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Editorial statement

The Transport and Communications Bulletin for Asia and the Pacific is a peer-reviewed journal published once a year by the Transport and Tourism Division of the Economic and Social Commission for Asia and the Pacific (ESCAP). The main objectives of the Bulletin are: to provide a medium for the sharing of knowledge, experience, ideas, policy options and information on the development of transport infrastructure and services in the Asian and Pacific region; to stimulate policy-oriented research; and to increase the awareness of transport policy issues and responses. It is hoped that the Bulletin will help to widen and deepen debate on issues of interest and concern in the transport sector.

The travel and transport needs of women are different from those of men and women face different constraints. As such, access to transport technologies and services is gendered. However, traditional transport planning and policy interventions and project designs often fail to recognize the gender difference in travel and transport needs. The economic and social benefits of improving women’s access to travel and transport could be very high. Improvement in transport infrastructure, facilities and services can significantly increase school enrolment; help to reduce gender inequality; and facilitate women’s access to labour markets, paid employment and other social and economic opportunities that can support their empowerment in society. Improved transport facilities and services also make it possible for there to be an increased use of (reproductive) health-care facilities, antenatal care and professional attendants for childbirth. These can reduce child and maternal mortality, which remains a major issue of concern in achieving the relevant Millennium Development Goals targets in many countries of the Asian and Pacific region.

In recognition of the gender-based difference in needs, many Governments have taken initiatives to promote the gender issues in transport. Many promising approaches have been considered in both policy planning and project interventions. Interventions by various interest groups have also had positive results. Such experiences, ideas and information need to be shared so that decision makers and policy planners can be aware of them and therefore consider them for implementation.

In consideration of the importance of and wide interest in gender and transport, this subject was chosen as the theme for the current issue of the Bulletin. Six articles are included in the volume.
The first article looks at the planning issues in transport with regard to culture and gender. It reviews the strands of development approaches that have been considered in addressing the transport and mobility needs of women and looks at how research in this area has evolved over the past decades. It then examines various issues related to women and transport from the gender perspective that need to be considered in transport interventions. It also highlights the complementarities of sectoral initiatives can have positive impacts on women. Failure to consider such complementarities may even result in negative impacts on women, as has been experienced in many situations.

Feminist insights into transport issues involving women are the focus of the second article. The author stresses the need to refine theoretical frameworks around gender and transport, which need to be linked to a feminist agenda for development. The article also aims to stimulate discussion regarding the potential contributions of shifts in gender and development theory to gender and transport research in developing countries. This includes critically evaluating (a) the relationship between “gender” and “women”; (b) the efficiency paradigm in gender and transport research; and (c) the relationship between gender roles and gender power relations, gendered senses and the experiences of space and gendered organizational culture.

In recent years, donor agencies have placed increasing attention on including gender issues in transport interventions. The third article assesses the effectiveness of such efforts in projects funded by the World Bank and others. It also reviews the mechanisms that can be used to ensure better integration and explores more effective use of the gender and transport research outcomes in policy and planning.

In many developing countries, the distance to roads and health-care facilities is a major obstacle to accessing reproductive health services. However, very little is known about the relationship between the lack of transport infrastructure, including emergency transport services, and problems related to reproductive health, such as maternal mortality. The fourth article addresses this problem by applying regression analysis using available data on reproductive health and transport, such as the maternal mortality rate, the percentage of stunting, the percentage of assisted births by health professionals and the rural accessibility index. The analysis identifies countries in Asia in which women might be at a higher reproductive health risk because of physical access problems.

Based on experience in Bangladesh, the fifth article reiterates the fact that the success of an infrastructure development programme for poverty
reduction and improvement in the welfare of the target groups depends on packaging the programme with the necessary complementary interventions in other sectors. The article revisits the positive experience of transport interventions that benefited poor women when such measures were implemented as part of a large programme that considered gendered interventions in other areas. One example is the allocation of space to women traders in the rural markets that were developed under the project. The article also points to synergies between improved communication and infrastructure and information and communication technologies (ICTs) and the transport sector. In many societies, women face mobility constraints because of cultural factors, poor transport services and other factors. ICTs can be helpful in addressing the mobility constraints of women in undertaking entrepreneurial activities as well as in accessing social and economic opportunities. The article uses the positive experience of an ICT-based women’s networking initiative in India to illustrate how women may benefit from the potential synergies when transport and ICT developments are addressed together.

The sixth and last article in the volume examines the gendered dynamics that affect female mobility and access to health services in Nepal. Studies based on ethnographic and microdemographic data collected in two geographical regions revealed that a constellation of factors constrain female access to health services and may even increase the vulnerability of their reproductive health. In spite of a decentralized health policy and a wider range of motorized and intermediate transport options, rural communities face barriers related to wider political change and internal conflict. In both settings, the gendered factors affecting mobility have hampered access to the health services that have the greatest impacts on the health and general welfare of women and their children.

Views on gender issues in transport based on the outcome of research and analytical studies and experiences from a number of countries are shared in the articles. They also discuss important policy issues related to gender and transport. It is expected that they will generate further debate on the issues and increase awareness of their policy implications and responses. It is expected that the articles will also increase awareness of the necessity of considering gender issues in transport and other infrastructure development through an integrated approach that can effectively address the mobility constraints of women and promote women’s empowerment by facilitating their participation in wider social, political and economic opportunities.

The Bulletin welcomes analytical articles on topics that are currently at the forefront of transport infrastructure development and services in the region, on policy analysis and on best practices. The articles should be based on
original research and should have analytical depth. Empirically based articles should emphasize policy implications emerging from the analysis. Book reviews are also welcome. See the inside back cover for guidelines on contributing articles.

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<table>
<thead>
<tr>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editorial statement ................................................................. iii</td>
</tr>
<tr>
<td><strong>Roselle Leah K. Rivera</strong></td>
</tr>
<tr>
<td><strong>Denise Buiten</strong></td>
</tr>
<tr>
<td><strong>Jeff Turner and Meike Spitzner</strong></td>
</tr>
<tr>
<td><strong>Mika Kunieda</strong></td>
</tr>
<tr>
<td><strong>Marie Sicat</strong></td>
</tr>
<tr>
<td><strong>Kate Molesworth</strong></td>
</tr>
<tr>
<td>ACRONYM</td>
</tr>
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<td>ADB</td>
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<td>CIDA</td>
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<td>ILO</td>
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CULTURE, GENDER, TRANSPORT: CONTENTIOUS PLANNING ISSUES

Roselle Leah K. Rivera*

ABSTRACT

Transport is known to be one of the most significant investment sectors for many developing countries. Despite the recognized role of transport in development, scant attention has been accorded to the social and gender impacts of transport investments. The recognition of its key role in economic development through classic planning methods remains wanting because of the failure to see the different impacts of transport on the lives of women and men. While there has been an upsurge in research and policy advocacy to incorporate gender perspectives into the health, education and the agricultural sectors, few attempts in Asia have been vigorous in parallel intention and attention in the transport sector. As a starting point, this paper attempts to challenge and inspire researchers and those involved in policy advocacy to address this need.

Keywords: women and transport, developing countries, gender relations, gender-blind, mobility

INTRODUCTION

About 70 per cent of the 1.3 billion people living in poverty worldwide are women. According to a report by the Sustainable Transport Action Network for Asia and the Pacific, the transport systems and services, which hardly meet the needs of the poor, disproportionately affect women and their dependents:

“The lower the income of the household, the more probable it is that women will experience greater transport deprivation as compared to men. Transport deprivation may take the form of women’s use of inferior modes of transport as
compared to men; it may take the form of women's journey's having multiple purposes and thus generating greater anxiety in the travel context; it may take the form of customary or legal constraint on women's right to travel or to use a particular transport mode.” (Barter and Tanim, 2000)

With the above situation in mind, an examination of how gender issues are reflected in the field of transport is necessary to make women visible in transport planning, policymaking and transport interventions. Treating women as a distinct transportation user group with distinct travel needs and interests is the key to challenging the prevailing male-centred paradigm.

It is in this light that this paper will use a development lens to present contentious issues on women and transport with an emphasis on developing country realities. First, a definition of terms is given to situate the topic. Second, studies tackling women and transport are presented. Woven into salient themes to highlight issues on women and transport are insights and ideas culled from the available literature reviewed and possible avenues for future research to consider.

I. WOMEN, GENDER AND TRANSPORT IN A DEVELOPMENT CONTEXT

Transport is an essential part of people's lives. For women, transport provides greater access to various resources, such as employment, childcare, education, health and political processes. Women may constitute the majority of the public transport market (Hanlon, 1996). Women's needs and issues regarding transport are often assumed to be identical to men's (Hamilton, 1989), resulting in a low level of awareness of women's distinct travel needs. Consequently, gender issues in the transport arena are severely neglected.

A. Key concepts

The commonly used definition of transport or transportation is the movement of people and goods from one place to another. For the purpose of this paper, revisiting the definition by Bryceson and Howe (1993) will be useful. Their definition adds weight to daily mobility, as transport is seen as the movement of people and goods for any conceivable purpose, including the collection of water, fuel or firewood by any conceivable means, including walking and head loading. Thus said, three important points surface with regard to the realities for women in developing countries: (a) the mode of travel
is not necessarily conventional or motorized; (b) the choice of mode must be
given due attention, regardless of how unimportant it may seem; and (c) travel
purposes should not be disregarded.

By adding the term “women” to the term “transport”, the concern
becomes uncovering women’s travel needs and women’s travel experiences.
Through time, the topic “women and transport” has evolved into the composite
term “gender and transport”, which implies capturing the relationships and
dynamics of men vis-à-vis women regarding transport.

This inclusive perspective, which acknowledges both women and men,
placing men on par with women as equally embodied and gendered persons, is
what feminism is all about. As such, the evolution of the use of the term
“gender” in place of “women” can be best understood when viewed against the
historical context of developments in feminist thinking. Feminist critiques in the
1970s began to look more closely at the roots of women’s subordination, which
could be traced to the inequality between men and women, the sexual division
of labour and the non-valuation of women’s work within the household. The
roots of women’s subordination were linked to the household as an economic
unit and to the global economy. It is also crucial to acknowledge further
feminist critiques in the 1980s that spotlighted neo-liberal policies, the debt
crisis and top-down development projects, as these critiques led to debates on
development. In sum, the topic of women, gender and transport is inextricably
linked to these structural realities.

The conceptual shift from “women” to “gender” seeks to distinguish
between biological differences and socially constructed inequality. The use of
the concept of gender as socially constructed inequality set the stage for the
elucidation of gender relations. Tackling gender relations implies moving
beyond concentration on women and men as unrelated categories. Instead,
both men and women must be considered together to understand the complex
and unequal social dynamics through which resources are allocated, tasks and
responsibilities assigned, values held and power mobilized (Kabeer, 1996).

B. Strands of approaches

In the parlance of feminists and development professionals involved in
gender work, the use of terminologies in one’s work reveals one’s assumptions.
Most important, these assumptions reveal the strand of development approach
one embraces. Feminists of various shades in the political spectrum insist on
demystifying jargon to uncover the hidden oppressive assumptions of
perspectives.
In the first major exploration of the topic women and transport, which was published in 1989, Hamilton and Jenkins pointed out the ways transport policy had been gender-blind and had failed to integrate the issues affecting women in particular. Gender blindness means neither recognizing nor responding to the needs or priorities of women. The question whether women's potentials are restricted by the state of transport cannot be answered by what little information is available as most planning and development decisions are undertaken by men with little or no regard for women's needs (Turner and Fouracre, 1995).

Gender blindness in discussions on transport implies that there is no consideration of the fact that women also have to perform reproductive tasks. There is implicit ignorance about the fact that women are involved in multiple tasks beyond income earning. Women are also doing valuable work caring for members of the family and managing the household and community tasks.

Research on transport from the 1950s until the early 1980s was outright gender-blind. Such gender blindness was attributed in large part to researchers on transport coming from the predominantly male-dominated technical disciplines of transport planning and engineering and transport geography. However, the gender blindness manifested in the literature on transport conditions in the developing world did not pass unnoticed for long.

More attentive interest in the gender aspects of transportation slowly emerged in the mid-1980s. Research proceeded to address structural constraints on women’s daily mobility (Law, 1999), such as that done by Pickup (1984), who utilized the concept of gender to explain transport patterns. This research cited gender roles as the primary reason for the low level of mobility of women. Gender roles had three components: family roles, gender-related tasks and the conditions under which women travel. Although Pickup focused attention on unequal access to household resources (such as a vehicle), the use of the concept of gender role becomes not only problematic but also static in the mould of the often cited “women in development” approach in gender analysis literature. Fulfilling gender roles implied equivalence, consensus and choice, which were the crux of criticism by feminists. Nowhere in this study were the concepts of power or coercion.

It was during the 1990s that theoretical concerns, such as the construction of gender identities, began to overshadow the beginning of interest in structural constraints on women’s travel situation. According to Law (1999), with the increasing prominence of post-structuralist perspectives in the last
decade of the twentieth century, the attention of research on gender and transport was redirected from structural constraints to discursive constraints.

After all is said and done, it is evident that research on transport has begun to put a spotlight on gender. In general, most approaches include a discussion on gender-differentiated roles, which is a descriptive account of what men and women do. Even if gender analysis in current research on women and transport is fundamentally a matter of the analysis of disaggregated data, this step is a positive starting point. The less prominent focus on the relations of subordination and domination that underpin gender as a power relationship is, of course, waiting for thorough follow through.\footnote{A companion article in the Bulletin discusses this topic in greater detail.} As gender hierarchies are reproduced through the workings of other institutions, such as markets, firms and State institutions, it is imperative that gender analysis in research on transport extend beyond the confines of the household.

C. Women, transport and mobility

Today, it is more crucial to view the historical development of transport research against the realities of developed countries vis-à-vis developing countries. The often linear tendency to import the developed country perspective to developing countries continues to prevail. Most of the models originated in developed countries and have been followed universally by developing countries. The fact that many authors have criticized this tendency is promising at least.

A perfect illustration of the mismatch of developed country perspectives being imported into the developing country context is how authors have tackled mobility through the years. Extensively taken up in transport and development literature, many authors define mobility as the ability to move. In transport literature, the standard measurement of mobility is the number of trips made per person. While mobility can be easily broken down into various operational indicators, this concept is more applicable in a developed world context, where society is functionally organized (Centre for Transport Studies, 2006; Vasconcellos, 2003). Space is more often than not a distinctive, straightforward feature in developed countries. However, space is more structured around distinct cultural, ethnic and religious characteristics in most developing countries.
In many studies on transport, mobility is indeed used as a pivotal concept. (De Boer, 1986; Tillberg, 1998; Urry, 2000; Peters, 2001; Vasconcellos, 2001; Matin, 2002; Hall, 2004; Mumtaz and Salway, 2005; Hamilton and Jenkins, 2005). The concept of mobility is unable, however, to capture the diverse realities in the developing country context, specifically in reproduction processes in society, that is, the caring economy, which is crucial in understanding the gender variable in research on transport.

Interest in the caring economy marks a high point of interest in the gender aspects of transportation. This is rather recent in transport and development studies. Much of this kind of research is concentrated in rural Africa vis-à-vis agriculture, food production, distribution and economic growth (Bryceson and Howe, 1993; Masika and Baden, 1997; Fernando and Porter, 2002). Many studies on women and transport in the developing world have focused on African women, specifically those in sub-Saharan Africa. The empirical literature on the conditions of women in Asia is scarce; few studies have been done in Asia (Fernando and Porter, 2002; Selim and McCleery, 2005), with the exception of a few reports on World Bank projects in Bangladesh, China, the Lao People’s Democratic Republic and Viet Nam (Shefali, 2000; Fernando and Porter, 2002; Du and Kurz, 2003; Vu, 2003).

Research tackling the intersection of gender, transport and mobility in the developing world is admittedly rather recent. Available literature in the developing world points to the need to take into account women’s modal preferences in transport infrastructure planning. For example, one study done by the World Bank in Dhaka showed that 35 per cent of female commuters relied on cycle rickshaws as their sole mode of transport. One fourth of all women relied on rickshaws for accessing educational facilities. When authorities proposed to ban rickshaws from the major streets of Dhaka, they were in fact singling out not only the most environmentally friendly mode available but also the one transport choice most essential and accessible to women, thereby gravely affecting their mobility (Sustainable Transport Action Network for Asia and the Pacific, 1998).

II. ISSUES REGARDING WOMEN AND TRANSPORT

The spectrum of approaches outlined in the preceding section is captured in the following discussion about research on women and transport in various contexts, with a special emphasis on countries in the developing world. Several related concerns permeate the existing work, which makes it difficult to pinpoint the core of the problem or classify such issues and concerns into
stringent categories. Nevertheless, utilizing such themes can foster a better appreciation of the issues regarding women and transport.

**A. Defining gender and situating women's interests**

Gender relations, like all social relations, are multi-faceted: they reflect ideas, values and identities. They influence the allocation of labour between different tasks, activities and domains; they determine the distribution of resources, and they assign authority, the ability to make choices and decision-making power. This means that gender inequalities are multidimensional and cannot be reduced simply to questions of material or ideological constraints (Kabeer, 2003).

Therefore, supporting women's interests in the context of gender relations means optimizing labour time and effort from the perspective of women themselves. The concept of women's interests can be seen more clearly in findings on how transport interventions were destined to enhance solely men's mobility at the expense of women's welfare (Malmberg-Calvo, 1992). To illustrate, research on intermediate transport has shown how projects have glossed over the question of how men's and women's transport activities can be redistributed more equally. Improvements in intermediate transport in particular were found to be enjoyed by men, yet there were no attendant changes in the allocation of functional tasks and associated transport responsibilities along gender lines within the household.

Attention to the gender division of labour and activities is very useful in helping understand travel demand and the reasons why men and women make trips to particular places at certain times. Research on gender and transport in the developed world already includes a substantial discussion on the components of spatial and temporal differences in the organization of women's work and men's work, both paid and unpaid (Grieco and others, 1989; Hanson and Pratt, 1995). However, no such parallel work emanates from research in developing countries.

Valuable work on the gender division of labour in some developing countries may be found. In a similar vein, Bryceson and Howe (1993) stressed that the almost exclusive focus on household demand rather than in-depth research from the perspective of women who were primary transport suppliers has yielded the dangerous result of a restricted informational base for many donor agency interventions. Much of their research has illustrated the need for a more comprehensive research approach to push for women's interests. They emphasized the need to:
(a) Discard assumptions about the unity of household demand and household welfare;

(b) Widen the analysis to a consideration of the decision-making and logistics of women as primary transport suppliers;

(c) Abandon the narrow agricultural production maximization goal;

(d) Recognize the multitasking and childcare dimensions of women's transport strategies.

B. Culture and the gender logic in transport planning

The intertwining of gender relations and cultural constraints emerge as a second area of interest in research on women and transport. Bryceson and Howe (1993) noted how cultural norms in rural sub-Saharan Africa continued to dictate women's responsibilities. These included (a) travel and load carrying connected to providing basic household needs and (b) head loading and back loading goods in the absence of travel modes, such as wheelbarrows, trolleys or bicycles. These two underlying precepts of the gender division of labour stood in the way of not only a more rational distribution of work in the household, but also the equitable distribution of benefits between male and female household members through transport agency interventions aimed at replacing load carrying by people.

These findings give us a glimpse of how imperative it is to see the cultural dimension in understanding women and transport. Every society socializes young boys and girls in practices, beliefs and values that privilege one gender over another, thus perpetuating gender inequities. Both males and females are affected by these practices and pass them on to the next generation. Advocates of gender equity are analysing the nature of relationships between men and women in social structures, such as the family. They are challenging traditional practices that subordinate women and girls and transforming into public issues what is hidden in the private sphere of life.

Development agencies cannot justifiably avoid the issue of cultural norms regarding the allocation of transport work in the household along gender lines. The principle of sensitivity is expected to be put forward, pushing for a practice that all development efforts must be culturally acceptable to the community. In reality, the gender division of labour in transport accords women the bulk of responsibility, and this is what is culturally acceptable. Therefore, the conventional belief is that this unequal sharing of household tasks should not be subjected to external agency interference. Bryceson and Howe (1993)
are very emphatic about the reluctance of international agencies to challenge the dangerous cultural preferences of the community even though such age-old preferences give rise to gross inequities between the sexes. The impact on women is especially harsh as the transport burdens have been found to jeopardize women's physical health (Doran, 1996).

Cultural conventions affecting the transport situation of women also consist of prohibitive religious practices. Specific religious practices tackled by Matin and others (in Fernando and Porter, 2002) are those that influence gender roles and affect women's ability to benefit from transport improvements, as well as opportunities to purchase and benefit from transport. A study in a village in Faridpur, a district 145 km from Dhaka, showed that the majority of poor women there travel on foot to the union centre to participate in income-generation activities. Social restrictions prevent women from using public transport with men. There are only a few seats reserved for women on buses. When the buses are full, drivers do not take women. They have to wait a long time for the next bus and often use rickshaws or rickshaw vans, which charge high fares.

Such conventions as the exclusion of women in transport described above do not remain unchallenged, however, especially when people are mired in extreme poverty. In Bangladesh, cases of women from destitute families (Matin and others, in Fernando and Porter, 2002) are presented side by side with examples of the families of well-to-do women who are more concerned with maintaining the family’s izzat (respectability and honour).

Sangita and others (in Fernando and Porter, 2002) documented how women in Ahmedabad, an urban centre in the western region of India, were often willing to contribute to the purchase of means of transport not for themselves but for their husbands or adult sons. The respondents whom they interviewed stated that they would not use a bicycle, scooter or rickshaw because it was not culturally permissible. Most of the women respondents were willing to take out a loan from a bank for the purchase of a vehicle, not for themselves, but for male members of their household.

Nelson-Fyle and Sandhuif (1990) discussed the sensitivity of introducing into communities transport technologies and how women were not culturally associated with their use. Most of the time, women themselves prefer not to be involved in transport improvement initiatives. For example, Nelson-Fyle and Sandhuif’s research documents the feeding and caring system of a community-owned animal in an animal-powered mill. Mutual self-help through a well-knit group working together is therefore necessary since care for the animal is the group’s responsibility. However, if the animals are not
community owned, each user has to provide an animal to mill their grain. As men are usually the owners of animals, they are reluctant to allow their animals to be used in the milling process, traditionally considered the responsibility of women. In some societies, men see no advantage in reducing the labour burden on women since the belief is that women will only become idle.

As stressed by Fernando and Porter (2002) in their introduction to a collection of case studies on women and transport in the developing world, a focus on women's transport burden is not enough. The cultural conditions that constrict women’s mobility limit how far they can travel and their command over the political and social processes that determine their lives. It is just as important to address gendered power relations and to enable women to have greater mobility and more control over transport decision-making in the household, as well as in the wider political context.

C. Geography, location and urban-rural linkages

Interacting with culture affecting the transport situation of women are factors related to geography and the interplay of urban-rural linkages. Patterns of mobility are complex and depend on the interplay of both cultural and access factors, plus geographical factors (such as mountains or lakes) and locational factors. The latter two are well noted in available literature as crucial factors related to mobility patterns and transport burdens. A review of available work also reveals that research on women and transport in urban areas is scarce compared with existing work done on the transport situation of women in rural areas. Urban studies of the travel time and time budgets of women constitute a promising area for future research (Cervero and Jonathan, 1998).

One study debunks the belief that proximity to urban centres and a high density of transport in urban and peri-urban areas automatically mean better accessibility. Mukherjee (in Fernando and Porter, 2002) examined the journeys of rural women who commuted to and from the centre of Calcutta to emphasize this point. Domestic helpers, vendors, industrial workers and government institution labourers who travel from the outskirts of Calcutta into the city spend approximately 12 hours per day outside their homes. Their daily travel experiences include overcrowded, irregular public transport, a lot of time waiting for transport, a lack of facilities and harassment by pickpockets.

Related literature also mentions how transport has not included discussions on where people live. For example, transport is not a part of discussions on the location of credit institutions, housing, water (such as community taps) and basic services in communities. According to a study done
in Nairobi, 27 per cent of female-headed households depended on walking as their primary form of mobility, compared with only 15 per cent of the male-headed households (Barwell, 1996). Contrary to common perceptions, even women in urban areas are more likely than men to be dependent on walking as their only option. Other modes are often not available to them, because they are either too expensive or located too inconveniently or far away (Hook and Deike, 1998).

Research on households located close to paved roads vis-à-vis those far from paved roads highlight location as a key concern. This is best illustrated by a number of studies done on public transport. In Belo Horizonte, Brazil, the location of public transport routes meant poor women living in peripheral settlements had longer trips and changed transport more often than men (Schmink, 1982). Added to locational factors were the unreliable transport services, which translated into women’s untimely arrival at urban markets to sell their produce. Porter (2002) explained that the produce of women living in villages without road access deteriorated by the time they reached the market.

Looking at the differences in transport in rural and urban areas proves to be one useful way to emphasize the important differences in local contexts. It is then important to examine transport and development in changing urban and rural contexts, as well as in wider national and regional contexts. How mobility, accessibility and equity is affected by the locational context, especially with regard to disadvantages along dimensions of gender, language, ethnicity, class and minority status, still needs to be further explored. Thus, more focused research on women, gender and transport in rural-urban interactions, in different local contexts, and in current transformations in rural-urban linkages are critical, requiring careful understanding and consideration.

D. Transport safety and safe travel for women

The fourth issue is safe travel for women. Personal security concerns, including accidents and attacks, are an important theme of research on women and transport. Women’s fear of attack while travelling is also ultimately related to the issue of safety.

Personal security has been taken up in conventional transport sector research, focusing on the vulnerability of pedestrians, cyclists and people using slow-moving, non-motorized transport modes. The vulnerability of women is covered as women are usually pedestrians and users of slow-moving transport modes.
A gender-aware transport perspective shows another dimension of safety in women and transport research. For example, women walking on village paths and tracks are not likely to be at risk of being hit by motor vehicles, but they are often injured from falling, from sharp objects and thorns, or from animal bites and attacks. Women with head loads are particularly vulnerable, especially when paths are slippery or overgrown, distances are far or the women are tired. Bryceson and Howe (1993) explained that it was not simply a matter of balancing child carrying capacity with mobility as most rural women carry children in addition to other loads. The nature of women's multitasking at any time during their workday means that they have to carry an assortment of tools, raw materials or other goods while transporting young children.

Physical safety also means women being free from attack during travel. Research on the geography of women's fear has revealed women's pervasive awareness of the reality of sexual assault. A recent study on public transport in Colombo, Sri Lanka; Faisalabad, Pakistan; and Dar es Salaam, Tanzania (Sohail and others, 2006), demonstrates views of respondents on the lack of transport infrastructure, the harassment of young girls, rape attempts on women and the danger for women to walk. Other research in Lima, Peru, showed how safeguards against physical attack and sexual harassment on public vehicles restricted women's use of all types of transport (Anderson and Panzio, 1986). In a similar vein, a recent study in the Philippines describes the sexual harassment experiences of women members of workers and communities in metropolitan Manila (Herrera, 2007). Attempts to transform private cases of public transportation incidents into a public safety issue are indeed a promising beginning.

The Lima and metro Manila studies mentioned above describe how women using public transport have employed an array of self-protection strategies and behavioural constraints, such as travelling with a companion and deliberately avoiding certain places at certain times. These self-imposed precautionary measures have not only limited women's mobility but also contributed to the continued underrepresentation of women in specific locations. For those who have found themselves in such settings, the women's sense of fear and risk has been reinforced. This has prompted government agencies involved in transportation to become involved in what is known as "safety audits." Such studies mention how these have led to the creation of "safe cities" programmes in some countries, which involve fulfilling set criteria as well as environmental design to enhance and improve safety. (Trench and others, 1992; Law, 1999)
E. Integrating various sectoral initiatives

The fifth issue regarding women and transport concerns the intersection of transport with other sectors. Better stated, there is a danger in separating transportation from other sectors (Cervero, 1998). Experience has shown how integrated approaches that combine transport with other sectors are found to have more promising impacts on women, particularly if they take into account men’s and women’s transport-related roles, resources, constraints and priorities. Studies have found the links between access to social and health services and transport, access to education and transport, as well as access to trade and markets and transport. Therefore, these studies have tackled the various parts of the lives of women in communities.

Research has shown that the total stock of tasks of household transport has not actually changed as new tasks have replaced old tasks and how various tasks have also become easier to do, thanks to improvements in transport (Dawson and Barwell, 1993; Edmonds, 1998). As there are no changes in gender relations or the division of household labour along gender lines, workloads have become increasingly heavier on women. Other authors are even more straightforward by declaring that, by promoting traditional road-based solutions, effectively 90 per cent of resources are being directed to serve just 10 per cent of the population, with the majority of women, being excluded. Simply building more roads is not going to alleviate poverty and may make the poverty situation worse (Hook, 2006).

In a similar vein, understanding women and transport has meant taking into account the merging of what gender specialists have termed practical versus strategic needs (Moser, 1993). The former means tackling short term, survival-level needs, while the latter means addressing the structural and long term transformation of women’s lives. For example, the impact of transport interventions has always been measured in terms of rural women’s time savings. This has been criticized only to stress the potential benefits to the overall household rather than to women themselves. Moser (1993) identified this thinking amongst development agency initiatives, describing it as a failure to give priority to women’s strategic needs by instead prioritizing practical needs. This essentially sidesteps the deep-rooted political and economic dimensions of women’s subordination in society in favour of non-controversial attempts to address basic needs.
F. Participation: women practicing power

Last but not least is the issue of women themselves charting the course for changes in their lives, or what is well known in studies on the subject as a sense of “agency”. To address transport needs or to acquire and use transport technologies and services, men and women in poor communities usually have to negotiate with powerful stakeholders, such as policymakers, politicians, local officials, transport providers, local government officials or even financial institutions. Women are not recognized by policymakers as transport stakeholders. In assessing the level of transport demands and resources, women’s and community needs are nonexistent. As was given weight in the preceding sections, the harsh reality is that data on the travel and transport burden are highly generalized and aggregated in many developing countries (Peters, 2001). Looking through available policy documents, it is safe to conclude that women’s transport needs for both productive and reproductive purposes are generally ignored in transport policies in both developing and developed countries (Cervero and Jonathan, 1998).

In recent years, there have been few initiatives to reduce discrimination and to ensure a greater voice for women’s needs and priorities in transport and more generally in places where women live and work. Much attention can be seen in the area of income generation for women. It is now common to find discussions on women’s livelihood and transport needs together (Brown and Lloyd-Jones, in Rakodi, 2002).

Women need to be more involved in the planning and implementation of transport interventions so that their perspective and needs are more central to the interventions. Political representation by transport users, specifically women, is important. However, ordinary men and women in communities, without the confidence to register their travel needs, are relegated to the lower rung of captive transport users, who are burdened with barriers to representation. The first reality is their lack of representation in most upper bureaucracies and technocracies, because, more often than not, they are unorganized, making their demands invisible. The second reality is that transport is only one of the overwhelming concerns faced by poor communities.

The planning process is political in that interest groups negotiate solutions in a conflicting arena. Among the major forces in the arena of transport are the historically entrenched traditional politicians, the construction sector, the real estate sector, automobile users and the public transport industries. Case studies provide instances of women leaders in communities raising their concerns to authorities to improve infrastructure or services, with
no result. Unlike in some developed countries, transport stakeholders in developing countries, such as those in Asia and the Pacific, especially the poor and the marginalized, are not as influential as bureaucrats and private operators.

The needed changes being pushed for in the transport agenda, however, still do not specifically reflect the practical transport concerns of marginalized groups such as women. There is no evidence in studies on the subject of how local communities could put the interests of ordinary commuter citizens on the agenda. In addition, how organizations can strongly influence the agenda of politicians and public servants with a perspective of public interest is not on researchers' agenda. Also not mapped in any research is the need to express and register the transport needs of marginalized, vulnerable groups, such as women, their young children, the disabled and the elderly.

Still, a few initiatives in transport activism are evident. Pressure to transform the transportation system affecting the larger public is a rather recent phenomenon in the developing world. Transport activism is said to be categorized under specific sector struggles, such as the worker's movement (transport workers, public utility vehicle drivers), one corner of the consumer movement (as very few leaders have emerged to represent the large mass of unorganized public commuters) or the broad environmental movement, in which there has been much discussion and action on strategic issues (for example, global warming, clean energy). However, pushing for the changes needed is still not tactically linked to the practical transport concerns of such marginalized groups as women. A promising start is that the global women's movement is now visible in the transport arena, raising public safety issues and violence against women in public transportation. Such thinking across the labour, environmental, consumer and women's sectors can bring to life the development of gender, women and transport research.

CONCLUSION

The preceding discussion shows in many ways that there needs to be a rethinking of the outdated notions of work, the economy and development. The economy is not solely the productive or commercially oriented economy (formal and informal) that is measured solely in quantitative terms. A purely technology or infrastructure orientation continues to dominate the transport sector; therefore, there must be pressure to push for the social and cultural aspects of transport to be clearly articulated in the policy planning process. Integrating gender into transport policies must take the centre stage in this rethinking process.
The work of women, excluded in policy and planning because it is not traditionally produced for exchange in the market, must be made visible and be given value. Excluding the economy of social reproduction from the transport sector framework translates into ignoring equity the aspect in the design and delivery of transport sector activities. The crucial task of re-examining conventional notions means treating the transport sector as a gendered structure, recognizing the implications of transport policies for men and women and the implications of gender relations for sector level analysis and policy options.

This way, the crucial element of equity, or fairness, could be tackled head on. This approach is not meant to complement existing approaches, but to replace outdated approaches. The present approach calls for efficiency, even at the expense of equity, but the proposed approach calls for equity as the primary objective, with efficiency socially accorded and guaranteed.

Research on women and transport in the developing world, specifically in Asia and the Pacific, is in its infancy. Researchers working in the developing world must take the lead in discovering women, gender and transport with serious intention and attention. The call is now for serious researchers enlightened by progressive perspectives to guide policy and search for new ways to reconsider thinking about transport in women’s lives.

REFERENCES


Brown, Alison and Tony Lloyd Jones (2002). “Spatial planning, access and infrastructure”, in Carole Rakodi and Tony Lloyd Jones, eds., Urban


Cervero, Robert and Jonathan Mason, eds. Proceedings from the Conference on Transportation in Developing Countries, Clark Kerr Campus, University of California, Berkeley, 17-18 April 1998.


Mumtaz, Zubia and Sarah Salway (2005). “‘I never go anywhere’: extricating the links between women’s mobility and uptake of reproductive health services in Pakistan”, Social Science and Medicine, vol. 60, No. 8, pp. 1751-1765.


GENDER, TRANSPORT AND THE FEMINIST AGENDA: FEMINIST INSIGHTS TOWARDS ENGENDERING TRANSPORT RESEARCH

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ABSTRACT

The increasing recognition of the importance of integrating gender into transport research, policies and strategies is underscored by the need to refine theoretical frameworks around gender and transport and to link gender and transport research to a strong feminist agenda. It is argued that issues pertaining to gendered power relations (in communities, methodological approaches and institutions) need to be assessed through a gender lens from the necessarily political standpoint of effecting gender equality. This paper aims to stimulate discussion around the potential contributions of shifts in gender and development theory to gender and transport research in developing countries. This includes critically evaluating the relationship between “gender” and “women”, the efficiency paradigm in gender and transport research, the relationship between gender roles and gender power relations, gendered senses and the experiences of space and gendered organizational culture.

Keywords: gender, transport development, transport research

INTRODUCTION

There has been increasing recognition of the importance of integrating gender into transport research, policies and strategies over the past three decades. Through the application of a gender lens, androcentric approaches in traditional transport planning have been called into question. The need for engendered transport research and policy has also been evidenced through empirical data pointing to the gendered differences in travel patterns and needs, as well as time and money spent on travel and transport. While the bulk of research in this area is still located within developed countries, increasing

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attention to gender and transport can be witnessed in developing countries (Venter, Mashiri and Buiten, 2006), where much work is needed to effectively engender transport research and planning towards the alleviation of poverty and oppression.

However, this developing area of research is characterized by the need to refine theoretical frameworks around gender and transport. It is argued in this paper that by doing this, methodologies may be improved in a way that can effectively link gender and transport research to a strong feminist agenda. It is further argued that pressure to advance empirical research and implementation, while sidestepping theoretical engagement, may politically and practically compromise strategies to effectively integrate gender into the transport sector. Instead, the need for theoretical discussion should be prioritized and integrated into action agendas capable of implementation.

As Law (1999, p. 573) points out, “Work on gender and transport has been increasingly isolated from developments in both transport geography and feminist geography, and now risks intellectual stagnation”. This paper aims to stimulate further thinking around gender and transport by applying concepts based on feminist geography, as well as those originating from feminist development theory in general. This is done in an attempt to contribute to the theoretical development of this area of research and to highlight the potential theoretical and political weaknesses that may compromise the effective engendering of transport sector endeavours. While this paper is by no means intended as an exhaustive or comprehensive engagement with feminist issues related to gender and transport, it does aim to stimulate debate around, and engagement with, theoretical and political issues potentially impacting on gender and transport in the developing world in particular.

I. DEFINING CONCEPTS:
GENDER AND A FEMINIST APPROACH

It is important to note that feminist theory draws upon a vast and diverse body of knowledge, applying a variety of theoretical canons and approaches from Marxism to post-modernism. This means that feminist theory is incredibly diverse in its approach, with various feminist theories addressing gender inequality from different perspectives. What distinguishes a “feminist” approach, however, is a concern with, and desire to effect change in, the subjugated status of women (Cirksena and Cuklanz, 1992). Furthermore, feminist approaches are distinguished by their categorical application of “gender” as a tool of analysis (Mannathoko, 1992). Gender as a concept
denotes the various social aspects of being a man or a woman, a boy or a girl, that impact deeply on the ways in which humans think about and organize their social activity, as differentiated from biological sex (Mannathoko, 1992). Therefore, feminist theory aims to identify the sources of women’s oppression, the varied nature and impact of gendered power relations and possible ways in which to address power imbalances threaded through with gender. By necessity, then, a feminist approach is distinguished by a political agenda to effect change. In this sense, it can be argued that, for gender and transport as an area of inquiry and action to succeed in challenging the conditions that have led and continue to lead to gender inequalities in transport, gender and transport cannot be entirely distanced from a political feminist agenda to effect meaningful change.

It is further important to note that a good deal of progressive feminist theory is evolving towards a broader conception of “gender” than a focus on “gender equity” through legal reform and the participation of women will allow. Some feminist theorists have begun to develop theory that further critiques knowledge production and certain privileged ways of thinking as being androcentric. The discourses and institutions that rest on these knowledge production processes and ways of thinking are also therefore critiqued as being androcentric. This has implications for the notion of gender mainstreaming and integration in the transport sector as a whole. If transport institutions and knowledge production processes around transport (such as research) are androcentric, this will have implications for the way in which transport resources and policies are handled.

II. GENDER AND DEVELOPMENT: THEORETICAL DEBATES AND DEVELOPMENT

A brief account of what is considered to be critical milestones in debates surrounding gender and development theory as a whole will be highlighted here to provide a context from which to explore the theoretical and political issues surrounding the gender and transport arena. Gender and development theory has been, and continues to be, a divergent and contested body of theory. However, key shifts in its development have been characterized by the reconceptions of the relationship between the notions of “women” and “gender”.

Early analyses leading from a liberal feminist paradigm tended to focus on “women” as a social category and their relation to the economy and development processes. Noting the exclusion of women from male-dominated
arenas, initiatives in this vein focused on compensatory measures to include women in development endeavours (March, Smyth and Mukhopadhyay, 1999). This approach is commonly known as the WID approach and has since been roundly criticized, although key components of this approach still remain in certain development institutions’ approaches despite rhetorical shifts.

The WID approach has, in the first instance, been criticized for drawing from problematic development paradigms that favour efficiency (March, Smyth and Mukhopadhyay, 1999). Hence, WID approaches have also been criticized for being based on development paradigms that “interpret Africa from the perspective of its economic ‘inefficiency’” and that are subsequently associated with the prescription that “women of Africa should be concertedly ‘captured’ by the global market and the economic initiatives of the state” (Lewis, undated). Therefore, opponents of the WID approach argue that inserting women into unequal, androcentric and Eurocentric development processes, without questioning the development agenda as a whole, can further entrench gendered and class oppression rather than relieve the subordinate position of women (March, Smyth and Mukhopadhyay, 1999).

For example, some feminist scholars have pointed to examples in which women’s increased participation in the paid labour force in developing countries has led to further gender and class oppression. Casale (2004), for example, notes that the feminization of the labour market in South Africa has not particularly benefited women, since the very causes for women’s disadvantaged position in the labour market relative to that of men have not fundamentally been challenged. Mama (1996) also succinctly captures key feminist concerns regarding the WID approach, which, she argues, draws on “a discourse which (does) not challenge the gross inequalities of prevailing gender relations, under the rubric of ‘women in development’”. She further notes that the WID approach was constructed in a way that avoided “directly challenging patriarchy and capitalism and demanding the confrontation of women’s oppression, instead targeting women as a group to be ‘integrated into development’” (Mama, 1996).

Critiques such as these have highlighted the need to question development paradigms emerging from a patriarchal context, rather than assume that the inclusion of women in development processes and analyses will bring about equality and empowerment. Furthermore, critiques of the WID approach led to theorization on the institutional changes necessary to avoid the perpetuation of gender inequalities within or through institutions. Rather than focusing merely on “women” as a social group, these critiques led to
frameworks that also took into account the processes and relations that recreate and reinforce inequalities between men and women.

These frameworks draw from the GAD approach (March, Smyth and Mukhopadhyay, 1999). This approach takes the relational aspects of the WID approach further, emphasizing more fully the manifestations of gender not only in the form of unequal relationships between men and women but also in structures, procedures, institutions and ways of thinking. The role and study of masculinities have also emerged through GAD, along with the notion of gendered organizational culture (Flood, 2004). The GAD approach furthermore highlights the multiplicity of intersecting variables that challenge the implied homogeneity of the concept “woman”. In so doing, the GAD approach asserts the need for a multifaceted and relational analysis of gender, whereby gender identity and status are viewed as being influenced by other social factors, such as race, class, ethnicity, age and culture. Thereby, women are not seen as a homogenous group, but as diverse in their gender identities and statuses over place and time.

The application of, and boundaries between, the approaches above are not always easily identified. Furthermore, while a strong body of knowledge supports a general shift away from a WID approach, in practice, WID discourses continue to echo in the corridors of many institutions dealing with development endeavours. However, feminist theory, especially that which has emerged from Africa, has witnessed an important theoretical and political shift towards an understanding of gender as relational, constituted by many different variables, including race, class and ethnicity, and manifest at social, institutional, economic and political levels. Some of the implications of this general shift for gender and transport research are discussed below.

III. GENDER AND TRANSPORT: THEORETICAL REFLECTIONS

Problems in considering “gender” and “women” synonymous

While the theoretical developments described above generally advocate a relational conception of gender, in gender and transport research, advocacy, policies and strategies there exists a strong focus on women’s transport needs in particular. This in itself is not surprising, considering that the bulk of knowledge on transport has been identified as excluding women’s interests. Therefore, a focus on women is a necessary step towards equality, addressing the significant gendered lacunae that exist in transport research and
planning. Indeed, from a feminist perspective, capturing the voices and interests of women, so neglected in most disciplines, is an important practical and political step towards equality and the awareness of important gender dynamics.

However, where “gender” is taken merely to connote “women”, theoretical, political and methodological problems may arise. In the first instance, there may be a tendency to homogenize women (and by implication men as well), bypassing the important intersections of class, race, ethnicity, age and others. In developing countries in particular, obscuring views into the class and race dynamics of gendered transport burdens and constraints in this way would compromise the methodologies and political agendas aimed at effecting change. Second, as critics of the WID approach have highlighted, gender and gendered power relations are constructed and manifested in relationships, between men and women, between women and women or men and men, and between people and institutions. Gendering, in other words, does not occur in isolation. Thus, challenging gendered inequalities and power relations cannot be achieved through a focus on women alone.

In this sense, with regard to gender and transport research, policies and strategies, there needs to be an awareness of the problematic assumptions inherent in discourses that narrowly equate “gender” with “women” alone. A number of methodological frameworks applied in gender and transport research have indeed unpacked gender relations with a view to understanding women’s transport constraints through investigations into gendered access to, and negotiation over, transport resources.

For example, in development research, the Moser framework includes a tool for the gender disaggregation of not only men’s and women’s activities and roles but also the control of resources and decision-making within households (Moser, 1993). This framework can be used to identify salient bargaining processes and interactions among household members surrounding resources, thereby creating an opportunity to reflect upon gender relations. As March, Smyth and Mukhopadhyay (1999) point out, however, the Moser framework has been criticized for comparing men’s and women’s roles, activities and control over resources without sufficiently probing the relationship between them. While the framework makes strides towards a GAD approach by articulating the issues of control and therefore power, critics of the Moser framework argue that it still tends towards an overemphasis of the differences between men and women, rather than further exploring the ways in which women and men are connected (March, Smyth and Mukhopadhyay, 1999). Therefore, a cognizance of the problematic aspects of the “gender” and
“women” synonym, which emphasizes women as a societal category over gender relations, could contribute to unpacking gender relations in more depth and hence formulating the best responses towards addressing gender biases in transport.

**Questioning the efficiency paradigm**

Women’s mobility constraints have been linked to the stagnancy of economic growth and a lack of social sustainability in households and communities, thus impacting on the success of development strategies (Lebo, 1999; Mahapa, 2003). Large, visible stakeholders in the field recognize the need to address women’s transport needs to ensure equitable, feasible and sustainable transport interventions (Lebo, 1999). Thus, gender mainstreaming in the transport sector is increasingly being regarded not only as a rights issue but also as part of economic and financial considerations for development projects and investments (Mashiri, Buiten and Zukulu, 2005). Therefore, two lines of argument in relation to gender and transport sometimes run parallel to one another, one premised on gender equity and rights and the other premised on economic and financial considerations for women’s integration in development projects and investments. The efficiency, or business case, model in particular is potentially problematic to the feminist agenda. On the one hand, the belated recognition of women’s contribution to the economy and social sustainability through agriculture and unpaid domestic and care work is of critical importance. On the other hand, however, feminist critiques of (WID) approaches should lead us to expand upon this recognition towards a questioning of efficiency paradigms underpinning transport research. This involves asking whether these paradigms, inherent in the very male-biased approaches to development planning that gender activists are attempting to transform, will effectively transform the transport sector. There is a need to question whether the efficiency paradigms underpinning much of the transport research will be effective in addressing socio-economic inequalities, which demands a rights-based approach.

While financial constraints should be borne in mind when determining investments, it is argued here that there also appears to be a need for the appropriate politicization of gender and transport endeavours from a feminist perspective in order to ensure that gender equality is indeed reached. Approaches relying on efficiency claims to motivate change would, under a feminist lens, need to be carefully considered. Where efficiency is a goal, critical issues of unequal gendered power relations are at risk of being sidestepped. Furthermore, it is important to regard the efficiency paradigm critically to avoid a situation in which women’s labour is not merely “captured”
and used for the purposes of development. Instead, the meaningful transformation of gender relations needs to be promoted in the development arena.

**Moving beyond gender roles towards gendered power relations**

Common gender-informed critiques launched against traditional transport planning and research include those relating to the tendency to determine and direct transport investments based largely on mainstream commuter patterns (Venter, Mashiri and Buiten, 2006) and to tackle transport issues through a top-down approach, concentrating on technical requirements (Masika and Baden, 1997). Shifts in transport planning perspectives towards approaches taking greater account of all travel needs, including those of low-income persons and special-needs users (Mashiri, Buiten and Zukulu 2005; Venter, Mashiri and Buiten, 2006), have been advocated not only by gender critiques but also by transport research aimed at tackling transport issues from a pro-poor perspective.

Thus, a general shift can be observed towards addressing transport roles and needs relating not only to mainstream paid employment but also to those associated with social, reproductive and informal productive forms of work (Grieco and Turner, 1997; Mashiri, 2005). The effect is to consider socio-economic growth and sustainability as encompassing not only formal employment but also other forms of unpaid work that support the economy and are intrinsic to social well-being. Furthermore, the effect is to make visible the gendered work performed largely by women, which is generally absent from traditional approaches. These have been important steps made in gender and transport research.

As Law (1999, p. 569) points out, “Researchers using aggregate travel data and travel diaries for a number of developed countries reported consistent and significant gender differences in trip purpose, trip distance, transport mode and other aspects of travel behaviour”. She further points out that “explanations drew on the burgeoning feminist literature, particularly the concept of sex roles.” However, Law indicates the weaknesses identified in focusing merely on “gender roles”, noting that “the concept of role-playing tends to imply equivalence, consensus and choice rather than power and coercion” (p. 572).

Therefore, some gender and transport researchers and activists have highlighted the need to include an analysis of gendered power relations that impact upon roles and access to resources. If a feminist agenda is to be
incorporated into transport research, researchers need to unpack not only gender roles and needs but also the power relations that restrict women's access to transport resources and the transport roles they are assigned. Gendered roles and access to resources should not be normalized, but viewed critically in the context of patriarchal power relations.

**Incorporating gendered notions and senses of space**

Literature related to gender and transport in developing countries has begun to incorporate to a greater extent the issues related to gendered senses and the experiences of space in developing countries, in particular related to the issues of sexual harassment, rape and the associated fear that can act as a constraint to free, secure and dignified movement (for example, Fernando and Porter, 2002). However, it is argued here that, in developing countries, there is a need for increased attention on having a theoretical base originating in feminist geography, which pertains to the gendered senses and experiences of transport and mobility. As Law notes, “Daily mobility incorporates a range of issues central to human geography, including the use of (unequally distributed) resources, the experience of social interactions in transport-related settings and participation in a system of cultural beliefs and practices” (Law, 1999, p. 574).

Law thus proposes further research surrounding gendered subject identities in relation to transport and mobility. This could extend gender and transport research to unpacking gendered beliefs, power relations and relationships to technology that impact on mobility patterns and relations to resources. Furthermore, gendered embodiment, as well as its relation to transport and mobility, needs to be researched in order to understand and address the implications of sexual assault and harassment (as well as the threat thereof) for women’s and girl’s transport and mobility patterns and experiences (p. 580). These issues need to be further explored in developing countries for the transport sector to respond effectively to the critical social dynamics of transport, mobility and, indeed, access.

Transport surveys, for example, tend to focus on transport patterns and needs, especially in relation to access to resources, while omitting a deeper probing of the socially constituted experiences of space that impact upon transport patterns or needs. Therefore, qualitative research into gendered senses of space, for example, exploring women's gendered sense of safety or vulnerability in certain spaces, could highlight potential factors influencing their decision to travel or not to travel in certain areas, at certain times, in certain ways (for example, in a group) or using certain modes of transport.
From women’s participation to engendering organizational culture

One of the key responses aimed at addressing gendered inequalities and exploitation in development projects and institutions has been the increased participation of women. This has often been promoted through the framework of gender mainstreaming, which is increasingly being incorporated into mainstream thinking and policy development. However, the associated meanings, potential scope and applied tools for gender mainstreaming can differ considerably.

As discussed above, feminist development theory has witnessed a shift from WID to GAD approaches, with the latter critiquing and aiming to address the tendency to merely insert women into gender-biased development processes to the detriment of their effective empowerment and equality. Instead, GAD is concentrated on the notion that gender relations should be addressed in development processes, effecting the empowerment of women, as well as the transformation of structures, procedures and institutions towards the promotion of gender equality. Societies and institutions are organized around gendered norms and identities that collectively assign statuses, roles, views, attitudes and priorities.

Thus, not only women’s participation but also the engendering of organizational culture are needed to move beyond the ways of thinking and doing that continue to subtly or overtly constrain women’s meaningful participation in various sectors and to address gender-biased benefits accruing from development projects. The transport sector should be encouraged to respond progressively to theory and research identifying organizational culture as an important factor impeding meaningful transformation.

For example, where the organizational and professional discourse in a given organization is underpinned by androcentric approaches, as discussed in this paper, attempts to integrate feminist approaches will be ineffective and will potentially marginalize the members of the organization that attempt to integrate these feminist approaches into their work. Furthermore, where an organization’s prevailing work culture continues to be prejudiced against women, marginalizing them in subtle or overt ways, women’s employment in such organizations will not result in their truly meaningful participation within that organization. This could relate to issues from sexual harassment to other subtle forms of sexism, which continue to undermine women’s position within the work environment. Therefore, the discourses and practices that underpin the day-to-day functioning of organizations need to be assessed from a gender perspective, and the necessary reforms need to be implemented. Certain
organizations have begun to address these issues through comprehensive gender audits undertaken by gender specialists, who assess the working environment within organizations from a gender perspective and make the relevant recommendations.

IV. FROM RESEARCH TO ACTION

Regarding the theoretical issues discussed above, the question remains as to how they can be translated into programmes and strategies that can make a difference to communities in developing countries. One of the key propositions put forward here is that there is a need to prioritize the strengthening of research through theoretical reflection towards a knowledge base that can contribute to gender-aware and feminist-informed action agendas. Without theoretically informed research, understanding the issues that need to be addressed will remain a challenge.

However, these theoretical discussions should also be implemented at all stages of development, from research through to policy and programme development and implementation. For example, the cognizance of critiques of paradigms that implicitly aim to harness the work of women in development, without addressing the core need for their socio-economic empowerment, could lead to action agendas that improve the underlying socio-economic power relations that undermine equitable development. An understanding of gender relations within various communities through an awareness that gender is multiply constituted and that it varies over space and time can contribute to engendered programmes that are locally appropriate.

Finally, it is proposed here that the political slant of the feminist agenda, based upon the assertion of unequal gendered power relations and the need for the assertion of gender rights, needs to be mainstreamed in all processes leading towards the implementation of programmes. In essence, transforming mindsets and approaches is necessary for the feminist agenda to find root at all levels of development processes.

CONCLUSION

While the issues raised above are not intended as a comprehensive overview of potential feminist theoretical and political concerns regarding the developing gender and transport arena, the aim of this paper has been to stimulate discussion around the potential contributions of shifts in gender and development theory to gender and transport research in developing countries.
Through such theoretical and research developments, it has been argued that action agendas can be strengthened towards sustainable solutions. It has been put forward that issues pertaining to gendered power relations (in communities, methodological approaches and institutions) need to be assessed through a gender lens from the necessarily political standpoint of effecting gender equality. It has been argued that unless gender and transport theory is developed in this respect, and interacts more directly with feminist concerns over gendered power, the meaningful transformation of the transport sector is likely to be compromised. Unpacking and addressing these issues is a complex process. Nonetheless, an explicit engagement with feminist theory can contribute to expanding gender and transport theory, as well as improving methodologies and approaches in order to transform transport-related research by incorporating gender issues.

REFERENCES


REALITY CHECK: HOW EFFECTIVE HAVE EFFORTS BEEN TO INTEGRATE GENDER INTO DONOR AGENCY TRANSPORT INTERVENTIONS?

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ABSTRACT

In recent years, there has been a considerable focus placed by donor agencies on the inclusion of gender issues into the development of transport aid intervention. It is necessary to assess how effective this effort has been and whether there is a gap between rhetoric and reality. This paper draws on the experience of the authors, undertaking for the World Bank and others, on the ineffectiveness of efforts to integrate and mainstream gender into donor transport projects. It will also review mechanisms that can be used to ensure the better integration of gender and transport research into policy and planning. In addition, the paper will explore the more effective use of such research in policy and planning.

Keywords: gender and transport, transport and development, integration of gender into transport interventions, donor agency transport interventions

INTRODUCTION

The World Bank’s strategy on gender (World Bank, 2002) makes a strong case for integrating gender into its practices. The strategy starkly highlights that gender inequality retards economic growth and poverty reduction. This conclusion is supported by the World Development Report 2000/2001 (World Bank, 2001) and the policy research report Engendering Development through Gender Equality in Rights, Resources, and Voice (King and Mason, 2001). Much of this analysis centres on the reduced effectiveness of aid programmes and policies, especially in reducing poverty, in which gender is not integrated into the World Bank’s activities. The gender strategy highlights the argument that gender integration is heavily concerned with development.

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effectiveness and should be driven by the less-than-systematic integration of gender concerns into the World Bank’s work across all sectors to date (World Bank, 2002).

To adequately integrate gender analysis into transport sector projects, programmes and policies, Elson, Evers and Turner (1999) argue that one should take a sectoral view and consider both the implications of transport sector policies and projects for men and women and the implications of gender relations for transport sector level analysis and policy options. Rather than looking at women solely as targets or sector beneficiaries, it is important to examine the ways in which gender relations, gendered norms and gender imbalances affect the performance, priorities and impacts of the transport sector. This involves recognizing that the transport needs of men and women can be different that men and women have different capabilities concerning participation in the design and delivery of services and that the institutions that design, deliver and evaluate transport sector projects, programmes and policies operate according to rules and norms that are themselves gendered (that is, they normally function in ways that prioritize men’s needs and viewpoints over those of women). Looking at a sector as a gendered structure highlights the ways in which seemingly “gender neutral” institutions may in fact be gender-biased and may unwittingly overburden the economy of social reproduction. The negative feedback to social reproduction can have negative implications for the commercially oriented market economy and, ultimately, undermine the overall effectiveness of sectoral investment. Elson, Evers and Turner argue that this analysis can be developed further by looking at the macro-, meso- and microdimensions of the sector.

They argue that the macrodimension is the context provided by the overall public sector budget and the gender biases within expenditure priorities. It is also reasonable to argue that the macrodimension is provided by wider governmental policies, and it is here also that a national Government’s own policies on gender equality and poverty reduction provide a macrocontext for the transport sector. The authors argue that the mesodimension of the transport sector is set by the institutions that make up the sector and their gendered practices. An analysis that shows how gender bias can operate in institutions has been provided by Goetz (1995). This identifies (a) how institutional rules and norms can fail to value, recognize or accommodate unpaid reproductive work, (b) how they can show preference to men and exclude and discriminate against women as clients, recipients, stakeholders, participants, etc. and (c) how they can establish women’s roles in public services and markets as secondary, supportive and dependent. This work also points to the fact that institutions can treat the household as an undifferentiated
unit and women as dependants of men within the household, which has significant implications for how travel data are collected and analysed. The final level of analysis by Elson, Evers and Turner (1999) is the microdimension of households and individuals. Here they particularly highlight the impact of gender relations on how men and women travel and the implications this has for the design and impact of transport sector projects.

This paper sets out a study that sought to use the theoretical approach described above to understand of about the gendered nature of the transport sector in order to assess the effectiveness of efforts to integrate gender into donors’ attempts to support transport within developing countries. Taking the analytical form of macro-, meso- and microdimensions to gendered actions within the transport sector, a series of case studies was undertaken to explore the gendered nature of transport sector investments made by donor agencies, such as the World Bank, and the effectiveness of recent efforts to enhance the gender equality of these investments. A total of 10 case studies in 9 countries across Asia, Africa and Latin America (Bangladesh, China, the Lao People’s Democratic Republic, Lesotho, Peru, Senegal, South Africa, Uganda and Viet Nam) were carried out in collaboration with specialists from the countries in which the case studies were located. The case studies were conducted between March and August 2003 and explored in detail a series of aid-funded projects and initiatives supported by the World Bank and other donors, and one project supported by national resources alone. The case studies looked at the implementation history of projects, their gender policy environment, the gendered nature of the sector in which they were located and the gender impacts and outcomes attributable to them. The countries in which the case studies were carried out were selected in order to capture the range of gender issues in the transport sector and the contextual factors that affect both the outcomes and the ways in which transport interventions are conceptualized, designed and implemented. Differences in the nature of national gender policies were also considered in the selection of different case study projects, programmes and policies. Different types and scales of transport projects were also sought to be reflected in the choice of case study. As a result, the case studies included national or sectoral policies designed to promote women’s mobility and access to transport, large-scale urban projects that potentially benefit large numbers of women, rural transport projects that could potentially benefit large numbers of women, and small-scale urban and rural transport projects.
I. THE ROLE OF THE GENDER-POSITIVE ENABLING ENVIRONMENT

If one is to view change in the transport sector in a holistic manner as a gendered structure, then an enabling policy environment at the macrolevel that promotes gender equality is a crucial element for the integration of gender into this sector. Without such an enabling environment, it is likely to be very difficult to integrate gender effectively into the transport sector. Conversely, however, a macroconstitutional, legal and social environment that promotes and enables gender equality is not alone sufficient to integrate gender into the transport sector.

The case studies report a number of examples, such as in Uganda, Senegal and South Africa, where an enabling gender equality environment is being created and where positive initiatives are being developed to promote gender equality in the national policy framework. These have influence at the macropolicy development level and at a decentralized level. However, the case studies highlight the inadequacy of merely having an enabling environment for the integration of gender into the transport sector. For, while it is clear that these national-level initiatives are not always successful, it appears that there is consistently a gap between the developing gender policy of a nation and that policy’s influence on the nation’s transport policy. There is a consistent failing within the transport sector to translate or incorporate changes in the policy dialogue around gender equality into dialogue within the sector.

Perhaps as significant as explicit national gender policy are the changes to decentralized local government structures as outlined in several case studies (in Bangladesh, China, Senegal and South Africa). These changes are designed to increase the relative gender balance of men and women in local government decision-making and may eventually have the effect of raising the profile of gender issues in transport and many other sectors from the bottom up.

II. A GAP BETWEEN MACROGENDER POLICY AND THE TRANSPORT SECTOR

In many countries, there thus appears to be a gap in the process of policy development between the developing gender policy framework and the transport sector policy. In Uganda, for example, an enlightened gender environment at the constitutional level does not transfer to roads policy. Roads policy fails to explicitly include gender in its objectives and strategies and thus
does not reflect the national commitment to gender-responsive development (Tanzarn, 2003, p. 14).

Even more remarkable is the case of South Africa, where a substantial gap is reported between the enabling macroenvironment and transport policy. Despite the fact that the country has a gender-sensitive constitution and is in the vanguard of efforts to develop gender-sensitive macrobudget processes, this has not been translated into a gender-sensitive national transport policy. The planning guidelines set out in the National Land Transport Transition Act, 2000 do not articulate the main objectives of the Constitution. The case study reports that the only example of the rhetoric of the constitution being accommodated is the inclusion in the national transport policy of some women being termed “special categories” or “vulnerable and disadvantaged” and passengers with physical disabilities. The South African case study argues that discussing gender needs is not the same as coming up with strategies to address those gender needs. The South African constitution has good intentions that do not filter down to the national transport policy. As a result of this gap between the macropolicy environment and the national transport policy, gender needs are not adequately addressed (Mahapa, 2003, p. 10).

China also exhibits a gap between its national transport policy and its gender policy. The case study argues that this is due to the perception of the transport sector as being economically and technologically driven and having addressed social impacts insufficiently. Another reason is that gender policy is implemented not through the integration of gender across all policy areas but through women-centred organizations by individuals who may not have the technical capacity to engage with the transport sector (Jie and Kurz, 2003, p. 12).

The case studies did find some examples of national transport policies including the integration of gender issues, although it was not clear to what extent these are anything more than rhetoric. For example, according to the Senegal case study, the National Strategy for Rural Transport will be “implemented following a global, integrated and participative process, that takes gender issues, local contexts, capacities of groups and individuals into consideration.” (Bop, 2003, p. 9).

The Senegalese rural transport strategies identified the stakeholders whose involvement was necessary in order to promote gender equality in the transport policy through representation in different bodies in charge of planning and implementation. These include the Ministry of Family, Social Action and National Solidarity and the Federation of Senegalese Women’s Associations. In
addition, women and vulnerable groups were part of the task forces set up by the Government to oversee policy coordination (Bop, 2003, p. 9). However, the Senegalese case study argues that some of these policy statements may be paying little more than lip service to the idea of integrating gender, as what is written in policy documents may not be acted upon. Some policy statements may also be seen as necessary for external audiences, such as donor agencies, as evidence suggests that ministries that should be included in this process have not been involved (Bop, 2003, p. 20).

Furthermore, institutional structures may already be gender biased, in that such policy statements will not lead to concrete measures to address gender inequalities. In the Senegalese National Strategy for Rural Transport, it is suggested that the State does not allocate resources to fund community roads, which, in practice, are used more by women than by men. Instead, the funding of the community roads is left to the rural communities, whose budget, the case study argues, clearly cannot afford it (Bop, 2003, p. 12). In China, the case study found that the opinions and norms among transport sector professionals act as a barrier. It was found that, among senior transport sector professionals, many more men than women saw no gender issues in transport in China. Of those who did, more men than women saw women’s role in the sector as wives and mothers who could teach their children and husbands road safety, and as a potential workforce (Bop, 2003, p. 15). Furthermore, as shown in the case study from the Lao People’s Democratic Republic, gender considerations may be integrated into policy, but without robust auditing procedures, such as mechanisms for setting targets, there may be no robust mechanisms to ensure that policy is put into practice. The Strategic Directions for the Development of the Road Sector, issued by the Ministry of Communication, Transport, Post and Construction of the Lao People’s Democratic Republic do acknowledge the importance of gender issues with respect to improving rural road access. The directions include goals and objectives to support the wider national policy objectives of food security and poverty alleviation and even include those related to establishing more accountable management through the measurement and reporting of output-based key performance indicators. However, there are no key performance indicators for the integration of gender into the transport sector, which may undermine the efforts to promote gender integration, and such activities could become of secondary importance compared with those that have performance indicators to meet (Phengkhay, 2003, p.13).
III. LABOUR-BASED ROAD CONSTRUCTION AND MAINTENANCE: A COMMUNITY OF GOOD PRACTICE?

While the inclusion of gender in sector-wide transport policy was not found to be widespread and did not often lead to clear action, it is perhaps of equal interest that there were certain subsector areas of transport policy, such as rural roads maintenance and construction, where it was more prevalent. In particular, the awareness of gender issues is becoming more widespread in labour-based construction methods. It is an area in which the choice of technology is seen as providing a space to promote the participation of, and benefits to, women. It is also an area in which government departments are clearly addressing internal and external factors that have a bearing on women’s lives. These factors include redressing the imbalances in staffing, maintaining an equitable representation of women at all levels, looking at procurement policies and promoting construction methods that target the employment and training of women.

In Uganda, for example, the district, urban, and community roads policy appears to be in contrast with the wider policy described earlier. Here the White Paper on Sustainable Maintenance of District, Urban and Community Access Roads could be seen as a watershed in an otherwise male-dominated transport sector. The Paper allows for gender- and women-specific provisions to be implemented to ensure, as well as to strengthen, women’s participation in decision-making regarding district, urban and community roads. It is all the more significant as that the Paper deals with those secondary roads that are largely used by the majority of poor people, including women, to secure their livelihoods. Also, in South Africa, in contrast to a lack of gender issues in the mainstream of South African transport policy, the case study highlights the fact that policy statements issued by a subsidiary ministry connected to rural road management appear to be more enlightened. The agency responsible, the Department of Public Works, acknowledges in its policy documents that there are a number of internal and external efforts that have a bearing on women’s lives. These include redressing the imbalances in staffing and maintaining an equitable representation of women at all levels within the organization. External environmental efforts include the application of measures and policies that promote the optimal distribution of benefits to women, for example through procurement reform policies. In addition, the Department cites the promotion of utilizing labour intensive construction methods that target the employment and training of women. In addition, the Department has translated such policies into action in community-based public works programmes. The Department has introduced the Emerging Female Contractors Development Programme, which
identifies women with potential and then encourages them, through training workshops and networking, to establish businesses within the construction industry. (Mahapa, 2003, p. 14).

It appears that some of this policy development may be happening in areas in which transport sector policy is not as well integrated as is desirable, or in which responsibility for the implementation of transport policy is spread across several ministries. This lack of integration may present an opportunity for policies that support gender integration; it may be easier to support gender integration without the outright opposition often faced in the male-dominated spaces traditionally associated with mainstream transport policy. In addition, the role of a well-established international discussion (see, for example, the ILO-Advisory Support, Information Services and Training Programme) around the involvement of women in labour-based construction methods may also mean national policymakers in this area (who are likely to interact with donor agencies) are used to using donors’ language in policy statements. Much of the discussion connected with the incorporation of women into road maintenance focuses on an easily measurable target of participation. The fact that there is an auditable yardstick of achievement must have an impact on how readily this approach can be adopted as policy. However, all of this does not necessarily translate into action. Furthermore, this fragmented transport policy landscape means that a policy discussion incorporating gender in one subsector will not transfer to action connected with the integration of gender in other transport subsectors, such as road safety, public transport or freight transport.

At other subsector levels outside the area of labour-based construction, few examples of gender-aware transport policies were found the case studies. One notable exception, perhaps, is the policy of the “feminization” of the traffic police in Peru. Due to high levels of corruption in the traditionally male-dominated traffic police force, many male officers were replaced by female officers. This was received with high levels of acceptance (about 70 per cent in one survey) and gives a different image of the police. Through a series of interviews, the Peru case study shows that the inclusion of women on the traffic police force appears to have had a significant social and cultural impact on the Peruvian transport sector (Guiterrez, 2003, p. 16). It appears to have changed overnight the public image of the traffic police and restored some of its credibility and the public’s confidence in their work.
IV. GENDER PRACTICE IN PROJECT PREPARATION AND DESIGN

In the design of transport projects in rural Bangladesh, communities appear to be clearly involved in the local priority-setting stage as well as in road construction and maintenance. As a result, the Rural Infrastructure Development Project included building women-only sections in local markets and involving community organizers in forming labour contracting associations with landless or destitute women for the routine maintenance of, and tree plantation along, the project roads. In addition, the implementation process was also influenced by donors, resulting in the appointment of a project sociologist to supervise and monitor all gender-related activities (Khatun, 2003, p. 5). The various elements included also lent themselves to be easily measured and checked to ensure that implementation had been achieved. In Lesotho, the Government encouraged local councils to participate in the identification of access needs and constraints. However, in practice, the technical design of microlevel projects does not include local communities. Thus, there appears to be an obvious gap between community representatives identifying access problems and the Department of Rural Roads prioritizing and designing interventions without their consultation, which may lead to projects that become “white elephants” and are ineffective in meeting community needs (Ntho and Tsikoane, 2003).

It is noteworthy to see what agencies were responsible for the design and implementation of these good practice projects. In some cases, it was the responsibility of a public works department or a local government ministry, often with remote assistance (financial and monitoring and evaluation) from an external funding agency. In Lesotho, the demand for a road development programme came from the Department of Rural Roads, which was under a ministry other than the one responsible for transport policy. The Department actively requests the district secretaries (of which there are 10) to compile and prioritize requests to fund infrastructure projects in the district, drawing on local councils comprising male and female village representatives. Subsequently, the Department requests funding from a variety of donors for particular interventions. Rarely is a mainstream transport ministry the responsible agency. It is perhaps reasonable to expect more gender-integrated projects to be more prevalent in subsidiary areas of a bureaucracy, where such projects may present less of a challenge to institutionalized gender bias (Ntho and Tsikoane, 2003).

Other case studies present a more varied analysis. The inclusion of gender in these projects is largely characterized by its failure to influence implementation. In particular, gender “goes missing” between the initial project
idea and the project planning documents, and between the project planning documents and actual implementation. This occurred in an urban Bangladesh case. The development of the World Bank implementation project DUTP emerged as a result of recommendations from studies conducted under the Planning Commission and UNDP Greater Dhaka Integrated Transport Study (DITS, 1994). The Study included a working paper on the mobility of women of which gender was an important component. There was also a series of World Bank-funded preparation studies, including the Gender Dimensions in Transport in the Dhaka Metropolitan Area (Shefali, 2000). However, when DUTP was established, even though it was a direct result of recommendations from the Study, there was no gender component within it. Despite the identification of gender as an issue in the project preparation stages within the Study, it reports that the implementation measures that were funded completely failed to address any gender issues identified during project preparation. Instead, they concentrated on the traditional elements of urban transport planning, including developing road infrastructure, constructing flyovers, developing bus terminals and bus routes, and improving traffic flow management across the road network. Despite the loss of gender issues from the project, DUTP was funded and is ongoing. This is probably a good example of a project funded on gender rationales but from which gender as an issue disappears during implementation (Zohir, 2003).

The Lima Urban Transport Project, is similar case, in which gender issues were lost between the stages of the project’s design. The Peru case study concludes that gender issues were not explicit in the Transport Rehabilitation Project, despite gender clearly being part of other World Bank projects in the same country. From looking at only these two cases, it is not clear how widespread the loss of gender issues is in transport investment programmes between initial project preparation and approval, but more systematic mapping of such a gap is clearly required if one is not to conclude that it is widespread (Guiterrez, 2003).

The roles (both positive and negative) of external agencies in the promotion of gender integration are keys in all projects. The Viet Nam case study describes the “ownership” of a project’s gender component as originating from external actor rather than from national agencies. It highlights the fact that the first attempt to mainstream gender in the Viet Nam waterways authority came from external donors and consultants through the Inland Waterways Project which was funded by CIDA. It was clear that, while gender equality was not explicitly included in the objectives of the Project, gender was addressed as a cross-cutting issue throughout the project design, implementation and evaluation phases in keeping with CIDA policy on gender equality. In addition,
international gender specialists and trainers were assigned to the project, and mainstreaming gender was made an explicit function of the project manager (Vu, 2003, p. 7). CIDA projects in China have also made gender a cross-cutting issue. These projects have sought to build capacity to develop the transport sector, and have included quotas and targets for the training of women within the projects. It was found that such approaches to redress gender balances within the institutions have been met with mixed results. Attitudes among Chinese project staff have been mixed, and the case study concludes that a quota system may have a limited effect on gender equality in the short term. Without the constant “driving” of gender integration by external agencies, which is ultimately unsustainable, it appears that there need to be clear mechanisms in place to ensure that gender integration is carried out by the implementing bodies (Jie and Kurz, 2003, p. 30).

V. THE IMPORTANCE OF PROJECT LEARNING AND OUTCOMES

Monitoring and evaluation are the keys to the development of project knowledge. They ensure that projects follow their objectives, that the lessons from a project are learned, and that best practices are fostered across the development sector as a whole. Monitoring and evaluation were also clearly highlighted in the case study reports as an area in which gaps appeared. There appeared to be a mismatch between the desire to show a project had met its planned gender-focused outcomes and, through a lack of gender-sensitive monitoring indicators, the ability to do so or to rectify any divergence from the desired outcomes before the project’s completion. Several case study reports cite examples in which monitoring and evaluation appeared not to find the gender priorities set out in the project design. In Viet Nam, for example, the case study reports that there were several levels of monitoring during the project implementation, and the higher the level of monitoring the more powerful it was (both in terms of decision-making and funds control. Conversely, the local voice was less important, and women’s participation was almost unnecessary. Furthermore, the project fund management and the provincial officials had much better technical expertise than commune staff. As a result, albeit with some variation, the projects often achieved a very high quality of construction and contract management. This was what the monitoring team thought important and it was allied with the technical skills available, at the expense of its achievement in building beneficiaries management capacity and communication between waterway inspectors and population (Vu, 2003, p. 14).
In the project-level analysis, some case study reports show that, through effective monitoring and auditing progress, disparities and shortfalls within the projects had become evident, but they were able to be rectified either during the project or in subsequent projects. For example, with the benefit of hindsight, the latest version of the Ugandan Road Sector Project has introduced “gender capacity development plans”, which have very specific gendered actions for each component of the project (these being road sector institutions, labour-based training, national gravel roads, district roads and community access). Similarly, the Bangladesh Rural Integrated Development Plan is the third to take place since the ADB financed the first project in 1988. The Local Government Engineering Department has paid special attention to gender issues in the latest version of the project. It has put in place a sociologist to supervise gender issues from headquarters and a Gender Action Plan to address gender issues, highlighting objectives, target groups, indicators, activities and targets (Khatun, 2003). However, the degree to which the other projects explored by the case studies were able to rectify the gaps and inconsistencies is a potential cause for concern. As a result, thought should be given to ways in which the projects could be “retrofitted” with good gender practice.

The case studies conducted under this research project also highlight a variety of individual and community experiences resulting from efforts to integrate gender into transport investments. This section does not begin to do justice to the richness of data presented in the case study reports. However, key issues are highlighted, including a range of positive outcomes from the projects. In particular, a number of labour-based construction projects (in Uganda and Lesotho) and rural infrastructure projects (in Bangladesh) appear to have noticeable positive impacts on the gendered outcomes of opportunity and empowerment. However, here again gaps and inconsistencies appear. Many of the case studies report negative impacts on gendered outcomes around personal security. It appears that very few of the case studies are explicitly designed for the impact that projects may have on gendered security. Furthermore, there appear to be inconsistencies in the understanding of the effect that project activities will have on outcomes. A number of projects, which were examined by reviewers, sought to improve infrastructure, yet communities were often clear that the positive outcomes from such activities would be greatly reduced unless enhanced transport services followed such infrastructure improvements.
CONCLUSION AND RECOMMENDATION

The gender-enabling environment found in many of the case study countries is not often translated into practice across the transport sector. Even in Uganda, the best gender practice case study identified in this paper, the research reveals a gap between the national gender framework and the consistent inclusion of gender in the transport sector. The bulk of the other cases reveal substantial gaps. Given the strength and explicitness of the commitment to gender in the national frameworks, its absence as a measurable aspect of transport policy can be viewed as a deficit. This deficit is currently visible across the board.

Thus, although the international policy discourse environment is likely to result in developing countries including gender in their policy frameworks, it does not necessarily lead to the systematic integration of gender into the transport sector. Some countries were found to incorporate general statements on the consideration of gender in transport policy frameworks or project planning documents. However, in many cases, the use of gendered language is likely to be a result of the interaction with international donor agencies and is perhaps done in order to receive funding. Rarely were these statements translated into action.

Auditing is therefore necessary to ensure the integration of gender at the mesolevel. For example, national and regional transport policy institutions have no clear process to identify (a) the gendered nature of the transport sector, (b) how many men and women are working in the transport sector, (c) who is planning the transport sector or (d) what women’s and men’s transport needs are or how they are met. That there was little understanding demonstrated of the role of transport in maternal mortality, water management or household survival strategies, for example, is an obvious and visible failure. In addition, there were no clear examples of the processes by which the needs of women and men were incorporated into project design. It should also be borne in mind that auditing is a revenue expenditure item rather than a capital expenditure item. The bias towards capital expenditure items rather than revenue items favours external actors in the policy discourse and the share of development resources: one-off construction contracts for roads on the basis of gender rationales with no follow-up evaluation of actual beneficiaries is not an uncommon experience within the field of gender and transport.

The importance of auditing to the lowest levels of the implementation hierarchy is clearly seen in the examples of projects that are funded on gender rationales but from which gender disappears as an issue or the purpose for the
action during the implementation of the project. Such factors as a lack of capacity to implement gender actions, a lack of monitoring indicators and a resistance to change all feature in this disappearance. The case studies report such disappearances to be commonplace. There is no systematic database available on how often gender is “lost” in this way, but it is something that requires further research, and there is a need to fund a pilot project for this purpose.

This paper recommends that “retrofitting” be required to promote the integration of gender into transport policy in order to overcome institutional resistance to change within transport organizations. Externally funded “retrofitting” is necessary in order to identify gendered transport needs, audit policies and projects and develop gender policy into transport action.

REFERENCES


Elson, Diane, Barbara Evers and Jeff Turner (1999). “Transport sector programmes in developing countries: integrating a gender analysis”, GENECON Unit, Graduate School of Social Sciences, University of Manchester, United Kingdom.


FINDING FISTULA PATIENTS IN ASIA

Mika Kunieda*

ABSTRACT

In developing countries, the distance to roads and health facilities is said to be a major obstacle in accessing reproductive health care or delivering health care to the household. The access problem is in addition to what are known to be the causes of high maternal mortality and morbidity, which include the problem of obstetric fistula, the low economic and social status of women, poverty, poor nutrition and health, and early pregnancy. However, very little is known about the relationship between the lack of emergency transport and obstetric fistula, a problem that occurs as a result of a lack of access to health services. This study utilizes existing health and transport data, such as the maternal mortality rate, the percentages of stunting and assisted births by health professionals, and the rural population who live within 2 km of a road (the rural access index) in order to identify the countries in Asia in which women may be at a higher risk of obstetric fistula. The analysis finds that access to health services in Afghanistan, Nepal and Timor-Leste among some other countries, may need to be improved further in order to save more mothers’ lives and to prevent pregnancy-related injuries. However, because of the limitation of the available data, further investigation into the effect of the physical and mobility problem in accessing health care would be required to reach any definite conclusion.

I. OBSTRUCTED LABOUR: BACKGROUND

According to UNFPA, every minute a woman dies somewhere in pregnancy or childbirth. Up to 15 per cent of pregnant women in all population groups experience potentially fatal complications. This adds up to 1,400 women dying each day, or an estimated 529,000 each year, from pregnancy-related causes. For each woman who dies, about 20 women survive but suffer

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from serious disease, disability or physical damage caused by complications from pregnancy or childbirth.

Obstructed labour is a major cause of the deaths (maternal mortality) and disabilities (maternal morbidity) mentioned above. Labour is obstructed when the passage of the fetus is blocked. If obstructed labour is not diagnosed in time or when it is not properly managed, it can lead to the death or disability of the mother or fetus. One of the major disabilities that can occur as a result of obstructed labour is obstetric fistula.

Studies have indicated that 1 to 2 out of every 100 births in Nigeria and three out of every 100 in India are obstructed. However, many of these women, and particularly rural women, in developing countries are without access to emergency obstetric care. The World Health Organization estimates that approximately 2 million women have untreated fistula and that approximately 100,000 women develop fistula each year, most of them living in sub-Saharan Africa and Asia.

Obstetric fistula is prevalent in developing countries due to a lack of adequate health-care delivery services and facilities, including proper diagnosis, as well as poor nutrition, poverty, and other socio-economic and cultural factors, which prevent antenatal care and delivery, or access to such services. Many developed countries have eliminated the problem of obstetric fistula as a result of proper and timely diagnosis and Caesarean section operations when labour is obstructed. However, the relationship between obstructed labour and obstetric fistula in developing countries is unknown as data are available only from tertiary hospitals, which only a fortunate few can reach. Virtually nothing is known about fistula patients in rural areas because they are frequently either unaware that this condition can be repaired or unable to access health-care facilities due to a lack of transport or other factors.

Only 58 per cent of women in developing countries deliver with the assistance of a professional (a midwife or doctor), and only 40 per cent give birth in a hospital or health centre. Ideally, and according to the reproductive health benchmark set by the General Assembly in its resolution 5-21/2 of 2 July 1999, at least 40 per cent of births should be assisted by skilled birth attendants where maternal mortality is very high and 80 per cent globally by 2005. The corresponding targets for the years 2010 and 2015 are 50 and 85 per cent, and 60 and 90 per cent, respectively.

1 Adopted at the Special session of the General Assembly for the overall review and appraisal of the implementation of the Programme of Action of the International Conference on Population and Development, held from 30 June to 2 July 1999.
A cross country regression analysis of 28 countries for which data were available (figure 1) shows that maternal mortality can be reduced by raising the percentage of births assisted by skilled birth attendants. The scatter plot in the figure clearly shows that a higher percentage of assisted births corresponds to a lower MMR.

![Figure 1. Maternal mortality rate versus assisted births (percentage)](image)

\[ y = -35.449x + 941.77 \]

\[ R^2 = 0.4379 \]

\[ p\text{-value} = 0.00000203 \]


**Obstetric Fistula: a review of the situation**

There is very little literature on the prevalence of obstetric fistula in developing countries. UNFPA is currently the lead agency in the campaign to end obstetric fistula in developing countries. This campaign has funded the assessment of the situation in some, mostly African, countries. For example, in Kenya, it was estimated that there were 3,000 new cases of fistula per year, with approximately one to two fistulas developing per 1,000 deliveries, meaning that there was a backlog of 300,000 untreated cases. Only 7.5 per cent of women with fistula were able to access treatment. The number of fistula operations performed annually between 1992 and 2001 increased steadily from a low of 36 cases to a high of 479 cases. In the four districts surveyed, there were 113 reported fistula cases, of which 94 were repaired. Most of these repair surgeries were performed at hospitals in West Pokot, Kenya. In Malawi, there were 200 cases in 2003. In Mali, there were 568 cases over 3 years. In the
Niger, approximately 200 fistula cases have been recorded each year since 2003. In Nigeria, 1,100 fistula patients were cured in one year. The Addis Ababa Fistula Hospital also cures 1,200 fistula patients each year. See table 1 for more details.

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of cases and year(s)</th>
<th>Average cured per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>241 cases in 2002</td>
<td>241</td>
</tr>
<tr>
<td>Benin</td>
<td>237 cases, 2000-2003</td>
<td>60</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>420 cases, 1997-2002</td>
<td>70</td>
</tr>
<tr>
<td>Chad</td>
<td>162 cases, 2002-2003</td>
<td>81</td>
</tr>
<tr>
<td>Eritrea</td>
<td>37 cases in 2002</td>
<td>37</td>
</tr>
<tr>
<td>Kenya</td>
<td>36 cases in 1992</td>
<td>476</td>
</tr>
<tr>
<td></td>
<td>479 cases in 2001</td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td>200 cases in 2003</td>
<td>200</td>
</tr>
<tr>
<td>Mali</td>
<td>568 cases in three years</td>
<td>189</td>
</tr>
<tr>
<td>Niger</td>
<td>200 cases recorded each year</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>since 2003</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>1 100 cases in one year</td>
<td>1 100</td>
</tr>
<tr>
<td>Uganda</td>
<td>283 cases in one year</td>
<td>283</td>
</tr>
<tr>
<td>Zambia</td>
<td>244 cases in one year</td>
<td>244</td>
</tr>
</tbody>
</table>


As can be seen in table 1, Bangladesh is the only country in Asia where a situational analysis was completed. The analysis found that, in 2002, six medical college hospitals saw a total of 241 fistula patients. Among them, 192 women were admitted and 123 were treated. Most of the repair surgeries were performed at the Dhaka and Chittagong medical college hospitals. It was also estimated that, for every 1,000 married women, there were 1.69 fistula cases in Bangladesh.

As mentioned previously, the lack of data on the prevalence of obstetric fistula prevents a rigorous analysis of the relation between obstetric fistula and its causal factors, including the lack of access to health services. However, experience from Africa shows that, for each maternal death due to obstetric fistula, there are 20 girls and women with the condition who were fortunate enough to survive to tell their story, but who were not fortunate enough to
access health care and surgery in time. In the absence of data on fistula prevalence, this paper utilized MMR as a proxy indicator of the problem.

II. FACTORS LEADING TO OBSTETRIC FISTULA

**Low economic and social status of women**

The low economic and social status of women is both a cause and a result of poverty. As the social status of women is generally lower than that of men, women are more likely to be malnourished, illiterate and unable to make decisions on reproductive health or on accessing health care. In this study, the GEM index of human development, as defined and measured by UNDP was used in order to get a better picture of women’s lives in developing countries. GEM is a composite index measuring gender inequality on three basic dimensions of empowerment: economic participation and decision-making, political participation and decision-making, and power over economic resources. To understand the effect of women’s empowerment on maternal mortality, a regression analysis was performed between GEM and MMR, taking GEM as the explanatory variable and MMR as the response variable.

![Figure 2. Maternal mortality rate versus gender empowerment measure](image)


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3 The 13 countries included in the analysis were Bangladesh, Cambodia, Fiji, the Islamic Republic of Iran, Malaysia, Mongolia, Pakistan, the Philippines, the Republic of Korea, Singapore, Sri Lanka, Thailand, and Yemen.
Figure 2 shows the results of the regression analysis. Generally, as the degree of empowerment of women increases, MMR decreases.

What may GEM indicate in terms of mobility? Although data on GEM for many African countries where fistula was known to be prevalent were not available, restricted or low empowerment meant that the women had little say in many of the decisions in their lives, including those on mobility. It is interesting to note that, in predominately Muslim countries such as Bangladesh, the Islamic Republic of Iran and Pakistan, where the mobility of women is known to be restricted, GEM is also quite low. The degree to which the women were allowed to make decisions that affected their access to basic and emergency health care and obstetric care, however, is yet to be fully ascertained.

**Poor nutrition and health**

The medical literature reports (see, for example, Konje and Ladipo, 2000) that obstructed labour is directly related to the height of the mother, which is influenced by nutritional status in childhood and adolescence. Women who never grew to their full potential (according to their genetic background) and are on average under 152 cm will most likely have a small frame and a narrow pelvis. This means that an average-sized fetal head will not be able to pass through the mother’s small pelvis or narrow birth canal. This disproportion between the fetal head and the maternal pelvis is a major indication for the risk of obstructed labour and the possible need for a Caesarean delivery. The height-for-age indicator, or stunting, can therefore be considered an indicator of the risk of obstructed labour. Low food intake and malnutrition, which are a result of poverty, the low status of women and their lack of education, lead to stunting.

In Ethiopia and Nigeria, the two countries that are known to have a relatively high fistula prevalence rate, the proportion of stunted children under 5 years of age are 52 per cent and 38 per cent, respectively. According to some estimates, three quarters of the world’s underweight and stunted children live in Asia. According to UNICEF, the top 10 countries in Asia where children have a high biological risk due to the proportion of their stunted children are the Democratic People’s Republic of Korea (42 per cent), Timor-Leste (28 per cent), Afghanistan (25 per cent), India (23 per cent), Nepal (21 per cent), the Lao People’s Democratic Republic (21 per cent), Cambodia (21 per cent), Pakistan

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4 The UNICEF definition for moderate and severe stunting is “below minus two standard deviations from median weight for height of reference population” (see www.unicef.org/infobycountry/stats_popup2.html).
(18 per cent), Bangladesh (17 per cent) and Bhutan (15 per cent). In of these countries there is a high prevalence of severely to moderately stunted children or a high to medium biological risk. A significant proportion of children in Afghanistan, Nepal, Timor-Leste and India are severely to moderately stunted.5

A regression analysis was performed with stunting as the explanatory variable and MMR as the response variable. The results are shown in figure 3. It can be seen that there is a positive relation between stunting and maternal mortality: a higher percentage of stunting corresponds to a higher MMR.

![Figure 3. Maternal mortality rate and stunting](image)


Note: The 21 countries/regions for which statistics were available are Afghanistan, Bangladesh, Bhutan, Cambodia, China, Ethiopia, India, the Democratic People’s Republic of Korea, the Lao People’s Democratic Republic, Mongolia, Myanmar, Nepal, the Niger, Nigeria, northern Pakistan, the Philippines, Singapore, Sri Lanka, Timor-Leste, Thailand and Viet Nam.

**Early marriage, pregnancy and delivery**

Girls who marry early and who are shorter than the average girls of their genetic background and do not get enough calorie intake tend to be at

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5 In different countries, different averages are used as an indicator for a higher risk of obstructed labour. For example, girls under 155 cm in Burkina Faso, 156 cm in Denmark, 150 cm in Kenya, 146 cm in Tanzania and 140 cm in India are considered to be at a higher biological risk when giving birth.
a greater risk of obstructed labour and obstetric fistula. However, early marriage in itself is not a direct cause of obstetric fistula, and this paper does not intend to provoke a debate on this local tradition or extensive discussion on early marriages.

The mean age of women at first delivery may be considered a social risk indicator. This should be a simple figure that takes into account societal norms and that expresses the risk of fistula for a young woman. Unfortunately, no published data on the mean age of girls at first delivery is available.

The health risk indicator was examined next. Delivery at home could be seen as a health risk indicator as those who attend the birth, such as the mother-in-law, sisters-in-law or neighbours, are unlikely to identify problems that would lead to obstructed labour. The community surrounding the woman may also not be able to identify the critical time to help the woman or transfer her to a medically trained professional. However, data on home deliveries were also non-existent. Therefore, a proxy indicator, the percentage of births attended by skilled health personnel, such as a doctor, nurse or midwife, was utilized in this paper.

The 10 countries that have the lowest percentage of births attended by skilled health personnel are Ethiopia (6 per cent), Bangladesh (13 per cent), Afghanistan (14 per cent), Nepal (15 per cent), the Niger (16 per cent), Chad (16 per cent), Timor-Leste (18 per cent), the Lao People’s Democratic Republic (19 per cent), Pakistan (23 per cent) and Haiti (24 per cent).

The data in table 2 and in figure 1 clearly show that a high MMR or a high risk of death from maternal causes is a function of a low percentage of attended births.

**Access and transportation to health facilities**

Another major causal factor of obstetric fistula is the low utilization of health services, including having a birth attendant at delivery, due to rural women’s time and mobility constraints, and particularly due to the lack of emergency transportation to health centres or hospitals.

In a study in the southern region of Ethiopia, Kunieda and Mulu (2006) found that most health facilities were located along the road network. It may be assumed that health facilities in Asia are also situated along a reasonably accessible road. This means that the RAI developed by the World Bank can be used to analyse the effect of physical access to health facilities. Since 2006,
Table 2. Top 10 countries that have a low percentage of attended births and adjusted maternal mortality rate 2000

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Country</th>
<th>Percentage of attended births</th>
<th>Adjusted maternal mortality rate 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ethiopia</td>
<td>6</td>
<td>850</td>
</tr>
<tr>
<td>2.</td>
<td>Bangladesh*</td>
<td>13</td>
<td>380</td>
</tr>
<tr>
<td>3.</td>
<td>Afghanistan*</td>
<td>14</td>
<td>1,900</td>
</tr>
<tr>
<td>4.</td>
<td>Nepal*</td>
<td>15</td>
<td>740</td>
</tr>
<tr>
<td>5.</td>
<td>Niger</td>
<td>16</td>
<td>1,600</td>
</tr>
<tr>
<td>6.</td>
<td>Chad</td>
<td>16</td>
<td>1,100</td>
</tr>
<tr>
<td>7.</td>
<td>Timor-Leste*</td>
<td>18</td>
<td>660</td>
</tr>
<tr>
<td>8.</td>
<td>Lao People’s Democratic Republic*</td>
<td>19</td>
<td>650</td>
</tr>
<tr>
<td>9.</td>
<td>Pakistan*</td>
<td>23</td>
<td>500</td>
</tr>
<tr>
<td>10.</td>
<td>Haiti</td>
<td>24</td>
<td>680</td>
</tr>
</tbody>
</table>


* Asian country

RAI has been available as one of the world development indicators published by the World Bank.6

RAI shows the proportion of the total rural population who live within 2 km or a 20-minute walk from an all-weather road. The reverse of this indicator points to the proportion of the total rural population who live beyond 2 km of an all-weather road. For example, in Nepal, 85 per cent of the rural population live more than 2 km from an all-weather road or a road that is passable during most times of the year. The corresponding figures for Bangladesh and Mongolia are 63 per cent and 64 per cent, respectively. RAIs for Asian countries are listed in annex 1, which includes a short description of the problems women face in accessing reproductive health-care services due to the lack of transportation facilities in some of the Asian countries included in this paper.

Observations in Africa, notably in an assessment report of fistula in the United Republic of Tanzania (Women’s Dignity Project, UNFPA and the Government of the United Republic of Tanzania Ministry of Health 2002) and from the Addis Ababa Fistula Hospital, point to the fact that the further

6 For more information, see Roberts and others, 2006.
a woman lives from a health centre, the more likely she is to be stunted, continue hard labour throughout her pregnancy, unable to access prenatal care, give birth at home, and, ultimately, be at a higher risk for obstructed labour.

Figure 4 shows the result of a regression analysis, depicting the relationship between MMR and RAI for 28 countries. The p-value was 0.0135, and the correlation was significant at a 1 per cent level. The regression results show that RAI could explain 21 per cent of MMR among the sample countries. However, apparently there were few outliers in the data set. If these outliers were excluded from the analysis, RAI could explain a much higher proportion of MMR.

Figure 4. Maternal mortality rate and the rural access index

<table>
<thead>
<tr>
<th>RAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>120</td>
</tr>
</tbody>
</table>

MMR

<table>
<thead>
<tr>
<th>y = -7.874x + 867.87</th>
</tr>
</thead>
<tbody>
<tr>
<td>R² = 0.2125</td>
</tr>
<tr>
<td>p-value = 0.0135</td>
</tr>
</tbody>
</table>


It is also important to note some of the limitations of RAI. A high value of RAI does not necessarily indicate a greater level of accessibility. The linear distance from the road and the topography of the area in which the expectant mother lives are both important factors affecting accessibility. RAI considers only distance and not topography and therefore has limitations in assessing true accessibility.

Quality of care

There are said to be three types of delays that lead to maternal mortality and morbidity. The first is the delay in accessing care or making the
decision to seek care. The second is the delay in arranging transport or access to the nearest health centre due to a lack of a vehicle or money. The third is the delay in referral or obtaining care once at the health facility. This paper would not be complete without discussing the quality of care or the “last delay” in being referred properly or in obtaining care.

The quality of care with regard to obstetric fistula varies from one country to another. This is due to the fact that, in most countries, fistula repair surgery is a highly specialized field that is usually not taught as part of medical training. The Addis Ababa Fistula Hospital is the world’s leading teaching hospital specializing in fistula surgery. Obstetrics and gynaecology doctors from Ethiopia and other developing countries spend two months at the Fistula Hospital to receive specialized on-the-job training in fistula repair surgery. Sometimes, the Fistula Hospital must perform surgery on patients whose previous operations had been botched or through which their condition had worsened. According to the medical director of the Fistula Hospital, these surgeries are the most complicated ones. This points to the need to train more doctors who can undertake this specialized surgery. However, constraints have led to a waiting list of one to two years for doctors who would like to be trained in fistula repair surgery.

In Asia, Bangladesh is currently in the process of constructing a national fistula centre. Doctors from Karachi, Pakistan, and New Delhi, India, have also been trained at the Addis Ababa Fistula Hospital. Timely referral and timely transport from the rural area health clinics, centres and hospitals to doctors who have been trained in fistula surgery in each country will help to cure fistula patients. This will also prevent not only further nerve injuries resulting from immobility but also suicide due to the shame of leaking and isolation.

**CONCLUSION**

This paper finds that, although access to transport is only one part of a complex problem, it is a crucial factor in reducing maternal, as well as child and foetus, deaths and disabilities. UNFPA reports a dearth of explanatory data related to maternal mortality. The author’s hypothesis when beginning this paper was that transport data could fill in this gap of health knowledge. A listing and cross-country analysis of RAI and other key maternal indicators found that, although a correlation between transport and available health statistics could be proved, the statistical significance was not very high. This could possibly be due to the substitution of proxy indicators, such as MMR for
the fistula prevalence rate, and the use of a RAI as an indicator for health facility access. If a gender-disaggregated RAI were available, it might produce different results as women are known to have different travel needs and problems that RAI has clearly not captured.

A further compilation and a greater availability of data on transport and access, disaggregated by gender and geographical area, would help not only to improve the findings of the analysis presented in this paper but also to identify the areas where obstetric fistula may be a problem in Asia. In the meantime, however, the probability of obstetric emergencies, including obstetric fistula, could be preliminarily investigated by using the easy-to-obtain traditional indicators of maternal mortality, the rate of assisted births and RAI.
## Annex 1

### Compilation of data used in this paper

<table>
<thead>
<tr>
<th>Country</th>
<th>MMR (UNFPA)</th>
<th>Stunted children (UNICEF)</th>
<th>Assisted births (UNICEF)</th>
<th>RAI (WDI)</th>
<th>GEM (UNDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>1 900</td>
<td>54</td>
<td>14</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td>380</td>
<td>43</td>
<td>13</td>
<td>37</td>
<td>0.218</td>
</tr>
<tr>
<td>Bhutan</td>
<td>420</td>
<td>40</td>
<td>37</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>450</td>
<td>45</td>
<td>32</td>
<td>87</td>
<td>0.364</td>
</tr>
<tr>
<td>China</td>
<td>56</td>
<td>14</td>
<td>96</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>850</td>
<td>52</td>
<td>6</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Fiji</td>
<td>75</td>
<td>99</td>
<td>76</td>
<td>3.381</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>540</td>
<td>46</td>
<td>43</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>230</td>
<td>72</td>
<td>94</td>
<td>3.316</td>
<td></td>
</tr>
<tr>
<td>Iran (Islamic Republic of)</td>
<td>76</td>
<td>90</td>
<td>66</td>
<td>3.316</td>
<td></td>
</tr>
<tr>
<td>Democratic People’s Republic of Korea</td>
<td>67</td>
<td>37</td>
<td>97</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>20</td>
<td>100</td>
<td>89</td>
<td>0.479</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>41</td>
<td>97</td>
<td>82</td>
<td>0.502</td>
<td></td>
</tr>
<tr>
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<td>110</td>
<td>25</td>
<td>97</td>
<td>36</td>
<td>0.388</td>
</tr>
<tr>
<td>Myanmar</td>
<td>360</td>
<td>32</td>
<td>57</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Nepal</td>
<td>740</td>
<td>51</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
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<td>Niger</td>
<td>1 600</td>
<td>40</td>
<td>16</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>800</td>
<td>38</td>
<td>35</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>500</td>
<td>37</td>
<td>23</td>
<td>77</td>
<td>0.379</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>300</td>
<td>41</td>
<td>68</td>
<td>0.526</td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>200</td>
<td>30</td>
<td>60</td>
<td>80</td>
<td>0.654</td>
</tr>
<tr>
<td>Singapore</td>
<td>30</td>
<td>2</td>
<td>100</td>
<td>21</td>
<td>0.452</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>92</td>
<td>14</td>
<td>96</td>
<td>92</td>
<td>0.370</td>
</tr>
<tr>
<td>Thailand</td>
<td>44</td>
<td>13</td>
<td>99</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>660</td>
<td>49</td>
<td>18</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>130</td>
<td>32</td>
<td>85</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>Yemen</td>
<td>570</td>
<td>27</td>
<td>73</td>
<td>0.123</td>
<td></td>
</tr>
</tbody>
</table>

Annex 2
Profiles of countries with a possibly high fistula prevalence

This paper finds that women in Afghanistan, Bangladesh, Bhutan, Cambodia, India, the Lao People’s Democratic Republic, Nepal, Pakistan, Timor-Leste and Viet Nam are at a higher risk of obstetric fistula due to economic, social and cultural factors, including RAI. In figure 5 their level of risk is compared to their RAI and proportion of assisted births.

Figure 5. Country comparison of fistula causal indicators

In Timor-Leste, the Demographic and Health Survey found that 25 per cent of families, mainly from remote mountain areas, have to travel two hours or more to reach nurses or paramedics in government health-care facilities. A study on travel by the World Bank (2005c) found that village centres are on average 0.7 km from a vehicle-passable road and 4.8 km from a paved road, whereas urban centres are on average 0.3 km from a vehicle-passable road and 0.3 km from a paved road. The road network is quite extensive compared with that of many developing countries, and access to roads and to health facilities would not be difficult if more transport, including intermediate means of transport, were available to carry mothers experiencing difficulties in labour. According to the World Bank study, there were only 19,600 vehicles in...
Timor-Leste, including 6,500 motorcycles. A significant number of such vehicles were owned by international organizations.

In Afghanistan, recent surveys (World Bank, 2005a) have revealed that almost half of all deaths among women of reproductive age are a result of pregnancy and childbirth. A range of factors contributes to this situation, such as a lack of access to basic health facilities. Only 40 per cent of the population live in areas covered by basic health facilities, and only 9 per cent of rural households reported having a health facility in their village. Other factors are a lack of female staff at the existing facilities, particularly in rural areas, and marked rural-urban disparities in the quality of health facilities. A lack of infrastructure (roads and transport) and security also reduces mobility and accessibility. Half of the respondents in a Tufts University survey (Mazurana, Stites and Nojumi, 2004) in Badghis, Herat, Kabul, Kandahar and Nangarhar provinces in Afghanistan reported that they were unable to access some form of health care or had to travel on average three hours to reach the health facility.

Since women would normally consult their male family members about seeking medical care and require the assistance of men to travel to a health clinic, the lack of male knowledge and understanding of reproductive health care among men was found to be an obstacle equally as important as the women’s own lack of awareness.

In Nepal, ethnicity or caste is an important factor that may help explain why women access emergency obstetric care differently. Neupane (2004) found that, in mountainous areas of the country, high-caste men were unwilling to transport the lowest caste (Dalit) women who were in labour and needed emergency obstetric care. Also, Dalit women could not join emergency transport funds, which could make transportation more affordable to them.

In the Lao People’s Democratic Republic, a gender profile (World Bank, 2005b) confirms that women are often forced to walk long distances to seek medical help and supplies because of the dearth of health centres and the lack of roads and transport. Many women do not utilize health services due to the difficulty of reaching a health facility.

In Cambodia, cultural beliefs, the low quality of health care, the poor state of rural roads, a lack of transport and poor access to a clean water supply contribute to a high MMR. The Demographic and Health Survey 2000 (Cambodia National Institute of Statistics, 2000) found that more than 95 per cent of women had one or more problems in accessing health care. Of the women surveyed, 88 per cent reported that they were unable to pay for health
care or other indirect costs, such as transportation expenses. The survey revealed that, of the people who had recently lost their land, 46 per cent of the cases were related to direct and indirect health expenditures. Of the women surveyed, 40 per cent identified the distance to health facilities and transportation as a constraint (World Bank, 2004).

In Pakistan, a World Bank study (Vishwanath, 2006) found that the utilization of maternal services was low, with only half of expectant mothers receiving antenatal care and tetanus toxoid shots and nearly three-quarters giving birth at home. This was due to the inaccessibility of public primary health facilities. Of the people living in rural communities, 42 per cent did not have a primary health facility within 5 km of their homes, and 35 per cent did not have either a public health facility nearby or a female health worker. However, the lack of transport was not the only reason why women did not utilize health services; seclusion practices and the weak enforcement of existing laws resulted in an increased reliance on informal social protection institutions and arrangements.

In Viet Nam, access to hospitals is a major problem. One study found that the poorest women had the least access to safe motherhood services, with some having to travel 20 km from their residence to reach the nearest district hospital. Even on average, women had to travel almost 10 km from their residence to the nearest district hospital (Knowles, date unknown).

**REFERENCES**


IMPACT OF IMPROVED COMMUNICATION ON WOMEN’S TRANSPORT NEEDS AND EMPOWERMENT IN BANGLADESH

Marie Sicat*

ABSTRACT

The effective development of transport and ICT infrastructure can play a strong role in fostering gender equality and women’s empowerment and contribute to the region’s achievement of the Millennium Development Goals. Harnessing the potential for synergies between improved communications and ICTs with transport development can play a crucial role in promoting the empowerment and general welfare of women.

In Bangladesh, cultural and social norms often restrict women’s travel, which may prevent them from doing activities outside their homes. This paper, which is based on case studies, provides insights on how complementary interventions in the transport, ICT and other infrastructure sectors can facilitate women’s access to a broad range of socio-economic opportunities and services. In this way, the interventions can contribute to promoting the empowerment and general welfare of women.

Keywords: women, gender, entrepreneurship, transport, ICTs, women’s empowerment

I. INTRODUCTION AND BACKGROUND

With the costliness of investments in transport and ICTs infrastructure, Governments are seeking ways to optimize their investments in these areas. Projects in different types of infrastructure can interact and result in compounded benefits through proper planning. There are potential synergies between better communications and ICT systems and improvements in transport infrastructure. Better transport facilities and roads impact positively on communication flows. Similarly, the availability of improved communications

* Associate Social Affairs Officer, Gender and Development Section, Emerging Social Issues Division, ESCAP.
and ICT infrastructure has an effect on people’s travel patterns and transport needs.

UNDP has estimated that, among the 1.3 billion poor people in the developing world, women represent approximately 70 per cent. Millennium Development Goal 3 is committed to promoting gender equality and women’s empowerment. Effective transport and ICT infrastructure development can play a strong role in fostering gender equality and women’s empowerment, and contribute to the region’s achievement of the targets of Millennium Development Goal 3 and other Goals.

As women and men have different economic and social roles and responsibilities and are subject to differing social norms, their access to facilities and services, as well as their needs, often differ with regard to transport and ICTs. While ensuring women’s access to ICTs and averting a gender “digital divide” in developing countries has been recognized as important to women’s empowerment, the relationship of transport to gender equality and to the empowerment of women is less understood. In planning infrastructure facilities, harnessing the potential for synergies between improved communications and ICTs with transport development can play a crucial role in promoting gender equality and women’s empowerment. However, considerable work is needed to better understand the dynamics behind this relationship. It is important to consider how to accommodate women and men’s differing needs in order to make the development of transportation and ICT infrastructure more efficient and complementary.

In this respect, Bangladesh poses an interesting case for examining the gender dimension of (a) how improved communications can impact on travel patterns and enhance investments in transport and (b) how improvements in transport infrastructure can impact on communication flows and communication technology needs and access.

This paper will examine these dynamics with particular focus on the effects of improved transport and communications and ICTs, as well as the interplay between these developments on women’s entrepreneurship in rural areas. It will include a general mapping of the travel needs of rural women in Bangladesh with regard to their daily tasks and responsibilities and the societal norms and constraints to which women are subject. Two case studies are presented to illustrate women’s basic transport and communications needs for carry out their household and entrepreneurship activities. One case study focuses on women’s household activities, while the second focuses on women’s entrepreneurship activities. The potential for women’s empowerment
in Bangladesh through synergized transport and ICT improvements is considered based on lessons drawn from the third case study on Nabanna, a woman’s ICT entrepreneurship initiative in India. Finally, this paper concludes by examining where there may be opportunities to develop transport and communications technologies in an integrated and mutually reinforcing manner in order to promote rural women’s empowerment and women’s entrepreneurship.

II. FACTORS AFFECTING WOMEN’S MOBILITY IN BANGLADESH

Bangladesh is one of the world’s most densely populated countries, with more than 77 per cent of its population living in rural areas. More than two thirds of the people living below the poverty line in Bangladesh are women. There is a marked difference between men and women in the amount of travel and in their travel purposes. It is important to consider to what extent these differences can be attributed to gendered differences in travel needs and to what extent they are caused by social norms. In Bangladesh, women’s mobility is subject to a number of factors, which include the accessibility of safe and comfortable transport modes, travelling conditions and social norms circumscribing acceptable conduct and activities for women according to traditional practices.

Roads, transport modes and travelling conditions for women

Road transport is the major form of transport for the movement of people and goods in Bangladesh. The road transport system is comprised of mechanized vehicles and a more traditional, informal transport sector serviced largely by non-motorized forms of transportation (that is, rickshaws, rickshaw vans and “bullock” carts). Most modes of transport are non-motorized, and walking is the primary means of mobility. On rural roads, informal non-motorized vehicles and walking are particularly predominant.

Unsafe road and transport conditions impede rural women’s mobility in Bangladesh. Public transport, road improvements and infrastructure design also tend to cater to the formal work needs of men rather than to the needs of women, which are primarily in the areas of reproductive, productive and community-managing work. This leaves women with few travel alternatives. Studies indicate that women face discourteous treatment and harassment on crowded public modes of transportation, such as buses. This further reinforces women’s preference to use less “public” forms of transportation, such as...
rickshaws. This, however, entails greater cost and is not affordable for very poor women (ADB, and others, 2005).

**Social norms and women’s mobility in Bangladesh**

Bangladesh is a traditional patriarchal society, and the family comprises the basic unit of social control and sets the norms for gender roles. Social norms, such as the Islamic practice of purdah, tend to prohibit many women from leaving the home by requiring them to adhere to a strict code that determines when and for what reasons women may wander outside their homes. The practice, which is aimed at secluding women in order to protect their modesty and purity, is common throughout the country. In Bangladesh, it is widely perceived that a “decent” woman should not go to the market in order to preserve the izzat, or respectability and honour, of the family (Fernando and Porter 2002). For women, work outside the household is disparaged and discouraged (Karim, 2001). As a consequence, the labour market is restricted for women, making it more challenging for a woman to be financially independent (USAID, 2006).

As a result of economic hardship necessitating the need to engage in income-generation activities, poor and destitute women are generally more willing to challenge strict adherence to traditional conventions, such as purdah, and are likely to be more mobile than more affluent women. They travel to fields, markets and road construction sites for work.

While there exist segments of the upper class in which “liberalized” women live a more mobile lifestyle (normally as a result of education), key factors affecting the extent to which purdah constrains a woman’s mobility are her economic and social status. Education is also a factor influencing the extent to which purdah is embraced by women.

Discrimination in the provision of services on the basis of a woman’s ancestry can manifest itself in caste- (or tribe-) based distinctions among some populations in Bangladesh. These distinctions, determined by birth, result in serious violations across the full spectrum of civil, cultural, economic, political and social rights. Women who are discriminated against on the basis of caste are often singled out, not because of a difference in physical appearance or race, but rather because they belong to an endogamous social group that has been isolated socially and occupationally from other groups in society. The triple burden of gender, class and caste makes lower-caste women the furthest removed from equitable access to basic resources and services in transport and communications and from legal protections necessary to ensure women’s
safety and security where travel may be necessary (Human Rights Watch, 2004).

Due to the complex influence of gender, class, wealth and caste on women's mobility, it can be difficult to determine how women are affected by investments in transportation infrastructure. Improved transport infrastructure and travelling conditions for women do not necessarily result in the greater mobility of or positive transport impacts on Bangladeshi women. To ensure that the benefits of transport infrastructure investments for women are not undermined, it is crucial to develop gender-sensitive transport approaches that address these societal constraints and issues of gender relations effectively.

III. MAPPING WOMEN’S TRAVEL NEEDS

A study by Matin and others on the relationship between mobility and rural women’s empowerment in Bangladesh shows that there is a rigid division of labour in the composition of work done by Bangladeshi women and men (Matin and others, 1999). Official labour statistics on formal work activities show that women work fewer hours than men in all types of activities, including both agricultural and non-agricultural work. However, data gathered through time-use studies in rural areas show that women spend as many, if not more, hours at work than men. These are primarily in household maintenance and subsistence activities.

Women’s household activities

Bangladeshi women in rural areas shoulder the responsibility of managing the household. In terms of reproductive activities, women generally have primary responsibility for the care and feeding of children and families. Cooking, cleaning, childcare and nursing activities, and looking after family members occupy a major portion of Bangladeshi women’s daily work. Generally included in their cooking responsibilities are, for example, gathering and managing water and fuel resources, such as stove ash or straw. Women are also primarily concerned with impending family needs and other maternity concerns requiring immediate and long-term care, such as seeing to children's and family members' health and schooling, ensuring sufficient household income, and helping the employment of the family (Biswas, Bryce and Bryce, 2001).

Women's use of roads and transport facilities involves fulfilling the above-mentioned domestic and familial responsibilities and caretaking work.
Even for women observing purdah, transport and commuting needs may often involve travelling to health facilities, within the village or to agricultural fields for various household tasks, such as gathering water or straw. Where rural women cannot gain access to or afford simple transport, such as rickshaws, they frequently walk with heavy loads or carry head loads. For women observing purdah less strictly, transport needs may also include visits to local markets or travel to wage employment and jobs.

**Women's supplementary income generation through subsistence activities, wage employment and microentrepreneurship**

Bangladeshi women participate in different kinds of economic activities, such as subsistence agriculture, largely as unpaid family workers or, if the work is paid, in order to supplement the family income. In general, women participate more in rural industries that can be conducted at home in breaks between household work, and less in those that require them to work outside the home.

The 1996 data indicate that, in comparison with other countries in the region, unpaid family workers in Bangladesh constitute the highest proportion of employed women, while the percentages of employers, self-employed persons and employees are the lowest in Bangladesh (Karim, 2001).

Women, in particular poor women who do not observe purdah and work outside their homes, often enter unskilled, low-paid forms of employment. For example, women’s participation in almost all stages of crop production is common, and post-harvest crop processing at the household level represents the single major source of employment for rural women, providing 40 per cent of woman’s wage earnings. Increasingly, women are moving into agricultural activities, such as transplanting, weeding, harvesting and irrigation, which have traditionally been done by men. Road construction and maintenance work has also proved to be an effective wage opportunity for women. In addition, improved roads, facilitate women’s access to other destinations, such as other villages for wage work, or social facilities, such as schools and health clinics.

Large numbers of women in rural areas generate supplementary family income through small family businesses and activities in the informal sector. These women’s microenterprises are frequently located in the home. Purdah-observing Bangladeshi women can operate home-based family enterprises, although they do not travel to markets to sell their products or to purchase raw materials (Biswas, Bryce and Bryce, 2001).
Due to the low social status of women, particularly in rural Bangladesh, women tend not to be regarded as owners of the enterprises or income-generation subsistence activities they run. They tend not to receive a share of the income nor to be involved in family financial decision-making.

Due to the global recognition of the Grameen Bank microcredit initiatives pioneered by Bangladeshi economist Mohammad Yunus, women-targeted microcredit schemes are increasingly being introduced. However, for the most part, women’s “cottage industries” in developing countries tend to be overlooked by agencies because they are in the informal sector. As a result, they are usually run by women with no or minimal access to financial resources, credit or equipment, or with limited household and community-level decision-making power, which promulgates the “invisibility” of women (Dutta, 2003). These women are not regarded as earning members of the official economy and their income-generation activities are “invisible”, leading to the development of public policies that do not frequently address or integrate the needs of women entrepreneurs and the stunted expansion of their businesses.

Improvements in transport accompanied by credit initiatives for women can substantially strengthen women’s businesses and promote entrepreneurship. The other factors that affect a woman’s travel needs in undertaking these economic activities are the extent to which she observes or does not observe purdah, her socio-economic status, gender power relations in Bangladeshi society and whether her economic needs take precedence over traditional and religious demands.

IV. SYNERGIES BETWEEN COMMUNICATIONS/ICT SYSTEMS AND TRANSPORT INFRASTRUCTURE AND POLICY CONSIDERATIONS FOR WOMEN’S EMPOWERMENT

The need to consider synergies between transport and other infrastructures is reinforced by the fact that transport infrastructure is not an end in itself. People use transport to gain access to other places, services and infrastructures. To make the best use of the potentials created by improved transport facilities, other things must be in place, and the chief role of transport is to facilitate people’s access to these other services and facilities. Subsequently, it is essential that there is an integrated, holistic approach to the development of transport infrastructure and that this be done in tandem with other infrastructure development. To ensure the full benefit of transport
development to the public, the development agenda must be looked at as a whole rather than on the basis of a purely sectoral perspective (ESCAP, 2006).

The linkages between ICTs and transport can be seen in how improved communications strengthening poor people's access to information can result from investment in transport infrastructure. This can have far-reaching impacts on rural Bangladeshi women and implications for women's transport needs relating to access to activities and opportunities.

**Linkages between improved transport and women’s mobility**

Although there has been recognition that gender equality, women’s well-being and human security are important to transport planning, few transport projects have actually incorporated these successfully. A portable steel bridge project, funded by the Government of Japan in Bangladesh, exemplifies one project that did so (Jahan and McCleery, 2005). It also demonstrates the linkages among improved transport, ICTs and women’s mobility. The steel bridge project was aimed at building small-scale bridges on strategic routes and resulted in the considerably increased mobility of women. The site selection of the bridges was done in a way to ensure that they were easily accessible by women and the surroundings were safe for them. The bridges were also appealing to women since most of the transportation modes used on the bridge were familiar to them.

As a result of the bridge's women-friendly design and location, larger numbers of women began to make trips, mostly to visit health facilities, markets, schools and relatives' homes. Women's greater ease of access to health clinics and their increased participation in social and community activities were particularly notable. For women less restricted by purdah, the prospect of an easier and safer commute also created incentives for more women to take wage employment.

As travel to health clinics and hospitals for family purposes is one of the common trips made by women, a key benefit of better road transport is women’s improved access to these health facilities and, as a result, the improved quality of women’s emergency reproductive care. According to a Millennium Development Goals report on Bangladesh, one of the chief causes of maternal deaths is the delay in women receiving health care due to the inaccessibility of health services/centres. Most health centres and private clinics are located in district towns, whereas 70 per cent of the population live in rural areas.
Since the lack of access to appropriate transport services is one of the main reasons for the poor reproductive health of rural women in many countries, improved transport facilities and services can make possible the increased use of health-care facilities and health-care professionals, leading to a reduction of maternal mortality (ESCAP, 2006).

Interestingly, the improved communications system resulting from the bridge project had a powerful spillover effect on purdah-observing women as well, though they did not leave their homes or experience a direct change in mobility. A joint Japan-UNDP study on the project found that, due to the better communications resulting from the bridges, numerous NGOs moved into these areas. This spurred significant increases in women’s entrepreneurship, self-employment and microfinancing activities. The NGOs played a strong role in providing entrepreneurship support to women and training in income-generation areas, such as poultry, cattle-rearing, vegetable gardening, handicrafts, pond-fish culture and other activities (Jahan and McCleery, 2005). Although the women operated their businesses from home and did not themselves undertake travel to markets to sell their products or to purchase raw materials, the increased ease with which partners could come to their doorstep and easier and less expensive access to markets helped their businesses to flourish.

**Linkages between improved ICTs, women’s entrepreneurship and women’s mobility**

In the area of ICTs and infrastructure, such initiatives as the Grameen Bank Village Phone project, in which money is loaned to poor rural women to start small businesses purchasing and renting out mobile phone services to the rural community. This is an example of how communications and ICTs can play a role in promoting women’s entrepreneurship, inducing women’s increased mobility and shifting travel patterns.

In growth centres of Bangladesh, there have been initiatives in local markets to allocate at least 15 per cent of the space to the women’s market section, with seating and selling arrangements for destitute women. This is gradually changing conditions under which women have little or no opportunity to sell products at the market because social norms make it difficult for them to set up stalls next to male shopkeepers or because they are at risk of harassment. This initiative has created income-generation opportunities for women previously not available to them. In addition, it has provided greater incentives for women to support improved transport routes due to their
motivation to gain access to the market places for entrepreneurship purposes (Sultana and Tanaka, 2002; Kelkar, Nathan and Rownok, 2004).

**Linkages between improved transport, ICTs and women's entrepreneurship: effects on promoting women's empowerment and sociocultural change**

Important changes are taking place in rural Bangladesh with regard to the creation of empowering conditions for women and girls. With such initiatives as the Grameen microcredit schemes for women and the introduction of women's market sections, increasing numbers of women are entering the Bangladeshi job market. These initiatives and changes have led to significant advances in social perceptions of women's role in society and the need for their mobility. However, long entrenched social and religious practices still remain a major problem towards women's social advancement and empowerment.

One way that these initiatives are contributing to the promotion of women's empowerment can be seen in the greater connectivity among people, which is a result of women's entrepreneurship and of bringing cell phones to rural areas. This has a synergetic effect in promoting stronger information flows within rural areas, in society as a whole and among Bangladeshi women. In this sense, communications and ICTs can play a crucial role in inducing gradual changes towards women regarding their social status and in addressing constraints that restrict women's activities and mobility. ICTs can facilitate greater communication among purdah-observing women and play a role in enabling women to reach out to the world outside the home and break out of their isolation despite their physical seclusion.

Innovations are taking place in the development of women's knowledge and skills through ICT-mediated women's networks. Where women are hindered from communication flows that are normally acquired through physical travel, the development of ICTs can provide an effective alternative mechanism through which Bangladeshi women can gain access and exposure to information flows.

Even in cases in which ICT-induced efficiencies can substitute travel, the expansion of women's enterprises through the use of ICTs can have a synergetic effect on travel, generating greater travel either by the woman entrepreneur herself or by employees or business partners. The demand for travel and transport needs may also increase for purdah-restricted women entrepreneurs, though these travels may be delegated to male associates and partners.
In the knowledge and sociocultural norms sphere, even in the case of women remaining confined to the home, improvements in communications and ICT infrastructure can play a role in exerting incremental changes to social perceptions and customs that impede women’s travel and mobility. In the long-run, such improvements contribute to the greater effectiveness of transport infrastructure in promoting women’s empowerment.

V. CASE STUDIES

There is a scarcity of quantitative studies examining the effect of improved communications and ICTs on the travel needs of rural women and the interplay between improvements in transport infrastructure and improvements in communications/ICT infrastructure. This paper presents the following two case studies to provide a picture of the travel and communications situations that rural Bangladeshi women face both in the traditional household setting and in the context of a more progressive women’s entrepreneurship situation.

The first case study documents data from a study conducted on women’s time use to give a clear picture of women’s travel needs in Bangladesh. The second case study profiles a woman entrepreneur in a women’s market section of a Bangladeshi market. It demonstrates how significant changes in social perceptions regarding women’s entrepreneurship have led to increased opportunities for women to travel for business purposes.

This paper presents a third case study on Nabanna, a women’s entrepreneurship initiative in India. This case study demonstrates how ICTs have helped to promote women’s entrepreneurship by improving information flows and by identifying business opportunities leading to both travel efficiencies and business expansion-related travel. Although sociocultural norms in India differ from those in Bangladesh, the experience gained from this case study provides insights on how to address some of the mobility vis-à-vis the empowerment problems of women that are also relevant to Bangladesh.

Case study 1: travel time savings study in Bangladesh

The following is a summary of a study conducted by I.T. Transport Limited for DFID (2002). Although not focused exclusively on women, it provides a picture of women’s transport needs and patterns in a traditional household setting. The study focused on travel time savings through effective investments in transport infrastructure and service development. It was conducted in 2002 in Jessore District, in south-western Bangladesh.
Although physical, environmental and transport characteristics vary across Bangladesh, Jessore District was selected as it represented the majority of the country, where there is a predominance of land transport as opposed to water transport. Bicycles and rickshaw vans are the most used forms of transport in Jessore. Buses ply on paved roads, and “bullock” carts enable access where roads are of poor quality. The study covered seven paved, partly paved and dirt roads of between 3 and 19 km in length. Agriculture was the main source of household income in the study area.

Travel patterns were analysed based on separate types of questionnaires administered at the household level and at roadside interviews. In addition, selected male and female travellers from different social groups were interviewed to ascertain their reasons for travelling, choice of transport mode and how these were related to their socio-economic circumstances.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households basic needs</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Household wider socio-economic needs</td>
<td>957</td>
<td>153</td>
<td>1110</td>
</tr>
<tr>
<td>Social and leisure</td>
<td>259</td>
<td>116</td>
<td>375</td>
</tr>
</tbody>
</table>

Table 1 presents the overall and gender-disaggregated purpose for travel under three broad categories. It can be seen from the table that approximately three out of four trips were made to meet the household’s wider socio-economic needs, and one out of four for social and leisure purposes, respectively. Only a small proportion of trips were made for household basic needs using the roads covered in the study. Travel in relation to the household’s basic needs included travelling in relation to basic household activities, such as water collection, firewood collection and grain grinding, and basic agricultural
activities, such as ploughing, planting, weeding and harvesting. This was expected as most travel for basic needs was on unclassified tracks and paths much closer to homes.

Table 2. Gender-disaggregated purposes for travel relating to wider socio-economic needs

<table>
<thead>
<tr>
<th>Purpose of travel</th>
<th>Overall</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td></td>
<td>Percentage</td>
<td>Percentage</td>
<td>Percentage</td>
</tr>
<tr>
<td>Household wider agricultural needs</td>
<td>119</td>
<td>117</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>For going to economic facilities (e.g. banks)</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Travelling while work under other employer</td>
<td>12</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Self-employed travelling while working</td>
<td>43</td>
<td>39</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>For going and coming from work place</td>
<td>237</td>
<td>186</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>19</td>
<td>33</td>
</tr>
<tr>
<td>For purchase/selling of goods for profit</td>
<td>264</td>
<td>254</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>27</td>
<td>7</td>
</tr>
<tr>
<td>Travel to go to health facilities</td>
<td>66</td>
<td>46</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Travel to go to market for purchase (non-profit)</td>
<td>203</td>
<td>183</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>Travel to go to town</td>
<td>31</td>
<td>27</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Travel to go to administrative centres (e.g. government offices, post office)</td>
<td>32</td>
<td>31</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Travel to go to educational institutions</td>
<td>97</td>
<td>57</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>6</td>
<td>26</td>
</tr>
</tbody>
</table>


Table 2 above provides a more detailed breakdown of the second category of table 1. As seen in table 2, there was a marked difference between the travel purposes of men and those of women, with a larger proportion of women's travel being for social and leisure purposes, which included meeting social obligations. In this category, there was a substantial difference between the travel purposes of men and those of women, with the largest proportion of trips of the former being “for purchase/selling of goods for profit”, followed by “for going and coming from work place.” In the case of women, the largest proportion of trips were made “for going and coming from work place”, followed by for travelling “to health facilities” and for going “to market for purchase (non-profit)”. The reason behind women travelling to health facilities more than men was related to women’s responsibilities for their children’s health and welfare.
Given the scarcity of data on women’s travel patterns, thus case study helps to illustrate what largely has been known informally or anecdotally about women’s travel in Bangladesh and shows the low mobility of women. It shows that women who travel are doing so particularly for work purposes. It also confirms quantitatively that travel to health clinics is a key purpose for women's travel, which should be a significant factor in increasing efforts to reduce the obstacles to women’s travel.

Case study 2: a woman entrepreneur in a women’s market section

This case study is from a World Bank study and examines gender mainstreaming in the Third Rural Infrastructure Development Project, implemented by the Government of Bangladesh from 1998 to 2004 with funding from international donors (Khatun, 2003). It describes Ms. Lovely Roy Choudhury, a woman entrepreneur who, in 2000, acquired a space for a shop in the women’s market section of a local market. She was a 32-year-old widow with one child living in her father’s house. She had a tenth grade education.

Before acquiring the shop, Ms. Choudhury had long been involved in handicraft activities at home and survived by selling these products in nearby areas. She also worked as a handicrafts trainer and as a teacher on an informal basis at the village school.

When she first joined the women’s market section, there were only five women traders. The number was growing and, approximately three years later, there were 18 women traders. Initially, all the women faced some social problems but over time their work was appreciated by the community. Most of Ms. Choudhury’s customers were girls from a local college.

The improved road network with good transport facilities played a large role in the expansion of Ms. Choudhury’s business. It helped in carrying commodities for the shop and in bringing customers from surrounding areas. Ms. Choudhury started a tailoring business and later began selling clothes. While originally she had little capital to run the business, she was later able to acquire materials on credit from relatives. This enabled her to survive. Through the business, Ms. Choudhury had become not only financially independent and a successful entrepreneur but also a role model in the locality.

The women’s market section illustrates how a holistic, integrated approach can be taken for the development of infrastructure facilities to support women’s entrepreneurship and empowerment programmes. The initiative was a part of a large-scale project integrating the gender dimension into numerous
components of infrastructure development: the construction of the women’s shops, information campaigns and social assessments, the political process of allotting the shops to women, the gender-sensitive design of water and toilet facilities, training for women on shop management, the inclusion of women in market traders associations, and the forming of linkages with local women members of the union council (Sultana and Tanaka, 2002; Rahman, 2004). The Project demonstrates the need to consider synergies among various types of infrastructure development.

Case study 3: potential transport efficiencies through ICTs: lessons from Nabanna¹

Although not located in Bangladesh, Nabanna, an ICT initiative in Baduria, India, is an interesting case that provides insights into the potential role that ICTs can play in creating travel time efficiencies for women. It also provides an indication of the mechanisms through which ICTs may be used to promote women’s entrepreneurship and to provide opportunities for women to benefit from improved transport and communications, irrespective of their purdah-related circumstances.

Poverty is pervasive, with many people dependent on daily wage payment for work in the fields, on construction sites or in brick kilns. Nabanna is a women’s ICT initiative that reportedly provides women, who have few opportunities for self-advancement, with an education. The goal of Nabanna is to energize the community in Baduria by empowering poor women to organize and to “harvest” information. As central feature of the initiative, two to three women from each of the municipality’s 17 wards are identified as information agents. These women participate in information and communication training and form the backbone of the network. Each information agent leads an information group, comprised of 10 women who are recruited from their local neighbourhood. The information group meets on a weekly basis.

The information agents are usually students or housewives and reach about 600 women in the community. Some information group members are skilled in knitting and weaving. Bidi (tobacco) binding, which is often an income-generation activity that the whole family participates in, is very prominent in Baduria. Other family-oriented work includes weaving. Women work independently or as a part of the family and do not have direct access to markets to sell their products. In most cases, they sell them via an agency or other distributor.

¹ Based on Ghose and Ghosh (see reference).
The training centre is used each day by approximately 10 to 12 information agents who devote about two hours each week to training. One of the women’s main activities is to maintain regular diaries about their everyday lives and topics suggested by the sponsoring organization. Through these diaries, the women have explored a wide range of topics and yielded a wide array of information. The information agents role play and take notes on discussions that take place in the information groups, simultaneously identifying topics and feeding information on a gamut of themes that affect Baduria and its women.

Although this case study does not address women’s travel patterns explicitly, it provides some indication of the potential travel time savings through the application of ICTs. This can be seen to be very helpful in Nabanna’s role in fostering microenterprises among women. The initiative’s ability to effectively harness ICTs results in significant transport and time savings in marketing activities, which could take considerably longer when done on foot or by other modes of transportation. For example, Nabanna has been supporting the association of piecework embroiderers with women running larger businesses across the community at large, facilitating new social connections and relationships. ICTs are enabling women entrepreneurs to identify potential business partners and clients with much less effort, and increasing business opportunities while reducing travelling and commuting time.

Through Nabanna, new horizontal linkages have been created. Women in Baduria can link producers and markets and make use of productive information inputs to income-generation ideas. For example, women entrepreneurs have the ability to outsource work, such as embroidery, but they lack information on to whom to outsource the work. On the other hand, poor women who have embroidery skills do not know from whom to procure work. ICTs are enabling the linking of these women and generating greater embroidery business.

The network has so far proven to be a valuable source for generating information in such areas as income-generation opportunities, focusing on which people have much skills and who needs them, as well as in educational inputs, such as in health and hospitals.

**SUMMARY OF FINDINGS AND CONCLUSION**

This paper examines the effects of improved communications and transport infrastructure, and the synergy between them, on Bangladeshi women, whose mobility is affected by social and cultural constraints, such as
purdah. The gendered planning of infrastructure facilities was found to be crucial and had strong implications for women. It was found that improved transport infrastructure could significantly strengthen women’s entrepreneurship across the board. This applied both to women not practicing purdah and to self-employed women practicing purdah by working in home-based businesses. Similarly, improved communications improved the situation of women and advanced their entrepreneurship whether they practiced purdah or not. The development of both infrastructures (transport and communications) and the harnessing of their synergies offer even greater potential for promoting women’s entrepreneurship and empowerment.

There is a lack of quantitative studies examining the potential impact of gradual changes in rural Bangladeshi society on women’s empowerment and of the increasing presence of women in rural markets on women's travel. However, an examination of the case studies provides some insight into the current travel situation and the effects ICT innovations are having on rural society. It also shows how ICTs can play a role in reducing women’s travel needs or in promoting women’s mobility amid changing conditions and can support initiatives for women’s empowerment.

ICTs play a role in making existing travel more efficient and can reduce the need for additional travel in order to exploit new opportunities. At the same time, ICTs can be a catalyst for uniting woman entrepreneurs with their clientele, spurring greater business opportunities and increased travel due to business expansion and outreach to a wider customer base.

The second case study, which describes the woman entrepreneur in the women's market section, illustrates how an integrated approach in infrastructure development can make transport investments more effective. The women's market section was only one component of a large-scale integrated infrastructure development project comprised of numerous components: women's road maintenance programmes, flood refugees, bridges, ghats, training and women’s markets, to name a few.

Increasing the presence of women in traditionally male-dominated markets leads to an increased need for travel, which changes the travel patterns of rural Bangladeshi women. While traditional travel purposes circumscribed by purdah allow women to travel for primarily non-profit activities, the co-development of entrepreneurial incentives in markets for women and improved road conditions can increase the presence of women on roads for “for profit” purposes.
Also, there have been a number of initiatives involving women in road construction and maintenance schemes. These schemes offer wage opportunities for poor rural women. In addition, women’s motivation to engage in entrepreneurship activities and the growing acceptance of women in markets provide an incentive for women to take a vested interest in the improvement and maintenance of roads and transport facilities as they need safe and effective transport to run their businesses. The ease and safety of travel can encourage greater numbers of women to take wage employment that requires them to commute or travel.

The formation of women’s networks through a system of information agents has proven to be highly effective in building women’s ICT literacy and capacity. These networks are a necessary adjunct to basic ICT infrastructure and serve the purpose of women’s empowerment through microenterprise and other business activities and mobility needs. They also help to improve efficiency by eliminating unnecessary travel.

In the case of Nabanna, the creation of a women’s network played a role in increasing women’s embroidery work. While the embroidery work remained a stay-at-home activity for the women, and men were the principle parties involved in travel for the sale of the products, ICTs played a crucial role in spurring efficiencies and the lucrativeness of women’s businesses without an increase in travel. This could be perceived as positive, resulting from women's more efficient utilization of time due to the use of ICTs.

Bangladesh’s growing number of initiatives to promote women’s empowerment and what appears to be changing social conditions, coupled with the introduction of innovations in ICTs and women’s networks, will have strong impacts on women’s travel and ICT needs in the future. The rich interplay that transport and ICT infrastructures can have in assisting women to meet their growing needs in pursuit of empowerment should be an important consideration in infrastructure planning and development. Evidence from the case studies suggests that the mutually reinforcing and complementary development of transport and ICT infrastructures can effectively support women’s empowerment. However, further quantitative analysis is needed to examine this interplay and to learn more about the optimal conditions for their co-development.
REFERENCES


ABSTRACT

Based on original ethnographic and microdemographic data collected in two distinct geographical regions of Nepal, this paper examines the gendered dynamics that mediate female mobility and access to health services. Fieldwork was conducted in the highland region of north-east Nepal, following the building of a road linking communities with local and central health services. It revealed a constellation of factors constraining female access to health services and even increasing the vulnerability of their reproductive health. A decade later, further research conducted in the far western lowlands of Nepal sharply brought into focus how, in spite of a decentralized health policy and a wider range of motorized and intermediate transport options, rural communities faced barriers to accessing health services that related to wider political change and conflict. In both settings, the implications of gendered factors mediating mobility aggravated by the political and security context have hampered access to the very health services that have the greatest impacts on women and children’s health and inclusion in the development process.

INTRODUCTION

In spite of national and international efforts guided by the Millennium Development Goals, maternal and neonatal mortality rates remain unacceptably high in many low and middle-income countries. South-East Asian countries have, in absolute numbers, some of the highest incidence of maternal and neonatal mortality (Lawn, Cousens and Zupan, 2005). In many rural areas of the

* Reproductive Health and Social Development Adviser, Swiss Centre for International Health, Swiss Tropical Institute, Socinstrasse 57, P.O. Box 4002 Basel, Switzerland; Phone +41 61 284 81 79, Fax +41 61 284 81 03; e-mail: kate.molesworth@unibas.ch. Internet: http://www.sti.ch.
region, female reproductive health choices and access to skilled reproductive health assistance are mediated by a constellation of economic, social, logistical and political factors acting at the local and national levels. In the last decade in Nepal, rural female mobility and access to health care have had to be negotiated within an arena of rapid political change and insecurity. This paper draws on an in-depth study of rural women’s access to reproductive health services conducted between 1989 and 1991 in the hills of north-east Nepal, together with more recent short-term and geographically diffuse research conducted in 2003 in the rural east, mid-west and west of the Terai. These reveal that, despite the changing political landscape, common themes continue to shape and constrain female reproductive health choices within poor and marginalized rural communities. Despite a policy shift towards a more integrated and decentralized reproductive health-care system in rural Nepal during the time these studies were conducted, certain persistent factors emerged that kept rural Nepalese women’s reproductive health needs from being met and restricted their access to appropriate and skilled services. As a consequence, the efficacy of policy changes aimed at decentralizing the delivery of reproductive health-care services has been compromised. In addition, national and international efforts to address the kingdom’s high population growth rate and poor reproductive health indices have been hampered (UNDP, 2006), as has progressed towards the Millennium Development Goals, particularly Goals 4 and 5.

I. THE MEDIATING ROLE OF GENDER AND ECONOMIC DYNAMICS IN THE ACCESS OF TAMANG COMMUNITIES TO REPRODUCTIVE HEALTH CARE

A. Transport provision in north-east Nepal: the Tamang of Jetthul

The first study was conducted among Tamang communities in the hamlets of Samche and Turana in the Jetthul Village Development Committee, in Sindhupalchowk District in the north-eastern hills of Nepal. Using a combination of ethnographic and microdemographic techniques, the study was carried out between 1989 and 1991. It looked at multiple economic and social issues surrounding female mobility and access to reproductive and health services and how far the particular needs of the poor and socially marginalized Tamang were met.

1 Lowland plains in the south of Nepal along the border with India.
2 To protect the privacy of the study communities, the village names are pseudonyms. For convenience, the study area is referred to as “Jetthul”.
3 Village development committees are the local administrative bodies in Nepal.
Before a paved road was completed in 1985, the transport options of the Jetthul communities were confined to walking, and the journey to the capital took many days on foot. Human porterage was the main form of haulage as the land is too steep for the use of bicycles and oxcarts such as those commonly used in the Terai. Although the Tamang were traditionally renowned horse-keepers, fodder became so scarce over the years that pack animals could not be maintained. The nearby road, constructed with the financial and technical support of the Swiss Agency for Development and Cooperation, was the first motorable road in the north-east of the kingdom. It linked the regional town of Jiri via the market town of Lamosangu with the north-south Arniko Highway running from the Tibetan border to the Kathmandu Valley. Known as the Lamosangu-Jiri road, it was a 1.5 hour walk uphill from the Jetthul villages. Regular public bus services and informal transport in commercial and privately owned lorries and trucks provided frequent transport along the road, which also connected villagers with local government services, such as health services and secondary schools.

The completion of the road provided new opportunities for transporting goods to and from urban areas and beyond and enabled the villagers to travel to Kathmandu within a day. This was particularly significant for the Tamang, whose men increasingly engaged in migrant labour. The Tamang of Jetthul are subsistence agropastoralists who traditionally meet the majority of needs through household food production and cottage industries, such as weaving and brewing, and by exchanging goods with other jat groups, such as the Kami blacksmiths. For generations, like many of Nepal’s hill groups, they have engaged in seasonal migration as increasing population growth has exceeded the production capability of cultivable land. In recent years, the growing need for cash has led to an increasing reliance on migration for cash labour in the capital and in the Terai, the nation’s agricultural and industrial heartland, which the new road encouraged and enabled.

B. Gender dynamics of the Tamang

The Tamang have a tradition of gender equality that is pronounced within the context of mainstream Nepalese society. Unlike the Hindu majority, the Tamang have more liberal customs and a spiritual world view combining animist and Buddhist beliefs, and this gives the women sexual freedom similar to that of the men. Young Tamang people associate freely, and pre- and extramarital sexual liaisons, while a potential source of social discord, do not incur social sanction or exclusion, whereas in mainstream Nepalese society

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4 The Nepali term jat refers to ethnic and caste groups.
female sexuality is strictly guarded within marriage. The Tamang’s gender equality in freedom of association and choice of sexual partners, however, is a factor that, combined with other aspects of their lifestyle, such as dietary practices, sets them apart from the Hindu majority and causes them to be stigmatized.

Accompanying the sexual freedom and relative gender equality, clearly defined gendered domains were evident in Tamang life in Jetthul. Ploughing, for example, was regarded to be an exclusively male province, to such a degree that it was taboo for women and girls to touch a plough. Exclusive female spheres, such as brewing chang (millet beer) or distilling rakshi (rice spirit alcohol), enabled women to develop reputations for being skilled in running cottage industries and to earn cash income from both neighbours and visitors.

Family decision-making, however variable according to the individual characters involved, was generally done equally between couples. Traditionally, cash was controlled by senior women in extended family households. The Tamang regarded them to be more judicious household accountants than men, who had the stereotypical reputation for being careless with money and prone to gambling. Although women and girls were the main carers of young children and prepared the family meals, it was not remarkable for men and boys to take on these tasks. In the main, traditional family power dynamics in Jetthul tended to run along generational lines rather than along gender lines. This was most strongly evident in the processes surrounding the selection of marriage partners. In the majority of cases, senior kin selected the spouses of the young men and women in their families in the interests of alliance building and reciprocal labour arrangements. There was a preference for cross-cousin unions, which enabled labour and land resources to remain at the disposal of the family network.

In common with wider Nepalese and Asian cultures, the Tamang of Jetthul demonstrated a strong son preference that might seem paradoxical given the relative gender equality of other aspects of Tamang life. As sons remain living in their natal households after marriage and take responsibility for the financial security and welfare of their parents in old age and infirmity, they become increasingly important to wider family fortunes as they mature. Indeed, all Tamang are dependent on the economic power of their sons in old age and infirmity, which places pressure on people to marry, give birth to and successfully raise sons. Given the uncertainty of child survival and high infant mortality in Jetthul, married couples concentrated their energies and investments on the survival of productive sons.
C. Political dynamics in the Jetthul villages

The study among the Tamang people of the Jetthul Village Development Committee in the north-eastern hills of Nepal was conducted during a period of marked political change. At the commencement of fieldwork in 1989, Nepal was ruled directly by the monarch, ostensibly through a panchayat democracy, until the concession to a democratic multiparty system following the popular democratic movement that culminated in mass protests in the spring of 1990. National rebellion played out locally in Jetthul, with a new era of local political debate, argument and conflict. In neighbouring villages, the situation became intense with firearms being carried, whereas previously only the multi-purpose and practical khukuri knives were worn. A number of Tamang from more volatile villages in the locale were injured and died, while others fled. In Jetthul, the democratization of the nation came and went with only small-scale conflicts. Following the momentous political and constitutional changes in the spring of 1990, calm was restored in the two Jetthul study villages for the duration of the research.

D. Local and regional health services

At the time of the study, family planning and reproductive health-care services were delivered by the Government jointly with a number of bilateral and multilateral donors, such as USAID and UNFPA within FP/MCH and ICHSDP. As part of these projects, reproductive care and contraceptive services were designed to be delivered to rural areas, where 90 per cent of the kingdom’s population lived. Throughout rural Nepal, 260 specialist FP/MCH clinics and subdistrict ICHSDP health clinics provided these services at the local level, supported by cadres of auxiliary nurse midwives and village health workers.

The new Lamosangu-Jiri road clearly had the potential to reduce the physical isolation of the Jetthul villagers from local primary health-care facilities and regional specialist centres, while decreasing delays in the transportation of emergency cases to health outlets. At the local level, the road provided the opportunity for rapid motorized transportation to the health post at Dhandarpakhar, 12 km from the villages. It enabled access for government outreach workers, such as village health workers and auxiliary nurse midwives, to provide basic health care, essential drugs and contraceptive supplies at the village level. The road also provided a direct motorable link with the regional hospital at Jiri, some two to three hours’ drive to the east, and with national hospitals in the Kathmandu Valley, some five hours away by road. However, the study revealed how the poverty and social marginalization of the Tamang, combined with the impacts of their economic strategies on gender dynamics,
restricted the use of the road by women and girls to access health services provided under FP/MCH and ICHSDP.

E. Gender and economic dynamics in female mobility

Male migration to the Kathmandu Valley and the Terai for wage labour, enabled by the road and necessitated by poverty and a lack of local opportunities, had become a typical feature of Tamang life in Jetthul in the early 1990s. This economic strategy had a ripple effect on women as regards their mobility, their access to health services and their ability to take advantage of the opportunities offered by the road.

Initial ethnographic surveying in Jetthul and Kathmandu revealed that the majority of the male youth would like to live almost exclusively in Kathmandu. While many married men also migrated to the city and the Terai, older men tended to return to their village households more frequently than younger men. The younger men more readily adopted urban lifestyles, which were most evident in their clothing (reflecting that of stereotypical Hindi film icons: dark leather jacket, dark glasses and jeans) and knowledge of the Asian cinema and of western music. In spite of the number of Jetthul men living in Kathmandu and the Terai, prevailing jat prejudices, combined with their lack of skills and education, determined the men’s labour options. These were invariably at the unskilled and most poorly remunerated end of the wage labour scale. Although some of the more streetwise youths were able to gain casual employment in stalls in the tourist district of Thamel, the majority worked long hours in carpet factories, on construction sites and portering goods. Some of the more fortunate and more mature men obtained work among the large cadre of domestic night watchmen known as chowkidars. The common feature of all the Jetthul men who found employment outside the village, and typical of low-status Tamang migrants elsewhere (Campbell, 1997; Miller, 1990), was that they saved and returned to their households with very little cash when they made their annual home visit for the autumn festival of Desain. This was due to a number of factors within and outside their control. Naivety and desperation for work led the men to accept lower wages and more exploitive working and living conditions than urban people. Being away from the comfort of their families and lured to the nightlife of the city, the men had a substantial proportion of their meagre wages depleted.

Quantitative data collected in the course of the study revealed that, whereas most of the Jetthul men spent substantial periods of their working lives in the Kathmandu Valley, only 29 per cent of the 82 women aged 15 to 45 surveyed, travelled there in a year and just 15 per cent had ever lived in a city
for a month or longer. The consequences of diverging life experiences and different degrees of exposure to urban centres had both economic and social implications for the men and women of Jetthul. It is of particular importance to note that as male mobility and experience expanded, women became increasingly confined to their communities. Although the mobility of Tamang women customarily involves a high degree of walking, by which they maintain a broad local network via trails between villages, increasing male absence and a decreasing household labour force meant that, women had to fill the void in order to maintain family subsistence farming. Their daily duties of growing crops, managing livestock, collecting fuel wood and fodder, and caring for their children effectively reduced the time available to them for social activities outside the immediate village vicinity.

The gendered labour strategies increasingly defined and divergent, resulted in a shift away from female control of household cash. As migrant wage labour had become a greater part of men’s labour, and men increasingly managed (and spent) their earnings away from their households, women found that their own opportunities for generating income were diminished within the village sphere. Once the road was built, there was a rise in the importation of cheap and desirable consumer goods from China (via the Arniko Highway), India and elsewhere. This had the effect of depressing the value and demand for traditional village products, such as Tamang chang and rakshi, hand spun yarn and woven cloth. In the villages, the women of Jetthul were further mired in poverty by shifts in consumerism arising from the importation of manufactured goods into the area, which depressed the market for female handicrafts and home-distilled alcohol (Molesworth, 2006b).

Perhaps the most significant consequence of the changing gendered dynamics relating to the economic strategies of the Jetthul Tamang was that women’s access to cash reduced markedly over time as their subsistence production work burdens increased. For this reason, women made no use of the road to access health services. In Jetthul, there were no TBAs, and the majority of women gave birth alone and unassisted. Given the persistence of Tamang poverty combined with women’s reduced access to cash, gynaecological conditions and obstetric emergencies were unalleviated by the building of the road. The decision to seek skilled assistance was primarily focused on the costs of having the patient carried up to the road head, road transportation, accommodation for accompanying relatives, medicine and food. Consequently, families made protracted decisions during which emergencies became more acute and life-threatening. The literature on the subject is quite clear regarding the importance of the timely transportation of women with obstetric emergencies to skilled health-care professional in order to prevent
maternal and neonatal disabilities and deaths. Thaddeus and Maine’s (1994) “three delays” model identified key time phases during which maternal and child health and survival can be compromised. Although the model takes into account such factors as access to quality care and socio-economic issues, it omits the link with transportation, which is important for rural communities, such as the Tamang of Jetthul.

In highly pronatalist Tamang society, where sons are crucial to the economic survival of all individuals in their old age, and the household labour force is maintained through children who work from as young as 5 years of age (Molesworth, 2006a, p. 262), attitude towards family planning and contraception were sharply defined along gender lines. The majority of men were opposed to fertility management because the greater number of children born meant a stronger potential for surviving sons. Tamang men in Jetthul also judged each other’s masculinity on the grounds of their assumed virility, which was perhaps no less of a fertility motivator than economic considerations. Women of reproductive age were, however, extremely fearful of childbirth after witnessing the pain, disability and deaths following the obstetric emergencies of friends and relatives. Although the majority of women of reproductive age expressed a desire to reduce their number of pregnancies, none of the women in Jetthul used contraceptive pills, which, under FP/MCH and ICHSDP, should have been available at the local health post, which was 12 km down the road, and from outreach staff, namely the auxiliary nurse midwives and village health workers. Ethnographic approaches revealed the “difference” between Tamang culture and mainstream Nepalese culture, which, combined with the censure of Tamang female sexuality, hampered women’s access to these local and outreach reproductive health services. Tamang women from Jetthul said that they were treated as if they were inferior by higher jat health post staff. Although the women were outspoken about sexuality when they were in familiar surroundings, their lack of education and knowledge about contraception and reproductive health prevented them from requesting services from condescending male health post staff. Given the substantial time and financial costs involved in travelling to the local health post, Tamang women in Jetthul feared being belittled and returning without the assistance they sought, and therefore considered the journey there to be a waste of time and money. As a consequence, their reproductive health needs continued to be unmet in spite of the potential of the road to improve their access to services.
II. REPRODUCTIVE HEALTH CARE IN A CLIMATE OF POLITICAL CHANGE AND UNCERTAINTY: RESEARCH FROM THE TERAI IN 2003

A. Background

The ex-Kamaiya

For Tamang women in Jetthul in the early 1990s, the situation was one of an unmet demand for appropriate, temporary and female-controlled contraception, hampered by poor access to reproductive health services and an absence of obstetric care at the village level. These factors were mediated by social and gender inequalities and economic factors as much as by the physical distance from the services. A decade later, in 2003, research was conducted among disadvantaged women who had recently been released from bonded labour in a number of rural locations in the east, mid-west and west of the Terai (Jhapa, Morang, Rupandehi, Badiya and Banke Districts) in the south of Nepal. This research revealed that, while there had been a policy shift towards the greater decentralization of reproductive health services, there was a persistent tendency towards obstructing women’s access to reproductive health services. In addition, the atmosphere of increasing danger and uncertainty arising from the insurgency inhibited disadvantaged women’s reproductive health- and contraceptive-seeking behaviour.

The term Kamaiya refers to bonded labourers in the Terai, who consisted of disadvantaged people whose families were indebted to wealthy landowners. The Kamaiya bonded labourers were not homogeneous in terms of their jat. Some were Dalit, impoverished and disadvantaged by their “untouchable” jat status, and a substantial number belonged to the Tharu ethnic group. Unlike the Dalit, the Tharu are not regarded to be of “untouchable” jat status. The Tharu are considered to be one of the oldest of Nepal's ethnic groups to have populated the tropical plains of the Terai and the forests of the Siwalik Hills. However, the Tharu became dispossessed of their homelands with the increasing settlement by northern hill peoples and later under the kingdom’s First Five-Year Plan (1956-1961) for national development (Molesworth and Mueller-Boeker, 2005). Traditionally, the Tharu are subsistence farmers; however, over time they lost control of their land and with it their source of livelihood. Gradually, many Tharu families became indebted to landowners, or zamindars, whose land they worked effectively as Kamaiya, as debts were inherited by children from their parents. On 21 February 2002, the Government of Nepal passed a law prohibiting bonded labour and the Kamaiya
were freed. However, at the time of the study, the majority of the ex-Kamaiya in the Terai were living in extreme poverty.

**Policy and political change**

Throughout the 1990s, the Ministry of Health developed policies aimed at decentralizing health-care services. In 1998, the first national reproductive health strategy set out a more integrated approach, with the objective of strengthening services at the community level. However, intensifying grass-roots political change had an impact on the provision of and access to reproductive health-care services in rural areas.

Out of the discontent experienced by some sectors of Nepalese society following the democratization of the early 1990s, CPN(M) grew in size and strength. Soon after the CPN(M) initiated a rebellion from the grass roots of rural Nepal, the country faced internal armed conflict. At the time of the second study, many people were reported to have been killed (Libanora, 2003, p. 6), and the country remained in a state of insecurity, which was particularly acute in rural areas and western parts of the country.

With rising insecurity, disempowered, low status, poor and marginalized women feared an increase in sexual assaults. This highlighted the growing need for highly accessible, socially sympathetic and discrete reproductive health services for emotionally and physically traumatized women. However, accessing the services that had remained available became increasingly problematic with the rising insecurity.

**B. Changing patterns of male migration: persistent impacts on women**

A decade earlier, Jetthul men were migrating from the hills south to the more productive plains and the industrialized areas of the Terai, but the insurgency spurred local Terai men to themselves outmigrate in increasing numbers. A combination of fear and diminishing livelihood options forced men from areas of Nepal’s agricultural and industrial heartland to seek work elsewhere. A growing culture of extortion and intimidation of industrialists, businesspeople and landlords crippled the many enterprises and halted the construction work that had previously provided both Terai and hill peoples with jobs. The effect was a marked reduction in employment options for poor, unskilled workers, particularly in the most insecure parts of the mid- and far-west. As some areas had become CPN(M) strongholds, men felt the dual vulnerability of recruitment by insurgent forces and the fear of accusations of
collaboration with government or rebel forces. To escape this situation, many left their families to live and work in more secure urban areas of Nepal. Others fled over the nearby border into India.

Although the driving force behind male migration from areas of the Terai may have differed from that in Jetthul a decade earlier, poor women, who remained in the village to care for their children and elderly relatives, experienced similar consequences that constrained the scope of their reproductive choices and mediated their access to services. By taking up the responsibilities vacated by men, women in the Terai, like those in Jetthul, had to cope with an increased work burden. Their poverty was exacerbated, and reliance upon child labour was maintained, which in turn impeded children’s access, particularly that of girls, to education (Molesworth, 2001, pp. 178-180), maintaining the cycle of high female illiteracy. This further exacerbated the situation of the low awareness of and little access to information on reproductive health services, and women remained unable to make informed reproductive health decisions. The worsening poverty of marginalized women coping with fear and insecurity combined to thwart their access to reproductive health services. Many of the poorest households, such as those of the ex-Kamaiya, experienced extreme food insecurity and the further weakening of their ability to pay for reproductive health and contraceptive services.

C. Access to reproductive health services in the Terai

For the Tamang in Jetthul, animal-powered and intermediate forms of transport were precluded by the difficult terrain and the lack of fodder in the hills. However, prior to the insurgency, travel in the Terai was generally easier due to the flat topography and the higher density of roads and tracks. These conditions enabled the use of a number of intermediate, animal-based and motorized forms of transport. People were physically able to use bicycles (although women cycled and travelled alone less than men did due to social and cultural constraints in the Terai), rickshaws and animal carts in addition to motorized vehicles. For women living in poor rural communities in the Terai, such as the ex-Kamaiya, however, the use of motorized transport continued to be obstructed by poverty, which remained a major obstacle to accessing reproductive health services.

Many villages and ex-Kamaiya settlements in the mid-west are located away from road, and, due to their economic situation, the villagers do not have any means of transport. Like the women in Jetthul a decade earlier, poor women in parts of the Terai have to walk substantial distances before reaching any form of transport. Because of the extreme poverty of ex-Kamaiya women in
rural areas of the Terai, travel to reproductive health outlets other than on foot is not an economically viable option, and their heavy domestic and productive work burdens restrict the time available to them to walk to health outlets.

As in Jetthul in the early 1990s, disadvantaged patients in parts of the Terai had to be carried for several kilometres before reaching transport, and poverty continued to mediate health-seeking decisions and outcomes. In 2003, the situation was exacerbated as the unstable security situation compounded difficulties for rural people seeking medical assistance in obstetric emergencies. Movement became increasingly riskier, particularly at night, as fewer vehicles travelled off main highways and through areas where there might be armed forces. Night-time journeys were avoided, particularly in many parts of the rural west, which became progressively unsafe, as both military and paramilitary personnel stopped, searched and questioned people moving after dark. Rural people had to adapt and cope with both official and self-imposed curfews, which compounded the difficulties they encountered in accessing medical care (Beun and Neupane, 2003, p. 8) and further restricted their ability to obtain skilled emergency assistance (Stevenson, 2002, p. 1495). This placed women in particular at risk, due to their biological vulnerability and obstetric needs during their reproductive years.

D. Effects of conflict on reproductive health services

Non-governmental reproductive health clinics that were perceived by local communities and rebel leaders to be tangibly benefiting local people, conducting transparent accounting, and refraining from paying inflated salaries, from involving themselves in corruption, and from directly supporting government action against the insurgents, were usually left to conduct their business in peace. However, as many rural health posts were constructed in close proximity to government offices, they came under attack, and many were destroyed along with primary government targets in the course of the insurgency. Medical services and staff were also reported to have become direct targets themselves (Stevenson, 2002, p. 1495), in addition to being caught in the crossfire. Consequently, in some areas, the health service infrastructure was reduced to burned-out buildings, equipment was destroyed and drug supplies were severely disrupted. Some health professionals had withdrawn to more secure urban areas, while those remaining in areas of conflict were widely reported to be working under conditions of extreme fear and intimidation and with interference in their work (DHSP, 2003; Sharma, Osti and Sharma, 2002, p. 1519). While coping under ethical pressure and coercion to treat injured insurgents, medical staff were legally bound under a 2001 Ministry of Health directive to seek permission from the Ministry prior to treating
any trauma cases (DHSP, 2003, pp. 3, 7). These circumstances severely disrupted rural health services, and patient confidentiality was compromised. Under these conditions, socially marginalized women, such as the ex-Kamaiya, were further discouraged from seeking reproductive health care, especially since they were generally reluctant to disclose symptoms of a sexual nature (World Bank, 2001, p. 13). This situation was exacerbated by the social differentials (in education, jat, economic status and gender) between reproductive health-care providers and their female clients that continued to persist throughout Nepal.

E. Impact of social and gender inequalities on reproductive health care

The jat and gender gaps observed between clients and reproductive health-care providers in Jetthul in the early 1990s were also in evidence in the rural Terai in 2003. Women in the south of Nepal tended to enjoy less gender equality than their counterparts of Tibeto-Burman hill groups, such as the Tamang (Acharya 1994, p. 1). The same assumptions that hindered dialogue between health workers and Tamang clients were evident in transactions with the poor and disempowered ex-Kamaiya in the Terai and placed women’s reproductive health at risk. The women were reluctant to request family planning and reproductive health information and assistance for fear they might be thought to be engaging in prostitution, which had become less covert and more openly acknowledged in Nepal in recent years. This was exacerbated by the reluctance of Nepalese reproductive health workers to interact with young female clients, regardless of their marital status (Mathur, Malhotra and Mehta, 2001, p. 94).

In recent years in Nepal, there has been greater public discussion on female sexuality and limited affirmation of women carrying condoms, however, it has also been acknowledged that women discovered to be carrying contraceptives were highly likely to become stigmatized (Suvecha, 2003). Given that security checks had become commonplace with the rising state of insecurity, women feared being searched while carrying supplies from health outlets to their villages.

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5 In 2003, UNFPA launched a condom (called “Number One”) campaign openly targeting young people in Nepal. This is an indicator of social and sexual change and the rising need for contraception, particularly condoms among AIDS-aware and informed young people.
F. Grass-roots reproductive health in 2003

In the Terai, community-level obstetric care was evident in a number of ex-Kamaiya settlements and villages, which had trained TBAs. TBAs are a cadre of local women who serve their own communities and offer basic obstetric care without gender and jat biases. However, semi-structured interviews conducted at women’s group meetings revealed that many reproductive health needs remained unmet and that poor rural women’s reproductive health continued to be vulnerable.

Women expressed concern over the lack of local, accessible health-care outlets and services. They felt that more, better trained and approachable health professionals were required at both the community and the local levels. Many women reported that, when they needed medical attention and were able to afford it, they crossed the border to seek assistance in India, where they believed they received superior and less expensive services than those available locally in Nepal.

Ethnographic enquiries focusing on community TBAs revealed that they and their clients suffered from a lack of support and training. Delivery kits supplied by the Ministry of Health were used as a focal point for discussion, during which it emerged that the TBAs had a very poor understanding of how to use some of the basic items they contained. Some TBAs reported that they were not sure how or when to use phenol-based disinfectant. It transpired that, during training, which for many lasted less than two weeks, the TBAs had been given conflicting advice. One TBA was told by a trainer to use the disinfectant in the delivery procedure “... to clean [her] hands and the floor”, but was later instructed by another trainer not to use disinfectant. As a consequence, some TBAs avoided using disinfectant altogether. From the comments many TBAs made and judging by the aged but unused condition of such items as disinfectant bottles and latex gloves, it was evident that many items in the basic TBA kit were not used for their intended purpose.

In focus group discussions, the TBAs were asked about some of the Ministry of Health pamphlets that they carried in their cases. These were written in Devanagari (Nepali script) and illustrated. Many TBAs were unable to correctly describe the basic subject of certain information leaflets in their kits and were unfamiliar with the health messages they provided, as literacy rates are low among the disadvantaged women in the Terai due to limited opportunities to attend school. Of greater concern was that the TBAs felt undertrained and that they lacked supervision and professional support. As skilled emergency staff could not be called out to rural areas at night due to the
high level of insecurity, the TBAs were left feeling isolated, underprepared and yet responsible for obstetric care in their villages. While women were very supportive of their community TBAs, they endorsed their perceived need for enhanced support and training and the importance of better access to emergency obstetric assistance.

The lack of skills development and information were not the only problems with which the TBAs in the rural Terai had to contend. Problems in resupplying their kits discouraged many TBAs from using certain items, such as latex gloves and umbilical kits, and encouraged them to reuse single-use and disposable items, such as razor blades. Discussion with the TBAs revealed ambiguity about the stocking and resupplying of their kits. They reported that some patients gave them money for their services, which enabled them to replenish their kits. This situation, in which individual TBAs were able to maintain their essential obstetric supplies only if and when they were given donations by patients, was far from satisfactory. Given that both patients and TBAs belonged to some of the poorest communities in Nepal, the level of funding actually channelled into maintaining the TBA kits was extremely inadequate.

CONCLUSION

Such factors as poor female education, poverty, increasing male migration and an expanding commercial sex industry combine to maintain the vulnerability of female reproductive health in rural areas of Nepal, where the ability to pay remains a primary determinant of female health-seeking behaviour (World Bank, 2001, p. 13). The fact that 74 per cent of health-care costs are estimated to be met at the household level in Nepal (Hotchkiss and others, 1998) has a major impact upon the most impoverished sectors of the population. As the majority of Nepal's population live in rural areas, the distance from skilled assistance and the lack of transport services severely hamper access to health services among the poor.6 This, together with the persistent jat and gender biases among reproductive health-care providers, continues to maintain inequalities in access to services by women of poor and socially marginalized groups (Smith-Estelle and Gruskin, 2003, p. 147; World Bank, 2001, p. 14).

Given that, in the new millennium, over half of all Nepalese women are estimated to receive no antenatal care (Smith-Estelle and Gruskin, 2003,

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6 See a companion article in this volume.
p. 147\textsuperscript{7}), it has become crucial that reproductive health care as a whole, and obstetric services in particular, be strengthened at the community level in rural areas. Because a peace accord was signed between the Maoist insurgents and the Government in November 2006, there is hope for improved security in spite of continued factional conflicts (BBC News, 2007). It is crucial that the Government of Nepal, with support from international agencies, prioritizes the rebuilding and strengthening of health services, particularly maternal and child health-care services. Furthermore, there is a need for a commitment to investing in motorized and intermediate forms of transport in rural areas, with the aim of reducing delays in obstetric emergencies, increasing access to skilled birth attendants and improving maternal and child health care, in order to make a concerted effort towards meeting the nation’s Millennium Development Goals.

As part of its recent health reforms to decentralize obstetric care, the Ministry of Health, in collaboration with NSMP (Beun and Neupane, 2003; Manandhar, 2000), has developed a programme of maternal and child health workers, which is based on a three-and-a-half-month training programme that provides continued supervision and support, including a six-week refresher course. It aims to raise the standard of obstetric, reproductive and family planning services at the community level. As this programme is based on the recruitment of a local female cadre selected by individual village development committees, it enables staff to work within their own communities and, therefore, has the potential to address some of the persistent barriers to reproductive health care for poor and marginalized rural women.

While the policy towards decentralized reproductive health-care services represents a much needed shift in a positive direction, a whole constellation of economic and social factors persists in mediating rural Nepalese women’s access to health services and reproductive health and contraceptive choices. Given the continuing insecurity and rapid social change with which rural people must contend, a more holistic and integrated approach is needed in order to enhance female inclusion in development initiatives, such as transport initiatives and wider development processes. By improving female literacy and livelihood options, women might, for example, become more empowered to use motorized and intermediate forms of transport to access reproductive health-care services and information and to make informed choices. In this way, rural women might overcome both persistent obstacles and new vulnerabilities and obtain the reproductive health care appropriate to their needs.

\textsuperscript{7} Quoting the Nepal Demographic and Health Survey 2001.
REFERENCES


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One copy of the manuscript in English should be submitted together with a covering letter to the Editor indicating that the material has not been previously published or submitted for publication elsewhere. The author(s) should also submit a copy of the manuscript on computer diskette, labelled with the title of the article and the word-processing programme used, or by e-mail as an attachment file. MS Word and WordPerfect are the preferred word-processing programmes.

The length of the manuscript, including tables, figures and bibliographical references, may not exceed 7,500 words. Manuscripts should be typed on one side of A4 paper in double spacing and pages should be numbered. A list of references should be included. Manuscripts are subject to editorial revision.

The title page should contain (a) title; (b) name(s) of the author(s); (c) institutional affiliation(s); (d) complete mailing address, e-mail address and facsimile number of the author, or of the principal author in the case of joint authors; and (e) an abstract of approximately 150 words clearly stating the main conclusions of the article. Acknowledgements, if any, should appear at the end of the text.

Articles should include a final section containing the main conclusions, which should be broadly intelligible to a non-specialist reader.

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