# **TIM Works Project**

Investment Budget Execution Support for Rural Infrastructure Development and Employment Generation

# **Independent Mid-term Evaluation**

(Timing of Evaluation Mission in Timor-Leste: 28 September – 10 October 2009)

# **Final Report**



Geographic Coverage: Timor Leste (8 Districts: Aileu, Baucau, Dili, Lautem,

Liquica, Manatutu, Oecusse and Viqueque)<sup>1</sup>

Project Start Date: 1 September 2008 Project Completion Date: 30 June 2010

Project Period covered by Evaluation: 1 September 2008 – 15 August 2009

Budget: US\$ 8,145,316<sup>2</sup>

Implementing Partner: Secretariat of State for Vocational Training and

**Employment (SEFOPE)** 

**Donor Contributions<sup>3</sup>:** 

Norway – TIM/08/M50/NOR: USD 2,499,452 (July 2008 – January 2010) EC – TIM/08/M51/EEC: USD 2,022,403 (January 2009 – June 2010) Ireland – TIM/08/M52/IRL: USD 1,230,661 (July 2009 – June 2010)

Government of Timor-Leste: USD 2,392,800 (Pledged and administered by GOTL)

ILO RBSA<sup>4</sup>: USD 196,508

**ILO Implementing Unit: ILO Timor-Leste Programme** 

Technical Backstopping: ILO Regional Office for Asia and the Pacific Administrative Backstopping: ILO Office for Indonesia and Timor-Leste

5 January, 2009 Bas Athmer, Consultant

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<sup>&</sup>lt;sup>1</sup> For maintenance activities the geographical coverage was extended in 2009 to another 5 districts (Ermera, Cova Lima, Bobnara, Ainoro and Manu Fahi).

<sup>&</sup>lt;sup>2</sup> Excluding ILO RBSA contribution of US\$ 196,508.

<sup>&</sup>lt;sup>3</sup> Budgets of donor contributions are based on information from the ILO about the actual contributions received from the donors. Those contributions have been converted into US Dollars, the ILO's operating currency, at the prevailing exchange rate at the time that the donor contributions were received.

<sup>&</sup>lt;sup>4</sup> Regular Budget Supplementary Account.

# Acknowledgements

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The information and feed-back provided to the mission has been very useful in enabling the mission to carry out its assignment. The mission specifically wants to thank the staff of SEFOPE, representatives of Ireland, Norway and the EC Delegation and the ILO staff of TIM-Works for their inputs and the time made available to brief the mission about the Project and to give valuable feed-back.

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# **Abbreviations and Acronyms**

ADB - Asian Development Bank

ASEAN - Association of South East Asian Nations

BoQ - Bill of Quantities CFW - Cash for Work

DCP - Dynamic Cone Penetrometer
DEC - District Employment Center

DNE - Direcção Nacional de Estatística (National Bureau of Statistics)

DRBFC - Directorate of Roads, Bridges and Flood Control

DWCP - Decent Work Country Programme
EIA - Environmental Impact Assessment
EB - Equipment-based technology
EC - European Commission

EDC - Education Development Centre Inc

EGPW - Employment Generating Public Works

EU - European Union

GDP - Gross Domestic Product GoTL - Government of Timor Leste

GTZ - Gesellschaft für Technische Zusammenarbeit (German Technical

Cooperation Agency)

IDP - Internally Displaced Persons
 ILO - International Labour Organisation
 IMF - International Monetary Fund

JICA - Japan International Cooperation Agency

LB - Labour-based technology
LDP - Local Development Programme
LI - Labour Intensive technology
MDG - Millennium Development Goals

MLCR - Ministry of Labour and Community Reinsertion

MOI - Ministry of Infrastructure NGO - Non-government Organization

RBSA - Regular Budget Supplementary Account
RDP - Rural Development Programme (EC-funded)
REGS - Rapid Employment Generation Scheme

RW - Reservation Wage RWR - Reservation Wage Rate

SEFOPE - Secretaria de Estado ba Formasaun Profisional no Empregu

(Secretariat of State for Vocational Training and Employment)

TA - Technical Assistance

TL - Timor Leste

TLSLS - Timor Leste Survey of Living Standards (2007)

TLSS - Timor Leste Survey of Sucos (2001)
UNICEF - United Nations Children's Fund

UNMISET - United Nations Mission of Support in East Timor
UNDAF - United Nations Development Assistance Framework

UNDP - United Nations Development Programme

WFP - World Food Programme

YEP - Youth Employment Programme
YES - Youth Employment Survey (2007)

Currency in Timor Leste: US\$

# **Executive summary**

# I. Purpose and Scope of the Evaluation

The purpose of this independent evaluation of the *Investment Budget Execution Support for Rural Infrastructure Development and Employment Generation (TIM-Works)* is to provide an independent assessment of the Project with regards 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. This independent mid-term evaluation also aims at advising the primary clients (SEFOPE, ILO and the Project donors), as required, about necessary adjustments regarding targets, partnership arrangements, implementation methods and resource allocations for the remainder of the Project.

The findings of the evaluation are also meant to facilitate the Project's Steering Committee in reviewing the Project's results and in decision taking. For the ILO, the evaluation is intended to aide necessary Project adjustments, the design of future similar projects in Timor-Leste or elsewhere, and analyze achieved productivity rates. This evaluation reviews the Project's achievements as a whole, regardless of specific donor contributions and includes all the Project's activities undertaken jointly by SEFOPE and ILO, covering the period 1 September 2008 – 15 August 2009.

## II. Brief Description of the Project

TIM Works is designed to contribute to the Government's priorities of creating employment, reducing poverty, stimulating economic growth and increasing social stability. The Project is operational in the poorest regions of Timor-Leste, covering 13 Districts <sup>5</sup>. Its goal is to contribute to economic development and poverty reduction by spurring growth in the infrastructure sector. The immediate objective of TIM-Works is livelihood improvement and social stability in rural communities through rural development and employment generation. Intended outputs include the rehabilitation and maintenance of rural roads using labour-based technologies, employment generation, capacity building for infrastructure providers in the private and public sectors, and the adaptation of policies and regulations for further up scaling of labour-based methods. Annex 1 provides the Project's Logical Framework, including the Project's specific outputs, indicators, means of verification and assumptions.

#### III. Evaluation Methods

The scope for the evaluation has been set by the key evaluation questions as formulated in the TOR (Annex 2). These questions relate to four key evaluation criteria, i.e. relevance and strategic fit, effectiveness, efficiency and sustainability. Following a desk review of the available documentation, initial meetings with key stakeholders in Dili and a first field visit, the mission found the formulated key questions adequate and comprehensive. During the evaluation the UN evaluation norms, standards and ethical safeguards have been followed.

Used evaluation methods included; i) identification and review of available documents; ii) meetings and interviews with involved government departments, donors and ILO staff; iii) structured, semi-structured and open interviews with workers and contractors and their staff; iv) focus-group meetings with workers and beneficiary households; v) random skill tests of contractors and skilled workers; vi) visual inspections of the works at selected sites; vii) inspections of available documentation at the work-sites; viii) photographs, and; ix) a stakeholder workshop at the completion of the field mission.

<sup>&</sup>lt;sup>5</sup> Road rehabilitation works are implemented in 7 districts; Aileu, Baucau, Dili, Lautum, Liquica, Manatutu and Viqueque. The geographic coverage of the maintenance activities was initially also concentrated in the 8 originally selected districts (i.e. the above mentioned 7 districts and Oecusse). In 2009 the coverage of the maintenance activities has been extended to include an additional 5 districts; Ermera, Cova Lima, Bobonara, Ainoro and Manu.

Available information and time constraints limited the mission's scope for conducting an in-depth analysis of labour productivities. Considering the limited time that the Project has been operational and taking into account the limited current progress regarding the rehabilitation works, it was not relevant to provide an in-depth analysis of the impact of the Project on poverty and local economic development. The mission did however conduct limited numbers of interviews and focus-group meetings to obtain an indicative assessment of the expected effects and impacts of the Project related to improved access and its contribution to poverty reduction

#### IV. Main Findings and Recommendations

## Relevance and Strategic Fit

TIM Works is of strategic importance and relevance in contributing to the GoTL's national development priorities. These include the provision of employment opportunities for a rapidly growing labour force, a contribution to social stability, the improvement of rural road access to social and economic services and facilities, private sector development support and human resource development and institutional strengthening. TIM Works is well aligned with Timor-Leste's MDGs, donors' priorities, UNDAF priorities and ILO DWCP priorities for Timor-Leste. Those priorities, as formulated at the time of the formulation of TIM Works mid 2008, are still valid at the time of the mid-term evaluation.

Through the cash transfers provided through TIM Works, the Project makes a significant contribution to its objective of livelihood improvement and social stability but structural long-term unemployment and underemployment issues are not being addressed *directly* through the Project through these cash transfers as the Project only offers short-term employment opportunities. The key long-term benefit that is expected from the Project is its contribution to economic development and poverty reduction through improvements to rural roads infrastructure. As the Project had only completed 6 kilometers of road rehabilitation at the time of the mid-term evaluation, it is too early to assess the effects and impacts of improved rural roads access on local economic development and poverty reduction.

In addressing its objectives, the Project's overall implementation approach is considered, efficient, effective and well-balanced. The designed interventions make optimum use of the locally available capacities, resources and skills. 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. Appropriate labour-based (equipment-supported) approaches, technologies and design standards are used. The recruitment of the rural poor, with a special emphasis on youth and women, is successfully promoted. Women's participation exceeds the target and youth constitutes 57% of the labour force, reflecting the priority given by the Government to promote youth employment<sup>6</sup>.

# **Effectiveness**

Considering the very difficult working environment in which the Project operates, and taking into account its innovative character<sup>7</sup>, the substantive efforts and time allocated to train the various groups of targeted trainees (contractors and their staff, involved government staff, workers), and the large geographic coverage, the Project has made good progress. Overall, required key inputs like staff and

<sup>&</sup>lt;sup>6</sup> This is also reflected in the minutes of the inception workshop where it is mentioned by the SEFOPE representative that at least 50% of the work force should constitute youth (15-29 years age group). In the project documents no specific targets have been set for the employment of youth. However, in line with Government priorities, the Project's targeting strategy focuses on the provision of employment opportunities for youth and has introduced stipulations in the rehabilitation and maintenance contracts that mention that at least 70% of the work force should be youth (15-29 years).

<sup>&</sup>lt;sup>7</sup> The introduction of the application of labour-based approaches and technologies that require: i) adaptations to the planning and organization of the work; ii) intensive quality control and supervision; iii) an optimization of the balance between inputs by workers and light equipment, and; iv) the introduction of an output (task-based) remuneration system for the work-force.

equipment were mobilized in a timely matter<sup>8</sup>. The overall quality of the inspected works is considered satisfactory but there is a need for continued (and increased) attention to further increase the quality of the works and to ensure that sound environmental practices are being applied. These relate to the excavation from quarries, the quality of 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 the road alignment that have a very steep gradients.

The budget for the works component constitutes 69% of the total Project budget. The labour costs constitute about 55% of the total construction and maintenance costs (50% for rehabilitation activities and 74% for maintenance activities) and the costs for materials and equipment make up for the remaining 45% of the costs for the construction and maintenance works. These figures are fairly typical for this type of labour-based rural road rehabilitation and maintenance projects.

By September 2009 the Project had completed the rehabilitation of two road links with a total length of 6 kilometers, whereas rehabilitation works at another 14 roads, totaling 106 kilometers, are ongoing. Based on current expenditures on the on-going rehabilitation works, vis-à-vis the cost-estimates for these roads, it is estimated that an 'equivalent' length of 64 kilometers is completed on these ongoing rehabilitation works. 684 kilometers of rural roads had been maintained and maintenance works are on-going at 444 kilometers of roads. For 2010 a further 409 kilometers of roads are planned to be included in the maintenance activities, which will bring the total length of roads covered under the Project's maintenance activities to 1,537 kilometers (i.e. the original target). 417,136 work-days of work have been generated, benefiting 11,253 workers and their families. From the total budget of US\$ 8.145 million '9, approximately US\$ 2.941 million has been spent (36%). Expenditures for works amounted to about US\$ 1.931 million, or 34% of the works budget of US\$ 5.650 million. An estimated US\$ 1.2 million (or 62%) of the total investments in the construction and maintenance works have been injected in the local economy, of which US\$ 1.03 million for wages.

The current physical progress indicates that the physical maintenance targets can be achieved within the originally envisaged Project's time-frame but a time extension will be required to complete the rehabilitation works. Considering the current progress of the rehabilitation works (23%) after 58% of the project implementation period has expired, a time extension of at least 3 months is recommended to complete these works. Currently the average rate of progress is 0.8 km per scheme per month and the Project can implement at maximum works at 16 road sites simultaneously. Considering the scope for increasing the currently low labour productivity rates, it should be possible to increase the delivery rate with about 25%. Assuming a delivery rate at 90% of the maximum delivery rate of 16 kilometers per month, it is estimated that the Project will be able to deliver 14.4 kilometers of rehabilitation works per month. It is recommended that the donors review the actual progress on rehabilitation works by the end of February 2010 to assess whether the proposed 3 months time extension is sufficient or whether a further 3 months time extension is required. Delays in progress could for example occur due to unexpected and/or prolonged rainfall.

At the same time it will be required to reduce the target of 300 kilometers of road rehabilitation to 231 kilometers as the currently envisaged rehabilitation costs per kilometer are higher than expected. In the original design of the Project, rehabilitation costs were estimated at US\$ 15,000 per kilometer. Based on the actually incurred costs on the 2 completed road links and the cost-estimates prepared by the Project for the currently on-going road rehabilitation works (on 14 road links), it appears that the rehabilitation costs per kilometer are US\$ 19,123 per kilometer 10, i.e. 27% higher than originally foreseen. Based on information provided by the Project, annex 5 provides an overview of the estimated required investment costs per km for 35 roads sections, covering at total length of 225 kilometers.

<sup>&</sup>lt;sup>8</sup> The Project only experienced delays with the procurement of rollers for compactions but this issue was adequately addressed by the Project by renting rollers locally.

<sup>&</sup>lt;sup>9</sup> This excludes the ILO RBSA contribution of US\$ 200,000 which was not subject to this evaluation.

<sup>&</sup>lt;sup>10</sup> This figure is in the same range as the actually incurred costs for already completed works. For the already completed 6 kilometers of rehabilitation works the incurred costs are US\$ 19,313 per kilometer.

It appears that the reasons for this difference are related to higher than expected requirements for drainage structures, higher than expected costs for local construction materials (in particular related to the haulage distances) and the lower than assumed labour productivity. It will be useful to monitor the actual costs and identify what specific cost items are causing the apparent cost increase. When a provision for cost escalation of 5% is included, the average investment requirements per kilometer for rehabilitation works are about US\$ 20,000 and this figure has been used to revise the physical targets for the rehabilitation works to 231 kilometers. An investment of US\$ 20,000 per kilometer is competitive with the costs of similar rehabilitation works carried out by the Directorate of Roads, Bridges and Flood Control (DRBFC) of the Ministry of Infrastructure<sup>11</sup> and also comparable with investments costs of similar projects in other developing countries that are implemented in mountainous terrain like in Timor-Leste.

For a three months time extension an additional budget of US\$ 200,000 will be required to enable the continued input of the TIM Works Project Coordinator and the three Regional Engineers during this three months extension. The Project has informed the mission that, besides these additional budget requirements, no further additional funding is required to extend the operations for 3 additional months

The actual labour productivity that is being achieved for the rehabilitation works is relatively low compared to labour productivities achieved in other labour-based road rehabilitation projects that are being implemented in similar terrain conditions. This is reflected in the relatively high number of labour-days of input per kilometer of rehabilitation work.

One of the reasons of the low labour productivity is that this is a relatively new concept and experiences with the introduction of such systems indicate that considerable time and effort is required to establish such systems effectively. This is in particular the case in low capacity environments like in Timor-Leste. Another reason for the relatively low labour productivity is the limited number of hours per day (4-6) that the labourers work. Increased supervision to ensure that workers complete a daily task that reflects 7 hours of work is required to increase labour productivity. Another constraint is the frequent job rotation as this limits the potentials for retaining the skills that workers have acquired during their employment.

It would be very useful if the Project would undertake time-motion studies to assess achievable labour productivity norms for the main activities and, as required, adjust the labour productivities. Available information from the site work plans and muster rolls can also be used to verify the adequacy of the currently assumed labour productivity norms. It is important that adjustments are being made in close consultation with the concerned workers. If no consensus is reached about the possible daily output per worker for the different activities, workers may not be interested to participate in the works.

The used daily wage rate of US\$ 2 for unskilled labour is appropriate and justified and attracts the targeted beneficiaries without inducing undesirable competition for local labour. An issue however is the fact that other projects and agencies pay different (i.e. higher) wages for work of a similar nature. The rate used by the Ministry of Infrastructure for unskilled labour in similar projects is US\$ 3 and the issue of different wage rates for similar work needs to be addressed by the Government. It is recommended that a uniform rate for wages for unskilled labourers employed in labour-based activities is applied to all such works.

As per the Project's original design it was assumed that a worker would receive 44 days of short-term employment. Actual figures indicate that workers are being employed on average for 37 days. This deviation reflects the aspiration of the central government and the village authorities (sucos) to benefit as many people as possible. The originally envisaged duration of employment of 44 days per household (i.e. 2 months on the basis of a 5 days working week) is preferable, mainly for practical operational reasons. Substantial variations were observed in the number of work-days that

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<sup>&</sup>lt;sup>11</sup> A cost-estimate of a rural roads project executed by the Directorate of Roads, Bridges and Flood Control (contracted to a private contractor) indicates a rehabilitation cost of US\$ 27,250 per kilometer. For this particular scheme, wages constituted 36% of the total cost. In comparison, in the TIM-Works Project labour costs for rehabilitation works constitute about 50% of the total construction costs.

participating households benefit. It is recommended that the Project takes the necessary corrective action, as much as practically possible, to address this issue. At the same time it is recommended that the processing of payments to the workers is further streamlined to avoid undue delays in payments.

With the short duration of the employment opportunities offered through the Project it is not expected that these income transfers will contribute to a structural improvement of their livelihood condition<sup>12</sup>. The limited numbers of interviews that were conducted provided an indication of the limitation of the Project in its present design, in terms of its possible contribution to poverty contribution through income transfers. The interviewed workers mentioned that it raised their short-term purchasing power and allowed them to purchase basic household goods or to pay for the educational costs of their children. The interviewed workers indicated that they would return to agricultural production activities (subsistence farming) again upon the completion of their employment with the TIM Works.

As the Project had only completed the rehabilitation of 6 kilometers of roads at the time of the evaluation, it was too early to asses the effect of the improved road infrastructure on local economic development in general, and an improvement of the livelihood conditions of the vulnerable poor in particular. It is recommended that the Project designs and implements a baseline study that allows for an assessment of the effects of the improved road accessibility later on, once the road works have been completed.

Capacity building activities for the public and private sector are fully integrated in the set-up and implementation of the Project. The training approach and the training materials developed and used by the Project are effective and relate well to actual training requirements. The quality of the training activities is reflected in the overall satisfactory quality of the works. An indicator of the effectiveness of the training of the contractors is the good quality of the observed works under the trial contracts and the quality of the bids submitted by the nine trained contractors.

The Project combines formal class-room training with practical on-the-job training. Targeted trainees include the involved staff of SEFOPE, private contractors and their supervisors, community contractors and workers. As of September 2009 the Project had delivered 1,759 trainee-days of formal class-room training to 42 SEFOPE staff and to 36 contractors and their staff. In addition an estimated 7,248 trainee-days has been delivered by the Project staff through on-the-job training. The Project's progress vis-à-vis its capacity building targets is on schedule

Comprehensive technical guidelines, contracting guidelines, specifications and procedures have been developed to guide the planning, procurement, and implementation and supervision of the works. The Project has also established an effective system for financial and administrative management. A comprehensive relational SQL database system has also been set-up. This provides a powerful tool to monitor and analyze achievements.

This database not only has the ability to provide and analyze data about the physical and financial progress (up to the level of individual contracts) but can also generate and analyze data related to the employment dimensions of the Project, including the employment of women and youth. There is however still a considerable backlog in data entry and data validation and it is very important that the Project ensures a timely entry of data in the database and proper data validation and verification to avoid data entry back-logs and data inaccuracies and inconsistencies. This activity should be given a high priority as this instrument is of key importance to enable tracking the progress and the expected outcome of the Project. It will also provide the management with a tool that will allow for a timely identification of delays and the initiation of subsequent corrective action.

The Project has developed comprehensive time-bound work planning schedules at various levels to facilitate the implementation of the activities and to monitor the progress. Monitoring and evaluation (M&E) activities include field monitoring. The emphasis is mainly on qualitative monitoring. The

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<sup>&</sup>lt;sup>12</sup> Experiences from other workfare programmes in developing countries also indicate that the short duration of the employment offered limits their scope in terms of contributing to poverty alleviation through income transfers.

inclusion of quantitative monitoring, against specific targets and indicators, would further enhance the quality of the monitoring as it would allow for a more structural and systematic analysis of the Project's progress and performance.

It is recommended that quantitative monitoring is included in monitoring and reporting activities and that linkages between planned progress and actual achievements are reflected in the progress reports. At the moment no effect/impact monitoring is being done and it is recommended that simple surveys are designed and implemented to capture basic information that will be required to assess the Project in assessing the impact in terms of improved accessibility, contribution to poverty alleviation and the perceived usefulness by the beneficiaries. In addition it is recommended that the Project designs and implement a tracer study to monitor and evaluate the effects and impact of its training activities for the different groups of trainees covered by the Project.

The Project has established linkages with training providers, employment service centers and microfinance institutions, in particular through the ILO implemented Youth Employment Promotion Programme (YEP) to address structural long-term employment issues, in particular for youth, but these linkages have not resulted in significant achievements. Under the YEP, District Employment Centers (DEC) have been strengthened and the intention is that these DECs will assist unemployed youth in finding jobs. It is however not expected that the DECs will have a major role regarding job placement for the youth employed under TIM Works.

Whereas the job vacancies available with the DECs are mainly civil service jobs, the workers engaged by TIM-Works are mainly subsistence farmers without formal education who operate in the informal sector. As such a disconnect exists between the types of job offered and the skills of the workers. None of the interviewed workers were registered with the DEC as job seekers and it appeared that the DECs have no up-to-date information about the TIM-Works workers in their database. Through the DECs only limited numbers of jobs vacancies are available. A possible useful function of the DECs would be the provision of basic numeracy and literacy training for the workers employed by TIM-Works. To date only limited numbers of workers have received such training and it is recommended that the Project intensifies efforts aiming at an increased coverage of the Project's workers under these numeracy and literacy activities.

The Project is coordinating its activities with the Directorate of Roads, Bridges and Flood Control of the Ministry of Infrastructures to ensure that priorities of the Ministry of Infrastructure are also reflected in the selection of the roads and to avoid duplication. The Project has established functional informal and formal linkages with other relevant projects like the EC-funded Rural Development Projects II and III to promote synergies and complementarities with other relevant projects. TIM Works is actively involved in key policy and strategy development activities, including the formulation of a Rural Roads Policy (Ministry of Infrastructure) and the development of a policy framework for rural development. Based on the experiences with the implementation of the TIM-Works, the Project is in a good position to provide well-informed advice to the policy makers on policies and strategies for rural development and rural roads. Whether the Project will be able to convince policy makers to adopt and implement policies and regulations for further scaling up labour-based approaches will depend on the political commitment and on the Project's ability to convince policy makers about the strategic importance, relevance and effectiveness of the applied labour-based methods and strategies.

Various activities are being undertaken and planned to disseminate information about the Project and to ensure visibility<sup>13</sup>. These activities require adequate financial and human resources to enable their effective implementation. Considering the current work load of the available staff, it may be required

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<sup>&</sup>lt;sup>13</sup> Including progress reports, information campaigns and meetings with beneficiaries and relevant projects, the preparation of press releases, the organization of launch ceremonies, press/media coverage of events like training courses, the organization of field visits for dignitaries, the erection of sign boards and coverage of achievement in newspapers. Planned activities include the preparation of a short documentary for TV Timor Leste, inviting media during high level field visits, sharing information about the Project on the ILO website, the preparation of posters with key information about the Project for display in the local communities and the preparation of Power Point Presentations about the Project for different audiences.

to allocate specific funds from the budget to engage a consultant to provide lead inputs in the preparation and implementation of the envisaged PR and communication activities. The Project is innovative in nature and considering its relevance and already demonstrated successful approaches, it is very important that the various processes, procedures and lessons learned are well documented as this may greatly benefit the GoTL and donors in the design of similar future labour-based infrastructure development projects and programmes. More attention is required to the documentation of best practices and lessons learned<sup>14</sup>.

# **Efficiency**

The decision to implement the Project with SEFOPE as implementing partner is considered practical and justified. On the longer-term it is however recommended to implement programmes like TIM-Works through the Directorate of Roads, Bridges and Flood Control of the Ministry of Infrastructures (MoI), as the MoI is the official owner of the classified road network in Timor Leste and is responsible for the development and maintenance of the road network. Such a transition would also enhance the longer-term technical and institutional sustainability of the labour-based work methods and approaches that are now being applied successfully by the TIM-Works Project.

This will also facilitate the planning, programming and coordination of investments in rural roads infrastructure. Considering the current low 'absorption' capacities of the Directorate of Roads, Bridges and Flood Control, it is foreseen that considerable external technical assistance would be required for the delivery of similar projects in the next 5-10 years. Such labour-based infrastructure works programmes should include significant training and capacity building elements as well to increase the delivery capacity of the Directorate of Roads, Bridges and Flood Control. In the longer term, once decentralization is being firmly implemented, the management of rural road works should logically be assigned to the local authorities.

Through the TIM-Works Project and the Youth Employment Promotion Programme (YEP) SEFOPE is gaining significant expertise and experience on the employment dimensions of employment-intensive infrastructure development projects. It is recommended that SEFOPE retains this role in similar future projects. By monitoring and analyzing the direct and indirect effects of employment-intensive infrastructure investments on employment, SEFOPE will continue to have a very important role in providing advice and feedback at both downstream and upstream level.

The organizational set-up and implementation arrangements of the TIM-Works Project are efficient, considering the challenging working environment which is characterized by low capacities in the public and private sector, limited communication possibilities, a large geographic coverage, challenging terrain and climatologic conditions, a large number of contracts to be managed, and the extensive travel that is required to reach the sites.

Efficient use is made of the available ILO staff and available capacities within the communities and among the involved public and private sector stakeholders. Technical support and backstopping that is provided by the ILO is considered effective and useful. It has assisted the Project in drawing on its long-standing experience in the design of the Project and in continuously improving and fine-tuning the efficiency and effectiveness of the approach and the delivery of the outputs. The Project's total delivery cost for one day's wage to a worker is about US\$ 7 which is considered fairly cost-effective for this type of project, taking into account the conditions challenging terrain conditions and the low capacity environment in which the Project operates.

<sup>&</sup>lt;sup>14</sup> Documentation that will be very useful relates for example to the selection of the roads, the applied capacity building modalities, participatory processes and procedures followed to inform and involve local communities, the recruitment and rotation of labourers, the task-work concept, the planning and implementation of the maintenance works using community contractors, contracting procedures for contracting rehabilitation works, quality control and quality assurance, the use of local materials and skills, the payment of wages, the flow of information between the field and the national level, etc.

The GoTL had pledged to contribute USD 2,392,800 to TIM Works for the payment of the wages of the workers. In 2008 the GoTL contributed US\$ 531,000 and for 2009 a contribution of US\$ 500,000 was made. Originally a contribution of US\$ 1.0 million was envisaged for 2009. Due to the reduced Government contribution for 2009, the Project has already depleted the funds for the payment of wages and funds from the donors are currently being used to ensure a continuation of the payment of the wages. Unless the GoTL contributes the still remaining pledged amount (US\$ 1.362 million), the Project has to reduce its physical targets.

#### Sustainability

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 challenging 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 the public and private sector 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.

Apart from capacity requirements and the institutionalization of policies, strategies, approaches, procedures and standards, the sustainability and relevance of interventions also depends on the importance of the selected roads in the rural roads network (in the context of facilitating local economic development), the quality of the reconstruction/rehabilitation works and the availability of funds for maintenance. The Project is successfully addressing the conditions related to the selection of the roads and the quality of the construction works, and is also demonstrating that effective maintenance systems can be established through community participation. The Project also contains a number of other features that enhance the scope for sustainability. These include the commitment and contribution of the GoTL to the payment of the wages, the active involvement of SEFOPE in the implementation of the Project, the synchronization of the wages of the national staff (contracted through SEFOPE) with those of civil servants in similar positions, and the strong emphasis given to capacity building of the public sector and the local construction industry.

To enhance sustainability it is very important that the GoTL increasingly assumes the responsibility for the maintenance of the rehabilitated road works. Without this, it is not likely that the investments currently made in improving the rural roads through the TIM-Works Project can be sustained. At the moment no formal agreement has been reached yet with the Government regarding the allocation of funds to maintain the rehabilitated roads and this issue needs to be addressed. The Project is already actively involved in the Government's Rural Roads Policy development activities and this provides the opportunity to influence the Government's policy regarding the maintenance of the rural roads network.

The Project is successfully demonstrating effective and efficient approaches and models for building capacities in the public and private sector. But demonstrating effective capacity building models for private sector development however is not sufficient. The Government needs to create an enabling environment, including the allocation of sufficient budgetary resources for investments in infrastructure through small local contractors, to make it interesting for these contractors to invest in their business and develop their capacities and qualifications.

The TIM-Works Project has made an excellent start in developing and applying various technical procedures, standards and specifications. But more than two years will be required to further develop and fine-tune them and more (formalized) interaction and collaboration with the Directorate of Roads, Bridges and Flood Control is needed to discuss the scope and modalities of integrating TIM-Works

procedures, guidelines and modalities within the Government system. A standardization of procedures and specifications is also essential in this respect. An example is the set of procedures currently being used by the Project for the procurement of works. To date TIM-Works follows the ILO procurement procedures. Although the Project had intended to start using the FIDIC<sup>15</sup> Short-Form of Contract, this has not happened yet. The FIDIC Short-Form of Contract provides a simple contractual framework with only the 'Employer' and the 'Contractor' as contract parties. The introduction of the FIDIC Short-Form of Contract would provide a more appropriate basis for institutionalizing procurement procedures for works than the currently used ILO service contract and it is recommended to introduce this contract form, in close consultation with the Ministry of Infrastructures.

Finally it is recommended that the scope and need for including other sectors within the framework of future employment-intensive (labour-based) infrastructure development programmes is explored. In the largely subsistence-oriented agrarian rural society in Timor-Leste a wide range of infrastructure improvements are required to provide an enabling environment for sustainable local economic development and poverty reduction. Apart from improvements in rural road accessibility, other priority areas are water and sanitation, irrigation development, afforestation and water-and soil conservation. Apart from water and sanitation, the other sectors lend themselves very well for the application of simple employment-intensive approaches and work-methods and could be considered, based on local requirements. By widening the scope of work to include investments in productive infrastructure development this will further enhance the scope for providing sustainable and long-term improvements to the local people's livelihood conditions.

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<sup>&</sup>lt;sup>15</sup> FIDIC is an acronym that stands for Fédération Internationale Des Ingénieurs-Conseils it is the French name for the International Federation of Consulting Engineers.

# 1. Background

- 1. Due to successive crises, communities in Timor-Leste face severe poverty and high levels of unemployment. This situation, combined with social tensions and exclusion, entails the risk of instability and seriously constraints the scope for sustainable local development. To address these issues, the Government of Timor-Leste (GoTL) has prioritized employment and income generation, in particular for youth. Public infrastructure works that provide essential basic infrastructure required for growth and development, that generate short-term employment, and that contribute to the development of long-term and sustainable job creation through the development of the private sector, constitute main priorities of the GoTL<sup>16</sup>.
- 2. The *Investment Budget Execution Support for Rural Infrastructure Development and Employment Generation (TIM Works)* has been designed to contribute to the Government's priorities of creating employment, reducing poverty, stimulating economic growth and increasing social stability. The TIM-Works Project integrates capacity building activities, targeting both the public and private sector, with the rehabilitation, construction and maintenance of essential basic infrastructure.
- 3. The Project applies appropriate labour-based (equipment-supported) approaches, technologies and design standards in the construction works and promotes the recruitment of the rural poor, with a special emphasis on youth and women, to be engaged as workers during the construction works. Construction activities under TIM Works focus on improving basic access by improving and maintaining key rural road links.
- 4. TIM Works is of strategic importance to the GoTL's national development priorities. These include the provision of sustainable and productive employment opportunities for a rapidly growing labour force, the improvement of access and social and economic services and facilities, private sector development support, improving and maintaining rural infrastructure, and human resource development and institutional strengthening. TIM Works is also well aligned with Timor-Leste's MDGs, UNDAF priorities and the ILO DWCP priorities for Timor-Leste<sup>17</sup>.
- 5. Since its launch on 1<sup>st</sup> September 2008, the Project has made good progress. After the completion of preparatory activities during the inception phase <sup>18</sup>, substantial progress has been made in the delivery of capacity building activities and the rehabilitation and maintenance of rural roads. Initially the Project focused on the implementation of routine maintenance activities and from January 2009 onwards, the implementation of road rehabilitation works started as well.

# 2. Evaluation approach

- 6. The purpose of this independent evaluation, as reflected in the TOR (see Annex 2) is to provide an independent assessment of the TIM Works Project with regards to the validity of the design, the efficiency and effectiveness of the implementation approaches, the achieved progress, the quality of the works, the encountered challenged, and the lessons learned. The purpose of this evaluation is also to advise, as required, the clients about necessary adjustments regarding targets, partnership arrangements, implementation methods and resource allocations.
- 7. The primary clients of the evaluation are SEFOPE, ILO and the three Project donors. The findings of the evaluation are also meant to facilitate the Project's Steering Committee in reviewing the

<sup>&</sup>lt;sup>16</sup> They are the first priority of the '2008 National Priority 4 Working Group' of the GoTL and constitute the pillar of the 2009 National Priority Working Group 2 on Rural Development in which he Ministry of Economy and Development, the Secretariat of State for Vocational Training and Employment and the Ministry of Infrastructures participate.

<sup>&</sup>lt;sup>17</sup> In particular to outcome 4 of the DWCP: 'More employment generated by rural infrastructure investment programmes'.

<sup>&</sup>lt;sup>18</sup> These include the establishment of the office, the mobilization of staff, the procurement of equipment and vehicles, the development of technical and administrative guidelines and manuals and the selection of the roads.

Project's results and in decision taking. For the ILO, the evaluation is also intended to aide necessary Project adjustments, the design of future similar projects in Timor-Leste or elsewhere, and analyze achieved productivity rates.

- 8. This evaluation reviews the TIM Works' achievements as a whole, regardless of the specific donor contributions and includes all the Project's activities undertaken jointly by SEFOPE and ILO, covering the period 1 September 2008 15 August 2009. The TOR for the evaluation also indicates that, to the extent possible, the planned activities for the remainder of the Project need to be reviewed.
- 9. The scope for the evaluation has been set by the key evaluation questions as formulated in the TOR (Annex 2). The formulated key questions mentioned in the TOR relate to four key evaluation criteria, i.e. relevance and strategic fit, effectiveness, efficiency and sustainability. Following a desk review of the available documentation, initial meetings with key stakeholders in Dili and a first field visit, the mission found the formulated key questions in general to be adequate and comprehensive.
- 10. Available information and time constraints limited the mission's scope for conducting an in-depth analysis of the labour productivities. For similar reasons, and because the time has been too short since the start of the Project to enable a meaningful evaluation of sustainable effects/impacts, it has not been possible to provide an in-depth analysis of the impact of the Project on poverty and local economic development. The mission did however conduct limited numbers of interviews and focus-group meetings to obtain an indicative assessment of the effects and the impacts of the Project related to improved access and its contribution to poverty reduction.
- 11. The UN evaluation norms, standards and ethical safeguards have been followed in the evaluation. Evaluation methods used included; i) the identification and review of available documents (from the TIM Works Project and other relevant documentation form other projects and donors); ii) meetings and interviews with the involved government departments, donors and ILO staff; iii) structured, semi-structured and open interviews with workers and contractors and their staff; iv) focus-group meetings with workers and beneficiary households; v) random skill tests of contractors and skilled workers; vi) visual inspections of the works at selected sites; vii) inspections of available documentation at the work-sites; viii) photographs, and; ix) a stakeholder workshop at the completion of the field mission.
- 12. Regions and sites selected for site inspections and interviews were selected using a purposive sampling strategy, based on the geographic coverage of the TIM-Works Project. Questionnaires were prepared for interviews with workers and community members living within the area of influence of the road but not participating in the road works. Participants were selected on the basis of quota sampling, with an equal number of males and females interviewed. Similarly, an equal number of those that were below 30 and 30 or above were interviewed. The sample of programme beneficiaries that participated in the structured survey was six. The sample of community beneficiaries that participated in the survey was three. In addition, a guide for focus groups with community members was devised and two focus groups were held. Annex 8 summarizes the findings from the interviews and focus group discussions that were held with the community workers and programme beneficiaries.
- 13. The itinerary of the field mission, including the persons met, is presented in Annex 3. A list of the documents that were reviewed is provided in Annex 4. For the individual and focus-group interviews with workers and with members of households living in the area of influence of the road, questionnaires were developed and these are presented in Annex 6. A detailed description of the evaluation methodology is presented in Annex 7.

# 3. Project Findings

## 3.1 Context

- 14. Timor-Leste ranks 158th out of 179 countries in the UNDP Human Development Index, making it the least developed country in Asia. The average per capita annual income is US\$ 440. 50% of the population lives below the national poverty line of US\$0.88 per day. Women are overrepresented amongst the poor and their status regarding land ownership and property is marginalized. This further contributes negatively to their decision making and participation in productive activities.
- 15. Compared to urban areas, the poverty situation in rural areas is significantly worse. 88% of the rural agricultural labour force (constituting 82% of the total labour force) is amongst the poorest in Timor-Leste. Agriculture is predominantly of a subsistence nature and an estimated 40% of the rural labour force is underemployed. Overall unemployment rate in Timor-Leste is estimated at 45%, with youth unemployment peaking at 60%.
- 16. Rural areas of Timor-Leste account for 76.2% of the Country's poor. <sup>19</sup> 82% of the consumption of the rural poor goes is on food, which means that little remains to support other basic needs related to health and education. Those that are engaged in subsistence agriculture are typically the poorest.
- 17. Short-term and long-term job creation is vital to economic and political stability in Timor-Leste. With a median age of the population of 22 years, creating jobs for the youth is of key importance in contributing to stability, poverty reduction and economic development. 15,000 young people enter the job market each year, and with 45% of the population younger than 15, the issue will become more pressing in the future. With so many young Timorese out of work, large-scale (public works) projects are vital in the short and medium term to provide (short-term) employment opportunities.
- 18. Timor-Leste is still in the process of transition from a short term emergency/reconstruction period to a longer term development phase and the security situation remains fragile. Therefore, the creation of large numbers of short-term job opportunities, in particular for the youth, is of significant importance on the short and medium term, also with the aim of contributing to continued peace and stability.
- 19. Equally important to the creation of short-term job opportunities is the provision of education and skills, in tandem with putting in place measures that will increase sustainable (self-) employment opportunities in the private and public sector. To increase investment delivery capacities by the public and private sector, training and capacity building is also essential. At the moment these capacities are very weak. To provide sufficient incentives for the private (construction) sector to develop its capacities, increased (public infrastructure) investments will be required.
- 20. Providing basic rural infrastructure is one of the key investment priorities for the GoTL. The Government recognizes its importance in creating an enabling environment for poverty reduction and stimulating local economic development. In this context, the improvement of the core rural roads network, using appropriate labour-based approaches and technologies that optimize employment creation and ensure good construction standards, plays an important role.
- 21. International experiences indicate that improving poor peoples' rural road access to economic and social facilities like markets, financial institutions, schools and health centers constitute one of the key triggers for longer-term sustainable local economic development, especially in fragile states like Timor-Leste. A transport sector study in Timor-Leste, commissioned by the ADB in 2006<sup>20</sup>, indicates that the poor condition of the roads (including rural roads) and/or a lack of good transportation systems were cited by the interviewed households as the major cause of poverty and the largest constraint to local economic development. It was followed by the lack of access to income generating

 $<sup>^{19}</sup>$  The poorest 40% of population comprise the poor reference group.

<sup>&</sup>lt;sup>20</sup> This study was conducted in 2006 by the Louis Berger Group, Inc on behalf of the Asian Development Bank (ADB).

opportunities, which is closely associated with the existing poor road conditions that prevents easy access to market activity centers.

22. Timor-Leste has a relatively dense road network of about 6,000 kilometers, of which 1,800 kilometers is paved. This network is however in a poor condition and routine and periodic maintenance is lacking. 44% of the paved roads and 89% of the unpaved roads (which include the entire network of 3,000 kilometers of rural roads) are in a poor condition<sup>21</sup> and this severely limits access for the rural population to markets, schools, health centers and other economic and social facilities and services.

# 3.2 Relevance and Strategic Fit

- 23. Timor-Leste's national development priorities<sup>22</sup>, donor priorities, the 2009-2013 UNDAF and the 2008-2013 ILO-DWCP priorities were addressed effectively when the TIM-Works Project was formulated in 2008. At the time of the mid-term evaluation these priorities are still valid and the Project is considered to be very relevant and strategically important within the context of the identified priorities. TIM-Works combines the improvement of strategically important rural roads with the provision of short-term employment opportunities. Appropriate labour-based approaches, models and technologies, combined with close supervision, ensure that, overall, relatively high quality standards can be maintained.
- 24. TIM Works is of strategic importance and relevant and significant in contributing to the GoTL's national development priorities. These include the provision of employment opportunities for a rapidly growing labour force, a contribution to social stability, the improvement of rural road access to social and economic services and facilities, private sector development support and human resource development and institutional strengthening.
- 25. In terms of addressing and integrating rural road infrastructure requirements, capacity building needs and the employment/social stability dimensions of the project (vis-à-vis available investments, objectives, targets, delivery capacities in the public/private sector, and locally available labour and materials) the Project's implementation approach is overall considered efficient, effective and well-balanced. It is making optimum use of the locally available resources and skills.
- 26. Through the cash transfers provided through TIM Works, the Project makes a significant contribution to short-term livelihood improvement and social stability but structural long-term unemployment and underemployment issues are not being addressed *directly* through the Project through these cash transfers as the Project only offers short-term employment opportunities.
- 27. The key long-term benefit that is expected from the Project is its contribution to economic development and poverty reduction through improvements to rural roads infrastructure. As the Project had only completed 6 kilometers of road rehabilitation at the time of the mid-term evaluation, it is too early to assess the effects and impacts of improved rural roads access on local economic development and poverty reduction.
- 28. 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. Appropriate labour-based (equipment-supported) approaches, technologies and design standards are used. The recruitment of the rural poor, with a special emphasis on youth and women, is successfully promoted. Women's participation exceeds the target and youth constitutes 57% of the labour force, reflecting the priority given by the Government to promote youth employment<sup>23</sup>.

<sup>&</sup>lt;sup>21</sup> Study carried out by the ADB in 2005.

The GoTL has declared 2009 as the year of infrastructure, rural development and human resources capacity development.

<sup>&</sup>lt;sup>23</sup> This is also reflected in the minutes of the inception workshop where it is mentioned by the SEFOPE representative that at least 50% of the work force should constitute youth (15-29 years age group). In the project documents no specific targets have been set for the employment of youth. However, in line with Government priorities, the Project's targeting strategy

- 29. 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 challenging 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.
- 30. More time is also required to further develop and fine-tune various technical procedures, standards and specifications. The TIM-Works Project has made an excellent start in doing so but more time will be required and more (formalized) interaction and collaboration with the Directorate of Roads, Bridges and Flood Control is needed to discuss the scope and modalities of integrating TIM-Works procedures, guidelines and modalities within the Government system. A standardization of procedures and specifications is essential in this respect.
- 31. To enhance sustainability it is equally important that the GoTL increasingly assumes the responsibility for the maintenance of the rehabilitated road works. Without this, it is not likely that the investments currently made in improving the rural roads through the TIM-Works Project can be sustained. At the same time it should also be realized that the capacities of the private construction sector (i.e. in the case of TIM-Works the small local contractors) to deliver the investments are of key importance. Apart from building capacities of the small contractors, as currently being done through the TIM-Works Project, an enabling environment needs to be created by the Government. This also means that there should be sufficient work available for these contractors to make it interesting for them to invest in developing their capacities.

## 3.3 Effectiveness

#### 3.3.1 Selection of Roads

- 32. Central Timor-Leste is home to two-thirds of the nation's poor. The region has a higher incidence of poverty and accounts for a higher percentage of the nation's population than the surrounding regions. The poor are also concentrated within the rural areas of Timor-Leste, and account for 76.2 per cent of the Nation's poor. Thus TIM Works' focus on rural areas and Central Timor-Leste suggests that the programme is geographically well focused.
- 33. Based on a review of available Project information, field observations and interviews with people living in the area of influence of the selected roads, it appears that the majority of roads that have been selected for maintenance and rehabilitation are important road links in the local rural roads network. Selection criteria used in the selection of the roads include the priorities of the local authorities, network considerations, accessibility to social facilities, the availability of labour and local materials, the population served and the technical feasibility and estimated costs of the proposed roads.
- 34. For the selection of rural roads for rehabilitation, the Project made an inventory of approximately 500 kilometers of rural roads in the 7 districts where rehabilitation works were planned. The outcome of the inventory and the application of the selection criteria resulted in the selection of 225 kilometers of road for rehabilitation. The selection of the roads has been done in close consultation with the local authorities and the concerned Directorate of Roads, Bridges and Flood Controls. Written documentation outlining the selection process, including a quantification of the prioritization criteria, and the justification for the selected roads is however not readily available.

focuses on the provision of employment opportunities for youth and has introduced stipulations in the rehabilitation and maintenance contracts that mention that at least 70% of the work force should be youth (15-29 years).

35. In the absence of a rural road master plan or a road condition inventory of the rural road network (which is currently in the process of being implemented through the EC-funded RDP III Project; scheduled for completion by the end of 2010), the Project's approach of preparing a rural road inventory of the rural roads in the Project's operational districts to facilitate the prioritization of the rural roads, was very useful. During the field-based road inventory, additional information was collected to facilitate the prioritization of the roads. Considering the urgency of a quick start of the construction activities, this approach was deemed effective.

#### 3.3.2 Overall Progress

- 36. Road rehabilitation works are implemented in 7 districts; Aileu, Baucau, Dili, Lautum, Liquica, Manatutu and Viqueque. The geographic coverage of the maintenance activities was initially also concentrated in the 8 originally selected districts (i.e. the above mentioned 7 districts and Oecusse). In 2009 the coverage of the maintenance activities has been extended to include an additional 5 districts; Ermera, Cova Lima, Bobonara, Ainoro and Manu Fahi
- 37. By September 2009, 684 kilometers of rural roads had been maintained (45% of the target of 1,536 kilometers). Out of the 300 kilometers of rural road targeted for rehabilitation, 6 kilometers had been completed and the overall weighted progress at on-going works on 106 kilometers of roads was 63%. The overall progress on the rehabilitation works is 23%.
- 38. Considering the very difficult working environment in which the Project operates<sup>24</sup>, and taking into account its innovative character<sup>25</sup>, the substantive efforts and time allocated to train the various groups of targeted trainees (contractors and their staff, involved government staff, workers), and the large geographic coverage, TIM Works' has made good progress. The duration of the maintenance contracts is 2-3 months and the length of the road links being maintained various between 5-12 kilometers (average 7 kilometers length).
- 39. Out of the total current expenditures for works (US\$ 1.931 million), about US\$ 1.031 million has been spent on wages (53%). The remaining expenditures were used for the procurement of local construction materials (like sand and stones), imported construction materials (like cement) and for hiring locally available trucks and compaction equipment.
- 40. It estimated that approximately US\$ 1.2 million (or 62%) of the total investments in the construction and maintenance works are injected in the local economy. The Project procures for example locally available stones that are being collected by local people who deposit these stones along the road side. Locally available trucks and tractors with trailers are being used for the transportation of sand, stones, quarry materials and water (stored in large portable water tanks). The Project contracts the owners for the transportation of the materials on a piece-work basis. The Project has also identified locally available compaction equipment, owned by the private construction industry and rents this equipment on a daily basis.
- 41. 417,136 work-days of work had been generated, benefiting 11,253 workers and their families. Out of the total budget of US\$ 8.145 million<sup>26</sup>, US\$ 2.941 million has been spent by September 2009, including US\$ 1.031 million<sup>27</sup> for the payment of wages by the GoTL. Table 1 summarizes an

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<sup>&</sup>lt;sup>24</sup> This includes challenging terrain and climatologic conditions, very limited capacities in the public and private sector, communication limitations, the shortage of locally available compaction equipment and accessibility constraints.

<sup>&</sup>lt;sup>25</sup> The introduction of the application of labour-based approaches and technologies that require: i) adaptations to the planning and organization of the work; ii) intensive quality control and supervision; iii) an optimization of the balance between inputs by workers and light equipment, and; iv) the introduction of an output (task-based) remuneration system for the work-force.

<sup>&</sup>lt;sup>26</sup> This excludes the additional allocation that was provided by the ILO through its RBSA funds. These funds were used by the TIM-Works Project to develop training materials and courses for the private construction industry, for the establishment of a routine maintenance system using labour-based methods and community contracting, for support to the Government in formulating a nationwide Workfare programme, and for carrying out a wage assessment for rural road works (and including recommendations for appropriate minimum wage levels).

<sup>&</sup>lt;sup>27</sup> In 2008 the GoTL contributed US\$ 531,000 and for 2009 a contribution of US\$ 500,000 was made. Originally a contribution of US\$ 1million was envisaged for 2009. Due to the reduced Government contribution for 2009, the Project has

assessment of current overall state of progress of the Project, against the Project's immediate objective and main outputs as formulated in the Project's Logical Framework.

42. Table 2 summarizes the progress and indicative status of expenditures of the TIM Works Project as of September 2009. The table indicates that overall 36% of the budget has been spent. The budget for the construction works includes a contribution of US\$ 2,392,800 from the GoTL for the payment of wages to the construction workers. In 2008 the GoTL contributed US\$ 531,000. For 2009 a contribution of US\$ 1 million was envisaged but this was reduced to US\$ 0.5 million

Table 1: Summary of Progress as of September 2009

OBJECTIVE AND KEY OUTPUTS	INDICATORS	PROGRESS/REMARKS		
Immediate Objective Livelihood improvement and social stability in rural communities through rural development and employment generation	a. Total km of road network improved     b. Number of workdays generated and     amount of cash injected in local     communities     c. Labour-based methods integrated into     national Workfare programmes	a. 690 km of roads improved, of which 684 km through maintenance. Rehabilitation going on at 106 km and maintenance works on 444 km. b. 417,136 workdays created and about US\$ 1.2 million injected in local economy c. Labour-based methods used; design of a national Workfare programmes still pending		
Output 1 Roads rehabilitation and maintenance with labour-based technologies	a. Total of 300 km rehabilitated b. Total of 1,536 km maintenance c. Labour-based technologies applied	a. 6 km rehabilitated and works on 106 km going on. Progress 23% vis-à-vis target b. 684 km of maintenance completed and works going on at 444 km. Overall progress 45% <sup>28</sup> c. Labour-based technologies applied		
Output 2 Employment generation	a. 1,039,200 work-days generated b. Employment provided to 23,568 beneficiaries, at least 30% women	a. 417,136 work-days generated (40%) b. Employed provided to 11,253 beneficiaries (48%), of which 57% youth, and including 31% women		
Outputs 3 Capacity building	<ul> <li>a. ≥ 30 government counterpart engineers, technicians, inspectors trained</li> <li>b. 100 community contractors trained</li> <li>c. 75 commercial contractors trained</li> <li>d. Tailored training materials prepared</li> </ul>	<ul> <li>a. 42 government engineers, supervisors, field officers and operations officers trained (140%)</li> <li>b. 44 community contractors trained (44%)</li> <li>c. 36 contractors and their supervisors trained (48%)</li> <li>d. Relevant training materials prepared</li> </ul>		
Output 4 Policies, strategies, guidelines and standards	a. Technical standards reviewed, revised b. Technical specification reviewed c. Contract documentation developed d. Project experiences on contracting documented and disseminated e. No. of government staff using progress monitoring & reporting system f. Number of other infrastructure projects benefiting from TIM-Works training materials, technical support and facilities g. Rural infrastructure policies/strategies on national development priorities prepared	a. Completed b. Completed c. Completed d. Not done yet (too early) e. All field-based government staff (42) use forms developed for planning, monitoring and reporting on works. At national level the management information system is used for monitoring/reporting f. ILO TIM-Works management and counterparts are participating in a technical working group (incl. government agencies, other projects, donors) to develop rural roads policy and strategy framework.		

already depleted the funds for the payment of wages and funds from the donors are currently being used to ensure a continuation of the payment of the wages.

28 In the progress reports and work plans no distinction is made between routine and periodic maintenance.

Table 2: Summary Status of Progress and Indicative Expenditures<sup>29</sup> (US\$) TIM Works Project

(At the time of the evaluation updated certified figures were not available on the expenditures and the presented figures are indicative, non-certified figures. These figures are based on an analysis of the available information at the Project by the mission at the time of the evaluation. The presented figures do not represent certified statements. These will be provided to each donor by the ILO Budget Bureau in Geneva)

	Budget line	Budget	Expenditures		
		US\$ million	US\$ million	as % of budget	
	Non-works	1.793	0.819	46%	
8	Works (construction)	5.650	1.931	34%	
9	Contingencies	0.155	0.000	0%	
10	Administrative costs	0.547	0.191	35%	
	TOTAL	8.145	2.941	36%	

43. The budget for TIM-Works is based on funding from three donors and a contribution by the GoTL of US\$ 2,392,800 for the payment of wages to the construction workers. The contributions by the donors and the GoTL have to be administered and managed in accordance with the different requirements of the three donors and the GoTL. Reporting requirements set by the donors and the GoTL are also different. Donor contributions cover different time-frames and this necessitates close financial management and, as required, timely adjustments to procurement plans by the Project management to ensure that planned activities and outputs can be realized vis-à-vis available financial resources. The Project is coordinating the management of the available resources from the donors and the GoTL in an efficient and effective way.

44. An overview with information about the physical progress, unit costs and the created number of labour-days is presented in table 3.

Table 3: Key information on physical progress, units costs and labour input characteristics

		unit	maintenance	rehabilitation
1	Construction Works			
1.1	Districts covered	number	15	7
1.2	Target	km	1,536	300
1.3	Completed	km	684	6
1.4	On-going	km	444	106
1.5	Progress	% of target	45%	23%
1.6	Average cost per km	US\$ per km	584	19,123
2	Labour input and wages			
2.1	Average labour input requirements	work-days per km	214	3,887
2.3	Average labour wages (unskilled + skilled)	US\$ per day	2.46	2.46
2.4	Average labour cost as % of construction costs	% of constr. costs	74%	50%
2.5	Number of labour-days generated	number	146,376	270,760
2.6	Target average no. of labour-days per labourer	no. of labour-days	44	44
2.7	Actual number of labour-days per labourer	no. of labour-days	30	42
2.8	Estimated number of employed workers	number	4,879	6,374

45. The current physical progress of the maintenance activities indicates that it is likely that the physical targets can be achieved within the originally envisaged Project's time-frame (i.e. 30<sup>th</sup> June 2010). For the rehabilitation works it is not expected that this will be the case as the progress of the rehabilitation works was only 23% as of September 2009, i.e. after 58% of the implementation period has passed.

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<sup>&</sup>lt;sup>29</sup> This excludes the RBSA funding, as this was not part of the evaluation.

- 46. Based on the available information from the Project, it appears that the current rate of progress for rehabilitation works varies from 0.6 1.0 km per scheme per month<sup>30</sup>. The average rate of progress is 0.8 km per scheme per month. The Project staff indicated that it would be possible to increase the progress to 1 km per scheme per month, i.e. an increase in delivery of 25%. Considering the current low labour productivity rates it should indeed be possible to increase the delivery rate and the mission concurs with the Project's assessment.
- 47. The Project can implement works at most at 16 schemes simultaneously and this thus translates to a maximum delivery capacity of 16 km per month. At the same time however increased attention is required to quality control issues and limitations related to the capacities of small contractors and the availability of water (for compaction) and compaction equipment should be taken into account. It is therefore recommended to schedule the remaining delivery of the rehabilitation works at 90% of the maximum capacity, i.e. at a rate of 14.4 km per month.
- 48. At the same time it is recommended to adjust the original physical targets for rehabilitation works. In the original design of the Project, the costs of the rehabilitation works were estimated at US\$ 15,000 per kilometer. Project experiences indicate that the actual costs are 27% higher, i.e. US\$ 19,123 per kilometer. Using this figure of US\$ 19,123, and including a 5% provision for cost increase, the average cost per kilometer of rehabilitation works can be calculated to be about US\$ 20,000 and it is proposed to revise the physical target for rehabilitation works accordingly.

#### 3.3.3 Labour-based Technologies and Work Methods

- 49. Appropriate labour-based technologies and work methods have been successfully introduced and established by the TIM-Works Project. To the extent feasible locally available materials, equipment and labour are being used for the works. The decision to opt for gravel roads is justified considering the low traffic volume of the rural roads that are being rehabilitated, and also keeping in mind that the Project aims at improving/providing <u>basic</u> motorable rural road access.
- 50. It is estimated that through the labour-based methods that are applied about 62% of the capital investments are injected in the local economy through; a) the payment of wages to the local labourers (53%)<sup>31</sup> and; b) through the procurement of local materials (like sand and stones) and hiring local equipment (9%).
- 51. The ratio works investments: non-works investments is about 69:31 (i.e. US\$ 5.650 million and US\$ 2.495 million) and this is considered efficient for projects of a similar nature, in particular when taking into account the fact that the ILO professional staff spends at least 50% of their time on training and capacity building (formal training and on-the-job training).
- 52. Routine maintenance activities are being implemented using community-based implementation modalities, with the works contracted through local community contractors. These local community contractors are being selected in close consultation with the village authorities and in the selection process the Project checks the qualification of these community contractors against defined minimum competencies and qualifications. Considering the nature of the works (largely unskilled work) and available capacities, and from the perspective of raising local awareness and recognition for the need of maintenance, this approach is considered to be effective.
- 53. At many of the roads where maintenance activities have been carried out, a considerable backlog in maintenance existed. This is reflected in the cost per kilometer. Considering this fact, the average maintenance costs per kilometer (US 600 per kilometer) are reasonable and they are comparable with the costs of routine rural road maintenance works in projects implemented in similar settings, working

 $<sup>^{30}</sup>$  Based on an analysis of the implementation period of 16 on-going schemes.

<sup>&</sup>lt;sup>31</sup> 50% in the case of rehabilitation works and 74% in the case of maintenance works. These figures are consistent with those of similar labour-based basic rural road access projects in Timor-Leste, Indonesia and elsewhere.

environments and work requirements. It is expected that the routine maintenance costs can be reduced to around US\$ 400 per kilometer once the backlog has been removed.

- 54. For rehabilitation works, the investment costs are in the range of US\$ 11,228 25,038 per kilometer (see also Annex 5). These large variations are due to the different terrain conditions, the initial condition of the roads and the specific road rehabilitation requirements (in particular regarding drainage structures). Average investment costs per kilometer for rehabilitation works are US\$ 19,123.
- 55. These costs appear to be competitive with the costs of similar rehabilitation works carried out by the Directorate of Roads, Bridges and Flood Control of the Ministry of Infrastructure. A cost-estimate of a rural roads project executed by the Directorate of Roads, Bridges and Flood Control (contracted to a private contractor) indicates a rehabilitation cost of US\$ 27,250 per kilometer. For this particular scheme, wages constituted 36% of the total cost. In comparison, in the TIM-Works Project labour costs constitute about 50% of the total rehabilitation costs.
- 56. The delivery of the investments in the maintenance and rehabilitation works is considered cost-effective and is in line with unit costs (per kilometer) for similar works in comparable working environments. Considering the key importance of providing adequate drainage structures that will prolong the life-time of the roads and reduce future maintenance costs, it is vital that adequate drainage is provided, even if this means that the average cost per kilometer of rehabilitated road would increase.
- 57. The Project developed and introduced appropriate and very comprehensive technical guidelines and specifications for the planning, design, cost-estimation and supervision of the rehabilitation and maintenance works. Quality control and quality assurance guidelines are also included. Procedures and forms for site planning, monitoring and reporting are available with the Project. Inspections at the visited sites indicated that daily and weekly work plans and muster rolls are being maintained reasonably well but there is scope to improve the quality of the work plans.
- 58. Detailed contracting guidelines have been developed by the Project for the rehabilitation works. These include sections containing bidding documents, forms for bid opening and review, bid evaluation methods, forms for contract award, forms for contract implementation, forms on payment statements, payment certificates and bidding documents for road drainage structures. ILO standard service contracts and contracting procedures are being used. Contracts include stipulations about the payment of minimum daily wage (US\$ 2 per day), minimum age and other relevant labour standards. For routine maintenance works, simple but effective and transparent contracts are being used
- 59. Due to capacity constraints among small local contractors, the Project started initially with the implementation of rehabilitation works through force account. Through an inventory done by the Project about the available capacities in Timor Leste of small local contractors, about 150 building contractors were identified. After an initial screening 50 of them were short-listed and invited for a meeting with the Project. 30 of them actually came to the meeting and were registered by the Project. Based on their competencies and experiences, an initial batch of 9 contractors was selected for training.
- 60. The system of pre-qualification of small local contractors, in conjunction with the training of eligible contractors, appears to be effective. This is reflected in the good quality of the works that were inspected during the mission at the trial contracts (the construction of a 4 meter span bridge, the construction of culverts and lining of road-side drains; all contracted to pre-qualified and trained local contractors).
- 61. With the training of the first batch of nine contractors now completed, works will be increasingly contracted out to pre-qualified small local contractors. Starting November 2009 another round of contractor training is scheduled for a second batch of contractors. It is expected that for the remaining rehabilitation works about 25% of the works will be implemented through small local contractors and the remaining 75% through force account.

# 3.3.4 Quality of the Works

- 62. Considering the very challenging environment in which the Project operates, the overall quality of the works is considered satisfactory. In the planning and implementation of the construction works the Project has to cope with various challenges. These include the time pressure to produce physical outputs, the very short time that the Project has been operational, the difficult terrain conditions and harsh climate, the shortage of capacities and skills in the public and private sector, the introduction of the new concept of the task-work system, the limited means of communication available to the field-based staff, the large geographic coverage of the Project and the substantial number of contracts that have to be managed.
- 63. In general the Project has a positive environmental impact by improving the drainage of the surface water run-off from the roads, thereby reducing the risks of erosion and landslides. In a few cases however it was observed during the field visits that gravel was excavated from quarries very close to the road side, and sometimes at unstable angles exceeding the angle of repose.
- 64. Although the quality of the gravel along the majority of the inspected road sections is good to acceptable, it was also observed that at some sections sub-standard quality gravel was used. Probably in order to reduce costs, the material used was excavated from berms close to the place were gravel was required.
- 65. In general the achieved levels of compaction as observed during the field visits appear to be acceptable. In a few case however it was noted that mechanical compaction was not done at optimum moisture content, thereby affecting the quality of the compaction. A cited problem is the shortage of water available for sprinkling. Sometimes water needs to be hauled from distances as far as 17 kilometers from the work site.
- 66. Another issue regarding compaction is the availability of compaction equipment. The Project has procured 10 numbers of 1.3 tons pedestrian rollers but as this capacity was not sufficient to cover the 16 different work sites where rehabilitation works are being undertaken simultaneously (i.e. the Project's maximum delivery capacity), an additional 6 rollers (5-7 ton static rollers) are being hired locally.
- 67. At a few observed sections the road gradients were very steep. For gravel roads, in conditions of high rainfall and/or high rainfall intensity, it is usually not recommended to construct gravel roads with a gradient exceeding 8-10% over long sections as this may cause excessive erosion and/or limit accessibility of motorized traffic (especially during the rainy season).
- 68. It is important that the water velocity in the side drains is being kept below the scouring velocity. For this reason sufficient attention should be paid to the construction of scour checks in the side drains, in relation to the gradient of the side-drains. For steep sections, lining of side-drains is recommended. In some cased it was observed that it was difficult to maintain the geometrical design of the side drains (trapezoidal) because of small rock outcrops. Instead of trying to remove these outcrops by heating (not recommended from an environmental point of view) it would be worthwhile to procure or hire hand-operated rock hammers to remove these rock outcrops.
- 69. In general the quality of the constructed culverts, bridges and the lining of the side-drains is good. In a few cases it was observed that not sufficient attention was paid to curing and to the correct placement of the reinforcement steel in the culvert slabs. Close supervision is required to ensure that the quality of the concrete construction works can be maintained.
- 70. The provision of adequate drainage facilities in road rehabilitation works is of key importance to the preservation of the construction works and will considerably increase the life-time of the road. It is therefore not recommended to economize on the costs of the rehabilitation works by compromising on the requirements for drainage structures.

# 3.3.5 Employment Creation and Beneficiary Targeting

- 71. The Project has generated about 417,136 work-days of short-term employment, benefiting 11,253 workers and their families. This translates to 40% progress vis-à-vis the work-days target (1,039,200) and 48% progress regarding the targeted number of workers (23,568). Youth constitute 57% of the workforce and women's participation is around 31%. This result exceeds the target set for the targeted share of women in the work force (30%). The inclusion of women in the workforce is actively promoted and the gender perspective is an integral component of the TIM-Works Project, during the planning, implementation and monitoring of activities.
- 72. In line with the priority of the Government of promoting youth employment<sup>32</sup>, the Project's employment strategy strongly focuses on the recruitment of youth<sup>33</sup> and with youth (15-29 years) constituting 57% of the labour force it can be concluded that the Project's approach in this respect is successful. Although the creation of short-term employment opportunities does not structurally resolve the problems of high levels of unemployment and underemployment (in particular among the youth), the cash transfers have a short-term stabilizing role. More structural and long-term solutions to the high levels of unemployment and underemployment would be required, in particular with regards to the provision of vocational and technical skills development, based on emerging demands and identified potentially promising economic sector activities.
- 73. The relatively high participation of youth and women in the work force is a substantial achievement of the Project. The introduction of the task work system provides more flexible work hours, which decreases barriers for female participation. It is important that the programme continues to focus on including women in providing work opportunities, particularly as women generally have poor social statistics, compared to men. For instance, the incidence of poverty for female-headed households is higher than that of male-headed households (Ministerio das Financas et al., 2008: 9). Further targeting of households headed by females could increase the socio-economic impact of the programme, as these households are the poorest.
- 74. The Project is actively involving the Gender Unit of the Directorate of Employment in SEFOPE and specific gender training for the SEFOPE field staff was organized in April and October 2009. As a result of the promotion of gender issues, a commendable 31% participation of women in the work force has been achieved.
- 75. With 57% of the Project's workforce being people in the age group of 15-29 years, TIM-Works has also demonstrated the effectiveness of its targeting approach in prioritizing the provision of short-term employment opportunities for the youth.
- 76. Interviews with gender trainers involved in training the Project staff indicated that increased access to knowledge about gender issues is required to challenge prevailing perceptions and decrease barriers to participation. It was noted that some members of the technical staff perceived gender inequality to be a structural issue upon which they could have little impact.
- 77. It was also noted that traditional community structures may not always pass on gender sensitive skills and/or information to community members. Strategies for gender sensitization could be strengthened in the Project. For instance, the gender focal point from the sub-district could be systematically invited to attend meetings that introduce the community to TIM Works, in order to ensure gender representation. The technical staff of TIM Works could play a role in facilitating their attendance.

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<sup>&</sup>lt;sup>32</sup> This is also reflected in the minutes of the inception workshop where it is mentioned by the SEFOPE representative that at least 50% of the work force should constitute youth (15-29 years age group).

<sup>&</sup>lt;sup>33</sup> In the project documents no specific targets have been set for the employment of youth. However, in line with Government priorities, the Project's targeting strategy focuses on the provision of employment opportunities for youth and has introduced stipulations in the rehabilitation and maintenance contracts that mention that at least 70% of the work force should be youth (15-29 years).

- 78. As per the original design of the Project it was assumed that a worker would be receive 44 days of short-term employment. The actual figures indicate that workers are being employed on average 37 days by the Project. This deviation reflects the aspiration of the central government and the village authorities (sucos) to benefit as many people as possible through the cash transfers provided by the Project.
- 79. By spreading the available investments thinly over large numbers of people, the scope for lifting the chronically poor out of poverty through cash transfers is very limited. Although time constraints prevented the mission from conducting a detailed assessment of the effects of the cash transfers on poverty reduction, the outcome from the limited number of interviews that were conducted with project workers indicated that the limited cash transfers made available through the short-term employment opportunities that are offered do not enable the workers to accumulate sufficient funds for productive investments to lift them out of poverty. Documented reviews of the effects of public works programmes in low-income countries confirm the limitations of such programmes vis-à-vis poverty reduction through cash transfers<sup>34</sup>.
- 80. Through the cash transfers the Project does however have an important function in contributing to short-term poverty alleviation and in providing stability through the provision of short-term employment opportunities to a substantial workforce of vulnerable poor people (including youth) who face high levels of unemployment and under-employment.
- 81. Reviews of the effects of public works programmes (see footnote 34 for relevant literature on this subject) indicate that public works programmes potentially can contribute to poverty reduction primarily through the improved social or economic infrastructure, provided that such infrastructure reflects the priorities of the targeted beneficiaries and that the constructed or rehabilitated infrastructure is of a good quality.
- 82. Within this context TIM-Works has the potential to contribute to poverty reduction as the selected infrastructure reflects the priority needs of the local communities and the overall quality of the rehabilitated infrastructure is satisfactory. The improvement of the physical infrastructure (and its maintenance) however is not sufficient. Other measures are required to be able to make optimum use of the improved infrastructure. These relate for example to initiatives that facilitate and improve the productivity of the largely agrarian communities, provide required skills, inputs, micro-finance and incentives for producers to produce for the market, and provide effective marketing outlets.
- 83. As the Project has only recently completed only 6 kilometers of rehabilitation works, it is too early to assess its effects in terms of contributing to poverty reduction through the provision of improved infrastructure. It is recommended that the Project establishes a base-line that will enable an assessment of the effects of the improved infrastructure at the end of the Project.
- 84. In terms of skill transfer to the workers, the mission has not been able to find evidence that the training provided to the workers or contractors has already led to an increased level of employability among these trainees. What has been observed however is that the training provided by the Project has resulted in increased implementation capacities and an overall satisfactory quality of the delivered work. It is recommended that a simple tracer study is being set-up to enable the Project to track the effects of its training on the employability of the different groups of trainees that have been trained.
- 85. The Government's aspiration of reaching large numbers of people through the Project requires TIM Works to rotate workers frequently. This is not only an additional administrative burden to the Project staff but also reduces the possibilities of increasing labour productivities (every time that newly recruited batches of workers start to work, they have to be trained and have to get accustomed to the requirements under the task-work system).

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<sup>&</sup>lt;sup>34</sup> The World Bank Discussion Paper SP 105 'How to Make Public Works Work: A Review of the Experience', May 2009 and the ILO 2002 Discussion Paper 'FROM WORKFARE TO FAIR WORK' provide a comprehensive review of the effects of Public Works Programmes on poverty reduction.

- 86. On the other hand it is very important that the cooperation from the Sucos and the Government is secured. Without their support, it would very difficult, if not impossible, to mobilize labourers for the construction works. With the available budget for investments and taking into account the government's aspirations of outreaching to large numbers of poor people, the originally envisaged duration of employment of 44 days per worker (or per household), appears to be a good compromise. From an operational point of view this is also considered a practical compromise vis-à-vis the required continuity, the scope for building up productivities and for administrative reasons. It is also sensible in terms of the intention of the Project to contribute to social stability by providing short-term employment to large numbers of people.
- 87. To the extent feasible, the Project is encouraged to take further action that aims at promoting the concept of providing a minimum of 44 days of work per household (on the basis of a 5 days working week this translates to 2 months of work). Apart from disseminating information about the concept and recruitment process and procedures to the local communities and its leaders through meetings, simple brochures in the local language that explain the concept of the short-term employment opportunities and the recruitment principles and practices can be used. At the same time such brochures could also be used to further explain the concept of task-work and inform the workers about the payment systems, frequencies and modalities.
- 88. In interviews with workers it became apparent that substantial variations existed between workers regarding the number of days that they worked for the Project<sup>35</sup>. Partly this can be explained by the differences in availability and interest between eligible workers to participate in the works. Another explanation is related to the demand for labour vis-à-vis the labour availability. Another factor that plays a role is the way in which the selection of the workers takes place. This process is largely controlled by the chief of the participating sucos.
- 89. Increasing the transparency of the recruitment and job rotation process and enhancing the principle of equal access to job opportunities for a minimum (and a maximum) stipulated number of days per household could for example be achieved by a wide dissemination of the information about the recruitment and rotational procedures and by keeping and displaying records of the number of completed workdays of work of the participating households.
- 90. At the same time it would be unrealistic to expect that full equality in terms of the number of work-days that participating households participate can be achieved. Factors like the supply of labour, labour input requirements, the Project's focus on youth employment and the promotion of the involvement of women in the workforce play a role as well. In addition, the Project has experienced that aldeias do not permit people form adjacent aldeias to work on road sections that they consider to be within their territory. This also causes inequalities in the number of work-days that workers can benefit from the Project.
- 91. Available information indicates that 67% of the employed workers have not received any formal schooling and 11% of them have only completed primary school. This is an indication that the Project's pro-poor targeting approach is effective and that the applied wage rates are appropriate.
- 92. The payments to workers are usually made within 2-3 weeks after the completion of the works in a particular calendar month. In general, the interviewed workers had no objections between this time lag between the completion of the works and the actual payments. A few exceptions were noted however where it had been over a month since the works were completed and the payments had no been effectuated yet. SEFOPE is responsible for the payment of the workers.

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<sup>&</sup>lt;sup>35</sup> Whereas some workers only worked for two weeks, others were employed for six months.

#### 3.3.6 Labour Productivities and Wage Rates

- 93. The Project is paying the workers wages on the basis of outputs, following a task-work system. The introduction of this task-work method is a relatively new concept and requires intensive training and supervision during introduction. TIM-Works has chosen for this approach as international experiences with the application of such a system have demonstrated that this system is potentially superior in terms of productivity, compared to a system of daily wage payments (based on attendance).
- 94. The Project has been able to establish the task-work based system in the design and implementation of the works in a very short time. This in itself is quite an achievement in a working environment where workers are usually paid on a daily basis where payments are not related to outputs.
- 95. The introduction of a task-work system and the use of labour-based work methods not only require a different organization of the works at the construction site, but also require a change in mentality. Within a very short period in time the Project has succeeded in introducing and applying the principles and practices of labour-based work methods and output-based payment modalities.
- 96. The national engineers and the supervisors who were interviewed by the mission demonstrated to have obtained a basic understanding of the principles and practices of the work planning and supervision that is required for the implementation of works using labour-based work methods and output-based payment systems.
- 97. Site observations and interviews with gang leaders indicated that they have basic educational (and numeric) skills but are not always very knowledgeable on how to optimize the division of tasks within a group of workers. The skilled workers responsible for setting out the works appear to be quite familiar with the basic requirements and skills for setting out activities like camber, slopes, side-drains).
- 98. Observed productivities and daily outputs are however still relatively low. The low labour productivity is reflected in the relatively high number of labour-days of input per kilometer of rehabilitation work (3,887). At some of the visited sites activities appeared to be undertaken in a reasonably balanced way whereas at other sites it was noted that labour and/or equipment were standing idle for periods of time because of the unbalance between the various activities and inputs. For the TIM Works type of labour-based (gravel) road rehabilitation in mountainous conditions, like the ones in Timor-Leste, labour input requirements of up to 3,000 labour-days per kilometer would be expected, assuming that the task work system has been well established.
- 99. Another reason for the relatively low labour productivity is the number of hours per day that the labourers work. From interviews with workers and site observations it appeared that labourers work 4-6 hours per day, whereas they are supposed to work 7 hours per day to complete a daily task. Another issue that affects the labour productivity is the frequent job rotation.
- 100. A comprehensive wage rate survey was undertaken by the Project in 2008 and indicated that a daily wage rate of US\$ 2 for unskilled casual labour is appropriate in terms of balancing between the need to attract sufficient interest from the targeted group of workers and at the same time avoiding undesirable competition for the demand for existing (agriculture-based) local labour requirements. During interviews and group discussion conducted by the mid-term evaluation mission with workers, the workers also indicated that they are available and interested to work on the TIM-Works Project as long as this does not conflict with the time that they require to attend to their regular (productive) livelihood activities.
- 101. The used daily wage rate of US\$ 2 for unskilled labour is appropriate and justified. A study on wage rates that was commissioned by the Project in 2008 indicates that a wage rate of US\$ 2 per day for unskilled casual labour is effective in terms of its intended self-targeting character, attracts sufficient numbers of people and avoids undue competition for labour requirements in the local (agricultural) labour market. Discussions held with workers during the evaluation mission confirmed

the appropriateness of the set wage levels and also indicated that the workers attracted by the Project are amongst the poorest. An issue however is the fact that other projects and agencies pay different (i.e. higher) wages for work of a similar nature. The rate used by the Ministry of Infrastructure for unskilled labour in similar projects is US\$ 3.

# 3.3.7 Training and Capacity Building

- 102. Training and capacity building activities for involved public and private sector recipients and for the engaged workforce are fully integrated in the set-up and implementation of the Project. Formal class-room training is combined with practical, needs-based, extensive on-the-job training. Targeted trainees include the involved staff of SEFOPE, private contractors and their supervisors, community contractors (for maintenance works) and unskilled and skilled local workers, including locally recruited gang leaders, masons and carpenters.
- 103. The approach of emphasizing strongly on training and capacity building activities, integrated within the framework of planning and implementing the construction activities, is a very sensible one. Local capacities in the private and public sector are very limited and capacity building is therefore a pre-requisite to enable the delivery of the investments in infrastructure improvements.
- 104. By September 2009 the Project had delivered 1,759 trainee-days of formal class-room training to 42 SEFOPE staff and to 36 contractors and their staff. In addition an estimated 7,248 trainee-days has been delivered by the Project staff through on-the-job training. This included the training of engineers, supervisors, private contractors and their staff, community contractors, gang leaders, masons and carpenters. Table 4 presents a summary of the estimated delivered number of trainee-days and the number of trainees who have received training through the Project.
- 105. The formal training that has been delivered included both class-room elements as well as practical outdoor exercises. From field observations, interviews with the field-based staff and contractors and a review of the training materials, it can be concluded that the training approach and the training materials developed and used by the Project are effective and relate well to the actual training requirements of the targeted group of trainees.

Table 4: Estimated number of Trainees and Trainee-days delivered by the Project

	Class-room Training		On-the-Job Training		Total Training	
	no. trainees	trainee-days	no. trainees	trainee-days	no. trainees	trainee-days
National Engineers	15	459	15	450	15	909
Project supervisors and officers	27	840	27	2,430	27	3,270
Contractors rehab works	9	140	3	90	9	230
Contractors' Supervisors	27	320	9	270	27	590
Community Contractors	0	0	44	528	44	528
Gang Leaders / Setting out	0	0	72	3,240	72	3,240
Masons, Carpenters	0	0	24	240	24	240
TOTAL	78	1,759	194	7,248	218	9,007

106. The implementation of trial contracts as a means of combining training and capacity building of small contractors with the actual construction of the works is also found to be very practical. The various training activities conducted by the Project for the pre-qualified and trained contractors are yielding results. Indicators of the effectiveness of the training are the quality of the observed works under the trial contractors and the quality of the bids submitted by the nine trained contractors for a number of trial contracts.

107. A challenge is the turn-over of national engineers and other Project staff. Since the start of the Project five trained engineers and two trained maintenance supervisors have left the Project. In

addition some staff changes occurred among the field officers and operations officers. This has implications for the progress of the work as it requires that vacant positions have to be filled and that new recruits need to be trained. This is in particular a concern for the positions of the national engineers as they are of key importance for the supervision of the construction works.

# 3.3.8 Institutional Set-up and Implementation Arrangements

- 108. The organizational set-up and implementation arrangements of the TIM-Works Project are considered efficient and effective. In the context of the challenging working environment, characterized by low capacities in the public and private sector, limited communication possibilities, a large geographic coverage, challenging terrain and climatologic conditions, a large number of contracts to be managed, and the extensive travel that is required to reach the sites, optimum use is being made of the available ILO staff.
- 109. The Project is engaging national engineers, maintenance supervisors, operations officers and field officers for the planning, implementation and supervision of the construction and maintenance works. This staff is funded through the budget but contracted by SEFOPE. Their remuneration follows the salary scales of SEFOPE and this approach is considered effective in terms of enhancing the sustainability of the Project.
- 110. Due to shortage of implementation capacities in the private construction sector (in particular small local contractors) rehabilitation works were initially implemented through force account. At present, with training completed for a first batch of 9 small local contractors, the Project is gradually including commercial contracting as an implementation modality for the rehabilitation works.
- 111. It is envisaged that the Project will contract approximately 25% of the remaining rehabilitation works to small local contractors and the remaining 75% of the works will be undertaken through force account. The Project is making optimum use of the (gradually increasing) capacities among private contractors and its own delivery capacities in deciding on the delivery modality for the rehabilitation works (force account and contracting to the private sector). Considering the nature of the work for the maintenance activities, the selected implementation modality of engaging local community contractors for these largely unskilled operations is justified.
- 112. The Project has established an effective system for the financial and administrative management of the available resources. A comprehensive relational SQL database system has also been set-up. This provides a powerful tool to monitor and analyze the Project's achievements. This database not only has the ability to provide and analyze data about the physical and financial progress (up to the level of individual contracts) but can also generate and analyze data related to the employment dimensions of the Project (like numbers of female and male workers employed, the number of work-days generated, the educational profile of the workers, etc.). It is important to ensure a timely entry of data in the database to avoid data entry back-logs.
- 113. At the time of the formulation of TIM-Works it was decided that SEFOPE would be the most appropriate and best positioned formal implementation partner for the Project considering the emphasis of the Project on the employment dimensions and the already existing collaboration between SEFOPE and the ILO through the Youth Employment Promotion Programme (YEP), facilitating a quick start-up of TIM-Works.
- 114. As such the decision to implement the Project which SEFOPE as implementing partner was practical and justified. On the longer-term it is recommended to implement labour-based infrastructure development programmes like TIM-Works through the Directorate of Roads, Bridges and Flood Control of the Ministry of Infrastructures (MoI) as the MoI is official owner of the classified road network in Timor Leste (including rural roads) and is responsible for the development and maintenance of the road network.

- 115. Such a transition would also enhance the longer-term technical and institutional sustainability of the labour-based work methods and approaches that are now being applied successfully by the TIM-Works Project. It would also facilitate the planning, programming and coordination of investments in rural roads infrastructure.
- 116. Considering the current 'absorption' capacities of the Directorate of Roads, Bridges and Flood Control, it is foreseen that considerable external technical assistance would be required for the delivery of similar projects over the coming 5-10 years. Such future projects or programmes should include significant training and capacity building elements as well to increase the delivery capacity of the Directorate of Roads, Bridges and Flood Control.
- 117. Through the TIM-Works Project and the Youth Employment Promotion Programme SEFOPE is gaining significant expertise and experience on the employment dimensions of employment-intensive infrastructure development programmes and projects. This experience is very useful and it is recommended that SEFOPE would retain this role in similar future programmes as well.
- 118. The capacities and competencies that are currently being developed in SEFOPE in monitoring and analyzing employment related issues in employment-intensive infrastructure investment programmes and their role in as an intermediate in providing opportunities for skills development and job placement will continue to be useful for future infrastructure development programmes with employment dimensions.
- 119. By monitoring and analyzing the direct and indirect effects of employment-intensive infrastructure investments on employment, SEFOPE will continue to have a very important role in providing advice and feedback at both downstream and upstream level. This could cover a range of activities, varying from providing information to projects about the number of (gender and age-group disaggregated) generated work-days to providing advice to senior government decision makers about the most effective strategies of achieving the GoTL employment and/or poverty-related objectives through public infrastructure investments.

# 3.3.9 Planning, Monitoring, Reporting and Evaluation

- 120. The Project has comprehensive time-bound work planning schedules at various levels to facilitate the implementation of the activities and to monitor the progress. A comprehensive operational database system has been established which has the ability to capture all the data that are required to enable an analysis of the progress of the Project. This management information system includes a contracts/works management database, a database providing information about the financial progress of the Project, and information on key indicators regarding its performance related to the employment targets.
- 121. Whereas the financial information system is up-to-date, there is still a back-log in data entry in the contracts/works database and the information system that captures the employment indicators of the Project. The reason for this back-log is the fact that the Project has recently decided to modify the design of the database and data are currently being transferred from the old database to the new one.
- 122. Once the data entry in the database has been updated, this will also provide the Project's management with increased capacities to link actual progress with planned targets (both time-bound and quantitatively). In addition, this will enable the Project to monitor the performance of the Project in a more structural way by analyzing the key performance indicators as formulated in the Project's logical framework.
- 123. The Project's monitoring and evaluation (M&E) activities include field monitoring. The emphasis is on qualitative monitoring. Whereas this is very useful, the inclusion of quantitative monitoring, against specific targets and indicators, would further enhance the quality of the monitoring.

- 124. 'Stories of Change' are also being prepared by the Project. These are very interesting as they capture the perceptions of the local people about their ideas regarding the benefits from the Project (in terms of direct employment benefits and the benefits expected from the improved access).
- 125. Monthly, quarterly and bi-annual progress reports are being prepared by the Project for the GoTL and the donors. Once the database has been updated and the consistency and quality of the data has been checked, this will facilitate the preparation of the progress reports. At the present the progress reports do not provide clear linkages between the planned quantitative progress and actual achievements (both cumulatively as well as for the specific reporting period).

#### 3.3.10 Information Dissemination, Visibility and Documentation

- 126. The Project has been operational for one year and the initial focus was to develop implementation capacities and to start with the delivery of the investments in maintenance and rehabilitation activities. The Project has succeeded well in achieving this and the overall progress and quality of delivery is very good, in particular taking into account the challenging environment in which the Project operates. Although the Project's initial emphasis was on a quick start-up of the construction activities (and the related employment generation), considerable activities have also been undertaken to disseminate information about the Project and ensure its visibility.
- 127. Information about the Project is being disseminated to the GoTL, the donors, the targeted beneficiaries (workers and the people targeted to benefit from improved access) and the public at large in various ways. These include progress reports and work plans for the GoTL and the donors, information campaigns and public meetings in the participating/benefiting aldeias, meetings with other relevant projects, the preparation of press releases, the organization of launch ceremonies at locations where works at started, press/media coverage about events like training workshops, the organization of field visits for dignitaries from GoTL and donors, the erection of sign boards<sup>36</sup> along the roads where works are implemented and coverage of achievement in newspapers (e.g. the 'Stories of Change').
- 128. In addition, the Project is planning to further improve its visibility by preparing a short documentary for TV Timor Leste (TVTL), by inviting media during high level field visits, sharing information about the Project on the ILO website (Knowledge Sharing Platform), the preparation of posters with key information about the Project for display in the local communities and the preparation of Power Point Presentations about the Project for different audiences.

# 3.3.11 Linkages with other Projects

- 129. TIM-Works has established linkages with other Projects and Government Institutions to optimize synergies and complementarities. The Project is closely linked with the Youth Employment Promotion Programme (YEP) and this provides opportunities to establish linkages with training providers, employment service centers and micro-finance institutions. As TIM-Works has only been operational for about a year. These linkages are still in the process of being developed and have not resulted yet in significant achievements.
- 130. The Project is coordinating its activities with the Directorate of Roads, Bridges and Flood Control to ensure that priorities of Public Works are also reflected in the selection of the road and to avoid duplication. On an informal basis the Project also maintains a working relation with other projects like the EC-funded Rural Development Projects II and III (RDP-II and RDP-III) aiming at information sharing, standardizing procedures and technical specifications, and seeking synergies and complementarities where useful.

<sup>&</sup>lt;sup>36</sup> In a few cases it was observed that the sign boards did not include specific information about the road and it is recommended that this is rectified.

- 131. Through the YEP Programme, the capacity of the District Employment Centers (DECs) of the SEFOPE have been enhanced and the intention is to use these DECs also to provide employment services to workers employed by the TIM-Works Project. Workers who are being employed by TIM-Works have to complete a registration form and the intention is to enter this information in the database of the DECs and to use it to assist the workers employed by TIM-Works to find more long-term employment opportunities. Another intended function of the DECs is to provide numeracy and literacy training to the TIM-Works' workers.
- 132. Although the intention of using the DECs to assist the workers employed by TIM-Works to find longer-term job opportunities is commendable, the question is whether it is effective. Whereas the job vacancies available with the DECs are mainly civil service jobs, the workers engaged by TIM-Works are mainly subsistence farmers who operate in the informal sector. As such a disconnect exists between the types of job offered and the profile of the workers. None of the interviewed workers were registered with the DEC as job seekers.
- 133. Practical limitations relate to the long travel times (and the shortage of public transport) between the sites where the road works are being implemented and the DECs. This seriously hinders the workers to activity explore job opportunities and the DECs to outreach to the communities. Further more it appears that the number of job vacancies available and filled through the DECs is very limited<sup>37</sup>. Due to technical problems with the database, the DECs have not up-to-date information about the TIM-Works workers in their database.
- 134. A potential useful function of the DECs is their role in facilitating numeracy and literacy training for workers of the TIM-Work Project (through the engagement of private training providers). To date however only very limited numbers of the workers of TIM-Works have received such training.

#### 3.3.12 Policy and Strategy Development

- 135. The Project actively participates in policy discussions with regards to the formulation of a Rural Roads Policy that is currently being prepared under the leadership and direction of the Ministry of Infrastructures. One of the issues currently being discussed is the need for the establishment of a Rural Roads Department within the Directorate for Roads, Bridges and Flood Control. A first draft of the Rural Roads Policy is scheduled to be available by the end of 2009.
- 136. Another activity at upstream level in which the Project is actively involved is the formulation of a policy framework for rural development, which is being prepared by the Ministry of Economic Development.
- 137. The Project is thus actively involved in key policy and strategy development activities and, based on the experiences with the implementation of the TIM-Works, the Project is in a good position to provide well-informed advice to the policy makers on policies and strategies for rural development and rural roads. For this reason it is also very important that the Project documents it achievements, best practices, challenges and opportunities in a comprehensive way, and shares these findings with the GoTL senior policy makers.

#### 3.3.13 Effects and Impacts

138. At this stage it is too early to assess the effects and impacts of the road maintenance and construction works in terms of improved access to social and economic services and with regards to spin-off effects. Interviews conducted with targeted road beneficiaries and a review of the Project's M&E mission reports indicate however that it is expected that the road improvements will have a

<sup>&</sup>lt;sup>37</sup> The DEC in Baucau reported for example that during the last 4 years only 139 job vacancies have been filled, i.e. 35 jobs per year.

positive impact on accessibility and related local economic development<sup>38</sup>. As already mentioned in paragraphs 91 to 94 it is recommended to set up simple base-line studies that will enable an assessment of (trends in) effects and impacts related to improved accessibility and poverty reduction.

- 139. The Project is being perceived to be very important in terms of its effects and impacts with regards to its contribution to peace keeping/social stability, the provision of large scale employment opportunities, the cash injections in the local economy, building capacities in the private and public sector and, last but not least, improving rural roads access. It is one of the largest projects on the ground and is providing substantial short-term employment opportunities for the rural poor. The Project has demonstrated its effectiveness of targeting the rural poor in general, and vulnerable youth and women in particular.
- 140. The WB-funded 'Justice for Poor' Programme conducted field research between June and September on the TIM-Works Project. The preliminary findings of this research indicated that the workers/beneficiaries of TIM-Works are highly satisfied with the work offered and that the task-work system is also being favoured. The research also confirmed the appropriateness of the minimum wage rate of US\$/day vis-à-vis the Project's objectives. Community members recognized the importance of the Project as an infrastructure project with long-term benefits. The research also indicated that TIM-Works has been successful in including women in the workforce.
- 141. Interviews and group-focus meetings conducted during the mission revealed that, overall, the beneficiaries are satisfied with the TIM-Works Project in terms of its management, leadership, working conditions, equality of payments between men and women for work of equal value and the task-work system. The interviewed people considered the Project important, in particular regarding the cash transfers through the employment opportunities provided by the Project. Interviews with selected workers indicated that the majority of the money earned through TIM-Works is being spent on purchasing basic household items. Beneficiaries also reported that they were able to purchase additional items such as clothing and pay costs associated with the education of their children.
- 142. Substantial amounts of cash are injected in the local economies through the Project and this, in conjunction with improved basic rural roads access, is expected to contribute to poverty alleviation in the local context. At individual household level the cash injections through the provided short-term employment opportunities are generally too small to make a structural difference in enabling household to be lifted out of poverty<sup>39</sup>.
- 143. Insufficient data are currently available with the Project that would provide a better insight of the effects of the Project on poverty reduction at household level through income transfers. Neither is information available about the effects and impact of the training activities on the employability of the trainees.

# 3.4 Efficiency

144. Till September 2009, the Project's total delivery cost for one day's wage to a worker is about US\$ 7. For this type of labour-based work, considering the daily wage rates for unskilled labour (US\$ 2) and skilled labour (US\$ 5) and taking into account that labour costs constitute approximately 56% of the total construction costs, this delivery cost is considered fairly cost-effective. The break-down of the delivery cost for one day of a worker's wage is as follows: i) direct wage to worker: US\$ 2.46; ii) non-wage construction costs per worker-day: US\$ 2.18; iii) Project delivery cost per worker-day US 2.36 (i.e. for the cost of design, supervision, logistics, project administration and training).

<sup>&</sup>lt;sup>38</sup> Interviewed workers mentioned for example that they would benefit from improved mobile health services and improved accessibility of traders and transporters to their villages.

<sup>&</sup>lt;sup>39</sup> Interviews conducted with workers during the missions indicated that the interviewees were expecting to continue with their subsistence agricultural activities once the TIM-Work activities were completed.

- 145. The GoTL had pledged to contribute USD 2,392,800 to TIM Works for the payment of the wages of the workers. In 2008 the GoTL contributed US\$ 531,000 and for 2009 a contribution of US\$ 500,000 was made. Originally a contribution of US\$ 1.0 million was envisaged for 2009. Due to the reduced Government contribution for 2009, the Project has already depleted the funds for the payment of wages and funds from the donors are currently being used to ensure a continuation of the payment of the wages. Unless the GoTL contributes the still remaining pledged amount (US\$ 1.362 million), the Project has to reduce its physical targets as donor funds will then have to be redirected for the payment of the wages.
- 146. The decision to implement the Project with SEFOPE as implementing partner is considered practical and justified. On the longer-term it is however recommended to implement programmes like TIM-Works through the Directorate of Roads, Bridges and Flood Control of the Ministry of Infrastructures (MoI) as the MoI is the official owner of the classified road network in Timor Leste and is responsible for the development and maintenance of the road network. Such a transition would also enhance the longer-term technical and institutional sustainability of the labour-based work methods and approaches that are now being applied successfully by the TIM-Works Project.
- 146. This will also facilitate the planning, programming and coordination of investments in rural roads infrastructure. Considering the current low 'absorption' capacities of the Directorate of Roads, Bridges and Flood Control, it is foreseen that considerable external technical assistance would be required for the delivery of similar projects in the next 5-10 years. Such labour-based infrastructure works programmes should include significant training and capacity building elements as well to increase the delivery capacity of the Directorate of Roads, Bridges and Flood Control. In the longer term, once decentralization is being firmly implemented, the management of rural road works should logically be assigned to the local authorities.
- 147. Through the TIM-Works Project and the Youth Employment Promotion Programme (YEP) SEFOPE is gaining significant expertise and experience on the employment dimensions of employment-intensive infrastructure development projects. It is recommended that SEFOPE retains this role in similar future projects. By monitoring and analyzing the direct and indirect effects of employment-intensive infrastructure investments on employment, SEFOPE will continue to have a very important role in providing advice and feedback at both downstream and upstream level.
- 148. The organizational set-up and implementation arrangements of the TIM-Works Project are efficient, considering the challenging working environment which is characterized by low capacities in the public and private sector, limited communication possibilities, a large geographic coverage, challenging terrain and climatologic conditions, a large number of contracts to be managed, and the extensive travel that is required to reach the sites.
- 149. Efficient use is made of the available ILO staff and available capacities within the communities and among the involved public and private sector stakeholders. Technical support and backstopping that is provided by the ILO is considered effective and useful. It has assisted the Project in drawing on its long-standing experience in the design of the Project and in continuously improving and fine-tuning the efficiency and effectiveness of the approach and the delivery of the outputs. The Project's total delivery cost for one day's wage to a worker is about US\$ 7 which is considered fairly cost-effective for this type of project, taking into account the conditions challenging terrain conditions and the low capacity environment in which the Project operates.

## 3.5 Sustainability

150. The Project is very relevant and significant and effectively integrates employment dimensions, infrastructure development, and capacity building/training for the public and private sector to enhance their capacities in planning and implementing infrastructure investments. The Project is also considered very relevant and of strategic importance in terms of its contribution to peace keeping and

social stability. The implementation modalities and delivery mechanisms established by the Project are sound and an efficient use is made of the available resources.

- 151. The sustainability and relevance of the interventions mainly relate to the importance of the selected roads in the rural roads network in the context of facilitating local economic development, the quality of the reconstruction and rehabilitation works, the availability of sufficient capacities in the public and private sector, and the availability of funds for maintenance.
- 152. The Project is successfully addressing the first three conditions; the selected roads are key roads in the local road network that reflect local priorities, the overall quality of the construction works is satisfactory, and intensive capacity building activities are being carried out to strengthen the delivery capacities of the involved government agencies and small local contractors. It should however be noted that it is not expected that sufficient capacities will have accrued after the completion of the Project to sustain and continue similar interventions without further external technical assistance. International experiences indicate that at least five years will be required before sufficient 'critical mass' has been created that will allow for a sustained continuation of labour-based projects like TIM Works at a large scale without significant external assistance.
- 153. To enhance sustainability it is of key importance that the GoTL increasingly assumes the responsibility for the maintenance of the rehabilitated road works. Without this, it is not likely that the investments currently made in improving the rural roads through the TIM-Works Project can be sustained. Although the contribution by the GoTL for the payment of the wages is a positive indication of its commitments, no formal agreement has been reached yet with the Government regarding the allocation of funds to maintain the rehabilitated roads. This issue needs to be addressed. The Project is already actively involved in the Government's Rural Roads Policy development activities and this provides an opportunity to influence the Government's policy regarding the maintenance of the rural roads network.
- 154. The Project contains a number of features that that are promising in terms of the scope for sustainability. These include the commitment and contribution of the GoTL to the payment of the wages, the active involvement of SEFOPE in the implementation of the Project, the synchronization of the wages of the national staff (contracted through SEFOPE) with those of civil servants in similar positions, and the strong emphasis given to capacity building of the public sector and the local construction industry.
- 155. The Project has only been operational for one year and it is too early to expect at this stage that the Project's modalities and approach can be sustained without continued external support. Considering the very limited capacities in both the public and private sector it is envisaged that at least another 5 years of implementation support will be required to delivery large scale public work programmes like TIM-Works.
- 156. From an institutional point of view it is recommended that eventual follow-up projects are being implemented with the Directorate of Roads, Bridges and Flood Control as National Implementing Partner. In addition it is necessary that the ownership of public works programmes like TIM-Works is gradually being transferred to the responsible government counterpart agencies (in this case the Directorate of Roads, Bridges and Flood Control). Considering the limited capacities available in the public and private sector, it is very important that the transfer of responsibilities is being implemented gradually and in line with emerging activities and in synergy with emerging 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.
- 157. The sustainability of a Project also depends to a large extent on the adoption of procedures for procurement. To date TIM-Works follows the ILO procurement procedures. Although the Project had

intended to start using the FIDIC<sup>40</sup> Short-Form of Contract, this has not happened yet. The FIDIC Short-Form of Contract provides a simple contractual framework with only the 'Employer' and the 'Contractor' as contract parties. The introduction of the FIDIC Short-Form of Contract would provide a more appropriate basis for institutionalizing procurement procedures for works than the currently used ILO service contract and it is proposed that this form of contract is being introduced as soon as practically possible.

- 158. More time is also required to further develop and fine-tune various technical procedures, standards and specifications. The TIM-Works Project has made an excellent start in doing so but more time will be required and more (formalized) interaction and collaboration with the Directorate of Roads, Bridges and Flood Control is needed to discuss the scope and modalities of integrating TIM-Works procedures, guidelines and modalities within the Government system. A standardization of procedures and specifications is essential in this respect.
- 159. It should be realized that the capacities of the private construction sector (i.e. in the case of TIM-Works the small local contractors) to deliver the investments are of key importance. Apart from building capacities of the small contractors, as currently being done through the TIM-Works Project, an enabling environment needs to be created by the Government. This also means that there should be sufficient work available for these contractors to make it interesting for them to invest in developing their capacities.
- 160. In the largely subsistence-oriented agrarian rural society in Timor-Leste a wide range of infrastructure improvements are required to provide an enabling environment for sustainable local economic development and poverty reduction. Apart from improvements in rural road accessibility, other priority areas are water and sanitation, irrigation development, afforestation and water-and soil conservation. Apart from water and sanitation, the other sectors lend themselves very well for the application of simple employment-intensive approaches and work-methods and could be considered, based on local requirements. By widening the scope of work to include investments in productive infrastructure development this will further enhance the scope for providing sustainable and long-term improvements to the local people's livelihood conditions.

## 4. Conclusions

- 161. TIM-Works is very relevant and significant in relation to the GoTL priorities. It contributes to peacekeeping and social stability, provides employment to large numbers of the rural poor, including youth and women, improves basic rural access targeting important road links in the rural road network, injects substantial investments in the local economy and builds necessary capacities in the public and private sector for the effective delivery of the investments.
- 162. The Project implements its activities and delivers its outputs in an efficient and effective way. The delivery of the training and capacity building activities and the investments in the maintenance and construction works are considered cost-effective. 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, in particular taking into account the very challenging environment in which the Project operates.
- 163. In principle the approach and implementation modalities followed by the Project are sound and the Project is seen as very useful as a 'stepping stone' to a larger national employment-intensive public works programme. Elements that would require a closer review when the scale of operations is expanded and when the approaches and modalities are being institutionalized relate to the procurement system for works and the current exclusive focus on rural roads. When the TIM-Works approach and

<sup>&</sup>lt;sup>40</sup> FIDIC is an acronym that stands for Fédération Internationale Des Ingénieurs-Conseils it is the French name for the International Federation of Consulting Engineers.

modalities are being up-scaled and mainstreamed it is important that procurement procedures are further synchronized with the Government's procurement system. In addition it is suggested to include other infrastructure sectors that reflect local priorities and that offer good potentials for the application of labour-based methods and technologies (like irrigation, forestry and water-and soil conservation). Interventions in these sectors would also be effective in terms of the improvement of productive infrastructure that could contribute effectively to sustainable local economic development and poverty reduction.

- 164. Considering the fact that the Project had to start construction activities within a very low capacity environment, it is not surprising that there is scope to further improve the overall quality of the works and the productivity of the labour and the equipment. As capacities develop, the Project is expected to be able to further improve the quality of the works and increase productivities. The Project has adopted a very effective capacity building and training strategy that combines formal classroom training with extensive on-the-job training and mentoring.
- 165. Although the Project contains a number of features that are very promising in relation to the sustainability of the interventions, a key constraint is the limited time-frame available for the implementation of the Project and the delivery of all the envisaged outputs. This relates in particular to the establishment and institutionalization of approaches, methods, models, standards and procedures, and the development of required capacities. These are activities that require more time than the 2 years currently allocated for the implementation of the Project. The Project is demonstrating the validity and effectiveness of its approach but more time will be required, and continued external technical assistance will be required to ensure that the developed systems and approaches can be sustained. Experiences indicate that similar projects in comparable working environments need at least 5-10 years of implementation before a sufficient critical mass has been attained and capacities have been developed that provide an enabling environment for sustained continuation at a large scale.
- 167. From an institutional point of view it is recommended that eventual follow-up projects are being implemented with the Directorate of Roads, Bridges and Flood Control as National Implementing Partner. In addition it is necessary that the ownership of public works programmes like TIM-Works is gradually being transferred to the responsible government counterpart agencies (in this case the Directorate of Roads, Bridges and Flood Control). Considering the limited capacities available in the public and private sector, it is very important that the transfer of responsibilities is being implemented gradually and in line with emerging activities and in synergy with emerging 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.
- 168. 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. The Government's demonstrated commitment by providing a significant financial contribution to the Project is already an indication of the Government's recognition of the importance of the Project

## 5. Recommendations

## 5.1 Time extension, Revised Physical Targets and Additional Budget Requirements

169. The Project has set very ambitious targets, in particular regarding the kilometers of rural roads to be rehabilitated. In addition, the originally assumed cost per kilometer of road rehabilitation appears to be under-estimated. For this reason, a time extension is proposed. Because the costs of the rehabilitation works were underestimated at the time of the design of the Project, the physical targets also need to be adjusted.

- 170. Taking into account the current progress, an investment cost of US\$ 20,000 per kilometer of rehabilitation works, an investment cost of around US\$ 600 per kilometer of maintenance works, a delivery capacity of 14.4 kilometers of rehabilitation works per month and a budget of US\$ 5.65 million for construction works, a proposed procurement plan for the remainder of the works is presented in table 5. The proposed procurement plan indicates that an extension of three months (i.e. July to September 2010) will be needed to complete the revised target of 231 kilometers of road rehabilitation<sup>41</sup>. The proposed extension period falls within the dry season, i.e. the peak construction period during which maximum progress can be made. This schedule shows that a 3 months time extension would be required to be able to complete the revised rehabilitation target.
- 171. It is recommended that the donors review the progress of the Project against the modified implementation suggested by the mid-term evaluation mission by the end of February 2009 and then decide whether a further extension (of three more months) is required to complete the revised physical targets. It is important to stress that the quality of the road drainage works should not be compromised in an effort to economize on the costs of the works.
- 172. The proposed procurement plan for the remainder of the Project assumes that the GoTL will allocate the remaining contribution for wages (i.e. US\$ 1.36 million) early 2010. If this contribution does not materialize, physical targets may have to be further reduced.

 Table 5: Proposed Procurement Plan for Rehabilitation and Maintenance Works

(Expenditures expressed in million US\$; rounded figures)

		Prev	vious										
	Budget	Prog	gress	Q4 -	2009	Q1 -	2010	Q2 -	2010	Q3 -	2010	TO	ΓAL
Activity	(US\$)	km	US\$	km	US\$	km	US\$	km	US\$	km	US\$	km	US\$
Maintenance	1.10	684	0.59	300	0.18	300	0.18	252	0.15	0	0.00	1536	1.10
Rehabilitation	4.55	70	1.34	43.2	0.86	43.2	0.86	43.2	0.86	31	0.62	231	4.55
TOTAL	5.65		1.93		1.04		1.04		1.01		0.62		5.65

173. Originally it was foreseen that the Project would be implemented over a period of 18 months. Because funding from the different donors has been released at different times, the Project duration has been extended to 24 months (ending in June 2010). This has stretched the available budget for non-work items, in particular for staffing inputs, to its limits. An extension of 3 months is therefore likely to have financial consequences. It is envisaged that, to cover additional staffing costs of the international Project Coordinator and the three international Regional Engineers for a period of 3 months, an additional amount of US\$ 200,000 will be required. The Project has informed the mission that no further additional funds are required to extend the project operations for an extension of 3 months.

## 5.2 Wage Rates and Beneficiary Targeting

- 174. The issue of different wage rates 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.
- 175. Significant variations exist between households in terms of the number of work-days that they participate in the works. Although it is recognized that such variations can not be completed avoided due to differences between various construction sites in terms of labour availability and labour requirements, it is important that the Project undertakes activities that minimize such variations. For

<sup>&</sup>lt;sup>41</sup> This revised physical target of 231 kilometer of rehabilitation works is slightly different from the revised physical target of 225 kilometers proposed by the ILO.

practical operational reasons it is recommended that, as much as practically possible, a rotational system is being followed that provides participating households with about 2 months of work. More attention is also necessary to ensure the timely payment of the labourers.

- 176. It is important that the Project continues to focus on including women in providing work opportunities, particularly as women generally have poor social statistics, compared to men. For instance, the incidence of poverty for female-headed households is higher than that of male-headed households (Ministerio das Financas et al., 2008: 9). Further targeting of households headed by females could increase the socio-economic impact of the programme, as these households are the poorest.
- 177. Interviews with gender trainers involved in training the Project staff indicated that increased access to knowledge about gender issues is required to challenge prevailing perceptions and decrease barriers to participation. Strategies for gender sensitization could be strengthened in the Project. For instance, the gender focal point from the sub-district could be systematically invited to attend meetings that introduce the community to TIM Works, in order to ensure gender representation. The technical staff of TIM Works could play a role in facilitating their attendance.
- 178. The Project is encouraged to explore possible innovative solutions to address the encountered reluctance of aldeias to let people from adjacent aldeias work on road sections that they consider to be within their territory. A possibility could for example be to explore the scope of reaching agreements between adjacent aldeias to recruit the number of labourers from an aldeia on the basis of the proportional size of the aldeia and to deploy labourers accordingly for the road works.
- 179. To the extent feasible, the Project is encouraged to take further action that aims at promoting the concept of providing a minimum of 44 days of work per household (on the basis of a 5 days working week this translates to 2 months of work). Apart from disseminating information about the concept and recruitment process and procedures to the local communities and its leaders through meetings, simple brochures in the local language that explain the concept of the short-term employment opportunities and the recruitment principles and practices can be used. At the same time such brochures could also be used to further explain the concept of task-work and inform the workers about the payment systems, frequencies and modalities.
- 180. Increasing the transparency of the recruitment and job rotation process and enhancing the principle of equal access to job opportunities for a minimum (and a maximum) stipulated number of days per household could for example be achieved by a wide dissemination of the information about the recruitment and rotational procedures and by keeping and displaying records of the number of completed workdays of work of the participating households.

## **5.3** Quality Control

- 181. Although the overall quality of the works is rated as satisfactory, site observations indicated 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 the road alignment that have a very steep gradient.
- 182. It is recommended that simple but effective EIA guidelines and guidelines regarding the selection, excavation and restoration of quarries are prepared and introduced in the operations. Numerous small quarries are unsightly and are usually not recommendable from an environmental point of view. Sufficient distance should also be kept between the site of the quarry and the road. Simple mechanical engineering and bio-engineering measures may be proposed for the excavation and restoration of the quarries. These could include the re-use of the stripped and separately stockpiled

topsoil, the construction of diversion drains at the up-hill side of the quarries, planting of locally available appropriate species, redressing at a stable angles of repose (possibly including benching), etc.

- 183. The Project only undertakes rehabilitation works on existing road alignments. In a number of cases it is required that the road sections are widened. In addition, land is required for the purpose of excavating gravel (quarries). These requirements are discussed with the concerned village authorities (sucos) and works are only started once an agreement has been reached regarding the required land acquisition. It would be useful if the Project would keep written records of these agreements.
- 184. As the quality of the gravel is a key determining factor influencing the quality of the road and its life-time, it is recommended to give more emphasis to the selection of quarry sites where good quality gravel can be found, even if this would increase the cost of the roads. It also requires that topsoil is stripped and stock-piled separately (and not mixed with the gravel) for later restoration. It is also necessary to remove large stones that do not meet the required gravel specifications.
- 185. The provision of adequate drainage facilities in road rehabilitation works is of key importance to the preservation of the construction works and will considerably increase the life-time of the road. It is therefore not recommended to economize on the costs of the rehabilitation works by compromising on the requirements for drainage structures. Sufficient attention should be paid to the construction of scour checks in the side drains, in relation to the gradient of the side-drains. For steep sections, lining of side-drains is recommended. In some cased it was observed that it was difficult to maintain the geometrical design of the side drains (trapezoidal) because of small rock outcrops. Instead of trying to remove these outcrops by heating (not recommended from an environmental point of view) it would be worthwhile to procure or hire hand-operated rock hammers to remove these rock outcrops.
- 186. At a few observed sections the road gradients were very steep. For gravel roads, in conditions of high rainfall and/or high rainfall intensity, it is usually not recommended to construct gravel roads with a gradient exceeding 8-10% over long sections as this may cause excessive erosion and/or limit accessibility of motorized traffic (especially during the rainy season). It would be useful to consider special spot improvements on such critical sections. This could be the construction of a more durable surface (e.g. with stone pavements), more cross-drainage facilities (e.g. French drains or water bars), or a combination of the two.
- 187. It is important that the water velocity in the side drains is being kept below the scouring velocity. For this reason sufficient attention should be paid to the construction of scour checks in the side drains, in relation to the gradient of the side-drains. For steep sections, lining of side-drains is recommended.
- 188. In general the quality of the constructed culverts, bridges and the lining of the side-drains is good. In a few cases it was observed that not sufficient attention was paid to curing and to the correct placement of the reinforcement steel in the culvert slabs. Close supervision is required to ensure that the quality of the concrete construction works can be maintained.
- 189. Even though long haulage distances of water would increase the total construction costs, it is very important that the optimum soil moisture content is maintained during compaction to ensure that minimum required compaction standards can be achieved. Close supervision and quality control are very important in this respect. The mission was informed that the Project has procured a number of Dynamic Cone Penetrometers (DCP) to check the compaction density. It is recommended that DCP testing is done at all the sites as a standard quality control procedure.
- 190. The Project has made an extensive effort to hire more rollers locally but it appears that there are simply no more rollers available locally. This leaves the Project in a situation where there is not spare compaction equipment available. When a roller breaks down (as was the case at one visited site) this has adverse effects on the progress. The procurement or hire of a couple of additional (pedestrian) rollers is recommended to provide the Project with a stand-by capacity for the eventuality of a breakdown of a roller.

191. Continued on-the-job training for national engineers, supervisors and gang-leaders is required to ensure that the good quality gravel is being used and to ascertain that the selection of quarries and the excavation of gravel is being done in an environmentally sound way. The Project may also consider sampling the gravel from identified gravel quarries and carry out material testing at the laboratory facilities of the Directorate of Roads, Bridges and Flood Control (in particular testing the California Bearing Ration; CBR).

## 5.4 Labour Productivity

- 192. To further increase the productivity (outputs), continued attention and close supervision will be required. The effective application of labour productivity norms requires an efficient and balanced organization of the work force at the site and site engineers, supervisors and gang leaders need to be well acquainted with the requirements. Workers also need to be well oriented and informed about the typical characteristics associated with the organization of work and the system of wage payments based on labour productivity norms. All these training activities and processes of acceptance of these new systems take time and in the low capacity environment in which the Project operates it is expected that it will take a considerable effort and time before these practices are well established and effectively implemented.
- 193. It is recommended that the Project undertakes time-motion studies to review labour and equipment productivities and to further optimize the output of the labourers and the equipment. More emphasis on explaining the task-work system to the workers and to the members of the local communities who are involved in the labour selection and recruitment would also be required to ensure that workers know beforehand what will be expected from them before starting their work. Available information from the site work plans and muster rolls can also be used to verify the adequacy of the currently assumed labour and equipment productivity norms. It is important that adjustments are being made in close consultation with the concerned workers. If no consensus is reached about the possible daily output per worker for the different activities, workers may not be interested to participate in the works
- 194. It is also important that daily tasks are set that reflect realistic outputs that can be achieved during a 6-7 hours workday. It was observed during the field visits and in interviews at the site that workers already considered their daily work to be completed after having worked for 4-5 hours.
- 195. Apart from the need of increasing the overall productivity, particular attention is required to further improve the balance between the different manual construction activities and to further optimize the balance between the deployment of labour and equipment.
- 196. There is a need to further enhance the skills of the national engineers and the supervisors in terms of optimizing the organization of the workers and in balancing the inputs of workers and equipment.
- 197. It will be useful if the Project documents for each of the individual road links that have been selected a one-page summary that summarizes the selection process, outlines the justification for the inclusion of the road in the Project and describes and quantifies (the adherence to) the prioritization and selection criteria.
- 198. Comparative indicators could be included in these summaries like the number of people benefiting from the road, the investment costs per person, estimates of the (expected) traffic types and volumes, location and distances to the nearest social and economic facilities and services and an indication of the time savings that are expected from the rehabilitation works. If information is available, it would also be useful to include an economic justification for the selection of the roads.

## 5.5 Training and Capacity Building

199. A potential useful function of the District Employment Centers would be their role in facilitating numeracy and literacy training for workers of the TIM-Work Project (through the engagement of private training providers). To date however only very limited numbers of the workers of TIM-Works have received such training and the Project is encouraged to strengthen activities that increase the participation of the workers employed by TIM Works in numeracy and literacy classes.

## 5.6 Monitoring, Evaluation and Reporting

- 200. It is recommended to design and implement simple surveys that capture basic information that will be required to assess the impact of the Project in terms of improved accessibility (e.g. simple traffic studies), its contribution to poverty reduction and the assessment of its useful by the beneficiaries (e.g. through beneficiary satisfaction studies). Simple standardized check-lists can also be considered to monitor, verify and/or validate the information available in the database and adherence to Project procedures (like recruitment procedures and conditions, job-rotation, payments, etc.).
- 201. It would also be useful if the Project would set-up and implement a simple tracer study to assess the effects and impacts of the training provided by the Project on the employability of the trained beneficiaries.(like the contractors, unskilled workers, skilled workers like masons, carpenters, gang leaders, community contractors and small commercial contractors).
- 202. It would be very useful if the Project would design and implement simple but effective surveys that would provide more substantial information about the effects of these income transfers on people's livelihood situation. This information will also be very useful for policy makers and/or project designers in deciding on various recruitment and employment principles and practices for similar projects or programmes in the future
- 203. Whereas the financial information system is up-to-date, there is still a back-log in data entry in the contracts/works database and the information system that captures the employment indicators of the Project. The reason for this back-log is the fact that the Project has recently decided to modify the design of the database and data are currently being transferred from the old database to the new one. It is recommended that this back-log is being removed as soon as possible and that entered data are being verified and validated to provide the management with up-to-date and accurate information about the Project's progress indicators.
- 204. Once the data entry in the database has been updated, this will also provide the Project's management with increased capacities to link actual progress with planned targets (both time-bound and quantitatively). In addition, this will enable the Project to monitor the performance of the Project in a more structural way by analyzing the key performance indicators as formulated in the Project's logical framework.
- 205. The Project's monitoring and evaluation (M&E) activities include field monitoring. The emphasis is on qualitative monitoring. Whereas this is very useful, the inclusion of quantitative monitoring, against specific targets and indicators, would further enhance the quality of the monitoring. A simple monitoring format can be developed that would allow for a more structural and systematic monitoring of the Project's progress and performance.
- 206. 'Stories of Change' are also being prepared by the Project. These are very interesting as they capture the perceptions of the local people about their ideas regarding the benefits from the Project (in terms of direct employment benefits and the benefits expected from the improved access). A more systematic assessment of the effects and impacts of the Project, based on objective verifiable indicators, would be useful to include within the framework of the Project's M&E activities.

- 207. Monthly, quarterly and bi-annual progress reports are being prepared by the Project for the GoTL and the donors. Once the database has been updated and the consistency and quality of the data has been checked, this will facilitate the preparation of the progress reports. There is scope to strengthen the linkages between planned progress and actual achievements (both cumulatively as well as for the specific reporting period) in the reports. At the same time the developed relational database offers the possibility to design standard queries that will facilitate the preparation of concise and factual progress reports.
- 208. The Project could also provide valuable inputs to the National Bureau of Statistics by assisting them in the formulation of questions in their socio-economic data collection surveys to capture information that is relevant to the formulation of future national labour-based public works programmes. Such information can be fed back in policies and strategies and could also be used to monitor the effects and impacts of current projects like TIM-Works.

## 5.7 Documentation and Visibility

- 209. It is very important that TIM-Works properly documents the findings and experiences of the Project as this will enhance the evidence base for the appropriateness and effectiveness of the approach and applied modalities and procedures. More efforts will be required to document the experiences, best practices and lessons learned by the Project, including findings from effect and impact monitoring. Such information will be very useful for policy makers to help them to formulate rural (infrastructure) development policies and strategies.
- 210. The Project is innovative in nature and considering its relevance and already demonstrated successful approaches, it is very important that the various processes, procedures and lessons learned are well documented as this may greatly benefit the GoTL and donors in the design of similar future projects and programmes.
- 211. The Project's planned information dissemination activities are very comprehensive but will also require adequate financial and human resources to enable their effective implementation. Considering the current work load of the available staff, it may be required to allocate funds to engage a consultant to provide lead inputs in the preparation and implementation of the envisaged public relations and communication activities. The Delegation of the European Commission to Timor-Leste has informed the ILO Office in Dili that modest financial assistance could be sourced from other European Commission funded operations for visibility purposes
- 212. Documentation that will be very useful relates for example to the selection of the roads, the modalities of building capacities among the involved public and private partners (including training needs assessment), the participatory processes and procedures followed to inform and involve local communities, the recruitment and rotation of labourers, the organization of the work following the task-work concept, the planning and implementation of the maintenance works using community contractors, contracting procedures for contracting rehabilitation works, quality control and quality assurance issues, the use of local materials and skills, the payment of wages, the flow of information between the field and the national level, etc. It will also be very useful if the Project will complete the operational manual for which various parts have already been prepared.
- 213. To further improve the visibility and transparency of the Project, it is recommended to include more information on the signboards that are erected at the different work sites. Information about the total costs of the works, the scheduled timing and duration of the implementation, the estimated number of work-days that will be generated and information briefly explaining the task-work system could be included on the sign boards.
- 214. The Project is thus actively involved in key policy and strategy development activities and, based on the experiences with the implementation of TIM-Works, the Project is in a good position to

provide well-informed advice to the policy makers on policies and strategies for rural development and rural roads. For this reason it is also very important that the Project documents it achievements, best practices, challenges and opportunities in a comprehensive way, and shares these findings with the GoTL senior policy makers.

## 6. Lessons Learned

- 215. TIM Works is demonstrating that innovative labour-based infrastructure development projects can be successfully implemented at a large scale in challenging and low capacity environments and that such projects are 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.
- 216. Such projects do need however sufficient time to be firmly established. This includes the development of strategies, guidelines, procedures and modalities that need to be integrated and institutionalized within the government system (like procurement procedures), the establishment of labour productivity norms as the basis for payment, the development of sufficient implementation capacities within the public and private sector, and the establishment of effective modalities for involving local communities in the planning and implementation of such works. A minimum of five years is reckoned to be required to achieve this.
- 217. The Project also shows that the introduction of innovative features like the task work concept where workers are being paid on the basis of their output, in accordance with set labour productivity norms, takes considerable time and effort. It is very important to closely monitor the appropriateness of the used labour productivity norms (and productivity norms of equipment) to ensure that realistic norms are being established. In parallel, close supervision is required to ensure that an optimum organization of the labour and the equipment is being achieved and that the amount of 'slack' time is being minimized.
- 218. The combination of limited class room training with extensive on-the-job training for supervisors, engineers and contractors regarding the planning and implementation of construction works using labour-based approaches proves to be very effective. In low capacity environments like Timor-Leste is should be acknowledged that considerable time and effort is required to train the contractors, engineers and supervisor on the effective application of labour-based methods. This should be factored into the designed (and initially low) rate of physical progress that a project will be able to achieve. During the initial one to two year much attention needs to be given to training and capacity building activities. When 'absorption' capacities in low capacity environments have been over-estimated, this may negatively affect the quality of the works because of pressure on a timely completion of the works.
- 219. 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.
- 220. Processes, achievements and lessons learned in the planning and implementation of innovative projects like TIM Works need to be well documented. This will enable policy makers to assess the relevance, significance and effectiveness of such projects and this will be very useful in convincing policy makers about the importance of such projects vis-à-vis objectives of employment creation, poverty reduction through infrastructure-triggered local economic development and issues related to social security. Proper documentation of the findings and lessons learned will also facilitate the design of similar future projects.

- 221. It is very important that effective monitoring and evaluation systems are being developed at the beginning of projects that do not only capture information about the physical and financial progress but that also enable projects with dual objectives (short-term contribution to poverty alleviation through targeted short-term employment creation and long-term contribution to poverty reduction through infrastructure-triggered local economic development) to assess its effectiveness in terms of effects and impacts.
- 222. TIM Works had to be operational within a very short period and only a short lead time was available to establish modalities, procedures and select and design the schemes. The decision of fully concentrating on the maintenance and rehabilitation of key rural roads links as these activities can be relatively quickly initiated and provide relative large numbers of employment opportunities and can be designed in a relatively short period. When more time and resources would have been available, it would have been worthwhile to adopt a broader and more diversified 'menu' of interventions that would reflect local communities' priorities. Examples of sub-sectors and activities with good potentials for labour absorption that could effective contribute to local economic development are small-holder irrigation development, flood control activities and water and soil conservation using labour-based or labour-intensive approaches.

## **Annexes**

## **Annex 1 – Logical Framework**

	Description	Verifiable Indicator	Means of verification	Assumptions
		and supervisors in Ministry of Infrastructure); contractors;	local communities in project distr	icts; training and academic institutions;
	men workers in project districts	Rural Infrastructure Development and Employment	Project duration: 24 months (Ju	L. 2008 - Trans 2010
Generation (TIM		Rurai filitastructure Developinent and Employment	Project duration: 24 months (Ju	ly 2008 – June 2010)
		nd poverty reduction by spurring growth in the infrastructure	e sector	
Immediate Obje	ective: Livelihood improvement and	Total km of road networks restored/created	Project final report	Government policies and priorities with
	rural communities through rural lemployment generation	Number of workdays generated and amount of car injected into local communities	Government annual budget for 2010	regards to the Workfare Programmes remain unchanged – likely
		Labour-based methods integrated into national Workfare programmes		National and provincial security conditions are stable – unlikely
Outputs	Roads rehabilitation and maintenance with labour-based technologies	<ol> <li>300 km rehabilitated/constructed, 36 km periodic maintenance and 1,500 km of routine road maintenance.</li> </ol>	Project Final report	Community are accessible – likely No natural disasters affecting road work progress – medium risks
	<ol> <li>Employment generation</li> <li>Capacity building for infrastructure providers in</li> </ol>	2. 1,039,200 workdays generated providing short-ter employment to 23,568 beneficiaries, at least 30% being women		Road materials are available – likely Small contractors have access to financial services - likely
	the private and public sectors  4. Policies and regulations	3. A. 30 engineers and technicians trained in LB approaches; 75 contractors and 100 community contractors trained in LB approaches		Academic and training institutions interested in participating in the project – likely
	adopted and implemented for further scaling up LB methods.	B. Number of academic and training institutions participating in project activities		Government staff are released to attend training and participate in project activities – likely
		C. 30% labour cost is reflected in Government 20 annual budget for infrastructure.	010	Project has access to government standards, specifications, and contract
		4. Policies and regulations in support of scaling up the LB methods adopted by the Ministry of Infrastructure and integrated into the Standards Or Practices in the Workfare Programmes		document - likely

	Description	Verifiable Indicator	Means of verification	Assumptions
Output 1	Road Rehabilitation and Maintenance Works	300 km rehabilitated/constructed, 36 km periodic maintena routine road maintenance.	nnce and 1,500 km of	
Activity 1.1	Rapid assessment for design of the initial training programme	Completion of the assessment within 3 months of project starting date	Rapid Assessment Report	
Activity 1.2	A trial training programme on rehabilitation, contracting procedures, and maintenance	LB approaches demonstrated on 18 kms road length Contractors awarded contracts for 4 km road rehabilitation, culvert construction, bridge works, and side slope stabilisation works Community contractors conducted routine maintenance on	Trial training report	Community are accessible – likely
		roads with fairly good conditions.		No natural disasters affecting road work
Activity 1.3	With central and local government authorities, appraisals and surveys of targeted roads conducted to effect the road rehabilitation and maintenance programme for implementation by the project, e.g., road condition surveys, preliminary and detailed designs, quantity surveying, traffic surveys, applying agreed selection and appraisal criteria.	Government authorities agreed to road and contractors' selection and appraisal criteria	Project implementation plan	progress – medium risks Road materials are available – likely Small contractors have access to financial services - likely
Activity 1.4	Rehabilitation and maintenance programme implemented through competitive bidding process	Progressive number of contracts awarded, completion within time and budget, and road lengths rehabilitated and maintained	Project M&E database	
Output 2	<b>Employment Generation</b>	1,039,200 workdays generated providing short-term employ beneficiaries, at least 30% being women	yment to 23,568	Community are accessible – likely No natural disasters affecting road work
Activity 2.1	LB methods used in rehabilitation and maintenance	Rehabilitation contract cost contains 30-50% wage Maintenance contract cost contains 70-80% wage	Project M&E database	progress – medium risks
Activity 2.2	Recruitment of local men and women for road works	30% of workers are women at the project completion date.	Project M&E database	
Activity 2.3	Supervisory staff trained in the effective organisation of large groups of workers, including implementation of incentive schemes.	Number of trainees trained by the project	Project M&E database	

	Description	Verifiable Indicator	Means of verification	Assumptions
Activity 2.4	Government staff and contractors trained in the essential regulations pertaining to employment of skilled	Number of trainees trained by the project	Project M&E database	
	and un-skilled labour.	Number of workers receiving wages and benefits in accordance with national regulations		
Output 3	Capacity building	Number of government counterpart staff and contractors to	rained	
		Number of training and/or academic institutions participat	ing in project activities	
		maintenance allocation		
Activity 3.1	Training materials for government staff and contractors developed	Training materials tailored to the specific requirements in Timor-Leste	Training materials	
Activity 3.1	Government counterpart engineers,	At least 30 government counterpart engineers, technicians,	Project M&E database	Community are accessible – likely
	technicians and inspectors trained in LB methods	and inspectors trained	Government 2010 annual	Government staff are released to attend
		Government annual budget balance allocation for rehabilitation and maintenance	budget	training and participate in project activities – likely Government policies
Activity 3.2	Contractors trained in LB methods	Number of commercial contractors and community contractors trained by the project, targeting 75 commercial contractors and 100 community contractors.	Project M&E database	and priorities with regards to the Workfare Programmes remain unchanged – likely
Activity 3.3	LB methods incorporated into curriculum of local universities and polytechnic	Number of local universities and polytechnic institutes participating in project activities	Project M&E database	Academic and training institutions interested in participating in the project – likely
Activity 3.4	Awareness raising and briefing seminars to key stakeholders	Number of attendants	Project M&E database	
Activity 3.5	Study tours to government management staff	Number of government counterparts participating in the study tours	Study tour reports	
Output 4	Policies, strategies, guidelines, and standards	Policies and regulations in support of scaling up the LB me Ministry of Infrastructure and integrated into the Standar Workfare Programmes		Project has access to government standards, specifications, and contract document - likely
Activity 4.1	Review existing technical standards for application of LB work methods	Number of technical standards reviewed, revised, and presented to GoTL	Project M&E database	Government policies and priorities with regards to the Workfare Programmes remain unchanged – likely
Activity 4.2	Review technical specifications for application of LB methods	Number of technical specifications reviewed	Project M&E database	

	Description	Verifiable Indicator	Means of verification	Assumptions
Activity 4.3	Contract documentation and management procedures already under development by MoI adopted to the specific requirements of LB methods and disseminated	Contract documentation and management procedures integrated requirements of LB methods	Contract documentation	
Activity 4.4	Assessment and documentation of project experiences with regards to contractor selection procedures and contractor performance for government for future use and report disseminated to all stakeholders	Areas for further improvements in government system identified  Number of stakeholders receiving project report/documents	Project reports submitted to the GOTL	
Activity 4.5	Introduction and technical assistance to government staff in the use of progress monitoring and reporting system.	Number of government staff using progress monitoring and reporting system	Project M&E database	
Activity 4.7	Sharing of project' training programme, technical support and training literature, manuals and procedures with other projects involved in rural infrastructure development.	project's training facilities	Project M&E database	
Activity 4.8	Preparation of appropriate rural infrastructure policies and strategies for the inclusion in national development plans.	Rural infrastructure policies and strategies addressing national development priorities	Project report submitted to GOTL	

## **Annex 2 - Terms of Reference**

## I. Background and Justification

- 1. Successive crises has drawn Timor-Leste communities into fierce poverty and social tensions and exclusion, creating ground for continued cycles of instability that prevent development and promote further social unrest. The Government of Timor Leste has prioritized employment and income generation as a key priority of work in 2008. Public infrastructure works generating employment is the first priority area of the "2008 National Priority 4 Working Group Employment and Income Generation". The priorities set by the government to be supported through the activities of this working group include creating jobs and income-earning opportunities particularly for young people, implement public works programmes that can create significant short term employment and which deliver infrastructure services essential for growth and development, and development of a vibrant private sector for long term sustainable job creation
- 2. The Investment Budget Execution Support for Rural Infrastructure Development and Employment Generation (TIM Works) seeks to contribute to employment generation, poverty reduction, economic growth and peace building through the rehabilitation, construction and maintenance of rural infrastructure using labour-based (equipment supported) work technology. The capital component, capacity building and technical assistance receive external funding whilst the Government of Timor-Leste provides funding for the labour cost component of the Project.
- 3. TIM Works makes strategic contributions to support Timor-Leste's national efforts to meet the millennium development goals, the United Nations Development Assistance (2008-2013), and the Timor-Leste Decent Work Country Programme (2008-2013) Outcome 4 "More employment generated by rural infrastructure investment programmes." Specifically, TIM Works supports the following national development priorities:
  - providing sustainable and productive employment opportunities for a rapidly growing labour force;
  - o improving access to social services and markets;
  - o private sector development support;
  - o improving and maintaining rural infrastructure; and
  - o human resource development and institutional strengthening.
- 4. TIM Works was formulated in close consultations with the Government of Timor-Leste and the three donors, the Government of Norway, the European Commission and the Government of Ireland. The donors agreed on the overall project approach, expected outcomes, outputs, and activities. Each donor indicated its financial contribution in May 2008. The project documents for each donor are identical in most part with the exception of the budget and outputs sections whereby the expected kilometres of road works and workdays of generated employment differ. Annexes II and III present the TIM Works project document and the outputs for financing by each donor. Due to the different review and administrative processes by each donor, the project budget has different implementation periods. But the three donors were acknowledged for their contribution to the project since its commencement on 1 September 2008. The table below provides details of the contractual arrangements.

Donor	Period	Contribution		Remarks
		Agreement Currency	Value	
Government of Norway	21 July 2008 – January 2010	Norwegian Krone	2,499,522	Extension to June 2010 in process, USD equivalent 2,499,522
European Commission	1 January 2010 – 30 June 2010	Euro	1,561,295	Equivalent to USD 2,022,403
Government of Ireland	1 July 2009 – 30 June 2010	Euro	875,000	Equivalent to USD 1,230,661
Government of Timor-Leste		USD	2,383,400	Pledged and administered directly by the GOTL

Note: Actual programme value is affected by the fluctuation in the currency exchange rate. At the time of its formulation in July 2008, the programme total value was projected at USD 8,401,175, representing the following contributions:

Government of Norway: USD 2,249,522
European Commission: USD 2,428,142
Government of Ireland: USD 1,090,111
Government of Timor-Leste: USD 2,383,400

As the donor contributions are paid to the ILO in instalment, the actual programme value can only be determined after the ILO has received the full amount of contribution, circa January 2010.

- 5. As of September 2009, TIM Works has made significant progress. It is implemented in partnership with the Government of Timor-Leste (represented by the Secretary of State for Vocational Training and Employment and the Directorate of Roads, Bridges and Flood Control of the Ministry of Infrastructure). SEFOPE, with the support from the ILO, has recruited national staff to implement the works in all 8 project districts. A total of 29 national staff has been recruited and assigned to TIM Works. This staff has received training and day-to-day coaching support from ILO technical staff. An operational database in SEFOPE is instrumental for the programming of resources, procurement of goods and services necessary for rehabilitation and maintenance of roads and capturing technical progress (infrastructure works and employment opportunities generated by the programme).
- 6. Progress made by TIM Works is regularly reported to Programme Steering Committee (PSC) in Dili, comprising representatives from relevant government counterparts, donors, and the ILO. The PSC have met twice in October 2008 and June 2009. Presented to the PSC included the Inception Report of October 2008 and the Progress Report of March 2009 attached as Annexes IV and V to this ToR.
- 7. According to the ILO evaluation policy, projects with a budget exceeding US\$ 500,000 need at least one independent evaluation and the project with a duration between 18-30 months require annual and final evaluation upon completion of project. Since TIM Works has been implemented for about one year, there is a need to conduct an assessment of the target results whether they are achievable within the project timeframe. This independent mid-term review is therefore proposed. It is aimed to provide an independent assessment of TIM Works to assess whether the project remains valid and whether it needs any adjustments and is likely to achieve its intended results and impact.

8. The evaluation will comply with evaluation norms and standards and the ethical safeguards will be follows

## II. Client, Scope and Purpose of the Evaluation

#### Client

9. The primary clients of the evaluation are the Secretariat of State for Vocational Training and Employment, ILO, and the three project donors. The evaluation findings and recommendations will facilitate the Programme Steering Committee in their regular review of implementation results and decision making processes. Specifically for the ILO, the evaluation will (i) aide necessary project adjustments and the design of future projects of similar nature in Timor-Leste and elsewhere and (ii) provide an in-depth analysis of the productivity rates achieved in the road works.

#### **Purpose and Scope**

- 10. The proposed evaluation is to provide an independent assessment of TIM Works with regards to the validity of the design, efficiency and cost-effectiveness of the project implementation approaches, achieved progress and quality of works, challenges, good practices, and lessons learned. The evaluation is also to advise its clients the necessary adjustments, as needed, in the project targets, partnership arrangements, implementation methods, and resource allocations.
- 11. The proposed evaluation will examine project achievements as a whole regardless of the specific contributions of each donor and budget delivery of each donor's contribution.
- 12. The evaluation includes all TIM Works activities jointly undertaken by the SEFOPE and the ILO from 1 September 2008 15 August 2009 and the planned activities for the remaining project period, as feasible.

## III. Key Evaluation Questions / Analytical Framework

- 13. The evaluation should address the overall ILO evaluation criteria such as *relevance and strategic fits* of the project, *validity of project design, project progress and effectiveness, efficiency of resource used*, effectiveness of management arrangement and *impact orientation* and *sustainability* as defined in the *ILO Guidelines for Planning and Managing Project evaluation* 2006. The evaluation shall adhere to the UN Evaluation Norms and Standards and OECD/DAC quality standards.
- 14. Suggested evaluation questions to be refined and finalized by the evaluator in consultation with the evaluation manager are as follows:

## Relevance and strategic fit:

- a. Does the project design effectively address the national development priorities, UNDAF, DWCP, and specific donor priorities/concerns in Timor-Leste, noting that these may have evolved significantly since mid 2008 when TIM Works was formulated?
- b. Are the strategic elements of the project (goals, outputs, implementation strategies, targets and indicators) achievable? Is the intervention logical and realistic? If not, why? What are the necessary adjustments?
- c. Does the project design effectively integrate the different interests and capacity levels of communities, contractors, SEFOPE, Ministry of Infrastructure in their roles as stakeholders, partners, implementers and beneficiaries?
- d. To what extent does the design and implementation strategy address the necessary synergies between the needs for improved rural access, employment generation, and administration and operational capacity of the government counterparts?
- e. What are the areas and potential for further scaling up and reinforcement?

f. How is the project implementation coordinated with other ILO and government initiatives in rural development in Timor-Leste? What are those programmes?

#### **Effectiveness:**

- g. Was the project initiated in an effective manner and were key project inputs such as staff and equipment mobilised in a timely manner?
- h. What is the progress to date as compared to the project goals and outputs, qualitatively and quantitatively? What are the achievements in terms of:
  - infrastructure improvement,
  - capacity building within government at the national and district levels,
  - employment generation,
  - the impact in terms of youth employment,
  - Poverty alleviation (Does this project actually reach the poor and help them not just with income injection but with long-term improvement?)
  - community empowerment (What is the effect of the project on the rural economy? How is the income generated by the project used?
  - contractors' capacity building,
  - mainstreaming gender equality, and
  - in which areas does the project have the least achievements and how to overcome these in future interventions?
- i. How does productivity rates and labour norms relate to similar projects in Timor-Leste and elsewhere? How and to what detail are quantities of completed work and labour inputs recorded and monitored? Are these systems adequate for progress and quality monitoring? Is there scope for further improvement of work organisation and quality assurance, and how can this be achieved?
- j. What are the actual costs of completed road works projects and how do these compare with those (i) estimated during the project design stage (ii) during the detailed field surveys and (iii) in comparison to similar works elsewhere in Timor and other countries? If actual costs are higher, what are the reasons for the deviations and which appropriate adaptations to the scope of works are recommended?
- k. When costs of (i) the maintenance works and (ii) the road construction works are disaggregated into categories (i.e. labour wages, materials and equipment), do they reflect common practice in labour-based, equipment-supported road works?
- 1. What are the reporting and monitoring arrangements to ensure that the project is on track according to the expected outcomes? How is gender and youth mainstreaming monitored?
- m. Is the project addressing adequately environmental challenges posed by the execution of the works?
- n. What adjustments have been made in the project implementation? What motivated these adjustments? To what extent are these adjustments effective and enhanced outcome achievements?
- o. What are the "surprise" achievements and challenges in the course of the implementation? What are the good practices and lessons learned noteworthy of documentation?

#### **Efficiency:**

- p. What are the partnership arrangements at various levels, community, district, interministerial and interagency? What are the challenges in establishing and maintaining these partnerships? What are the results of these partnerships? To what extent do these partnerships facilitate effective resource coordination (technical, socio-cultural, and financial)?
- q. Has the project implementation benefited from ILO's technical resources and international experience efficiently and in what ways?
- r. What are the experience and results on coordinating the TIM Works budget with the national budget? What is the government's budget contribution to date? Are these contributions sufficient and on time?

- s. What is the evidence of cost-effectiveness in project implementation and management?
- t. What are the good practices and lessons learned noteworthy of documentation?

#### **Sustainability:**

- u. Are the project achievements sustainable? More specifically, do the maintenance related project activities fully address the sustainability concerns? Can and to what extent is it likely that these will be sustained beyond the project period? Are there any elements of the project achievements that are not likely to be sustainable?
- v. To what extent has the institutional capacity of the government and the private sector been developed in order to continue this rural road works programme in the future without external support?
- w. What are the necessary action / interventions by the ILO, GoTL and donors to ensure that all project achievements can be sustained and provide a meaningful platform for further development in Timor-Leste? How to best further consolidate project achievements beyond the project life time?
- x. Are Government counterparts committed to continuation of the project work and what further support t hey would need? Can the project approach be replicable and scaled up by national partners? What are the support requirements for replication and scaling up of project strategy by national partners?
- **y.** What are the risks factors and remaining challenges that need to be mitigated to ensure maximum and sustainable capacity enhancement beyond the project timeframe?
- z. What are the good practices and lessons learned noteworthy of documentation?

## IV. Expected Outputs of the Review

#### 15. An Evaluation report (20-30 pages):

The team leader will be responsible to draft and finalise the evaluation report and evaluation summary according to ILO template.

The report will comprise an Evaluation Summary and the Evaluation Report with necessary annexes. The report shall be written in English and follows the standard evaluation report outline:

- Title Page
- Table of Contents
- Executive Summary
- Acronyms
- Background and project description (and progress to date)
- Purpose of evaluation
- Evaluation methodology and evaluation questions
- Project status, quality assessment of works and services, findings and recommendations by areas of evaluation (relevance and strategic fit; effectiveness; efficiency; and sustainability)
- Conclusion and recommendations by degree of importance
- Lessons learned and good practices on the intervention approaches and results
- Annexes, including but not limited to list of interviews, evaluation schedule, proceeding of stakeholders meeting, and other relevant information

The Evaluation Summaries will be prepared as per the template attached in Annex VI.

16. The Evaluation Report and Evaluation Summaries will be written in English and their final versions will be submitted in print ready copy. The final Evaluation Report will meet the minimum quality standards as per the evaluation report appraisal checklist as shown in Annex VII.

## V. Evaluation Methodology

#### 17. Composition of the Evaluation Team:

i. An international specialist/evaluator with strong background in project evaluation, capacity building, and local resource-based road works who has not been involved in the TIM Works Project design and implementation. S/he will possess a solid technical engineering background in employment-intensive rural road construction and maintenance. Familiarity with Timor-Leste and ILO's international experience in this field are a must. Language proficiency in Portuguese, Bahasa Indonesia, and/or Tetum is an advantage.

The international specialist will be the team leader of the evaluation.

ii. A national consultant is recruited to be part of the team. He/She should have monitoring and evaluation background and knowledge of Timor-Leste development priorities and challenges. He/she will work with the team leader and will contribute their local knowledge to help the team leader during the evaluation process and contribute to the completion of the evaluation report. The specific tasks and output of the national consultant is in Annex 1.

The ILO programme in Timor-Leste will serve as the secretariat for the evaluation.

- 18. **Evaluation methodology:** The evaluation is an independent evaluation and the final methodology and evaluation questions will be determined by the Evaluation Team Leader in consultation with the Evaluation Manager. These Terms of Reference has incorporated inputs and recommendations from the project donors, national counterparts, and ILO technical and programming units. Evaluation methods include but are not limited to:
  - O Desk review of background documents listed below:
    - Project Document
    - Inception Report
    - Progress Report (March 2009)
    - Steering Committee Meetings Report
    - Donor country strategies (as relevant)
    - Timor-Leste 2008 and 2009 National Development Priorities
    - Timor-Leste Decent Work Country Programme (2008-2013)
    - Timor-Leste UNDAF (2008-2013)
  - Field visits, interviews, group discussions and review of works related documents, including:
    - Project specific technical manuals, guidelines and training material,
    - Estimates of volumes of work and costs of road construction and maintenance works,
    - Technical drawings
    - Site progress reports, documenting quantities of completed work, labour inputs and expenses incurred,
    - Sub-project completion reports,
    - Operation manuals and guidelines,
    - Overall project work programme, site work plans, sample daily, weekly and monthly site reports,
    - Planning and monitoring report forms and procedures.
  - Contact with the government departments involved, with the project donors, with other donors/organizations involved in rural infrastructure works and with relevant civil society organizations.
  - At the completion of the field mission, a stakeholder workshop will be organized by the ILO in Dili to present overall findings, conclusions and recommendations.

#### VI. Budget

19. The evaluation is financed by the projects TIM/08/M50/NOR, TIM/08/M51/EEC, and TIM/08/M52/IRL.

20. The cost of the external collaboration contracts for the evaluation team is calculated in accordance with ILO rules and regulations. It comprises professional fees for 25 days, travel to and from Dili and applicable UN Daily Subsistence Allowance for the duration of the field work. Transport to the road works sites in the districts will be provided by ILO in Dili.

## VII. Management Arrangements and Timeframe

- 21. The Evaluation Manager appointed for this programme evaluation is Mr. Marc Van Imschoot of the Employment Incentive Investment Programme (EIIP) at ILO Geneva, whom the evaluator will work closely with and will report to. The Evaluation Officer in the ILO Regional Office for Asia and the Pacific will provide support to the Evaluation Manager.
- 22. The international specialist will be the team leader of the evaluation. The team leader will provide technical guidance to the national consultant, including develop the evaluation tools, guide on the use of the tool and preparation of the report and data analysis"
- 23. The Evaluation is scheduled to commence in September 2009.
- 24. The tentative schedule of the evaluation is as follows:

Date	Work	Output	Responsibility
Aug- 1 <sup>st</sup> week of Sep	Consultations/inputs to the Draft ToR	Draft ToR finalized	Project team, constituents, ILO backstopping, ILO TL evaluation coordinator, evaluation manager, Regional evaluation officer
Mid Aug – Sep	Identification of evaluator	Evaluator selected	Evaluation Manager/ Evaluation Officer
3 <sup>nd</sup> week of Sep	Award of contract to the Evaluator	External Collaborator Contracts	Project team
4 <sup>th</sup> week of Sep (2 days)	Desk review	Evaluation questions	Evaluators
4 <sup>th</sup> week of Sep	Briefing by ROAP in Bangkok (by phone)	Initial project briefing	Technical back-stopping unit ASIST-AP
September 30-Oct 15(16 days)	Travel to Dili, Project visits and stakeholder consultations and preparation of preliminary findings and debriefing)	Preliminary evaluation findings and recommendations discussed with key stakeholders	Evaluators with logistic support by the project team
Oct 23 (5 days)	Submission of a draft report	Draft report	Evaluators
23 Oct –Nov.6	Circulation of draft report to stakeholders for factual comments	Comments from stakeholders consolidated and sent to the evaluator	Evaluation manager
Nov. 10 (2 days)	Finalizing the evaluation report	Final evaluation report and evaluation summary to the satisfaction of the ILO.  The final report shall be submitted to the ILO no later than Nov 10, 2009	Evaluators

#### **Annexes:**

- 1. Specific Task/outputs of the national consultant
- 2. TIM Works Programme Document
- 3. TIM Works Inception Report (October 2008)

- 4. TIM Works Progress Report (March 2009)
- 5. TIM Works Outputs by Donor
- 6. Evaluation Summary Template
- 7. Evaluation Report Appraisal Checklist

## Annex 1: Specific Tasks/outputs of the national consultant

- To conduct an assessment of the short-term impact of already completed roads by interviewing road users, farmers living in the vicinity of the road etc. Where possible, all the data should be sex-disaggregated and different needs of women and men should be considered.
- To prepare specific report of the above assessment including the evaluation instruments, methodologies used for collecting information This specific report shall be part of the main report
- To join the International consultant in the field missions, where necessary, and to contribute to the main report to be written by the International consultant
- To support the team leader in the stakeholders workshop and the debriefing session

## Annex 3 - Itinerary, Persons Met and Sites Visited

## **Itinerary**

28-09-09:	Desk review documents.
29-09-09:	Desk review documents, briefing at ILO Jakarta (TL), travel Research Officer to Dili.
30-09-09:	Travel TL to Bali, desk review documents.
01-10-09:	Travel TL to Dili, preparation questionnaires, initial meeting with ILO staff and ILO Senior Rural Infrastructure Management Specialist ILO ROAP-Bangkok.
02-10-09:	Collection of data and meetings with staff ILO TIM Works SEFOPE, Public Works
03-10-09:	Field visits to selected project sites in Manatutu District
04-10-09:	Review documents and travel to Baucau
05-10-09:	Field visit to selected project sites in Baucau District and Lautem District. Visit to District Employment Center in Baucau.
06-10-09:	Field visit to selected project sites in Vequeque District and return to Dili
07-10-09:	Meeting with Delegation of European Commission, Royal Norwegian Embassy and Irish Aid and the collection and analysis of information.
08-10-09:	Meeting with TIM Works' Project staff and preparation for presentation/debriefing
09-10-09:	Presentation of preliminary findings and recommendations to Government, donors and ILO and the collection of additional information and data.
10-10-09:	Departure from Dili
12-10-09:	Analysis of collected information
13-10-09:	Analysis of collected information
14-10-09	Preparation of draft mission report
to	
25-10-09:	
26-10-09:	Submission of draft mission report to the ILO
10-12-09:	Received comments from ILO and donors on draft report
19-10-09	•
to	
23-10-09:	Incorporation of comments from ILO and donors in report
24-10-09:	Submission final mission report to the ILO

## **People Met**

- Ms. Parissara Lieuwkat, ILO Jkt Programme Officer
- Mr. Peter van Rooij, Deputy Country Director ILO Jakarta Office for Indonesia and Timor-Leste
- Mr. Jose Assalino, CTA, ILO Office Timor Leste
- Mr. Bjorn Johannessen, Senior Rural Infrastructure Management Specialist, ILO ROAP, Bangkok
- Mr. Joao Noronha, Monitoring and Evaluation Officer, ILO Office Timor Leste
- Mr. Tomas Stenstrom, Project Coordinator, ILO TIM Works Project
- Mr. Antonio Junior Indart, Database Specialist ILO Office Timor Leste
- Mr. Eoghan Walsh, Head of Mission, Embassy of Ireland, Dili, Timor-Leste
- Mr. Juan Carlos Rey Salgado, EU Ambassador, Dili, Timor-Leste
- Mr. Costas Tsilogiannis, First Counsellor, Head of Operations, Delegation of the European Commission to Timor-Leste
- Mr. Hans Peter Christophersen, Head of Mission, Royal Norwegian Embassy, Dili, Timor-Leste
- Mr. Jose Maria da Costa Soares, Director, Secretary of State for Vocational Training and Employment Division of Employment, Dili, Timor-Leste
- Mr. Van Samsan, Regional Engineer (international), ILO TIM Works
- Mr. Un Yat, Regional Engineer (international), ILO TIM Works

- Mr. Sam Vanda, Regional Engineer (international), ILO TIM Works
- Mr. Pen Sonath, ILO Consultant, Rural Infrastructure Training
- Mr. Milton Montero, Director of Directorate for Roads, Bridges and Flood Control, Directorate of Roads, Bridges and Flood Control of Ministry of Infrastructure
- Mr. Joao Pedro Amaral, Regional Engineer Directorate of Roads, Bridges and Flood Control for Dili Region
- Mr. Jose Freitas, Coordinator Rural Roads Division, Directorate of Roads, Bridges and Flood Control
- Mr. Adilio Baptista Lopez Marquez, Site Engineer TIM Works Project
- Mr. Juvenal Carlos Freitas, District Engineer Baucau District, TIM Works Project
- Mr. Sebastiao Da Cruz, District Engineer Baucau District, TIM Works Project
- Mr. Nicolao Boavida, Maintenance Supervisor Baucau District, TIM Works Project
- Mr. Kansiu De Jesus Da Cunha, District Engineer Lautum District, TIM Works Project
- Mr. Bonifacio Freitas Belo, District Engineer Vequeque District, TIM Works Project
- Mr. Felesberto Da Cruz, District Engineer Vequeque District, TIM Works Project
- Staff of the District Employment Center in Baucau
- 3 small local contractors who have been contracted for construction works (culverts, lining of site drains and a 4 meter span bridge) on the Manlala-Leohat road in Manatuto District.
- Last, but definitively not least, workers, beneficiaries and contractors at the visited project sites

## **Sites Visited**

## 03-10-09

- Manatuto District: Laclubar-Manelima road (8 km; rehabilitation works; on-going)
- Manatuto District: Manlala-Leohat road (1.2 km; rehabilitation works; on-going)
- Manatuto District: Sananai road (2 km; routine maintenance works; completed)
- Completed maintenance schemes in Manatuto District

#### 05-10-09

- Baucau District: Caicoli-Liabala road (6.5 km; rehabilitation works; on-going)
- Baucau District: Ostico-Wailakama road (7 km; rehabilitation works; on-going)
- District Employment Center, Baucau
- Lautem District: Dasidarai-Lequidiga road (10.5 km; rehabilitation works; on-going)
- Completed maintenance schemes in Baucau and Lautem District

## 06-10-09

- Vequeque District: Ossu Decima-Builale road (9 km; rehabilitation works; on-going)
- Loihuno-Oss Roua road (5.2 km; rehabilitation works; on-going)
- Completed maintenance schemes in Vequeque.

## **Annex 4 - Documents Reviewed**

- 1. Project document and agreement between the European Community and the ILO regarding the implementation of the TIM-Works Project
- 2. Project document and agreement between Norway and the ILO regarding the implementation of the TIM-Works Project
- 3. Project document and agreement between Ireland and the ILO regarding the implementation of the TIM-Works Project
- 4. ILO Appraisal checklist of the TIM-Works Project
- 5. Inception Report of the TIM-Works Project
- 6. Mission Report B. Johannessen of ILO ROAP-Bangkok, May and October 2009
- 7. Budget and status of expenditures up to September 2009 of the contributions of the 3 donors
- 8. Report of training on labour-based technology and contract management for private contracts from 20 April to 19 July 2009, by Pen Sonath, ILO Consultant Rural Infrastructure Training Specialist
- 9. EC Country Strategy for Timor-Leste 2008-2013.
- 10. UNDAF 2009-2013, Democratic Republic of Timor-Leste
- 11. Timor-Leste National Recovery Strategy
- 12. ILO, Timor-Leste 2008-2013 Decent Work Country Programme
- 13. Ministerio Das Fiancas, Direccao National de Estatistica and World Bank (2008), Timor-Leste: Poverty in a Young Nation, Direccao National de Estatistica, Dili.
- 14. Various mission reports of the TIM-Works M&E Specialist
- 15. Various 'Stories of Change' prepared by the TIM-Works M&E Specialist
- 16. TIM-Works Progress Report October 2008 March 2009
- 17. TIM-Works Progress Report April 2009 September 2009
- 18. Various TIM-Works District Action Plans
- 19. Monthly progress reports TIM-Works for August 2009
- 20. Road inventory report TIM-Works, 2008
- 21. Minutes of meetings Steering Committee
- 22. Maintenance manual
- 23. Technical guidelines
- 24. Contracting and bidding guidelines and formats
- 25. Muster rolls and work plans of the visited sites
- 26. Technical drawings and designs of the inspected works
- 27. Report on wages rates, TIM-Works 2008.
- 28. Poverty reduction and transportation infrastructure in Timor-Leste, USAID, 2006
- 29. Road sector investment planning in Timor-Leste, the Louis Berger Group, 2006
- 30. Special report FAO/WFP crop and food supply assessment mission to Timor-Leste, 2007
- 31. Asian Development Bank & Timor-Leste, Fact Sheet, 2009.
- 32. Minutes of Timor-Leste Development Partners Meeting, April 2009
- 33. World Bank, Country Brief Timor-Leste, 2007
- 34. The World Bank, Transport in Timor-Leste, An Overview, 2009.

**Annex 5 - Investment Costs per Kilometer of Rehabilitation Works** 

			km	Cost (US\$)	Cost/km (US\$)
1	Alieu	Maumeta	6	129,766	21,628
2		Maumeta cont	4	88,496	22,124
3		Lacotoi	2	38,000	19,000
4		Laulara	2	54,422	27,211
5		Fatubosa	4	95,720	23,930
6		Fatubosa cont	6	114,000	19,000
7	Baucau	Gariwal	4	85,873	21,468
8		Ustico	7	110,295	15,756
9		Laga	4	76,000	19,000
10		Venilale	7	78,596	11,228
11		Bagula	5	95,000	19,000
12	Dili	Kulau	7	156,400	22,343
13		Dare	5	110,366	22,073
14		Dili Aileu	3	57,000	19,000
15		Fatu Ahi	7	156,497	22,357
16		Dili Aileu	4	76,000	19,000
17	Lautem	Ilalai	11	146,425	13,311
18		Iliomar	7	133,000	19,000
19		Muapatine	9	93,137	10,349
20		Leuro	3	57,000	19,000
21	Liquica	Bazartete	11	275,423	25,038
22		Hatuquesi	8	187,983	23,498
23		Maubara	8	189,273	23,659
24		Darulete	3	57,000	19,000
25	Manatuto	Sananain	2	27,859	13,930
26		Manelima	8	164,216	20,527
27		Batara	4	86,489	21,622
28		Funar	9	180,111	20,012
29		TBA	3	57,000	19,000
30	Viqueque	Ossu Loihonu	6	107,175	17,863
31		Sukaer Oan	4	76,000	19,000
32		Ossu de Cima	9	125,239	13,915
33		Uatalari	3	57,000	19,000
34	Contracts	Trial I	20	380,000	19,000
35		Trial II	20	380,000	19,000
	Total		225	4,302,761	19,123

# Annex 6 - Survey for Community Stakeholders (Including Interview Guidelines) and Guide for Focus Groups with Programme Beneficiaries

## TIM Works – Survey for community stakeholders 1. General information 1.1 Name of project site 1.2 Name of project manager 1.3 Please describe the TIM Works activities being undertaken within your local area. 1) Construction 2) Maintenance 3) Rehabilitation 4) Other 1.4 In which District is this project located? 1) Aileu 5) Liquiça 6) Manatuto 2) Baucau 7) Oecusse 3) Dili 4) Lautem 8) Viqueque 1.5 In which Town/Village is the project located? 1.6 How long have you been living in the community? 1) Less than 3 months 2) Less than 1 year 3) Less than 3 years 4) More than 3 years 1.7 Please describe the locality 1) Urban formal 2) Urban informal 3) Peri urban 4) Traditional settlement 5) Farming 1.8 Please describe the dominant housing within the area. 1) formal housing 2) informal housing 3) traditional housing 1.9 Are you male or female?

1) Female	
2) Male	
1.10 Are you between the ages of 15-29?	
1.12 How would you describe your role in the	
community?	
1.11 What is your present occupation?	
1) Employed full time	
2) Self-employed	
3) Employed part-time/contract/temporarily	
4) Unemployed	
5) Housewife	
6) Pensioner	
7) Student	
8) Other (record answer)	
1.12 How many people in your household earn an	
income?	
1.13 Does your household produce any food and/or	
income from farming?	
2 Dec 1 - 1 - 1 - 1 - 1 - 1	TOTAL XXI I
2. Previous involvement with	TIM WORKS
A1 II	
2.1 Have you worked on a TIM Works project before?	
before:	
1) Yes	
2) No	
2.1.1 If yes, describe the position	
2.1.1 If yes, describe the position	
2.1.2 If yes, describe the duration of employment	
21.2.2.2.1 g to, woodane tall war on the programmer	
2.1.3 If yes, how long (months/weeks) did that	
particular project go for?	
2.1.4 If yes, how were you selected to work for this	
previous project?	
1) Word of mouth (friends/relatives/neighbours)	
2) Advertisement on newspaper	
3) Advertisement on Radio	
4) Headhunted	
5) The district employment centre	
6) Other (please specify)	
2.1.5 If yes, did you undergo any recruitment	
selection method for participation in this previous	
project?	
1) Yes	
2) No	

1) Interview	
2) Test	
3) No recruitment method	
4) Other (record answer)	
2.1.7 If yes, do any other members of your	
immediate family also work for TIM Works?	
3. Perception of the impact o	f the project
3. I election of the impact of	t the project
3.1 Do you believe that the work experience that	
the workers receive will enable them to get other	
work?	
1) Yes	
2) No	
3.1.1 Please provide an explanation for your	
answer.	
3.2 Have there been <b>POSITIVE</b> consequences that	
are directly related to TIM Works for the workers	
or their families since they started working on this	
programme?	
1) Yes	
2) No	
3.2.1 If yes, what are they?	
1) (1)	
1) Sharing of information	
2) There is money for the family	
3) Now employed  4) There is morely to buy food	
<ul><li>4) There is money to buy food</li><li>5) The life has become better/improved</li></ul>	
· · · · · · · · · · · · · · · · · · ·	
6) Ability to survive without borrowing money 7) Able to send children to school	
8) Able to purchase household goods	
9) Don't know	
10) Other (record answer)	
(DO NOT READ LIST)	
3.3 Have there been <b>POSITIVE</b> consequences that	
are directly related to TIM Works for the	
community as a whole since they started working	
on this programme?	
1	
1) Yes	
2) No	
3.3.1 If yes, what are they?	
1) Sharing of information	
2) There is money for the family	

3) Now employed 4) There is money to buy food 5) The life has become better/improved 6) Ability to survive without borrowing money 7) Able to send children to school 8) Able to purchase household goods 9) Don't know 10) Other (record answer) (DO NOT READ LIST) 3.4. Have there been **NEGATIVE** consequences that are directly related to TIM Works for the workers or their families since they started working on this programme? 1) Yes 2) No 3.4.1 If yes, what are they? 1) Laid off / no more income 2) Unemployed / project ended 3) Can't find another job 4) Money is too little 5) Don't get paid on time 6) Don't get paid the full amount 7) Travel long distances 8) Rainy days, no work no pay 9) Project cannot employ all in the community 10) No one is working at home 11) Life is still the same / No change 12) Too many tasks given 13) People do not treat co workers well 14) Don't know 15) Other (record answer) (DO NOT READ LIST) 3.5 Have there been any NEGATIVE consequences that are directly related to TIM Works for the community as a whole since they started working on this programme? 1) Yes 2) No 3.5.1 If yes, what are they? 1) Laid off / no more income 2) Unemployed / project ended 3) Can't find another job 4) Money is too little 5) Don't get paid on time 6) Don't get paid the full amount 7) Travel long distances 8) Rainy days, no work no pay

9) Project cannot employ all in the community	
10) No one is working at home	
11) Life is still the same / No change	
12) Too many tasks given	
13) People do not treat co workers well	
14) Don't know	
15) Other (record answer)	
(DO NOT READ LIST)	
3.6 What did you expect from this TIM Works	
project before it commenced?	
1) More jobs for the community	
2) More income for the community	
3) Workers to gain work experience	
4) Workers to learn new skills	
5) Don't know	
6) Other (record answer)	
(DO NOT READ LIST)	
3.7 Were your expectations met, exceeded or not	
met?	
1) Expectations NOT met	
2) Expectations met	
3) Expectations exceeded	
3.8 Why do you say this for expectations met,	
exceeded or not met?	
20 D di'd dha dha anisad han haa	
3.9 Do you think that the project has been effectively managed?	
3.9 Do you think that the project has been effectively managed?	
effectively managed?	
effectively managed?  1) Yes	
effectively managed?  1) Yes 2) No	
effectively managed?  1) Yes	
effectively managed?  1) Yes 2) No  3.9.1 Please provide a reason for your answer.	
effectively managed?  1) Yes 2) No  3.9.1 Please provide a reason for your answer.  1) Work well as a team	
effectively managed?  1) Yes 2) No  3.9.1 Please provide a reason for your answer.  1) Work well as a team 2) We are all treated equally	
effectively managed?  1) Yes 2) No 3.9.1 Please provide a reason for your answer.  1) Work well as a team 2) We are all treated equally 3) Coordinator always willing to listen to us	
effectively managed?  1) Yes 2) No  3.9.1 Please provide a reason for your answer.  1) Work well as a team 2) We are all treated equally 3) Coordinator always willing to listen to us 4) Never without supplies / materials	
effectively managed?  1) Yes 2) No  3.9.1 Please provide a reason for your answer.  1) Work well as a team 2) We are all treated equally 3) Coordinator always willing to listen to us 4) Never without supplies / materials 5) Usually paid on time	
1) Yes 2) No 3.9.1 Please provide a reason for your answer.  1) Work well as a team 2) We are all treated equally 3) Coordinator always willing to listen to us 4) Never without supplies / materials 5) Usually paid on time 6) Problems are resolved collaboratively	
effectively managed?  1) Yes 2) No  3.9.1 Please provide a reason for your answer.  1) Work well as a team 2) We are all treated equally 3) Coordinator always willing to listen to us 4) Never without supplies / materials 5) Usually paid on time	
1) Yes 2) No 3.9.1 Please provide a reason for your answer.  1) Work well as a team 2) We are all treated equally 3) Coordinator always willing to listen to us 4) Never without supplies / materials 5) Usually paid on time 6) Problems are resolved collaboratively 7) Project is still operating	
1) Yes 2) No 3.9.1 Please provide a reason for your answer.  1) Work well as a team 2) We are all treated equally 3) Coordinator always willing to listen to us 4) Never without supplies / materials 5) Usually paid on time 6) Problems are resolved collaboratively 7) Project is still operating  8) Contractor never present	
1) Yes 2) No 3.9.1 Please provide a reason for your answer.  1) Work well as a team 2) We are all treated equally 3) Coordinator always willing to listen to us 4) Never without supplies / materials 5) Usually paid on time 6) Problems are resolved collaboratively 7) Project is still operating  8) Contractor never present 9) Rarely paid on time or under paid	
1) Yes 2) No 3.9.1 Please provide a reason for your answer.  1) Work well as a team 2) We are all treated equally 3) Coordinator always willing to listen to us 4) Never without supplies / materials 5) Usually paid on time 6) Problems are resolved collaboratively 7) Project is still operating  8) Contractor never present 9) Rarely paid on time or under paid 10) No straight answers given to questions	
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(DO NOT READ LIST)	
3.10 Do you think that TIM Works is helping	
workers to improve their livelihoods?	
1) \$7	
1) Yes	
2) No	
3.10.1 Please provide a reason for your answer.	
1) Created jobs and providing income	
2) People are now getting skills	
3) Improved or better income than before	
4) Able to send children to school	
5) Able to start own business	
6) Improved access to markets	
7) Improved access to services	
6) Wages are too low	
7) Wages are paid late	
8) Our income is still the same	
9) Don't know	
10) Other (record answer)	
3.11. Do you think that TIM Works is helping to	
improve your access to social services and	
markets?	
1) Yes	
2) No	
3.11.2 Please provide an explanation for your	
answer.	
3.12 What do your biggest needs relate to?	
3	
1) Health	
2) Education	
3) Infrastructure	
4) Access to financial services	
5) Access to transport	
6) Agricultural development	
7) Other (record answer)	
3.12.1 Please describe how TIM Works helps to	
meet the needs that you identified.	
John Maria	
3.12.2 Please describe how TIM Works could be	
improved to meet the needs that you identified	
better.	
NOVOL 1	

## TIM Works - Guide for structured interviews with community stakeholders

<u>Instructions</u>: Interview people who have lived in the area for longer than three months and specifically target people who are local stakeholders who may know something about the impact of TIM Works project on residents lives in the area. Target the following types of people: shopkeepers; social workers; teachers; Advisory Committee members or other community workers.

Introduction: Hello, we would like to obtain your views on TIM Works projects in the area where you live. This is part of a mid-term evaluation of these projects commissioned by the ILO. We are interested to find out how TIM Works projects have benefited workers on the programmes as well as people living in the area where the programmes are active. Your assistance with this project will be appreciated.

Project district				
Project town/village				
Position of respondent in the community				
	1. Project background			
1.1 How long have you lived in this area?				
1.2 Have you heard of the TIM Works project in this area?				
1.2.1 If yes, how long has the project been in existence for in this area?				
* · · · · · · · · · · · · · · · · · · ·				
1.2.2 If yes, do you know of someone in this area (a friend, acquaintance, family member) who has worked on the project or who is currently working on the project?  [PROBE: friend, relative, family member, or someone else]				
1.2.3, If yes, how did people living in this area hear about the project?				

2. Livelihoods: Let us now explore your views on the way this project has benefited workers, their families, and the people living in the area around the project.		
People you know who work/have worked on the project, may have told you some things about work on project and how it has affected their lives and the lives of their families. In what ways has the programme benefited them?		
<b>2.1 Do you think the project has improved people's standard of living and how?</b> [PROBE: ability to feed children in their household and the diet of the household in general]		
<b>2.2</b> What impact has the project had on learners attending school in the area? [PROBE: more children attending school, learning progress –improved numeracy and literacy]?		
2.3 Has the project improved their households' ability to pay for basic household services such as water and electricity?		
2.4 Has the project improved the ability of participants to provide an income for families/households? [PROBE: reasons]		
2.5 Has it benefited people in respect of skills or training acquired whilst on the programme and how?  [PROBE: the types of skills/education they have acquired]		
[2110 22. and speed of status education and many adjusted]		

## **TIM Works -Guide for Focus Groups with Programme Beneficiaries**

Start off by introducing yourself and checking that everyone is comfortable with the language you are going to use. Then ask all the participants to briefly introduce themselves.

My name is .... I am a research officer and I work for the ILO's Employment Intensive Investment Programme. I am helping to conduct a mid-term evaluation of the TIM Works programme and I am interested to know how this programme has affected you, your family and your community.

We want to talk to you about your experiences with TIM Works in your area. The discussion today is aimed at finding out what TIM Works means to you, what benefits you get from the work you do on the project and what opportunities TIM Works has opened up for you.

1. **Project Background:** Before we start talking about specific issues relating to this TIM Works project. Tell me about when the project started; how you heard about the project and how you became involved in it; what work you specifically do on the project

NOTE TO MODERATOR: The aim here is to get some background information on the TIM Works project that participants are involved in. Specific issues to be covered by the moderator are:

- When did the TIM Works project first start in this area?
- How did participants hear about the project? [PROBE: through a friend/family member; the local authority)
- How did you get a job with TIM Works? [PROBE: did you apply to the programme or were you recruited and who were you recruited by?
- 2. **Impact on Livelihoods:** Let us now explore the way this TIM Works project has benefited you and the people living in the area around the project

<u>NOTE TO MODERATOR:</u> The aim of this section is to explore the impact of the TIM Works project on peoples' lives and the way they earn a living. Specific issues which the moderator should explore in this section are the following:

- Before you started working on this project, how did you get money to buy basic things like food? (i.e. domestic work, informal business, husband works, etc.) [PROBE: If other family members work, what kind of work do they do?]
  - Were you employed or unemployed before working on the programme [Instruction
    to moderator ask for a show of hands and then count how many employed versus
    unemployed participants]
    - For workers who were unemployed before working on the programme: how long had you been without a job?
    - Did anyone else in your household have a job before the Tim Works project started in your area?
    - For workers who had work before working on the project: did you give up/reduce your other work or domestic activities (especially for women) in order to be able to work for Tim Works?

- If you gave up this work, **why?** [PROBE: did someone else in your household take up your work/activities whilst you were working for TIM Works?
- What are some of the direct benefits for you working on the TIM Works project, other than the money you earn (PROBE: for example, increased access to transport or markets)?
- 3. **Spending patterns; access to services and longer term benefits:** Can we now look at the way this TIM Works project has influenced the things you buy, especially foods, other goods and services and whether the benefits you have derived from working on this project will be felt after you have left the project. Finally, we also want to explore whether the project has benefited people living in this area, but who are not directly working on the project.

<u>NOTE TO MODERATOR:</u> The aim of this section is to assess what <u>other</u> impacts the Tim Works project has had on workers and other people living in their area who are not directly involved with the project and whether the project has longer-term beneficial outcomes for the community even after it has been completed. The moderator should cover the following themes in this section:

- Has life generally improved, stayed the same or become worse since you have worked for the TIM Works project? [PROBE: reasons].
- What impact has this project had on your family members? [PROBE: better household nutrition; better access to health care and education for children etc.]
  - o How has being employed on this programme changed the way you live?
- What do you spend most of your income on and does your household have more savings since working for the TIM Works project?
  - o [PROBE: Are there things that you are able to buy now that you were not able to buy before becoming employed by this project? What kind of things?
  - o [PROBE: Has there been a change in the number of people you support financially, in comparison to the number of people you have supported before working the TIM Works project? Reasons.
  - o [PROBE: Since you started working on the project, has there been a change in your ability or (or ability of your family) to access services like health care and education and what has changed?
- Is there a difference between the kinds of foods that your family buys now and the kinds of foods that you bought before working here on the project? Give examples.
- Do you believe that there will be any medium to long-term benefit to you or your family after the TIM Works project is completed and your work has ended?
  - o [PROBE: reasons for your answer]
- What about the wider community? What impact has the TIM Works project had on the community in your area? What has been positive and what has been negative with respect to this impact? [PROBE: reasons for positive/negative impact]
- What will you do when the programme ends? [PROBE: what work will you do?]
- **4. Working conditions and work/worker related issues:** Let us talk about the kinds of work you do on the project, issues around allocation of tasks, and generally the conditions under which you are working.

<u>NOTE TO MODERATOR</u>: The aim of this section is assess workers' impressions on their employment and working conditions with the TIM Works project.

- What kinds of work do you do on the project? [Instructions to moderator: ask round-robin for the kinds of work people do on the project]
- Tell us something about the working conditions on the project [PROBE: are you satisfied with your working conditions and why?]
- In many work situations, workers may be happy or unhappy with their working conditions. Do you experience problems whilst you work on this project? If yes, what kinds of problems? [PROBE: for example some people may be favoured over others working on the project in respect of the kind of work they do; the amount of hours they spend working or the way they are paid for example]
- **5. General, closing questions:** Finally, let's conclude by exploring some of your general impressions of the TIM Works project you have been working on.

<u>NOTE TO MODERATOR</u>: the aim of this section is to finish off the discussion by asking participants for their general impressions of the TIM Works project and how such a project could be improved in the future. The moderator should explore the following specific issues:

- What was life like in general before the TIM Works project came to their area, and what has life been like since the project was established in your area?
  - o [PROBE: have things stayed the same? become worse? or has life improved since the TIM Works project came to your area? Ask participants for examples to illustrate their views].
- What do you think of the TIM Works project? How would you change it if you were given the opportunity?

## **Annex 7 – Detailed Description of the Evaluation Methodology**

Regions and sites selected for site inspections and interviews were selected using a purposive sampling strategy, based on the geographic coverage of the TIM-Works Project. Questionnaires were prepared for interviews with workers and community members living within the area of influence of the road but not participating in the road works.

Participants were selected on the basis of quota sampling, with an equal number of males and females interviewed. Similarly, an equal number of those that were below 30 and 30 or above were interviewed. For the individual and focus-group interviews with workers and with members of households living in the area of influence of the road, questionnaires were developed and these are presented in Annex 6.

Available information and time constraints limited the mission's scope for conducting an in-depth analysis of the labour productivities. For similar reasons, and because the time has been too short since the start of the Project to enable a meaningful evaluation of sustainable effects/impacts, it has not been possible nor meaningful to provide an in-depth analysis of the impact of the Project on poverty and local economic development. The mission did however conduct limited numbers of interviews and focus-group meetings to obtain an indicative assessment of the effects and the impacts of the Project related to improved access and its contribution to poverty reduction.

The UN evaluation norms, standards and ethical safeguards have been followed in the evaluation. Evaluation methods used included:

- the identification and review of available documents (from the TIM Works Project and other relevant documentation form other projects and donors);
- meetings and interviews with the involved government departments, donors and ILO staff;
- structured and semi-structured interviews with workers and contractors and their staff;
- focus-group meetings with workers and beneficiary households;
- visual inspections and observations of the works at selected sites;
- inspections of available documentation at the work-sites;
- photographs:
- a stakeholder workshop at the completion of the field mission.

Considering the limited time available project sites covered during the field visits were selected using a purposive sampling strategy, based on the geographic coverage of TIM Works and taking into account the different types of activities undertaken by the Project (maintenance and rehabilitation) and their status (completed or on-going).

Six in-depth interviews were conducted with project beneficiaries and three in-depth interviews were held with community beneficiaries. A questionnaire (that had been previously piloted) was developed for both programme workers and community members that were not working on the programme.

A set of objective and subjective measures of quality of life were included in the survey, in order to inform on the socio-economic effects of the programme. Participants were selected on the basis of quota sampling, with an equal number of males and females interviewed.

Similarly, an equal number of those that were below 30 and 30 or above were interviewed. In addition to the individual interviews, two focus group meetings were held with project beneficiaries and community beneficiaries. For these focus group meetings a questionnaire was also developed (the questionnaires are presented in Annex 6). The mission also conducted semi-structured on-site interviews with workers (unskilled and skilled), contractors, supervisors and engineers.

The table 1 below summarizes the coverage of the schemes that were sampled during the field mission.

**Table 1: Overview of Coverage of Sample during Field Mission** 

1	Rehabilitation	7 schemes visited in 4 districts in central and eastern Timor-Leste, i.e.44% of all sites where		
	Works	works are on-going, covering 57% of the districts where schemes are being implemented. The		
		visited sites also included completed sections. In-depth interviews and focus group meetings		
		with workers and project beneficiaries conducted at 3 sites, covering 6 interviews with		
		workers, 3 interviews with project beneficiaries and 2 focus group meetings.		
		Semi-structured interviews at all visited sites conducted with workers (about 20 workers),		
		supervisors (7 supervisors) and gang leaders (7 gang leaders). Semi-structured interviews		
		conducted at 4 sites with site engineers and at 1 site with 3 contractors.		
2	Maintenance	7 schemes visited in 4 districts in central and eastern Timor-Leste, i.e. covering 4 packages of		
	Works	maintenances out of the on-going 12 maintenance packages (i.e. coverage 33%). The project		
		is engaged in maintenance activities in 13 districts, so the geographic coverage of the sample		
		is about 31%. Completed maintenance schemes in these 4 districts were also visited.		
		Interviews were held with 2 community contractors and with 7 workers employed in		
		maintenance activities		

Subjects that were covered during the semi-structured interviews with the workers, supervisors, engineers and contractors are listed in table 2. Skilled workers include e.g. masons, carpenters, gang leaders and persons responsible for setting out the works.

Table 2: Key Questions Asked during Semi-structured Interviews

_	** 1 111 1	***	
1	Unskilled	Wage rate paid and timeliness of the payment of wages	
	workers	Duration of employment and worker rotation	
		<ul> <li>Understanding of the concept of the task-work system</li> </ul>	
		<ul> <li>Working conditions and working hours</li> </ul>	
		<ul> <li>Expected effect and impact of the improved road</li> </ul>	
		Main source of income	
2	Skilled	Experience in works similar to the works done in TIM Works	
	workers	Wage rate paid and timeliness of the payment of the wages	
		Duration of employment and worker rotation	
		Understanding of the task-work system and labour organization at the site	
		Education level and simple numerical skills tests	
		Understanding about setting out works and about quality control issues	
		Training received and working conditions and working hours	
		Expected effect and impact of the improved road	
		Main source of income	
3	Supervisors	Experience in works similar to the works done in TIM Works	
		Amount and timing of wages paid to the workers and worker rotation	
		Record keeping (daily and weekly site plans and attendance lists)	
		Understanding about setting out works and about quality control issues	
		<ul> <li>Understanding of the task-work system and labour organization at the site</li> </ul>	
		Challenges faced in organizing and implementing site supervision	
		Questions about labour productivities	
		Availability of local construction materials	
4	Site-engineers	Experience in works similar to the works done in TIM Works	
		Amount and timing of wages paid to the workers	
		Record keeping (daily and weekly site plans and attendance lists)	
		Understanding about setting out works and about quality control issues	
		Understanding of the task-work system and labour organization at the site	
		Challenges faced in site supervision	
		Questions about labour productivities	
		Availability of local construction materials	
5	Private	Experience in works similar to the works done in TIM Works	
	contractors	Training received from TIM Works	
		Understanding of designs, BoQs, cost-estimates, site organization	
		Wages paid to workers and frequency of payment	
6	Community	Understanding of the task-work system and the required maintenance work	
	contractors	Wages paid to workers and timing and frequency of the payments	
		Simple numerical tests and understanding of quality control issues	

# **Annex 8 – Findings from Detailed Interviews and Focus Group Meetings** with Community Workers and Programme Beneficiaries

It should be noted that, considering the small sample of project beneficiaries covered through the surveys, the findings of the survey are not considered conclusive and should be interpreted as indicative only.

## A. Findings from In-depth Interviews and Focus Group Meetings

## 1. Demographic Profile

People in the rural areas of Timor-Leste have little access to markets – both in terms of physical access and in terms of purchasing power. Therefore, strategies to rebuild the nation that can improve infrastructure, while increasing purchasing power serve a dual purpose and if implemented effectively can support social transformation and reduce risk.

Currently, people in rural areas walk an average of 19 minutes to reach a road that is passable by a vehicle in the dry season (Ministerio das Financas et al., 2008: 22). Communities in rural areas typically use roads to access health care (69.1 per cent), to buy items (63.2 per cent) and to go to school (59.1 per cent). In the wet season the accessibility of these roads decreases by over one third. It is important to note that roads that are not passable year round have implications for school attendance, community health and community wealth.

The rural areas of Timor-Leste account for 76.2 per cent of the Nation's poor. <sup>42</sup> Over 50 per cent of the rural population fails to attain sufficient calories and basic non-food items to pass the upper poverty line of \$0.88 USD per day. 82 per cent of the consumption of the rural poor goes is on food, which means that little remains to support other basic needs related to health and education (Ministerio das Financas et al., 2008: 18).

Those that are engaged in subsistence agriculture are typically the poorest. All people that participated in interviews reported that before joining TIM Works they derived their livelihood from subsistence agriculture. This suggests that a struggle for survival exists for workers that are involved in the programme. The programme's wage income transfer provides the household with a cash injection, which can increase purchasing power in the short-term.

Of all respondents interviewed, the average household had 7.2 members and within the household 2.8 people earned were earning an income. Data from the Timor-Leste Survey of Living Standards indicates that households with seven or more people have the highest incidence of poverty, which therefore suggests that the programme may be well targeted (Ministerio das Financas et al., 2008: 19).

All respondents lived in traditional housing structures, which did not have access to electricity or running water. Proximity to the nearest supply of drinking water varied greatly, ranging from five meters to two kilometers. Educational attainment of those interviewed varied from never having had attended school to having completed junior high school. All interviewees reported that children within their household that were of school going age were attending school.

Beneficiaries were asked about their biggest unmet need. The most common needs identified included:

- Access to monetary income to increase purchasing power;
- Access to transport to increase connectivity to markets and services;
- Access to clean and safe drinking water.

 $<sup>^{42}</sup>$  The poorest 40 per cent of population comprise the poor reference group.

## 2. Entry into the Project and Labour Market Activities

The respondents were asked how they found out about the TIM Works project. It was found that the local leader was the primary source of information about the work opportunities extended by TIM Works. Other sources of information included contractors or supervisors already working on the Project. Interviews with local leaders and TIM Works team members confirmed that community meetings is the main channel for promoting awareness of the programme and soliciting participation. The recruitment process for entry to the programme is minimal; with none of the interviewed programme beneficiaries reporting that they participated in a recruitment process in order to access the project. Those interviewed were also not registered with the District Employment Office as job seekers.

The beneficiaries reported that they worked six days per week, which accumulates to between 24 and 30 days per month. There was no difference in age or gender for the number of days worked per week. An incidence of shorter working weeks was reported by one beneficiary at the start of the programme. All beneficiaries reported an expectation to continue working in the project until its completion.

There were substantial differences between the total numbers of days worked on the project across project sites visited. Some projects offered work opportunities for one month, while other areas (usually areas with a smaller population and therefore a constrained supply of labour) offered work opportunities for up to six months.

All interviewed workers were engaged in subsistence agriculture prior to becoming involved in the Project. The main reason for giving up the activities that they were involved in prior to joining the Project was because TIM Works paid more than the aforementioned activities did. Interviewees reported that they had reduced their activities in subsistence agriculture due to a lack of time or due to natural fluctuations in the agricultural cycle (i.e. they worked on TIM Works during the agricultural slack season). Once the project is completed interviewees generally expected to return to agricultural production.

## 3. Perception of the Project

Project beneficiaries were asked about their views on the TIM works Project within their local community. They were asked to indicate whether they agreed or disagreed with statements about leadership and management, satisfaction with working conditions and satisfaction with the Project.

The respondents were asked whether the Project is well managed, whether they are satisfied with the Project's leadership and the working conditions, whether men and women are being paid equal wages for work of equal value and whether the work is considered important to the people in their area. Overall workers voiced general agreement with the statements, revealing positive views with all aspects of the Project mentioned in the interview process.

Beneficiaries agreed that the Project had been effectively managed. Effective management was generally attributed towards the task-based wage system. Beneficiaries perceived that the Project is very important to their local community, primarily due to the wage income transfer function of the Project. Beneficiaries anticipated that the Project could lead to improved access to social services and markets once completed.

Workers reported that the payment of their wages was sometimes delayed and that it was not always clear to them when they would be paid. In some cases it was also mentioned that there is a lack of clarity regarding the task based wage system and how rates are derived for the different tasks undertaken.

In regard to access, all interviewees reported that access to services and markets was poor before the TIM Works project started. Many of the people that were interviewed are living near schemes that were only partially completed, which therefore made it difficult for them to gauge the impact that the

improved road quality would have on the community. However, many reported an expectation that mobile health services would benefit from the improvements and that traders or transport providers may come if they are able to learn that the standard of the road has been improved.

## 4. Socio-economic Analysis

The analysis undertaken primarily focused on income measures of poverty. This included estimates of current total household monetary income per month; estimates of how much money is earned per month from various sources (including money from family members; businesses; salaries and wages; amounts received from government grants). Non-income measures of poverty included consideration of debt/savings, nutritional intake and perceptions of quality of life (subjective wellbeing).

## 4.1 Income measures of poverty

With respect to total household income, substantial differences were found between the TIM Works beneficiaries themselves and the community in general. For example, those that were interviewed that did not work on the Project had significantly lower monetary incomes than respondents working in the Project. The table 1 below provides an average of the reported monetary income earned by the Project beneficiaries households while employed on the Project. Each household had an average of 7.2 members and within the household 2.8 people earned were earning an income.

Table 1: Monthly household income while on working on the TIM Works programme (USD)

Monthly household income while working on TIM Works	<b>United States dollar</b>
Money from family members living outside household	4
Money from sale of agricultural produce	7
Salaries/Wages/Earnings from other family members	62
Salaries/Wages/Earnings from TIM Works	51

Data collected reveals that most households are able to derive some income from the sale of agricultural produce and remittance transfers. Although, it was noted that remittance transfers were irregular. Most of the people interviewed also had another person that lived within their household working on TIM Works projects – which explains the high income of "other family members". On average one other person from the household worked on TIM Works. This person may have been employed as a supervisor, engineer or programme beneficiary.

It was also noted that none of the households that were involved in TIM Works received cash transfers from the government (old age pension; military service). Indeed, in interviews with community members it was revealed that households that were receiving government grants had chosen not to seek employment on the programme.

Respondents were asked whether they produced any food for household consumption from agricultural activities. All interviewees reported engagement in such activities. The majority of produce derived from agricultural activities was for household consumption. On average households (average size – 7.2) earned \$7 USD from sale of produce. This monetary income was typically used to purchase basic household items, such as soap and oil. Participation in TIM Works provided beneficiary households with a relatively substantial additional monetary injection. This income was put towards purchase of basic household items. Beneficiaries also reported that they were able to purchase additional items such as clothing and pay costs associated with education of their children.

Interviewees were asked to consider how their monetary income fluctuated throughout the year. It was reported that household income could be as little as \$10 USD per month and that it could be a maximum of \$150 USD per month. Increase in monthly household income usually related to the sale

of an animal or involvement in a job creation projects such as TIM Works. It was reported that this occurred on a needs basis, between one-to-two times per year.

## 4.2 Non-income measures of poverty

To further investigate the depth of poverty of beneficiary households they were asked about their savings and debt patterns. Respondents were asked whether they currently had any savings or debt before joining TIM Works. None of the interviewees reported that they had savings before joining TIM Works. However, some interviewees reported that they were able to accumulate some savings derived from the TIM Works income. Longer involvement allowed for the accumulation of more savings, which could to go towards home improvement and improvement of living standards. Half of those interviewed report that they had some debt. This debt ranged between \$10 USD and \$50 USD. There was no significant difference in worker debt before and after involvement in the Project.

## B. Findings from Semi-structured Interviews with Workers, Contractors, Supervisors and Engineers

The key findings from the semi-structured interviews with workers, contractors, supervisors and engineers are summarized below:

- Unskilled labourers are being paid US\$ 2 per day and skilled labourers US\$ 3-5 per day. This is also the case for the workers who are employed by the private contractors. Payments are usually made within about two weeks after the end of the month. Sometimes payments are delayed. Overall the workers indicated that they were satisfied with the wages offered and with the timeliness of the wage payments.
- The duration of employment in TIM Works varied much between the individual workers. It varied from 2 weeks to 6 months. Skilled workers like gang leaders are usually employed for longer periods of time than unskilled workers.
- The concept of the task-work system is not always well understood. This is reflected in the observed sub-optimum productivities of labour and equipment. Quite some 'idle' time was observed.
- Workers mentioned that they work between 4-6 hourse per day to complete a task. At a number of visited sites this could also be observed.
- The main source of income for the unskilled labourers is subsistence agriculture. Skilled workers like gang leaders had usually completed at least primary education.
- The interviewed workers indicated that they expected that, once the road was completed, this would have positive effects on the local economy (e.g. through reduced transportation costs, improved public transport, more movement of goods).
- The engineers and supervisors had a basic understanding of basic quality control issues. However it was also observed that this knowledge was not always put into practice (e.g. regarding ensuring optimum moisture content for compaction and the quality of the gravel to be used in the construction works). The availability of water for compaction was cited as one of the challenges that the supervisors and site engineers faced.
- The interviewed contractors appeared to have a good understanding about the design, BoQ and cost-estimate of the works that they were contracted to implement. They also appeared to be well familiar with quality control issues and the organization of the works on-site.
- The site engineers and supervisors appear to keep site records like work plans and attendance lists, although it was sometimes noted that the records were not up to date.
- Contractors and skilled workers were able to do simple numerical tests successfully. One of the community contractors did not manage to do a simple numerical test.