are estimated and judgment issues about how impacts are valued.

Different issues arise if the problem is seen as essentially an equity issue. It may be clear that women have worse or more expensive transport than men, but this may be the result of more general gender inequality—for example, in terms of access to the household budget or to private transport—rather than biases in transport service provision. The question that must then be answered is whether gender-related transport measures are a cost-effective way to address gender-related disadvantages, given other available alternatives for low-cost interventions to reduce women's time and load burdens. In practice, many transport interventions can be designed to help the most vulnerable. For example, public transport subsidies are often justified on equity grounds. Similarly, the first stage of the design process in rural road projects is to identify areas at the greatest disadvantage.

Attention to gender in Bank transport projects must be part of a broad sector strategy that considers all disadvantaged groups. In general, well-designed improvements in transport systems can benefit women and men equally and, in some cases, women

The policy response will depend on whether gender-related transport burdens are seen as an efficiency issue or an equity issue

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more than men. But problems may arise when projects do not address gender differences in transport needs and women benefit less than men. Some women may even be worse off. Thus assisting women means raising awareness among policymakers and planners and ensuring that women are represented in user-based participatory planning.

In discussions with nontransport line ministries, cross-sectoral impacts of transport improvements—such as better access to and provision of health or education services—can serve as a basis for raising gender issues. Many times there will be tradeoffs to be faced, and informed decisions will require information about women's transport needs. A first step will be to ensure that at each stage of the planning process, attention is paid to involving women in the planning and implementation of projects that affect them.

Further reading

- Barwell, Ian. 1996. *Transport and the Village*. World Bank Discussion Paper 344. Washington, D.C.
- Bryceson, Deborah Fahy, and John Howe. 1993. "Rural Household Transport in Africa: Reducing the Burden on Women?" *World Development* 21(11): 1715–28.
- Gannon, Colin, and Zhi Liu. 1997. "Poverty and Transport." TWU Discussion Paper 30. World Bank, Transportation, Water, and Urban Development Department, Washington, D.C.
- Grieco, Margaret, Nana Apt, and Jeff Turner. 1996. *At Christmas and on Rainy Days: Trans-*

port, Travel and the Female Traders of Accra. Aldershot, U.K.: Avebury Press.

- Kudat, Ayse, Stan Peabody, Ovezdurdy Muhammetberdieve, and Klaus Moeltner. 1997. "Strengthening Ashgabat's Urban Transport System." In Michael Cernea and Ayse Kudat, ed., *Social Assessments for Better Development: Case Studies in Russia and Central Asia*. Environment and Sustainable Development Studies and Monographs Series 16. Washington, D.C.: World Bank.
- Paul-Majumder, Pratima, and Masuda Khattoon Shefali. 1997. *Examining Gender Dimensions of Transportation in Dhaka Metropolitan Area*. Nari Uddug Kendra. Dhaka, Bangladesh.
- World Bank. 1994. "Case Study on the Role of Women in Rural Transport: Access of Women to Domestic Facilities." SSATP Working Paper 11. Sub-Saharan African Transport Program, Washington, D.C.
- . 1996. *Sustainable Transport: Priorities for Policy Reform*. A Development in Practice book. Washington, D.C.

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If you are interested in similar topics, consider joining the Gender and Public Services Thematic Group. Contact Michael Bamberger (x36438) or Jerry Lebo (x87396), or click on Thematic Groups on PREMnet.



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