

Gender mainstreaming in rural road development and usage in Ethiopia

Key policy recommendations

- ▶ Gender provisions foreseen in the World Food Programme's Productive Safety Net Programme (PSNP) implementation manual are quite comprehensive and have been revised and integrated based on lessons learnt during the PSNP implementation period. However, **the gap between gender mainstreaming provisions and their implementation in rural road construction should be closed**. Particularly childcare and flexible working hours should be systematically implemented for both women headed households (WHH) and women spouses (WS).
- ▶ **Skills development of women in rural road construction needs to be supported**. The wage offered to skilled labourers is about three times that of unskilled labourers. It is usually the men who are trained in skilled jobs such as masonry. Training and skills-development initiatives can open up a number of higher-paying jobs to women, giving them higher returns on their time.
- ▶ **Additional business opportunities around construction sites need to be encouraged**. Economic opportunities for women arise spontaneously around the construction site, for instance in the form of sale of beverages and food to the workers. If catering at construction sites is formally recognised by road development authorities as a service required at work sites, or counts as a PSNP activity, a larger number of women would be able to utilise such opportunities.
- ▶ **Intermediate Means of Transport (IMTs) need to be introduced and promoted** in rural areas of Ethiopia, to fill the rural transport gap, particularly to improve the "**First mile**" connectivity: the path from the homestead to the nearest road. Local enterprises that manufacture, maintain and repair IMTs are limited in size and capacity. Government support would help proliferate these small businesses and disperse the IMT technology more widely.
- ▶ **Motorcycles and motorcycle-based transport solutions should be strongly considered** in the promotion and field-testing process; in recognition of their impact on improving connectivity and creating jobs in the rural transport sector in many African countries.
- ▶ **Easing tariffs and non-tariff barriers to vehicle imports** will make certain vehicles (such as bicycles and motorcycles) more affordable, and **stimulate**

local enterprise to develop local value chains around these vehicles. This will likely create a number of jobs related to their assemblage, maintenance, repair, and rental, as has been the case recently in several other countries such as Tanzania, Nigeria, and Liberia.

Brief problem summary

The construction of low volume rural roads (LVRR) under Ethiopia's PSNP and the Universal Rural Roads Access Programme (URRAP) has a number of impacts on women in terms of employment (during construction and maintenance), business opportunities, mobility and access to services, as well as in terms of land lost or damaged due to road construction. Importantly, there are significant, well-recognised differentials between the nature and magnitude of these impacts on WHH, WS in Male Headed Households (MHH), and men. To take these differentials into account, PSNP has provisions to maximise employment opportunities of women, particularly WHH, such as quotas, equal wage guarantees, and flexible working hours, lower work targets, and childcare; as well as provision to maximise the participation of WHH and WS in decision-making and planning of the works. However, widely recognised gaps continue to exist between the gender provisions and their implementation.

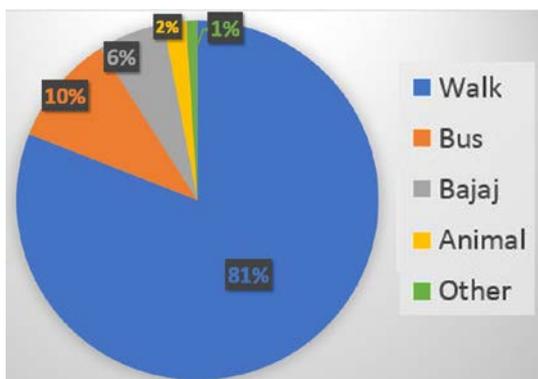
Figure 1: Rural roads are mostly used for walking, sometimes along with livestock and with donkeys that can carry cargo



Development of a rural road network, although a necessary condition for rural transport services to expand, is not sufficient to improve access to transport, particularly for women. Rural Ethiopia continues to be an overwhelmingly walking country, with 80% of all trips undertaken on foot. Motorised public transport accounts for only 16% of all trips (Figure 2). Public transport on rural roads is restricted to minibuses and midibuses. Generally

these are operated by private entrepreneurs within or between urban centres. They run on low volume rural roads only on market days (usually twice a week) when rural households travel to the nearest urban centre to sell produce and buy supplies. The transport operators cite quality of rural roads (most of them unpaved) and insufficient demand on non-market days as reasons for their reluctance to operate on rural routes. On other days, people can either walk or call a 'Bajaj' (motorised three-wheeler rickshaws). This implies an overall scarcity and a gap between the need for motorised transport and availability of options.

Figure 2: Modal Split for All Trips shows that rural roads are mostly used for walking



With a three-wheel design, small tyres, and high centre of gravity, Bajajs (Figure 3), an IMT option, are considered unstable and unsafe for plying on rural roads. Despite being officially banned from rural roads, local authorities largely tolerate Bajajs and rural households value them for being the only transport option available on demand; often the only option during emergencies.

In developing countries, IMTs are the main source of mobility for rural populations. IMTs fill the gap in rural transport needs that cannot be met on roads inhospitable to standard vehicles designed for urban conditions. In many African countries such as Uganda, Nigeria, Kenya, and Tanzania, motorcycle-based IMTs have been immensely effective in improving last mile connectivity, and in generating employment in rural areas.

Figure 3: A 'Bajaj,' or a motorised three-wheeler rickshaw, plying on a rural road



In Ethiopia, however, IMTs are scarce and expensive. Local manufacturing units that could develop/adapt IMT designs lack the capability and capacity to do so. Tariff and non-tariff barriers to import vehicles limit the availability of IMTs from abroad, as well as their spare parts. As a result, prices of even simple vehicles such as animal carts and bicycles have been increasing exponentially, making them unaffordable for a large part of the population.

Most relevant evidence

Road infrastructure and transport services in rural Ethiopia are at a level from where their expansion will benefit men and women alike. However, men exert a distinctly greater influence on road planning and benefit disproportionately more from the employment opportunities created in road development. Due to socio-economic norms related to gender relations, men also enjoy greater access to the available transport options. The status quo is exacerbated by women's greater work burden, exclusive responsibilities such as childcare, and a higher risk of personal safety when travelling. Nevertheless, given the nature of their share of domestic responsibilities, women have to travel more frequently than men. Thus, they exhibit a stronger demand for more roads, upgrading of existing roads, and better transport services. Between WS and WHH, the latter tend to have a lower economic standing and greater time poverty with respect to the burden of domestic chores, and thus lag further behind on all counts.

On the other hand, PSNP's gender mainstreaming provisions have brought about slow but steady changes. They have slowly pushed women's concerns up the planning agenda. For example, a key criterion for approving a village's request for a road now is whether it is connected to the government-run maternal ambulance service. Besides, more realistic work targets are enabling more and more women to participate in road works and earn a wage. However, the level of implementation of gender provisions such as childcare and flexible working hours is highly variable and generally low.

Experience from other countries has shown reliable, economical rural transport systems cannot be set up without IMTs. The spread of IMTs in Ethiopia is hindered by a suboptimal entrepreneurial environment and high tariff and non-tariff barriers to import. The value chains that can help design, adapt, manufacture, repair and service IMTs in rural areas need to be driven by local entrepreneurship (or enterprises): village or district-level retailers and repairers. Ethiopia is marked by a low-level 'Entrepreneurial Intentions' indicator (defined as intentions, backed by ability, to pursue a business activity

within the next 3 years); much below the corresponding figure for the Sub-Saharan African region. Current and potential entrepreneurs identified limited access to finance, corruption, and bureaucracy as the biggest constraints to setting up an enterprise. In terms of barriers to import, Ethiopia ranks 122 out of 138 countries on the Global Competitive Index as regards trade tariffs, 123 in terms of non-trade barriers (e.g. legal, technical, administrative requirements) to trade, and 96 in terms of burden of customs procedures. From the specific point of view of rural IMTs, the current macro-economic environment is linked to the high cost of vehicles, spare parts and inputs. This is apparent in the rise of donkey cart prices from ETB 5-6,000 to ETB 30,000 over the past decade or so. Bicycles have become 3 times more expensive over the same period (from ETB 1,300 to ETB 3,500-4,000).

Scarcity of wheeled transport options increases travel costs and crowding of midi- and minibuses; which further puts men at an advantage over WS and WHH (in that order). Crowded buses are discouraging and threatening to women, especially to those who are pregnant and/or carrying small babies. Men can better elbow their way through the crowd and get onto the bus. This results in women having to wait for many hours for less crowded buses or delaying the trip altogether. Additionally, men have in general more cash available than women to afford transport costs.

Figure 4: An unidentified woman with her child at Aynalem village, waiting for a midi-bus that will take her to Wukro town



Feeder road development through PSNP has demonstrated that expanding rural road networks while generating productive employment for men and women is feasible. Benefits accrued to women from the road development process have increased through higher implementation of specific gender provisions, interventions to enhance their skill-base and by supporting them to provide services (like catering) at road construction sites. "First Mile" connectivity needs to be improved by boosting the availability and use of IMTs. IMTs need to be tested and introduced in rural markets to fill the rural transport gap, which existing vehicles and services fail to do.

Deepening Gender Mainstreaming in Road Development

Two specific areas where women can be supported to further deepen gender mainstreaming are: a) developing their road construction and maintenance skills, and b) promoting their involvement in the provision of certain services required at road construction sites.

Skills development

As discussed earlier, feeder roads in rural Ethiopia are constructed under the PSNP. Roads of a higher category, with masonry work and cross-drainage facilities, are constructed under the URRAP programme. URRAP roads involve a higher degree of technical inputs and mechanisation. About 70% of the labour required in the URRAP is unskilled, and sourced from the road-adjacent community. Anybody can participate in URRAP work as long as they have completed their PSNP obligations. The remaining 30% is skilled labour contracted from elsewhere. The wage offered to skilled labourers (ETB 200) is about three times that of unskilled labourers (ETB 50-60). It is usually the men who are trained in skilled jobs such as masonry. Thus, roadwork activities under URRAP are typically divided along gender lines. Men can get the high-skilled, high-paying jobs (e.g. masonry, levelling), while women are mainly tasked with fetching water for the preparation of concrete mixture, carrying cement bags, mixing of construction materials, and watering cement structures. Women respondents in the research recognised masonry as a job that is viewed as a 'male job,' but one that they can do if they receive the necessary training, especially because it is not particularly labour-intensive.

Figure 5: Carrying stones (above) and water to mix cement are examples of jobs considered suited to women



Training and skills-development initiatives can open up a number of higher-paying jobs to women, giving them higher returns on their time. There are women's groups called *Selam* that already exist at village-level. They meet every month to discuss wide-ranging issues of common interest, such as household management, childcare, health, farm management, and marketing of produce. Construction and maintenance programmes can collaborate with the *Selam* groups in order to

systematically implement skilling programmes for women.

Business opportunities around construction sites

Apart from direct employment in road construction, economic opportunities arise in various forms around the construction site. There are instances of women making money by selling tea, coffee, snacks, lunch, and *talla* (local sorghum-based beer) to the workers. This was more common before PSNP was launched, when feeder road development was carried out by private constructors under no obligations to reserve jobs for women.

These opportunities are created by women out of their ingenuity. However, if catering at construction sites is formally recognised by PSNP authorities as a service required at work sites, and women caterers are extended support and recognition like child-carers are, a larger number of women would be able to utilise such opportunities. This will serve the larger objective to expand productive employment opportunities for women.

Promoting Intermediate Means of Transport

IMTs emerged as a key missing component of rural mobility, particularly for bridging the “first mile” from the village to the nearest road. The lack of IMT affects both men and women. However, given the nature of the household responsibilities assigned to women, they have to travel more frequently and under more trying circumstances (more likely to carry cargo and children, faced with exclusive threats like sexual assault). Thus, women stand to significantly benefit from improvement in transport services. IMTs meet transportation needs that cannot be fulfilled by walking, in areas where standard motorised transport is scarce. IMTs could be as simple as a donkey with a cart attached. In their more sophisticated forms they are often modified versions of standard locomotives (motorcycles/scooters/rickshaws) that have been customised to rural road conditions, local needs, and ability to pay.

The idea of motorcycles as rural transport solutions deserves special mention. Motorcycles and motorcycle-based IMTs emanate from South and Southeast Asia where they are popular as personal vehicles and as public transport. They have now spread across many African countries (e.g. Burkina Faso, Benin, Rwanda, Kenya, and Tanzania). Despite safety concerns reported in some countries (e.g. Uganda) due mainly to poor driver behaviour, motorcycle taxis generate huge economic and social benefits. Their rapid spread in these countries has been made possible by the relatively low tariff and non-tariff barriers to importing motorcycles from China and

India, as well as the spare parts and raw materials needed to modify and service them.

If the government was to play a key role in boosting the availability of IMTs, it should start by ensuring that appropriate, affordable materials are available for the fabrication and repair of carts and bicycles. In addition, IMT designs have to be adapted to match local (gender differentiated) needs and preferences. First steps should include demonstrations, feedback, and field-testing of the IMTs. Local entrepreneurs (mechanics, welders, transport operators) would need to be provided technical support, and perhaps even financial support and subsidies. These first steps will serve to inject design ideas and prototypes in rural markets, and build capacity among local entrepreneurs to adapt, sell, implement and service the solutions.

Summary of Project/Background

This Policy Brief is based on findings from the research project ‘*Gender Mainstreaming in Rural Road Construction and Usage in Ethiopia: Impact and Implications*’. The research was conducted in Ethiopia’s Amhara and Tigray regional states by MetaMeta (The Netherlands) and Mekelle University (Ethiopia) in 2016-2017. It was funded by the Research for Community Access Partnership (ReCAP) programme.

References

- BoCRT (Bureau of Construction, Road and Transport), 2016. Summary Classified 2nd Round Traffic Count for Rural Road (January 2016 G.C.) for the Supervision of Road Maintenance Program for Tigray Region [Data set, available upon request] [Provided to the MetaMeta/Mekelle University in November 2016]
- Fernando P and Porter G (eds), 2002. *Balancing the Load*. Edited Volume. London and New York: Zed Books.
- International Development Research Centre, 2012. *African Entrepreneurship: Sub-Saharan Regional Report*. Cape Town: University of Cape Town.
- MOFED (Ministry of Finance and Economic Development), 2002. *Ethiopia: Sustainable Development and Poverty Reduction*. Addis Ababa: Federal Democratic Republic of Ethiopia.
- Ministry of Rural Development, Government of India, 2012. *Proto-type on Road Side Plantation under MGNREGA based on Muzaffarpur Model*. New Delhi: Ministry of Rural Development, Government of India.
- World Economic Forum, 2017. *The Global Competitiveness Report 2016-2017*. Cologny/Geneva: World Economic Forum.