

The role of Road Maintenance Groups in the Local Roads Network sector in rural Nepal

This policy brief explores the role of Road Maintenance Groups (RMGs) that a number of donor programmes fund in Nepal to maintain and preserve of rural road assets. The brief highlights the dual benefit of this model in providing employment opportunities for poor community members that constitute the RMGs (a social protection function) and the basic maintenance works that help to keep rural roads open all year round (an asset preservation and basic access function).

The brief argues that because the RMG model demonstrates multiple development objectives through one model, development partners and the Government of Nepal should consider its continued and expanded use in the new federal context.

The ‘maintenance first’ agenda in Nepal

The Local Roads Network (LRN) represents the network of rural roads in Nepal that connect villages to each other across the country. Unlike the Strategic Roads Network (SRN), that is mostly made of paved roads (asphalt or ‘black topped’ roads as they are commonly referred to in Nepal) and make up most of the major highways in Nepal, roads in the LRN are mostly gravel or earthen. As such, LRN roads are prone to damage from the elements (particularly during monsoon rains) as well as from wear-and-tear from vehicular traffic, particularly heavy vehicles like tractors and jeeps that regularly traverse Nepal’s rural roads.

Supported by the Government of Nepal and development partners, the maintenance of rural roads in the LRN has gained significant traction and attention over the past decade. This has become known as the ‘maintenance first’ agenda. Because rural roads are prone to blockages (e.g. small landslides, potholes, etc.) that can limit basic accessibility, maintenance first advocates the benefit of maintaining basic access throughout the year compared to the more costly investment of rehabilitating roads that have fallen into disrepair as a result of inadequate maintenance. One of the main models that has been applied to achieve this is the trial adoption and use of Road Maintenance Groups (RMGs) through several donor supported programmes.

What are Road Maintenance Groups (RMGs)?

A Road Maintenance Group (RMG) is a group of workers who are identified engaged in paid road works (or cash-for-works). People selected to join RMGs are normally from local communities and identified as those with labour capacity and who are relatively poor or disadvantaged. The RMG model is an adaptation of the ‘length person’ system that was introduced in the SRN in Nepal in the 1990s. A length person would be trained to conduct basic maintenance functions (e.g. clearing debris on road, clearing blocked drainage, etc.) on a specified length of SRN road (typically a few km).

RMGs are paid to maintain a specific section of a rural road. They usually comprise five to seven workers, depending on the length of the road that the group is designated to maintain. These groups are responsible for basic maintenance activities that are generally categorised as routine, recurrent and periodic maintenance. The differences are subtle but crucial in recognising and implementing year-round basic maintenance activities (routine), predictable maintenance that requires less frequent attention (recurrent) and basic maintenance that is more ad-hoc and responds to specific issues (periodic) that all combine in maintaining basic access. All of the functions are similar in that the actual activities are ‘light’ in nature (e.g. clearing over-grown vegetation and small landslides and rubble, etc.) and can be performed by unskilled manual labour with the provision of some basic training.



RMG members, supported by RAP project, conducting maintenance activities along local road in Acham District.

RMGs in donor funded and Government of Nepal supported programmes

The use of RMGs in Nepal was initiated on two Government-supported and donor-funded projects: the DFID-funded Rural Access Programme (RAP) and the World Bank funded Strengthening Nepal’s Rural Transport Project (SNRTP). There are small differences between the RMG model on each project, which mainly pertains to the specific length of road each that RMG is responsible for and the typical number of employment days generated and distributed to members of the RMGs. On RAP, 11-13 working days per month are normally allocated to each RMG member, whereas up to 26 days per month are allocated to each RMG member on SNRTP. RAP believes that a ‘light human input’ is adequate for routine and recurrent maintenance and to keeping road corridors open from blockages. On the other hand the SNRTP approach is based on the premise that since rural roads are largely not properly built to technical engineered standards, routine and recurrent maintenance alone will not make the roads fit for usage; the model therefore also includes upgrading/ rehabilitation of roads.

Both projects have worked with the Government of Nepal’s Department of Local Infrastructure Development and Agricultural Roads (DoLIDAR) which sits within the Ministry of Federal Affairs and Local Development (MoFALD). With the involvement of DoLIDAR, a set of RMG Guidelines were developed and issued in 2016. The RMGs are contracted by local governments for part-time work and are paid against a monthly work plan. RMG remuneration is based on a daily district wage rate for the unskilled worker category. The RMG Guidelines allow the flexibility of contracting a worker for 1.5 km to 2 km of rural roads.

Box 1: RMGs operating in Nepal

A total of 3,958 Km of rural roads identified in the core network of 46 districts are under RMG maintenance. The table provides a summary of the use of RMGs in Nepal.

Project	District Coverage	Km under Maintenance
SNRTP	36	1,758
RAP	10	2,200
Total	46	3,958

The outcome of RMG-led maintenance work on roads

As yet there has not been a detailed assessment of the impact of routine and regular maintenance on rural roads in Nepal. However evidence gathered over time from RAP implementation as well as from the independent Monitoring, Evaluation and Learning (MEL) component of RAP suggests that road access has improved as a result of RMG and other

maintenance activities in the provinces that RAP operates in. For example, RAP monitors vehicle passage in the maintenance districts and has noted an increase in road traffic on roads that are maintained by RMGs. The MEL component’s Midline Impact Assessment, as well as direct feedback from beneficiaries (including road users), indicates that RMG-led maintenance work contributes to improved road access (see Box 2)

Box 2: Outcomes of RMG-led maintenance in Achham District

The shopkeepers in the Achham study location told us they really appreciate the better maintained roads. For example, one successful shopkeeper echoing others said “there is now at least one bus going through each day and the maintenance groups are doing a good job. They clear small potholes and sort them out before it becomes a bigger problem.”

(Source: MEL Midline Report, 2016)

“My jeep travels this road roughly 15-20 times per month. I have been using this road for 5 years. This road was initially constructed by VDC and RAP took over this road from 3 years ago. Since RAP took over this road, it has been maintained well. This road is open to two way traffic and roughly 20-25 vehicles travel through this road per day. 6-7 trips are made by Jeeps while rest of the trips are made by tractors.”

- Jeep Vehicle Driver in Achham

(Source: MEL Beneficiaries Feedback Review, 2017)

Positive impact on members of RMGs

An important feature of RMGs is that they target poor unemployed or underemployed members of local communities who are able to perform manual labour. The evidence from the MEL component of RAP shows that RMG works have a number of positive impacts on members of these groups. At the household level the MEL Midline Impact Assessment reports that RMG members regularly receiving cash for their work are more resilient to external shocks than those who are not members. The provision of a predictable and timely transfer of cash as a result of being part of a RMG acts as a cushion during lean times or periods of acute economic stress. There are also noticeable positive impacts for RMG members on other indicators relating to education and health as the cash used is regularly spent on children’s educational needs as well as purchase of medicine from local shops. These impacts are considered further in a previous policy brief that is available on the RAP website.¹

1 <http://rapnepal.com/content/rap-policy-brief-1>

Sustainability of RMG-led maintenance

The model of targeting and employing poor members of the local community to perform road maintenance activities as part of RMGs fulfils a dual purpose of providing seasonal work in the local area as well as helping to keep roads open for basic access. Given the huge infrastructure needs at the local level in Nepal and the year-round continuous nature of maintenance work, there is potential to better align public works programmes with the road planning processes of local governments.

The RMG model demonstrates that the need for local basic maintenance of road assets and the provision of on-going annual cyclical work can be met with the use of locally trained community members. However, one major limitation of the approach is that it targets potential workers living within one-and-a-half hours' walking distance from the road site. In sparsely populated areas this is a major limitation for inclusive participation of potential beneficiaries in RMG work.

Implications for future support

The RMG model promotes both the Government's social protection agenda and its maintenance-first agenda. Despite some limitations, there is potential to expand the RMG model so that activities also include other community-based infrastructure work. This has been piloted in another project supported by DFID-Nepal which provides assistance to the Government of Nepal's Karnali Employment Programme (KEP). In light of the Government of Nepal's new policy of providing a minimum employment guarantee to 200,000 rural poor in a new Prime Ministers Employment Programme, there is a wealth of knowledge and learning from the RMG-model that can provide multiple objectives through one potential budget at the local level.

Within the context of the recent shift in Nepal's governance structure – including local elections being held for the first time in 20 years and the creation of a Federal governance administration in the country – there is uncertainty about the future role of DoLIDAR and MoFALD. As described in this policy brief, the RMG model has had a positive impact on rural road access and on RMG members, and the need to maintain local road assets will continue to exist. Irrespective of how responsibilities for the LRN evolve under the new governance structure, the lessons and guidelines that have been developed for the RMG model remain relevant. The model demonstrates that multiple development objectives (e.g. social protection and local infrastructure preservation) can be achieved through one operational model and should be considered by development partners and the Government of Nepal in light of the new opportunities in the current Federal context.

The full Midline Impact Assessment Report can be found at this link: <http://rapnepal.com/content/midline-impact-assessment-report-rap>

All of the independent MEL component's reviews can be found at this link: <http://rapnepal.com/component-results/948>

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