

MODULE 7 - IMT Adoption

Abstract:

Module 7 first introduces an alternative analytical framework, which mainstreams gender into all five stages of the planning process. Second, it emphasizes how the patterns of IMT adoption are varied with a series of examples from around the world. Third, it highlights that programs need to understand the "market", target promotional activities accordingly, and formulate explicit strategies to ensure women are treated equally. Finally, section four presents monitoring and evaluation indicators which are useful for achieving more equity in IMT adoption patterns, improved policies, and increased exchange of information.

1. An Analytical Planning Framework

The World Bank SSATP has published an analytical framework concerning the promotion of IMTs (IT Transport, 1996). This envisages a very detailed five-stage planning process. It does not, however, consider the issue of gender and hence lacks a key element for planning purposes.

The first stage involves a broad contextual analysis that considers environmental factors (topography, infrastructure stocks, demography) and economic, industrial and social factors where gender considerations are essential. Categories including markets and household economics, technological options, finance for production, distribution and purchase of IMTs, cultural, religious and other factors, community groups and complementary initiatives all require that gender issues are considered and addressed. The best method is to disaggregate data to ensure analysis can take place on a number of levels and include all potential beneficiaries. The initial analysis would also normally consider some non-project factors including national planning, regulatory and fiscal processes that affect IMT costs and use where gender issues and concerns play pivotal roles.

As a second stage, the problems of access should be considered, including the possibilities of using non-transport solutions to tackle the problems of isolation. Gender access needs to be addressed within this context.

The third proposed step concerns a detailed diagnostic survey using a logical framework approach. The transport problems and needs to be tackled are defined with clear objectives, assumed costs, envisaged benefits and realistic time-scales. This is an ideal place to think through the gender implications of proposed options and alternatives.

The fourth proposed feature is a detailed demand and supply analysis, where gender would again be critical.

The final planning stage involves the development of detailed action plans which relate specifically to both gender users, men and women and relate to the supply of IMTs (adaptation, improvement, manufacture), the introduction and promotion of IMTs, and the provision of credit.

2. International Adoption Patterns of IMTs

As noted in previous sections, the patterns of technology adoption are very varied and frequently paradoxical. Some technologies spread rapidly, others slowly and some innovations are never

adopted. Some alternative technologies may coexist for years, while in other situations one rapidly replaces another.

In Nepal, people carry loads with back baskets, with forehead straps. In East Asia, loads may be carried with poles. Shoulder yokes have been used to carry water, milk and other loads in parts of Europe. While head-loading is dominant in most of sub-Saharan Africa, there are several other human-based technologies. In Chad people of different traditions in neighboring villages use three different water loading systems: head-loading, shoulder loading and back loading. These three transport technologies, with very different ergonomic profiles, have coexisted for centuries.

Cycle-rickshaw tricycles of various designs are common in parts of India, parts of Bangladesh, parts of The Philippines and parts of Indonesia. They are not uniformly distributed within these countries, and are seldom seen in some other Asian countries such as Sri Lanka. In Sri Lanka, and in Europe, load-carrying tricycles often have the two wheels and load in front of the driver. Tricycles have not been widely adopted in Africa or Latin America. However, a completely different design of tricycle taxi is used in Cuba. Bicycle taxis are in use in East Africa.

Wheelbarrows of different designs are found throughout the world. Human-pulled rickshaws, each with a passenger seat and canopy are used in Madagascar. Nowadays most carry freight rather than people, but IMT design has not changed to reflect this. In Madagascar ox carts with wooden spoked wheels are common and such cartwheels have been made on Zanzibar and Pemba, as well as in North Africa and South Africa. A few initiatives to make similar cartwheels have been made in several African countries, but cartwheels are now seldom encountered anywhere on the African mainland. Animal-drawn sledges are common in Madagascar, and also in eastern and southern Africa. Such sledges are seldom, if ever, seen in West Africa, but they are used in Cuba.

Motor cycles with sidecars are common in the Philippines, but not in other Asian countries. It is common to see men and women driving mopeds (mobyettes) in Burkina Faso, Benin and Togo but this is uncommon in Guinea, Ethiopia and Tanzania. Large numbers of power tillers are used to pull trailers in several countries in south Asia. Some power tillers are used for transport in countries such as Côte d'Ivoire, but this technology is yet to become common in Africa.

India has 14 million ox carts. Ethiopia has 14 million work oxen and five million donkeys, but very few animal-drawn carts. There may be one million donkey carts in use in West Africa, but in Madagascar and Cuba most carts are pulled by oxen. Cows, rather than oxen, pull carts in Portugal and Romania.

3. Programming Focus

"Market research" is needed in order for IMT programs to understand the needs, wants, preferences, priorities and purchasing power of the diverse users in their target groups. Priorities should be set in terms of specific target groups including women and programs based on the special requirements of such groups. A distinction should be made between access and ownership, noting that sometimes access may be sufficient.

Once suitable technologies have been identified, promotional activities should be carefully targeted, in terms of area of intervention and beneficiaries. Women often have not had sufficient amounts of information to make choices best suited to their needs, with tradition often dictating choice rather than need. The identification of options for IMT use and the dissemination of information, preparation of demonstrations and demonstration projects as well as pilot programs are excellent techniques for encouraging women in this area. This establishes the technology firmly under favorable conditions, before trying it in conditions where the physical, socio-economic and infrastructural environmental conditions may be less auspicious. What constitute favorable conditions will depend on the technology.

Since in many circumstances, men are more likely to think that they should have priority, task managers will need to formulate strategies, including targets, to ensure that women are equally treated. It could also become obvious that the best method for introduction of IMTs is to establish interest and critical masses near local or regional markets or trading centers, thus making it easier to introduce into outlying villages and remote areas.

4. Monitoring, Evaluation and Networking

Self-critical monitoring and objective evaluation are fundamental to the success of any program to develop and/or promote the use of IMTs. This is particularly true with respect to those where women beneficiaries are the prime target. In the past, there has been clear evidence of enthusiasm for particular technologies, lack of objectivity and irrational optimism in the face of disappointing adoption patterns.

Such problems may be overcome through mechanisms that include potential users (of both genders, status, purchasing power, etc) and other interested parties in program planning, monitoring and evaluation procedures. Methods need to be developed to enable program staff to understand the viewpoint of the diverse users. The various stakeholders must be allowed to talk honestly about their needs and concerns and realistically about their willingness to buy or use certain IMTs.

Women's participation in these groups and discussions where decisions are being made are key to success. This 'attitude' information needs to be regularly cross-checked with objective information from actual sales and use patterns, and any discrepancies investigated at an early stage.

Regular objective evaluation is also vital. Many programs and individuals fear the potential for criticism that may come with external evaluations. Sympathetic evaluators are often selected. This may be more comfortable in the short term, but restricts the potential for learning and program changes. Self-evaluation, aided by an independent external person, can be useful and may involve both program staff and key/representative stakeholders. If someone from an IMT project in another country assists the evaluation, the learning process may benefit two programs simultaneously. The lessons from evaluations should be documented and widely shared.

The record of inter-institutional information exchange and collaboration in the field of rural transport and development has been good. The strong links between various organizations has resulted in knowledge sharing and synergetic program development. Although indigenous experts have implemented most national IMT programs in Africa, international programs have been slow to build on African expertise.

Some national networks (transport forums, steering committees) have been formed, and these should play important roles in both information exchange and policy development with respect to IMT use by women and continued strong national and international networking is required, with increasing emphasis on inter-African networking and honest exchanges concerning the success and failure of IMT initiatives.

The following presents some monitoring indicators which may be useful for the above noted purposes.

		Monitoring Indicators
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Project Objectives	Activity	
<p>Make IMT transport planning more participatory & reflective of women's transport preferences & demands</p>		<ul style="list-style-type: none"> • Clear statements in CAS, ESW & national development plans regarding different IMT transport needs of women/men • Explicit strategies in project documents for addressing differential IMT transport demands of women/men
	<p>Compile sex-disaggregated data for use by Bank & Borrower-Country partners in formulating IMT sectoral plans & policy changes</p>	<p>Availability of data on:</p> <ul style="list-style-type: none"> • Women's income level • Access to household resources • Participation in formal and informal sector jobs • Female-headed households • Composition of female labor force • Type of travel/transport needs, existing modes and level of use
	<p>Assist borrower countries in making IMT planning more participatory, ensuring women's needs & demands are represented in these consultations</p>	<ul style="list-style-type: none"> • Level of financial resources committed to participatory activities • Level of inclusion of women's trade, marketing & savings assoc., women's NGOs, women's branches of unions, & representatives of women-owned businesses & contractors in workshops • Reflection of workshop outcomes in project & sectoral documents
	<p>Provide gender sensitivity training to donor staff & ministries to ensure biases do not constitute barriers to women's participation in project activities</p>	<ul style="list-style-type: none"> • Number of gender sensitivity training sessions given • Number of gender specialists employed • Statement of public commitment by ministers & staff at all levels to gender issues in planning of IMT activities
<p>Alleviate women's significant transport burdens in the rural areas by introduction of a variety of appropriately identified IMTs</p>		<ul style="list-style-type: none"> • Reduction in women's disproportionate time spent on transport-related activities • Increase in women's time spent on productive activities • Reduction in women's annual ton-km carried • Improved access to water & firewood sources • Improved access to inputs & markets for women's agricultural & other income generating activities
	<p>Involve women in the identification of road</p>	<ul style="list-style-type: none"> • Increase in the number of women & women's organizations informed about proposed dev't

	<p>construction, maintenance & rehabilitation projects to ensure that improvements in rural transport meet local travel & transport preferences</p>	<p>initiatives, decision-making procedures for implementation & management of rural infrastructure</p> <ul style="list-style-type: none"> • Number of women included in focus groups, mapping exercises, & participatory workshops regarding decisions about rural infrastructure improvements • Number of women involved in local councils & decision-making bodies regarding rural infrastructure improvements • Reflection of women's priorities in the selection of projects • Improved access to health care facilities, schools markets
	<p>Provide credit & intermediate modes (IMT) to rural women</p>	<ul style="list-style-type: none"> • Number of IMTs owned and operated by women • Funds allocated in the project budget to finance start-up costs of micro-credit institutions or rotating savings assoc. that will enable women to purchase transport aids • Increase in production & use of locally developed produced IMTs • Increase in project funds allocated to finance training, start-up & marketing costs associated with local-level design, production & marketing of IMT and transport aids • Number of loans provided to women for access to IMT
<p>Improve responsiveness of public transport systems to meet women's travel needs as a complement to IMT development</p>		<ul style="list-style-type: none"> • Reduction in the mean number of stages women must spend/trip • Reduction in women's travel time • Increase ridership among women users • Reduction in unmet travel demand
	<p>Conduct user surveys to identify gender differences in travel patterns, IMT preferences & demands</p>	<ul style="list-style-type: none"> • Availability of data on women's preferences regarding transport routes, scheduling, pricing, safety and vehicular design • Availability of data on women's travel activities, such as purpose of travel, modal choice, trip chaining, legs of journey • Available data on women's income level, access to household resources & other budget constraints that affect ability to utilize existing transport services
	<p>Provide capital, credit & other incentives to private sector transport operators interested in providing transport services that</p>	<ul style="list-style-type: none"> • Number of loans & training provided to NGO/enterprises for start-up costs associated with providing private sector transport services • Number of private sector transport providers that

	meet women's travel & transport preferences	<p>meet women's transport demand</p> <ul style="list-style-type: none"> Percentage of women among users of private transport operators
Provide & inform women of employment opportunities, particularly those that give rise to marketable skills enhancing women's involvement in decision-making, and work with them to identify the most appropriate means of transport – both motorized and IMT		<ul style="list-style-type: none"> Increase in women's employment in the transportation sector Number of women in local, regional & national level decision-making bodies Increase in women's skill base
	Design labor-intensive transport projects based on local availability of productive inputs & human resources, recognizing that women are potential contributors to project activities	<ul style="list-style-type: none"> Percentage of project inputs produced locally Ratio of labor-based vs. equipment-based activities Availability of data on men & women's seasonal labor availability Clear statements concerning goals for women's equal employment in the project objectives & all other project documents
	Involve women's NGOs, groups & micro-enterprises as contractors & subcontractors for project implementation, monitoring & evaluation	<ul style="list-style-type: none"> Number of local grassroots organizations & NGOs employing women for project activities Number of project components contracted to women/women's groups Number of loans provided to local contractors who mobilize women's labor Number of loans provided to micro-enterprises who produce construction materials used for projects Number of NGOs involved as external monitors & evaluators of women's project related activities
	Provide training to ensure that women have entry/access to a range of employment opportunities associated with the project	<ul style="list-style-type: none"> Number of female participants in training program for unskilled jobs Number of female participants in training of managerial & supervisory jobs Number of gender sensitivity training session held for managers & supervisors
	Take proactive measures to remove legal, institutional or other constraints on women's participation in project activities	<ul style="list-style-type: none"> Depth of women's knowledge of opportunities associated with the project Increase in women's participation in project related activities Inclusion of clauses regarding commitment to fair employment practices in TORs Existence of legislation guaranteeing women's equal opportunities The repeal of restrictive legislation concerning women's employment

		<ul style="list-style-type: none"> • Number of women utilizing social services, housing & other facilities provided by the project • Equitable remuneration
Mitigate possible negative impacts on women arising from transport IMT projects		<ul style="list-style-type: none"> • Impact evaluations reveal minimal negative effects
	Hold participatory stakeholder consultations with women & men to identify project impacts	<ul style="list-style-type: none"> • Number of women participating in community interviews & focus group discussion regarding project planning • Incorporation of women's views into project related documents • The performance of a social assessment for the target area
	Assess how government transportation sector policy objectives may differentially impact women & men	<ul style="list-style-type: none"> • Availability of studies on gender specific dimensions of proposed or enacted policies related to the transportation sector
	Review legal & regulatory frameworks, especially those relating to land use & property rights, which could be affected by transport sector development	<ul style="list-style-type: none"> • The performance of a social assessment for the target area
	Provide marketing assistance to facilitate women's access to new or altered markets	<ul style="list-style-type: none"> • Stability or improvement of women's income

Note: these indicators are not intended to be comprehensive but rather provide a guideline for Task managers. For optimal monitoring and evaluation, specific indicators and targets should be identified through consultation with local stakeholders and beneficiaries.