



Women in infrastructure works: Boosting gender equality and rural development!

Gender is an important but largely neglected aspect of infrastructure planning and provision. Rural women pay a particularly high price for the lack of infrastructure, in time spent accessing water for domestic or agricultural uses, processing and marketing food and other agricultural or non-farm products, collecting firewood and reaching health services for themselves and their families. This ‘time poverty’ limits their ability to develop or access complementary sources of income. Rural infrastructure programmes can enhance women’s participation and benefits – as workers during construction and as beneficiaries of the asset(s) created.

DID YOU KNOW?

- Worldwide over 1 billion people lack access to roads, 884 million do not have safe drinking water, 1.6 billion have no reliable sources of energy, 2.5 billion lack satisfactory sanitation facilities and 4 billion are without modern communication services.¹
- In many countries, women and girls spend more time and effort on transport (due to household chores such as fetching water and wood) and face greater safety and security risks when travelling. In Tanzania for example, women spend four times as much time on transportation-related tasks than men.²
- Public works have a long history as a policy instrument to promote economic growth and employment creation. Since the 1970s, the UN has been promoting a developmental approach that seeks optimal employment creation in regular infrastructure investments for sustainable growth and poverty alleviation, without compromising the quality or costs of the works.
- Whether designed as an emergency “safety net” (in times of economic crises, natural disasters, or post-conflict reconstruction) or as regular infrastructure investment, public works can provide large numbers of short-term and longer-term jobs. By designing infrastructure works, they allow local contractors and communities to participate, and by setting wage levels, type of payment (cash, food or a combination) and quotas for specific groups (including women), these programmes can ensure that those jobs directly benefit targeted groups.
- The choice of technology in infrastructure works influences employment generation. In the case of unpaved road construction, the share of equipment in the total cost may vary from 30 to 80% and that of labour from 10 to 60%.³
- Well-designed infrastructure programmes provide a useful entry point and catalyst for rural development, as they strengthen community organizations and participation, empower women, develop skills, and stimulate small enterprises and public-private partnerships.
- Explicit pro-employment policy and appropriate technology choices can be made in rural infrastructure provision, at equal cost and quality, with multiple paybacks: (1) higher direct and indirect employment creation, (2) higher multiplier effect because of the use of local resources, enterprises, skills and labour, and (3) easier maintenance.

WHY IS ACTION NEEDED?

Lack of basic infrastructure imposes high costs on rural populations, in terms of longer distances to travel to access goods and services, higher prices of consumption goods and low selling prices for their produce. It also deters the establishment of new (farm or non-farm) enterprises and hampers the productivity of existing ones.

Infrastructure investments in productive assets (such as roads, market and storage facilities, irrigation, small dams, electricity) and social assets (such as access to potable water, basic sanitation, schools and health services) can improve human development and welfare. Through public works or community-based infrastructure programmes (see Box 1), those investments also increase individual performance and rural productivity, generate higher incomes, stimulate economic growth, and can contribute to environmental sustainability (with erosion control and reforestation works). However, women are often marginalized during identification, design and implementation, limiting the positive effects on rural communities.



BOX 1 Public works and community-based infrastructure programmes

Public works are usually large scale programmes (e.g. roads) directly implemented by the State or sub-contracted to the private sector.

Community-based infrastructure programmes are multisectoral, participatory, and respond to demands and needs identified at the local (village) level.



Work on a school in Sri Lanka.

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1. Women do not always enjoy easy access to jobs in public works

- The proportion of women among construction workers varies between and within public works programmes, between regions, as well as from one village to another and between types of infrastructure within the same programme in the same region or province.⁴
- The main factors hindering rural women's participation as wage labourers in public works are:
 - The domestic labour division usually assigns women primary responsibility for childcare and domestic work (including fetching water and firewood often over long distances, with few transport means and infrastructure). This restricts their time for productive activities, and often means they can only participate in works within or near their village.
 - Wage work is often traditionally reserved for men and construction work is usually considered a man's job.
 - In areas of job scarcity and low agricultural incomes, women face stiff competition from men in public works projects, unless there are pro-active recruitment measures or quotas for women.
 - Information on job availability provided at district level or at the construction site may not reach women, or may not reach them in time to

BOX 2 The Indian National Rural Employment Guarantee Act (NREGA, 2005)

The NREGA guarantees 100 days of work at the statutory minimum wage to all rural households whose members are willing to perform unskilled manual labour. With a quota of at least 1/3 of jobs reserved for women, as well as child care facilities at work sites, participation of women in the schemes has been remarkable, although with significant variations across regions. NREGA work is widely accepted because it is government work, locally available, with regular and predictable working hours, and normally paid above local rural wages. Other significant benefits include increased food security and better livelihood options. The availability of local wage employment at the statutory minimum wage for women is a new development associated with the NREGA.⁵

Source: Khera, Reetika and Nandini Nayak, 2009

organize alternative arrangements for child care and domestic chores.

- Even when women take part in public works, they tend to be hired as unskilled labour and are underrepresented in skilled or supervisory positions.
 - Women and girls generally have lower access to transportation than men making them less flexible to accept jobs far away from their homes.
- Despite these constraints, evidence suggests that, given the opportunity, many women are interested in wage earning opportunities in public works to meet financial obligations, improve their incomes or ensure their family's subsistence and well-being (as illustrated in Box 2 with the Indian National Rural Employment Guarantee Act), where nearly 50% of the jobs are taken by women.

2. Women's participation is relatively higher in community-based infrastructure programmes

- Community-based rural infrastructure programmes may be planned and implemented entirely by local communities using local labour and resources or they may be developed, implemented and funded by governments, donors or NGOs in ways that encourage full participation of local stakeholders in the design, implementation and management/maintenance of the new assets.
- The returns of a gender focus in community works can be very high (e.g. project performance, improved maintenance, household well-being and women's empowerment) and adds no significant cost.
- As these works take place in or near the village, often women can easily combine working in them with their domestic and care duties. Many such projects have reported a high or even majority participation of women.
- Nonetheless, rural women tend to be under-represented in the identification and design stages of these works. As a result, women may not be included as paid labourers in implementation and maintenance, and the new assets may not meet their needs.

WHAT ARE THE POLICY OPTIONS?

Whether designed as an emergency "safety net" or as regular infrastructure investments (see Box 3), public works can provide large numbers of short-term and longer-term jobs and offer opportunities for greater gender equality in rural employment. Deliberate efforts are needed to ensure women's participation and benefits from infrastructure programmes.

BOX 3 Infrastructure works in Haiti

The ILO/UNDP/WFP Programme for natural disaster prevention and environmental rehabilitation in the Artibone Region in Haiti, implements water and soil conservation projects that provide income and enhance agricultural produce. Providing combined food and cash payments, these projects generate jobs of a 25-day duration to 3,600 households, about half of which are women headed.

Source: ILO, UNDP, WFP, and Republic of Haiti, 2009⁶



Environmental rehabilitation in Haiti.

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Infrastructure works need to be explicitly gender-sensitive and should seek to do the following:

1. Ensure gender equality in rural public works

Policy makers should:

- Design and implement gender-sensitive public works programmes, so that women can participate alongside men, despite the traditional division

of labour, and women's greater time poverty, restricted mobility and limited access to information.

- Consult with women about the type of jobs they can do as the range is often wider, or can progressively be made wider, than the perceived traditional male/female division of labour. For instance, Islamic law permits women to carry out virtually all construction works, except climbing ladders and working in wells or underground.
- Encourage women to perform tasks traditionally reserved, or perceived to be reserved, for men and create incentives to relax rigid social norms on the gender division of labour.
- Set decent work standards and include positive actions for women workers to secure equal access to jobs and training, and equal pay for work of comparable value.
- Use targeted strategies and approaches to facilitate women's access to wage labour in public works, from the design to the implementation and monitoring stages.

2. Ensure that gender concerns are adequately addressed in infrastructure project design and implementation

Project designers and implementers should:

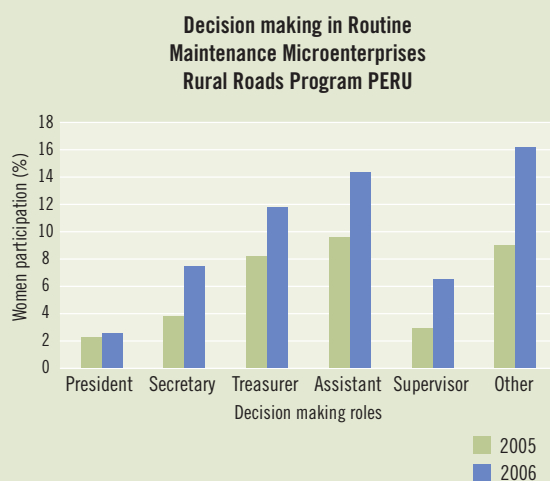
- Make sure that gender constraints are specifically addressed by assigning a gender expert at each strategic phase of project design and implementation (see Box 4). This expert should work closely with concerned women, designers, technicians and professionals to better understand rural women's needs and ensure gender-appropriate

BOX 4 Women's participation in irrigation programmes

Women use water as farmers in irrigated agriculture, and in other livelihood activities: most irrigation systems do not only deliver water for field crops, but also for domestic use. Changes in irrigation management may have very different impacts on women and men, depending in part on women's roles as decision makers. Irrigation planners should involve local women in analyzing their situation, needs and concerns regarding ways to improve irrigation management. FAO has prepared handbooks on gender analysis and a specialized field guide that combines irrigation issues and practices with socio-economic and gender analysis (see details in tools section).

Source: FAO, 2009⁹

BOX 5 Women's participation in public works in Peru



The Rural Roads Maintenance Programme in Peru (2003-2006) increased female participation from 3.5% to 24% by setting a female quota of 10% in micro enterprises combined with gender training for stakeholders in the project. Women's decision-making roles increased in the enterprises that received gender training (see graph). Women undertook all maintenance activities and performed better than men in many of them.⁷

Source: Gutiérrez, María T., 2005

methods, materials and techniques. The expert should also work with decision-makers to guarantee that policy makers, civil servants and technical staff of public works are aware of and committed to gender equality concerns.

- Provide gender training for technical staff and supervisors involved in the design and implementation of infrastructure works, and compose women-only work teams if this is culturally preferable.
- Provide rural women training to develop their capacities and skills to take on more technical or supervisory functions. Many projects (see Box 5) report that women respond very well to training opportunities, and that training has enabled them to take on more challenging and better paid functions, achieve greater self-confidence and self-esteem, and in some cases establish their own construction enterprises and become sub-contractors for maintenance works.
- Widely disseminate information about jobs available in public works programmes (through radio, visits to villages, or pamphlets) to ensure women know that they can apply for construction jobs.
- Provide women with adequate services that include transport to and from the worksite, and facilities for childcare near the worksite allowing regular breaks for nursing mothers.
- Consult women on the forms of payment that can contribute to their empowerment and increased food security. The WFP-FAO "Food and cash for work" programmes propose different forms of remuneration to women. Receiving cash allows women to extend their decision making authority beyond their traditional roles when the money is not captured by their husbands (e.g. Bangladesh),

yet in many cases, women prefer to be paid in food items which they can control (e.g. Burundi or Guatemala).⁸

3. Verify that infrastructure works are procured through small rural contractors

Infrastructure developers should:

- Subcontract implementation of public works to private enterprises, especially small rural contractors. This develops local capacities and public-private partnerships, creates more local employment and enhances the use of local resources, thus stimulating the local economy.
- Provide training for small rural contractors to develop their managerial and technical skills to implement labor-intensive public works, ensure that such training respects decent working conditions and reduces gender discrimination.
- Ensure (through the procurement agencies) that the infrastructure work sub-contracted to small enterprises integrates the gender concerns outlined above, in particular:
 - Include quotas or affirmative action in favour of rural women and vulnerable groups in the contract specifications. Monitor them regularly and apply sanctions to contractors who fail to deliver these contracted "social deliverables".
 - Integrate a gender component in the training of contractors, and stress the principles of gender equality in access to jobs and in wage levels.
 - Ensure that productivity norms in the contracts recognize gender capabilities.
 - Encourage women entrepreneurs to participate in training and tendering.

BOX 6 Gender mainstreaming in Integrated Rural Accessibility Planning (IRAP)

IRAP is a tool promoting community participation and the optimum use of local resources. It helps improve the access of rural populations to basic services (safe drinking water, primary health care, education, land, markets, etc.), by improving their mobility (e.g. rural roads improvement and low-cost means of transport) or by bringing goods and services closer to them (through better siting of basic facilities such as water supplies, health centres, schools and markets). IRAP has shown that gender-sensitive planning techniques are essential to improve women's access and transport and thus give them free time for education, health, social activities and income-generation.

Source: ILO, 2003 (www.ilo.org/eiip/irap)



Reservoir used in Rwanda to irrigate crops.

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4. Encourage specific approaches to be developed for rural community infrastructure works

Community infrastructure developers should:

- Make use of community contracts, whereby a community group establishes a contract with local government to undertake works that improve living conditions. Combining community contracts with labour-based approaches can empower communities and stimulate self-help action, create jobs, generate income, build capacities and strengthen partnerships.
- Promote community-based management of natural resources that gives a voice to the men and women who rely on them. In countries where small-scale women farmers have limited access to irrigation networks, improving women participation and gender equality in irrigation management can lead to rural activities that are more effective, inclusive and equitable.
- Consult and involve women and their organizations at all stages of infrastructure works (see Box 6), including their identification, the negotiation of community contributions (labour, materials, financial etc) and subsequent decisions

on implementation and management of the new assets. Such a gender focus can substantially improve the performance of community works projects, improve the longevity and maintenance of the asset, increase household well-being and children's schooling and stimulate women's empowerment at little or no additional cost (see example in Box 7).

BOX 7 Gender approach in community project in Bangladesh

In the Bangladeshi Sunamganj Community Based Resource Management Project (SCBRMP), IFAD applied an innovative approach to rural road construction and maintenance, using concrete blocks (flood-resistant and cheaper than bitumen roads) and local contractors and community groups. Block making in villages allowed locals, especially women, to fit the work in with household tasks; and women, selected among the poorest in the community, were also made responsible for routine maintenance and care of trees. The project provided crucial support to non-farm employment, such as in brickfields and sawmills. It also led to substantial agricultural wage increases linked to crop diversification, to improved links between more than 125 villages, thereby increasing mobility, particularly for women, and to a 40% to 80% increase in school attendance⁹.

Source: IFAD, 2008¹⁰

Endnotes

1 World Bank. 2008. *World Bank Group Sustainable Infrastructure Action Plan (SIAP)*. Washington D.C.

2 IFRTD. 2007. *An Unbalanced Load: women, men and transport*. www.ifrtd.org/new/issues/gender.php. London.

3 ILO. 2002. Rizwanul Islam. *Decent employment through labour-based technology in infrastructure*. Geneva.

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5 FAO-IFAD-ILO. 2009. Reetika, K. and Nayak, N. *Women workers and perceptions of the National Rural Employment Guarantee Act in India*. Paper presented

at the Workshop on Gaps, trends and current research in gender dimensions of agricultural and rural employment: differentiated pathways out of poverty, 31 March-2 April 2009. Rome.

6 République d'Haïti, PNUD, PAM, BIT. 2009. *Programme de Relèvement immédiat de la Région de l'Artibonite*. Rapport Périodique No. 3,

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7 Gutiérrez, María T. 2005. *Relaciones de Género en un Proyecto de Infraestructura Vial: Medidas afirmativas en pro de la inclusión de la mujer en el espacio laboral*, PUCP, PROVIAS RURAL MTC, Perú.

8 FAO. 1998. Walsh M. *Women in Food aid interventions: impacts and issues*. Rome.

9 FAO. 2009. *Bridging the gap. FAO's Programme for gender equality in agriculture and rural development*. Rome.

10 IFAD. 2008. *Making a difference in Asia and the Pacific*, News letter issue No. 20: *Constructing flood resistant roads links village lives and livelihoods in Bangladesh*. Rome.

TOOLS

- ILO ASIST DOC data base and ILO ASIST Bulletin.
- La gestión vial rural desde un enfoque de género. Módulos de capacitación para programas de mantenimiento vial. PROVIAS RURAL MTC Peru.
- Wide variety of documents, training materials and other resources (free downloads) can be found on:
 - ILO website: <http://www.ilo.org/public/english/employment/recon/eiip/publ/reference.htm>
 - IFAD website: <http://www.ifad.org/rural/learningnotes/hsa/1.htm>
 - FAO website: http://www.fao.org/ag/portal/ags-index/en/?no_cache=1
- Networking:
 - The International Forum for Rural Transport and Development (IFRTD) www.ifrtd.org
 - The Gender, Equity and Transport Forum (GATNET) www.ecoplan.org/gatnet/gt_index.htm
- FAO Irrigation sector Guide / SEAGA - 2001: <http://www.fao.org/sd/seaga/downloads/en/Irrigationen.pdf>.

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