





# Investment Budget Execution Support for Rural Infrastructure Development and Employment Generation (TIM Works)

#### **Quick Facts**

Country: Timor Leste

**Timing Mid-Term Evaluation:** 28.09-10.10. 2009 **Evaluation Period Covered:** 01.09.2008-15.08.2009

Mode of Evaluation: Independent Technical Area: Rural Infrastructure

Evaluation Management: EMP/INVEST, HQ

Evaluation Team: Bas Athmer (Team Leader) and

Ms. Emma Allen (Research Officer) **Project Start:** 1 September 2008 **Project End:** 30 June 2010

Project Code: TIM/08/M50/NOR, TIM/08/M51/EEC,

TIM/08/M52/IRL **Budget**: US\$ 8,145,316

**Donors:** EU (US\$2,022,403), Ireland (US\$1,230,661), Norway (US\$ 2,499,452), Government of Timor Leste (US\$ 2,392,800 – for the payment of workers' wages)

wages)

**Key Words:** Rural Infrastructure, Rehabilitation and Maintenance of Rural Roads, Labour-based Technologies, Employment Generation, Livelihoods Improvement, Social Stability and Capacity Building.

# Background & Context

## Summary of project purpose, logic and structure

The overall goal is to contribute to poverty reduction and economic development by spurring infrastructure growth. The specific purpose is to improve livelihoods and to contribute to social stability in the poorest rural regions of Timor-Leste through infrastructure development and cash transfers through the generation of short-term employment opportunities. The Project aims to rehabilitate and maintain respectively 300 km and 1,536 km of rural roads. By applying labour-based approaches and

technologies it is expected that 1,039,200 labour-days of short-term employment will be generated - of which at least 30% for women - benefiting 23,568 workers and their families. Capacity building activities for public and private infrastructure providers are fully integrated in the design of the Project. TIM-Works has been set-up for a period of two years only as it had been designed as a primer for a larger follow-up labour-based public works programme. The Project's Government Implementing Partner is The Secretariat of State for Vocational Training and Employment (SEFOPE).

## Present situation of project

As of 15<sup>th</sup> August 2009 the Project had spent US\$ 2.94 million (or 36%) of the total budget. 69% of the budget (or US\$ 5.65 million) is allocated for works. Labour costs constitute 55% of the works budget. These figures are fairly typical for this type of labour-based rural road development projects. By mid-August 2009 expenditures for works were US\$ 1.93 million (34% of the works budget), of which US\$ 1.03 million for labour wages.

By mid-August 2009 684 km of rural roads had been maintained and maintenance works were on-going at another 444 km. Rehabilitation works were completed at 2 roads (6 km) and on 14 rural roads (106 km) works were in progress. Due to the low capacity and physically challenging environment in which the Project operates, the physical progress - in particular with regards to rehabilitation works - has fallen behind schedule (23% of the rehabilitation works have been completed in 58% of the time).

Through the Project 417,136 work-days of short-term employment opportunities have been generated (40% of target), benefiting 11,523 workers and their families. 31% of the workforce constituted of women, which exceeds the target of 30%. Youth constitute 57% of the workforce. This reflects the priority of the Government of Timor-Leste (GoTL) to promote youth employment. The average duration of

employment among the engaged workers is 37 days but large variations were observed between individual workers and households. Overall, unskilled workers appeared to be satisfied with the used daily wage rate of US\$ 2. Available information indicates that this wage rate is effective in attracting the targeted beneficiaries without inducing undesirable competition for local labour. An issue is the fact that other projects and agencies pay higher wages for work of similar nature.

The delivery of capacity building and training activities, vis-à-vis the targets, is on schedule. 1,759 trainee-days of classroom training and 7,248 trainee-days of on-the-job training have been provided to the targeted trainees, including 42 SEFOPE engineers and technicians, 36 private contractors and their staff, 44 community contractors, and semi-skilled and skilled workers. Practical and comprehensive training materials have been developed and capacity building activities are effectively integrated within the Project. The quality of the training is reflected in the overall satisfactory quality of the construction works.

The Project has developed comprehensive technical manuals, procedures and standards for designing, planning, implementing and monitoring activities. A comprehensive management information system has been developed that not only enables the Project to monitor the physical en financial progress but also captures information about employment dimensions and beneficiary targeting.

The Project is actively involved in key policy and strategy development activities, including the formulation of a rural roads policy and a policy framework for rural development.

## Purpose, scope and objectives of the evaluation

This evaluation aims at providing an independent assessment of the Project as a whole against the key evaluation criteria (relevance and strategic fit, effectiveness, efficiency and sustainability). The formulated main evaluation questions relate to the validity of the design, the efficiency and effectiveness of the implementation approaches, achieved progress, the quality of the works, encountered challenged and lessons learned. The evaluation also aims at advising the primary clients about necessary adjustments regarding partnership targets, arrangements, implementation methods and resource allocations for the remainder of the Project.

### Methodology of evaluation

A combination of evaluation methods has been used, including: i) desk review; ii) meetings and interviews with various stakeholders and other projects; iii) inspections and observations, and; iv) a stakeholder

workshop. Available information and time constraints limited the mission's scope for conducting an indepth analysis of labour productivities in construction activities. At the time of the evaluation, rehabilitation works had only been completed at 2 road links totalling 6 km – and it was considered too early to make a detailed assessment of the effects and impact of the Project's investments in rural roads infrastructure on poverty reduction. During the evaluation, UN evaluation norms, standards and ethical safeguards have been followed.

# **Main Findings & Conclusions**

TIM-Works is very important and relevant in relation to the GoTL development priorities. It contributes to social stability, provides employment to large numbers of the rural poor (including youth and women), provides good quality basic rural roads access, injects substantial investments in the local economy and builds necessary capacities in the public and private sector for the effective delivery of the employment-intensive infrastructure investments.

Overall, the Project implements its activities and delivers its outputs in an efficient and effective way. Roads have been selected on the basis of agreed priorities that include criteria related to their importance in the rural road network and the population served. An optimum use is made of available local capacities, skills and resources in the delivery of the works. Appropriate labour-based technologies are being used in the maintenance and rehabilitation activities and the overall quality of the works is considered satisfactory. The design and delivery of the training/capacity building activities and investments in the maintenance and construction works are considered cost-effective.

The Project had to start construction within a very low capacity environment (both public and private sector) and it is therefore not surprising that there is scope to further improve the overall quality of the works, optimize the labour productivity and increase the delivery rate of construction works. As capacities are being developed, the Project is expected to be able to achieve this during the second year of implementation.

The Project has been designed as a 'primer' for a large scale public works programme and for this reason its implementation period has been limited to 2 years. Within such a short period, and considering the context and environment in which the Project is being implemented, it is not realistic to expect that the interventions can be sustained or expanded after its completion without continued follow-up external

inputs and support. International experiences in developing countries with similar projects, implemented in comparative settings, indicate that at least 5-10 years will be required to establish the necessary capacities and to mainstream and institutionalize required procedures, modalities and approaches. Considering the current low levels of delivery capacities in Timor-Leste, a minimum gestation period of 10 years is likely to be required for the establishment of an enabling and sustainable environment for the implementation of large scale public works programmes.

TIM Works has already gained extensive and very valuable experiences on the ground and the Project is in a good position to provide well-informed advice on policies and strategies for rural (roads) development and on the design of large scale employment-intensive public works programmes.

Because of the short duration of employment offered, it is not expected that the Project will contribute significantly to a structural improvement of the targeted beneficiaries' livelihood conditions. Limited numbers of interviews that were conducted with workers provided an indication of the limitation of the Project in this respect. A more structural contribution to poverty reduction may be expected from the envisaged effects of improved rural access on local economic development. As only 2 roads (with a total length of 6 km) were completed at the time of the evaluation, it is still too early to assess such effects.

#### **Recommendations & Lessons Learned**

#### Main recommendations and follow-up

Although it is expected that the rate of delivery of construction will gradually increase as capacities among public and private infrastructure providers are being developed and labour productivities are slowly increasing, the current progress indicates that a time extension of at least 3 months is required to complete the road rehabilitation works. It is proposed that the actual progress is reviewed again in February 2010 to assess whether the recommended 3 months time extension is sufficient. As actual investment costs for rehabilitation works appear to be higher (± US\$ 19,100 per km) than originally foreseen (US\$ 15,000 per km), it is proposed to reduce the target for rehabilitation works to 231 km. It will be useful to monitor the actual costs and identify what cost items cause the apparent cost increase. Achieving the physical targets is also subject to the timely allocation of the remaining GoTL contribution of US\$ 1.36 million for wages. If this contribution does not materialize in time, physical targets may have to be further reduced. For a time-extension of 3 months an estimated additional US\$ 200,000 will be required to continue the inputs of the international TA staff.

The issue of different wage rates offered by different projects for similar work needs to be addressed by the Government. It is recommended that a uniform rate for wages paid to unskilled labourers employed in labour-based activities is applied to all such works

The Project is encouraged to take steps to minimize variations regarding the number of worker-day that participating households benefit from can employment under the Project. This includes activities that aim at increasing the transparency of the recruitment and job rotation process and enhancing the principle of equal access to job opportunities. For practical operational reasons it is recommended that, as much as possible, a rotational system is being followed that provides each participating households with 2 months of work. More attention is also necessary to ensure the timely payment of the labourers. It is equally important that the Project continues to focus on the inclusion of women in providing work opportunities, with a special emphasis on poor female-headed households. To challenge prevailing perceptions and decrease barriers to female participation, strategies for gender sensitization could be strengthened in the Project

Although the overall quality of the construction works is rated as satisfactory, site observations indicate that there is a need for continued (and sometimes increased) attention to a number of qualitative and environmental construction issues. These relate to the excavation from quarries, compaction, the quality of the gravel, the quality of the side drains, the location and downstream protection of cross-drainage structures, the quality of culverts, and accessibility issues at sections along road alignments that have very steep gradients.

To further increase labour productivity, continued close supervision will be required and sufficient attention needs to be given to the organization of the work force (and equipment) at the site. Workers need to be well aware of the typical characteristics associated with the organization of the work and the output-based system of wage payments. Time-motion studies can be undertaken to review labour and equipment productivities and to set realistic tasks that can be achieved during a 6-7 hours workday.

The Project is encouraged to strengthen its linkages with the District Employment Centres (DECs) regarding activities that aim at increasing the participation of workers employed by TIM-Work in numeracy and literacy training offered by the DECs.

To assess the effects and impact of the Project it is recommended that simple surveys are being designed and implemented that capture information about changes in traffic characteristics, access to services and facilities, changes in economic livelihood conditions, changes in employability of trainees, and beneficiary satisfaction rating of the Project.

It is recommended that the current backlog in data entry in the computerized management information system (which includes a comprehensive contracts database system) is being addressed, and that data are being verified and validated to ensure quality and consistency. This will also increase the Project's capacities to link actual progress with planned targets (time-bound and quantitatively), will allow for a more structural monitoring of the performance of the Project against key performance indicators as formulated in the Project's logical framework, and will facilitate reporting.

More attention is required to the documentation and the dissemination of information about the Project's best practices, challenges, opportunities achievements, lessons learned and results. This will enhance the evidence base regarding the relevance, effectiveness and appropriateness of the followed approach and applied modalities and procedures. Such information may greatly benefit the GoTL and donors in the design of similar future projects and programmes and is equally useful for policy makers to help them to formulate rural (infrastructure) development policies and strategies. Limited additional resources will be required to undertake these activities.

The maintenance of the improved infrastructure assets is of crucial importance to preserve the value of the assets that have been created and this would require increased financial commitments by the Government and/or donors in the near future.

#### Important lessons learned

TIM Works is demonstrating that innovative labourbased infrastructure development projects can be successfully implemented at a relatively large scale in challenging and low capacity environments. The Project is very appropriate and effective in combining and integrating objectives of short-term employment generation, enhancing social stability and providing good quality and cost-effective basic infrastructure that reflects priorities and the needs of local people.

The experiences gained with the implementation of TIM-Works provide a solid foundation for the design and formulation of large scale follow-up public works programmes. A lesson learned from TIM-Works, and from similar projects implemented in comparative contexts in other developing countries, is that at least

5-10 years is required to build sufficient capacities and skills, and to firmly anchor and institutionalize approaches, procedures (e.g. on procurement) and modalities within the public and private sector. Sufficient time and resources should be factored in and allocated for capacity building during the initial years of implementation and construction targets should consequently initially be set at a sufficient conservative level. Over-ambitious construction targets could affect the quality of the works adversely, thereby negatively affecting conceptions about the quality and appropriateness of employment intensive (and equipment-supported) rural infrastructure investment approaches.

A crucial factor to the successful implementation of labour-based infrastructure development projects is the availability of competent and experienced technical assistance personnel. The success of TIM Works is largely attributable to the quality of the technical assistance provided by the ILO who has extensive experience in planning, managing and implementing labour-based infrastructure works projects

Considering the short period of two years available for the implementation of the Project, the exclusive focus on rural road rehabilitation and maintenance activities is justified as the selected activities can be designed and implemented relatively quickly and have excellent short-term employment potentials.

When more time (and resources) would have been available, it could have been worthwhile to adopt a broader and more diversified 'menu' of interventions that reflect local communities' specific priorities. Examples of sub-sectors and activities with good potentials for labour absorption that could effective contribute to local economic development and poverty reduction are small-holder irrigation development, flood control and water & soil conservation activities.

From an institutional and sustainability point of view it is recommended that eventual follow-up (public) infrastructure works programmes are implemented with the responsible technical line ministries and that the ownership of such programmes is gradually being transferred to them. Considering the limited capacities available in the public and private sector, it is very important that transferring responsibilities is being undertaken gradually, in line with emerging activities and in synergy with evolving decentralization processes. On the longer-term, once decentralization would be firmly implemented, the management of rural road works should logically be assigned to local authorities.

Through TIM-Works and the Youth Employment Programme (YEP), SEFOPE is gaining very valuable experience and expertise regarding the employment dimensions of employment-intensive infrastructure investment projects and it is recommended that SEFOPE retains its monitoring and analytical role in future employment-intensive public work programmes.