

Ex Post-Evaluation Brief

Laos: Rural road building Bokeo / Rural road infrastructure Northern Laos I+II



Programme/Client	Rural road building Province of Bokeo (RRB) 1) BMZ-Nr.: 2002 65 025* Rural infrastructure in Northern Laos (RIP) 2) Phase I - BMZ-Nr.: 2004 66 177 3) Phase II - BMZ-Nr.: 2006 65 596	
Programme executing agency	Ministry of Public Works & Transport/ MPWT	
Year of sample/ex post evaluation report: 2012/2012		
	Appraisal (planned)	Ex post-evaluation (actual)
Investment costs (total)	13.51 million	15.9 million
Counterpart contribution (company)	0.61 million	0.80 million
Funding, of which budget funds (BMZ)	1) 4.65 million 2) 4.25 million 3) 4.00 million	1) 4.95 million*** 2) 4.25 million 3) 4.41 million****
+ pers. support	1.36 million	1.49 million****

* random sample, ** not broken down; ***incl. remaining funds 0.3 million., **** incl. funds from follow-up phase RIP3

Project description: The evaluation of the RBB project contained in the sample was extended to the follow-up projects RIP I and RIP II (not yet in sample), which had identical concepts.

1. Improvement/repair of 440 km of rural roads, incl. bridges and drainage structures in the provinces of Bokeo, Luang Namtha and Oudomxai
2. Sourcing of material for routine maintenance and improved equipment for the executing agency
3. Consulting services for planning and building supervision

Accompanying measures: strengthening road-building administration/ general contractor/ setting up maintenance system.

Objectives: The overall objective was to contribute to improved living conditions of the rural population and the economic and social development of the programme region, to be measured against selected socio-economic indicators. The programme objective was to improve accessibility of the villages, ensure an all-year efficient transport connection, to be measured in terms of the full-year usability of the sections built/ rehabilitated and a significant increase in traffic volume 3 years upon completion of works.

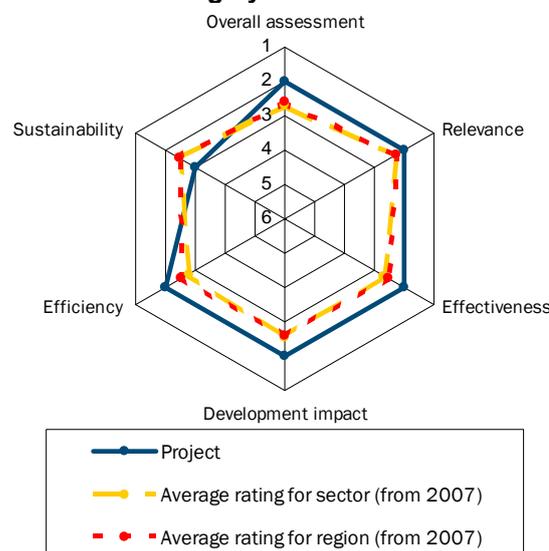
Target group: rural population in mountain regions.(*socio-econ. analysis appraisal*: 65,000 | *ex post socio-econ. analysis final*: 75,000 persons).

Overall rating: 2 (all projects)

Both implementation and impact of the projects can be assessed positively – although not all results can be attributed to the projects alone. Shortcomings in road maintenance continue to constitute a risk for sustainability.

Of Note: The improvement of individual project roads (e.g widening to 6 m) temporarily solved maintenance shortcomings in individual cases. Some provinces applied a (generally expensive) pre-financing arrangement by private construction companies. Though attractive in the short run, this reduced future budgets by the amounts to be repaid. In 2013 these deals were prohibited by the government due to the risks involved.

Rating by DAC criteria



EVALUATION SUMMARY

Overall rating: Both relevance, achievement of programme objectives, efficiency and achievement of the overall objective were positively rated. The sustainability of impacts depends to a great extent on road maintenance. This is still in need of considerable improvement, which, however, reflects the high risk already stated in the 2002 appraisal report. Bituminous surfacing of road sections with steep inclinations or leading through villages must be rated very positively – given the generally difficult climatic and topographical conditions. It but should be given higher priority in future projects. The system of *Village Maintenance Committees* in its present form should be reviewed, although – under budgetary considerations – it can be of use for some road sections. Overall, the impact of the projects is rated as good. **Rating (all projects): 2**

Relevance: The project approach conforms with Laotian sector policy and the development strategies for the rural sector. Inadequate transport connections to markets, social infrastructure and administrative centres constitute a significant obstacle to development. The project effectively targets this constraint. By focusing more strongly on the provinces (connection between the provinces) and district connections (= connection between the provincial capital and district centre) when selecting road sections, roads with increased importance for the province were targeted. Basic coordination took place with other donors in the sector and should be extended. Coordination has been more intensive since a local KfW representation was established 2012. For many road sections, the design was subsequently adjusted by applying double bituminous surface treatment (DBST) inside villages and at gradients above 15%. Against the backdrop of frequently inadequate road maintenance, this approach is to be rated especially positively. In view of the mountainous location and relatively poor condition on non-bitumen-surfaced gradients, this approach would also have merited consideration on slopes with lower gradients. **Sub-rating (all projects): 2**

Effectiveness: The socio-economic analyses of the projects and the *Maintenance Report* confirm that the programme objectives were achieved. Apart from enabling year round access, transport costs, travel times and vehicle operation costs were reduced. Traffic has increased by an average of approx. 390%. The extent to which the road connection reduced shifting cultivation or encouraged the planting of rubber or banana plantations was not analysed in the course of the project, so no reliable data can be inferred. Shifting cultivation at higher altitudes as well as large-scale rubber-tree cultivation is widespread. With respect to the villagers' extension needs on alternative forms of agriculture and on land use rights and techniques, greater efforts should be made to obtain accompanying support or follow-up projects from the Laotian government or other donors in order to reduce risks in connection with land use.

Road improvement tends to increase traffic risks. Those, according to the local road authorities these are still relatively low on the rural roads. This is also evidenced by the fact

that "speed breakers" at town and village entrances to are often removed by the local people. **Sub-rating (all projects): 2**

Efficiency: Thanks to additional allocations from reprogramming and funds saved, a single or double bituminous surface could be applied to additional parts of the network. The project was implemented largely on schedule. However, budgeted unit costs of EUR 22,000 per km of road and EUR 2,600 - 3000 per metre of bridge (RIP I) and EUR 15,000 per km and 2,700 per metre (RIP II) increased to EUR 29,000 per km and EUR 3,900 per metre. Expenditure was adjusted in accordance with the available budget, e.g. by reducing standards on straightening roads, levelling gradients, reducing steep slopes or applying better road surfaces on gradients. The cost increases can be attributed to higher building prices, the use of bitumen on sections for which this was not originally planned as well as the steep terrain in some sections. According to the RIP II final report, costs still compare favourable by international standards. The significant increase in traffic volume (more than 400%, with RIP I - on average - recording an increase from 41 to 179 cars/day) indicates good allocative efficiency. The introduction of *Village Maintenance Committees* was intended to offset the low level of public maintenance budgets. This procedure only functioned well on around 50% of the road sections, particularly less well in thinly populated areas. Overall, the training of entire villages, the provision of simple tools (having largely disappeared by now) and the continuous coordination and motivation of villagers was rather inefficient. The use of fewer, but paid, workers could increase the efficiency of routine manual maintenance. **Sub-rating (all projects): 2**

Overarching developmental impact: The socio-economic studies show that access to markets has improved, market-oriented agricultural production has increased, access to electricity much improved, and participation in lessons at primary and more advanced schools is better; besides, the gap between the genders has been reduced and the number of illiterates has declined. This was confirmed in on-site interviews. Particularly noticeable were also many A multitude of newly built health centres was conspicuous, as was the almost complete electrification along the roads as well as wide-ranging mobile phone coverage. The impact of the projects on land use and cropping patterns can no longer be determined ex post due to the a.m. lack of data.

Against a backdrop of generally positive economic trends, the positive changes in the villages along the programme roads were generally more pronounced than in comparable villages not covered by the programme. The change in poverty figures could not be adequately verified due to changes in Laotian surveying methodology. **Sub-rating (all projects): 2**

Sustainability: The *Maintenance Report* 01/2012 highlights the constraint with regard to adequate and regular funds for routine mechanical maintenance and periodical maintenance. This was confirmed in talks with representatives of the *Departments of Public Works and Transport* (DPWT) at province level and of the *Offices of Public Work and*

Transport (OPWT) at district level. This was further witnessed by the condition of the roads observed while travelling. Considerable differences in the condition of roads between those sections treated as part of the RRB (mainly at least satisfactory due to fewer/ lower gradients) and those from RIP I and II (at least half not satisfactory, mainly hilly/mountainous terrain). According to information available, at least the more serious road damages are repaired, generally within a few months; in such cases emergency budgets or similar were drawn on in case of need.

No unequivocal figures were available on the actual need for road maintenance in Laos as a basis for a comparison with the funds provided by the RMF. According to an evaluation conducted in 2010 on the project "Rehabilitation of National Route VI", sufficient funds for road maintenance were expected to be available for 2012. Although the provision of funds via the RMF has improved considerably since the beginning of the programme, it seems unlikely at present that the gap between requirements and available funds will be bridged in the near future. Additionally, lack of regular maintenance will increase long-term repair costs as well as the costs of road use (lower speed, greater wear, etc.). Future developments should therefore be closely monitored, also with view to future evaluations. At present, the petrol price tax for the RMF stands at approx. 5% of the petrol price. Thus, further potential exists for providing funds for road maintenance by increasing the tax. In interviews conducted locally, questions relating to concrete maintenance activities or plans and local budgets proved to be particularly difficult. Overall, the building of new roads is deemed to be politically more important in the districts and provinces and have a greater public impact than road maintenance. The construction of new roads or the improvement of existing ones was more frequently pre-financed by means of private loans (from the construction companies) although their repayment reduces the scope for future budgets. This practise has been declared inadmissible by the government since the beginning of 2013. **Sub-rating (all projects): 3**

Notes on the methods used to evaluate project success (project rating)

Projects (and programmes) are evaluated on a six-point scale, the criteria being relevance, effectiveness, efficiency and overarching developmental impact. The ratings are also used to arrive at a final assessment of a project's overall developmental efficacy. The scale is as follows:

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| 1 | Very good result that clearly exceeds expectations |
| 2 | Good result, fully in line with expectations and without any significant shortcomings |
| 3 | Satisfactory result – project falls short of expectations but the positive results dominate |
| 4 | Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results |
| 5 | Clearly inadequate result – despite some positive partial results, the negative results clearly dominate |
| 6 | The project has no impact or the situation has actually deteriorated |

Ratings 1-3 denote a positive or successful assessment while ratings 4-6 denote a not positive or unsuccessful assessment

Sustainability is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability) The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability): The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The overall rating on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Ratings 1-3 of the overall rating denote a "successful" project while ratings 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally "successful" only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least "satisfactory" (rating 3).