EVALUATION REPORT

- **Evaluation Title:** **Fourth Rural Development Programme (RDP IV), Enhancing Rural Access (ERA) Project**
- **ILO TC/SYMBOL:** **TIM/11/01/EEC**
- **Type of Evaluation :** **Independent Final Evaluation**
- **Country :** **Timor Leste**
- **Date of the evaluation:** **February 2016**
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- **ILO Administrative Office:** **ILO Country Office for Timor Leste**
- **ILO Technical Backstopping Office:** **Bangkok**
- **Date project ends:** **21 February 2016**
- **Donor: country and budget:** **European Union Euro 11.6 million** (USD 15,482,292)
- **Evaluation Manager:** **Miaw Tiang Tang**
- **Evaluation Budget:** **USD 25,000**
- **Key Words:** Labour intensive employment, infrastructure, transport, construction industry, engineering

This evaluation has been conducted according to ILO's evaluation policies and procedures. It has not been professionally edited, but has undergone quality control by the ILO Evaluation Unit.

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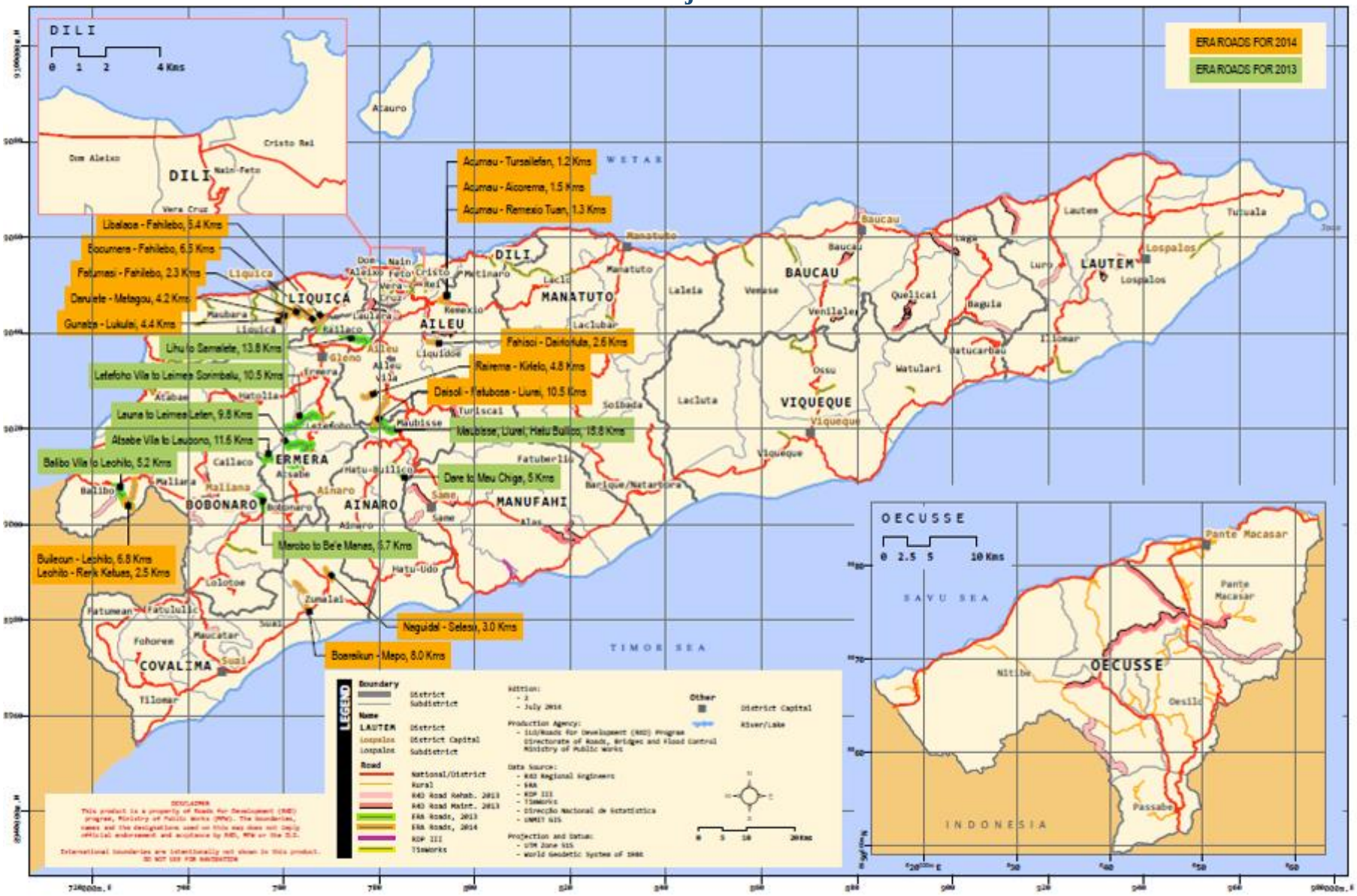
Abbreviations

ASEAN	Association of Southeast Asian Nations
BDS	Business development services
BoQ	Bill of quantities
BOSS	Business Opportunities and Support Systems (ILO Project with IADE)
CCI-TL	Chambers of Commerce and Industry in Timor-Leste
CTA	(ILO) Chief Technical Adviser
DAC	Development Assistance Committee
DFAT	Australian Government Department of Foreign Affairs and Trade (which implements Australia's development assistance program.
Don Bosco	Don Bosco Foundation Training Centre
DRBFC	Directorate of Roads Bridges and Flood Control
DWCP	(ILO) Timor-Leste Decent Work Country Programme 2008-2013
EC	European Commission
EDF 10	Evaluation of the European Union's Cooperation with Timor-Leste
ERA	Enhancing Rural Access (project)
EU	European Union
FGD	Focus group discussion
HH	Households
IADE	Instituto de Apoio ao Desenvolvimento (Business Development Institute - ERA implementation partner)
IFE	Independent final evaluation
ILO	International Labour Organization
INDMO	Instituto Nacional de Desenvolvimento de Mão de Obra
KSTL	Confederation of Trade Unions in Timor-Leste (Konfederasaun Syndikat Timor-Leste)
LBT	Labour-based technology
MDG	Millennium Development Goals
M&E	Monitoring and evaluation
MECAE	State Ministry for the Coordination of Economic Affairs
MFAT	(New Zealand) Ministry of Foreign Affairs and Trade
MIS	Management information system
MPWTC	Ministry of Public Works, Transport and Communications
MTR	Mid-term review
OSH	Occupational Safety and Health
PDID	Planeamento Desenvolvimento Integrado Distrital (Integrated District Development Planning).
PMU	Project management unit
PNDS	Programa Nasionál Dezenvolvimentu Suku, (National Program for Village Development)
PSC	Project Steering Committee
R4D	Roads for Development (Rural Road Programme implemented by ILO with MPWTC)
R4DIMR15	(R4D) Impact Monitoring Report October 2015
RDP II, III, IV	EU Rural Development Programmes No II, III and IV (ERA is part of RDP IV)
ROM	Results oriented monitoring mission (by ILO)
RRS	Draft Rural Roads Master Plan and Investment Strategy, GoTL/MPWTCTC (September 2015)
SCS	Significant change story (an ERA M&E tool)
SDP	Strategic Development Plan (2011-2030)
SEPFOPE	Secretariat of State for Vocational Training and Employment Policy
ToR	Terms of reference
TIM Works	Previous project implemented by the ILO with SEPFOPE, which preceded ERA
UNDAF	United Nations Development Assistance Framework
USD	United States dollar

ERA Project Road Locations



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Executive Summary

Project Background and Context

The International Labour Organisation (ILO) has implemented the Enhancing Road Access project (ERA) as part of the European Union (EU) funded 4th Rural Development Programme (RDP IV) from 2011 to 2016. The ERA project purpose was: '*The access of rural communities to services and to income opportunities is improved through the rehabilitation and maintenance of rural roads'*. The expected results were: R1. Labour-based rural road rehabilitation contracts effectively executed; R.2. Local civil works contractors and supervisors competent in contract management; and, R.3. Local civil works contractors and supervisors competent in labour-based rural road rehabilitation and maintenance.

The project undertook rural road rehabilitation and maintenance in selected western districts (Aileu, Ainaro, Bobonaro, Covalima, Ermera and Liquica) by capacitating (training, coaching and access to trial contracts) small construction contractors to carry out construction and maintenance works using labour-based technologies (LBT). The ILO Country Office for Indonesia and Timor Leste administered the project through the ILO Programme office for Timor Leste. Working under the State Ministry for the Coordination of Economic Affairs (MECAE), the implementation management team of five international engineers and specialists with locally employed engineers and support staff worked with two Timor-Leste national training institutions – the Don Bosco Foundation Training Centre (Don Bosco) and the Instituto de Apoio ao Desenvolvimento (IADE). The organisation's capacity to deliver and support comprehensive training courses and ongoing coaching of ERA trained company directors, engineers and supervisors was developed.

The project was designed in 2010, implemented from late 2011 and closed in late February 2016 with no significant disruptions. The initial budget allocation of Euro 10 million was increased to Euro 11.6 million.

Independent Final Evaluation

Background. The evaluation assessed the relevance, performance and success of project activities. It identified achievements, impacts, good practices and lessons learned from the project that the ILO, MECAE, the Government of Timor Leste (GoTL), the Ministry of Public Works, Transport and Communications (MPWTC) and its Directorate of Roads, Bridges and Flood Control (DRBFC), Don Bosco, IADE and other relevant technical ministries could replicable and the necessary conditions for sustainability. The evaluation assessed all implementation activities.
Knowledge and information from the evaluation will be used as the basis for better design and management for results of potential next phase of the project, future ILO activities in Timor Leste and the and other rural infrastructure projects, including the Australian Government supported Roads for Development (R4D) project. The evaluation supports public accountability of the Government of Timor Leste and the ILO.

Clients and users of the evaluation are:

- The ILO Programme office in Timor Leste and ILO Country office for Indonesia and Timor Leste
- The Government of Timor Leste as main beneficiary
- MECAE, MPWTC, DRBFC, IADE and Don Bosco
- Communities and contractors who were involved and benefited from the project
- ILO headquarters and Decent Work Team Bangkok
- EU as the funding agency
- The Chamber of Commerce and Industry (CCI-Timor-Leste) and the labour union organisation (KSTL).

The evaluation assessed project activities from November 2011 to the closing in February 2016, and included the six districts and all organisations participating in the project.

Methodology of evaluation. The evaluation used ILO and OECD DAC evaluation criteria. The evaluation combined document and database information reviews with key informant interviews, focus group discussions and field visits to rehabilitated roads and benefiting communities. Five project districts were visited. Impact and outcome data has been sourced from both the ERA M&E system information and from monitoring and evaluation (M&E) activities undertaken by the parallel R4D project which has used ERA developed training and coaching systems.

A final stakeholder workshop provided feedback on initial findings and conclusions and recommendations.

Evaluation Findings

Project Relevance and Design

- ERA aligned with national priorities to improve rural roads, documented in the Draft Rural Roads Master Plan and Investment Strategy.
- As rural road investment since independence had been very low, the ERA roads investments (approximately USD 8.75 million) was a valuable addition.
- The ERA (and R4D) road construction activities addressed the shortage of rural road contractors by creating opportunities for contractors to secure rural road rehabilitation and maintenance work within a supporting environment which allowed small construction companies and staff to develop their skills.
- ERA addressed the lack of GoTL institutional capacity to develop and support rural road (and other) contractor capacity. Development of the Don Bosco Training Centre and IADE technical and management training capacity provides an ongoing training resource with accreditation and compliance with national competency standards.

Effectiveness

- 62 rehabilitation contract packages, in eight batches, were issued. These contracts cover a total of 140 km of rural roads, in the six ERA districts. 49 contracts (79%) were completed on time and to agreed budget including approved time and cost extensions. \
- Only six contracts (10%) had to be terminated due to poor contractor performance. The failure of some contractors to meet project standards should be seen as part of the contractor capacity building process.
- The ERA roads are generally well constructed using an appropriate level of technology and meet the proposed national rural road pavement standards set out in the new Rural Road Strategy.
- The ERA training and support provided practical technical and management skills to entrepreneurs (contractors) and their engineering staff (graduate engineers) and supervisors.
- Linking of classroom training to trial road rehabilitation contracts supported by coaching strengthens the learning processes, and develops additional rural roads cost-effectively.
- The road rehabilitation and maintenance courses prepared and delivered by Don Bosco and IADE have received certification through the national qualifications systems overseen by INDMO.
- R4D specifies that all contractor staff nominated in tenders for R4D contracts should have INDMO certified ERA training. Currently companies cannot receive INDMO accreditation.
- Don Bosco, with strong support from ERA resources, has developed a strong cadre of skilled trainers. Ongoing funding through training contracts and / or incremental funding is required to ensure the Don Bosco rural roads training team is retained.

Efficiency

- About 89 % of ERA resources went into road construction (construction or supporting TA) while about 12 % supported the training and capacity building activities
- The rehabilitation costs per kilometre (USD 50,000 to USD 72,000/km) are less than other indicative local rural road rehabilitation costs.
- ERA training costs for a contractor are about 1 % of the value of the ERA construction contracts and provide immediate improved contractor performance. The coaching / mentoring support to contractors was even more cost effective.
- Most unskilled community workers earned USD 50 – USD 100 from the contract work and were paid about USD 4.50 per day worked. Women had lower total earnings because they undertook unskilled work and had shorter inputs. This income was mostly used for household livelihood necessities.

Management of Implementation

- The project management (PMU) structure provided cost-effective support with about 17 % of the project budget allocated to project management costs.
- There were limited formal links to the Ministry of Public Works, Transport and Communications (MPWTC) rural road activities and rural road activities and minimal links to other agencies with rural road programs such as SEPFOPE, PDID and PNDS.
- No formal processes are in place to include the major rural road stakeholders in the PSC or other high level coordination activities.
- The ERA M&E system worked well considering the limited resources to analyse and make use of all the M&E information. The monitoring (training and contracting) and M&E databases support this.

Sustainability

- ERA has increased the pool of experienced and trained local contractors, particularly in the use and management of LBT which reduces the amount of specialised equipment required. The ERA project has supported 150 local small contracting companies to implement small rural road contracts. However, the capacity and experience of the participating contractors is still limited.
- The developing road contractors appreciated the ERA / R4D contract design and competitive tendering processes which reduce tendering risks.
- ERA has shown how LBT can be more cost – effective than using specialised equipment in rural road construction. An ongoing challenge for rural road (and other rural infrastructure development activities) is the shortage of skilled labour to build the supporting drainage and culvert infrastructure.
- ERA, with R4D, have developed LBT maintenance systems and techniques for rural roads which are now being used by the MPWTC with GoTL funding.
- Currently the training providers are dependent on GoTL or donors funding rural road rehabilitation to fund training, coaching and refresher training of R4D rural road contractors. If Don Bosco and IADE can retain their ERA trained contractor trainers, with limited further guidance and technical inputs, the organisations are capable of delivering the current well-documented training material
- The current training packages are not well enough developed to meet all the needs of the developing small road contractors to reach a level where they can implement rural road rehabilitation and maintenance activities with limited supervision.

Project Impact

The ERA goal was: '*The access of rural communities to services and to income opportunities is improved through the rehabilitation and maintenance of rural roads'*. Pre and post project data from Community Snapshots of participating sucos shows there has been a marked increase (more than doubled) in the communities assessment of market access with smaller improvements in access to education and health services (60 % - 100 %). Traffic count information complemented this data and showed a large increase in vehicle traffic through the participating sucos after the road rehabilitation work. R4D surveys showed significant (33 % to 40 %) decreases in transit times along the similar R4D rehabilitated rural roads.

Other benefits from ERA rural road activities

(i) **New businesses.** The evaluation field work identified some villages where workers reported investment of road work income into income generating businesses.

(ii) **Transport services.** Most villages reported village members had purchased motorbikes for transport services and, in some cases, trucks for transport services.

(iii) **Improvements in access to markets** included: easier access to suco and district markets; more traders coming into the villages to compete for purchasing production; ability to move larger volumes of production quickly (leading to up to 50 % increases in production and changes to more valuable crops); and, farmers can access better seeds and production technology driven by market needs;

ERA outcomes and outputs

The project has achieved its revised outcome and outputs results contributing to improved access.

R.1 Road contracts implemented;

- 140 km of rehabilitated road (Revised target 140 km)
- 7,300 households have improved access to rural roads (Target 5,600)
- 500,000 worker-days for 8,000 beneficiaries (Target 430,000 worker days for 7,200 villagers, reduced from 780,800 due to higher unit costs/reduced road length rehabilitated)

R.2 Local contractors and supervisors implement construction contract management

- 552 contract managers complete accredited training (Target: 500)

R.3 Local contractors and supervisors competent in labour-based rural road works

- 206 contracting companies completed rehabilitation training and 67 companies trained in routine maintenance (Target: 45 companies certified for rural road rehabilitation and 15 certified for rural road maintenance)
- 100 % of trained contractors engaged in competitive bidding and/or implementing small LBT rehabilitation and maintenance contracts (Target 70 %)

- 89 % completed trial contract to specifications (Target >65%)
- 550 contractor staff, 34 MPWTC supervisors and 23 others trained (Target: 415)

Conclusions

5.1 **ERA has developed a successful capacity building model.** The ERA model of integrated training, trial contracts and, initial coaching and mentoring support has been a cost-effective model for upgrading the skills of the local small construction contractors.

5.2 **Additional capacity development is needed.** The small contractors trained through ERA will require further training and coaching to consolidate their acquired skills. Most will also need further technical and business management training at a higher level to become sustainable road construction businesses. If additional donor or GoTL support (on a fee for service basis) is not available to continue the existing training and coaching, the ERA work will be largely; wasted. There is currently no national certification process for road contracting companies.

5.3 **Wider use of ERA developed rural road skills.** Other GoTL agencies (SEPFOPE, PDID and PNDS) which implement rural roads activities are not using the improved capacity of ERA trained contractors to improve their rural roads activities.

5.4 **The ERA integrated training model is not sustainable** without strong institutional linkages to and support from the GoTL and private sector, through the CCI-TL.

5.5 **Formal institutional linkages.** The high level ERA coordination group, the PSC, did not include the major ERA and, rural road rehabilitation and maintenance stakeholders, such as the DRBFC, SEPFOPE and district governments but included service providers. This is not an appropriate governance structure.

5.6 **Linkages to district administrations.** As the Disconcentration / Decentralization processes proceed, rural road rehabilitation and maintenance activities need to more closely link with district administrations to share information and develop capacity.

5.7 **Tripartite issues.** ERA has developed a strong working relationship with the GoTL and the private sector construction contractors and their representative organisation, the CCI-TL, which has been developed with ILO assistance. ERA has developed the capacity of and used both GoTL (IADE) and private (Don Bosco) training organisations. All these organisations participated in the PSC. The labour union organisation (KSTL) had very limited involvement in the project activities.

5.8 **Gender**. ERA almost achieved the target of 30 % of construction labourers being women with 25 % being achieved. Contractors restricted women's work inputs to lighter manual work activities which limited their potential inputs and earnings. Interviewed women indicated they could have undertaken heavier manual labouring work. The lower women's inputs were also due to more skilled labourers, usually men, being used for to build more than planned road structures. The project did not include a skills upgrading activity targeting women. About 30 % of construction contracts were won and implemented successfully by women owned construction companies.

5.9 P**roject signage.** The project awareness signage used on the project roads provided limited information to inform communities or users of the project activities or provide information that would improve the transparency of contracting and implementation arrangements. The project site signs used by R4D were much more informative and are a good example of Best Practice.

Lessons Learnt and Good Practices

Lessons Learned

(i) Participants in ERA training courses need to meet a minimum standard of knowledge and skills or they will have great difficulties completing the classroom and practical training. Pre-testing of knowledge in the technical area at the start of a course will both assist in screening out participants with limited potential.

(ii) Despite many new contractors being entrepreneurs who are motivated to run a contracting business, they do not have the business management knowledge and skills, such as director capacity, cash flow management, preparation of tenders and managing contracts, to profitably manage their businesses and, possibly, expand the businesses.

(iii) Changes in traffic loads after upgrading a rural road which provides an alternative to a low quality district road for through traffic need to be assessed at the design stage to ensure the planned rehabilitation is appropriate to the probable traffic load.

Emerging Good Practices

(i) Integrated road rehabilitation and maintenance implementation, supervision and management training package including use of coaching / mentoring. The benefits of integrating the training processes have been demonstrated by ERA and provide a cost-effective approach to improving contractor performance and improving road contract outcomes.

(ii) There is extensive road rehabilitation experience in very difficult third world environments where cost-effective appropriate technologies have been tried. Introducing regional engineers with experience in similar conditions to design and supervise implementation of alternative approaches is a cost-effective way of transferring technology.

(iii) A weakness of many infrastructure development projects is that they rely on on-the-job training to transfer knowledge from expatriate engineering specialists to local engineering and contractor staff. By developing and making use of local vocational educational providers, the training modules and appropriate support can be embedded in these organisations. A key constraint is that ongoing national government (or donor) funding is needed to pay for the service provider inputs.

(iv) The Community snapshot model for impact assessment is a valuable tool for cost-effectively creating a baseline on community access to important services and then to assess the benefits achieved from the improved roads. (This practice was documented in the ILO ERA MTR 2013 Page 66)

Recommendations

7.1 Additional capacity development is needed (from Conclusion 5.2)

R.7.1.1: **The ERA integrated rural road contractor capacity development model should be continued.** (High priority) In the short term this can be partially achieved through ongoing R4D funding of R4D contractor training and support. This training/ support should make use of the existing capacity and resources that have been developed within Don Bosco and the IADE.

R.7.1.2: **New higher level technical and management training modules and support.** (High priority but requires significant donor and /or GoTL funding) This is to ensure the participating road contractors have the necessary skills and experience to independently implement rural road contracts that meet DRBFC construction and maintenance standards.

R.7.1.3: **Recognised certification of rural road contractors.** (Low priority) If recommendation R.7.1.2 can be implemented, certification of rural road contractors should be included as a second priority activity

7.2 Wider use of ERA developed rural road skills. (Conclusion 5.3)

R.7.2 **Rural road activities implemented by contractors with ERA trained staff.** (Medium priority) The MPWTC, as the GoTL technical agency responsible for rural roads, should encourage other GoTL non-technical agencies implementing rural road activities to use ERA / R4D trained road contractors and apply the appropriate road and construction standards using these contractors

7.3 Linking the ERA integrated rural road training model to the GoTL and private sector. (Conclusion 5.4)

R.7.3 **GoTL and the CCI-TL lead development of a sustainable rural roads skills development model.** (Low Priority) GoTL and the CCI-TL, with its member contractors, be encouraged to lead development of a sustainable funding and organisation model to support the two ERA developed road contractor training organisations.

7.4 Formalising institutional linkages. (Conclusion 5.5)

R.7.4 **Project coordination groups.** (High priority for new donor funded projects) Coordination bodies for future projects such as ERA which should distinguish between policy / strategic level participation at the PSC with implementation partners (service providers, service users and clients) becoming part of a lower working group structure which provides requested inputs to the PSC and addresses technical and implementation issues.

1 Project Background

The International Labour Organisation (ILO) has implemented the Enhancing Road Access project (ERA) as part of the European Union (EU) funded 4th Rural Development Programme (RDPI IV) from 2011 to 2016.

1.1 Policy Context

The RDP IV has the overall objective to contribute towards the realisation of the Government of Timor Leste's (GoTL) vision for rural development, as described in the Strategic Framework for Rural Development.

Timor Leste is one of the least developed countries in the region, its economy is essentially agriculture-based, with approximately 70% of the population of about 1.1 million living in rural area. The overall unemployment rate is estimated at 11% as the economy is unable to create sufficient employment opportunities for the expanding labour force. In addition, the poor condition of rural infrastructure, particularly the road network, has been a major constraint to local economic development and major cause of poverty in the rural area as it severely limits access for rural population to markets, schools, health services and, other economic and social services and facilities.

Linkages with other development frameworks: GoTL (Strategic Development Plan**) United Nations** (UNDAF) **and ILO** (DWCP)
In April 2010, the GoTL announced its 20-year Strategic Development Plan (SDP 2011-2030). The SDP emphasises the importance of infrastructure, including roads, in achieving accelerated sustainable development. The Timor-Leste SDP 2011-2030 targeted the rehabilitation of all rural roads by 2015[1] to minimum standard using locally based contractors. The Ministry of Public Works, Transport and Communications (MPWTC) Five-Year Action Plan linked to the SDP 2011-2030 outlined a strategy to improve the road network. By the end of 2017, the MPWTC aims to have 1,270 km of priority roads in good condition and being maintained. The MPWTC also plans to have a workforce able to implemented and maintain the roadwork program[2].

The Government also incorporated 'Foster Private Sector Growth' as a major goal of its SDP. The SDP acknowledged the need to increase investment in building national capacity to implement the SDP.

The project directly contributes to the ILO's Country Programme Outcome TLS 176 - *Enhanced rural employment, safety net, and economy through infrastructure investment, livelihoods programmes, and business development support.* The ILO, as part of the Timor-Leste United Nations Country Team, seeks to support Timor-Leste in realizing its national development goals, specifically with regards to transforming the current subsistent agriculture-based rural economy into a vibrant job-rich economy. Guiding ILO's contribution until end of 2013 was the Timor-Leste Decent Work Country Programme (DWCP) 2008-2013, which is aligned with the Timor-Leste United Nations Development Assistance Framework (UNDAF) 2009-2013.

The DWCP 2008-2013 was developed to support the ILO Declaration on Social Justice for a Fair Globalization. That declaration adopted four strategic objectives, which are considered inseparable, interrelated, and mutually supportive:

- Promoting employment by creating a sustainable institutional and economic environment

1 This was an ambitious target which has not been achieved.
[2] Developing the capacity of the GoTL agencies is a major activity of the Roads for Development (R4D) Project implemented by ILO.

- Developing and enhancing measures of social protection which are sustainable and adapted to national circumstances
- Promoting social dialogue and tripartism
- Respecting, promoting and realizing the fundamental principles and rights at work

Both UNDAF and DWCP support Timor-Leste's efforts to achieve the Millennium Development Goals (MDG): specifically MDG 1: Eradicate extreme poverty and hunger; MDG 3: Promote gender equality and empower women; and MDG 7: Ensure environmental sustainability.

The ERA Project shares the same institutional counterpart, Instituto de Apoio ao Desenvolvimento (IADE) (The Business Development Institute), with the ILO Business Opportunities and Support Services (BOSS) project and had natural synergies with the Training and Employment Support Project which ended in 2014. It also links with the Roads for Development Project (R4D), initially funded by the Australian Agency for International Development (AusAID), with R4D now funded and managed by the Australian Government Department of Foreign Affairs and Trade (DFAT) supporting GoTL road investment funds.

1.2 The Enhancing Rural Access Project

1.2.1 Project goals

The overall RDP IV **project goals / objectives** set out in the RDP IV and ERA logframe and results matrix attached as Annex 1 were:

1. '*Rural communities have adequate food, either directly from agricultural production, or through other employment and entrepreneurial activities'*.
2. *'Income generating opportunities and access to public infrastructure and services allows rural communities a basic quality of life and prospects for further improving livelihoods'*.

The ERA project addresses the second project goal through the ERA project purpose / immediate objective of: '*The access of rural communities to services and to income opportunities is improved through the rehabilitation and maintenance of rural roads'*. This was to be achieved by the end of the project in villages along the roads where project activities are undertaken. The expected results described in the logframe are:

R.1 Labour-based rural road rehabilitation contracts effectively executed;
R.2 Local civil works contractors and supervisors competent in contract management;
R.3 Local civil works contractors and supervisors competent in labour-based rural road rehabilitation and maintenance.

The main outputs expected over the planned four year implementation period were:

R.1 outputs – Rural roads:

- 140 km of rehabilitated road (140 km achieved. This was reduced from 150 km due to unit cost increases and budget constraints)
- 5,6000 households (HH) have improved access to rural
- 430,000 worker days for 7,200 village beneficiaries

Contractor capacity development

R.2 outputs:

- 500 contract managers complete accredited training
- IADE accredited by INDMO to deliver contract and business management training

R.3 outputs:

- 400 technical staff of target contracting companies and 15 MPWTC supervisors complete accredited technical training for rural road rehabilitation and/or maintenance
- At least 65% of the trainee contractors awarded trial contracts have completed their first trial contracts as per specifications on time and within budget
- 45 contracting companies certified by ERA for rural road rehabilitation and 15 companies certified for rural road maintenance
- At least 70% of the trained contractors are engaged in competitive bidding and/or implementing small LBT rehabilitation and maintenance contracts by the end of the project (EoP)
- Don Bosco Foundation Training Centre in Comoro (Don Bosco) accredited by INDMO to deliver technical training modules for rural road rehabilitation and/or maintenance

1.2.2 Project strategy

The project contributed to rehabilitation and maintenance of rural roads in the selected districts by capacitating (through training and providing access to work contracts) small-scale domestic contractors in Timor-Leste to carry out road construction and maintenance works using a labour-based approach. The project has enhanced the sustainability of its capacity building activities by selecting and working with national training institutions to develop their capacities in delivering comprehensive training courses for the small-scale contractors and their staff. Don Bosco provided the contractor technical (construction and maintenance) training to contractors and IADE trained contractors in contracts and business management.

The capacity building extended to the Directorate of Roads, Bridges and Flood Control (DRBFC), DRBFC supervisors and contract managers regarding the planning, design, implementation and management of labour-based rural road rehabilitation and maintenance works. ERA has supported and assisted these training institutions in accreditation in compliance with national competency standards. The capacity building strategy and training modules are based on the lessons learned from ILO experiences in Timor-Leste and elsewhere, including the previous ILO implemented project for Implementation Budget Execution Support for Rural Infrastructure Development and Employment Generation (TIM-Works).

1.2.3 Implementation

The project was designed in 2010 to follow-on from earlier ILO supported and implemented projects in Timor Leste. The project, scheduled for implementation over four years, start was slightly delayed from 1 September 2011 until 1 November 2011 and the project will be completed by 21 February 2016, after an agreed no-cost extension. Road rehabilitation activities have been carried out in the western districts of: Ermera (45.7 km of road), Ainaro (20.8 km) and Bobonaro (20.2 km), Aileu (20.6 km), Liquica (21.5 km) and Covalima (11.0 km) a total of 140km.

The project works closely with key stakeholders including the State Ministry for the Coordination of Economic Affairs (MECAE) - the official government counterpart institution, MPWTC, Don Bosco, IADE, the Chamber of Commerce and Industry Timor Leste (CCI-TL) and the SEPFOPE (Secretariat of State for Vocational Training and Employment Policy), and other projects involved in road construction, maintenance and capacity building projects, donors, and other government institutions.

1.2.4 Management arrangements

The project is administered by the ILO Country Office for Indonesia and Timor-Leste, and implemented by the ILO through the ILO Programme Office in Timor Leste, initially with the following staffing:

- Project Coordinator as a chief technical advisor (CTA).
- Project chief engineer, who now is also the Project Coordinator and ERA CTA.

- Other international experts included: a labour-based field engineer; a labour-based training specialist; a business management expert (cost-shared 50:50 with the BOSS project); and, a management information system (MIS) specialist.
- Local staff including local project administration support staff, local drivers and a local programme officer based in Jakarta.
- Local project technical and administrative staffs working through Don Bosco and IADE.

The Decent Work Technical Support Team (DWT) in Bangkok provides technical backstopping and monitoring support while the CO-Jakarta provides administrative backstopping.

1.2.5 Budget

The EU RDP IV funded the ERA with an initial budget allocation of Euro 10 million, subsequently increased to Euro 11.6 million through reallocation of funds. About two thirds of ERA's budget was allocated to construction related activities and the remaining one third to implement capacity building activities for implementing rehabilitation and maintenance of rural roads. A budget summary is provided in Section 3.4.

1.3 Technical Support and Reviews

An EU Results Oriented Monitoring (ROM) mission was undertaken November 2012 with regular missions since then. A technical backstopping mission was undertaken in June 2013 by ILO EIIP Bangkok/Delhi to review physical works implementation. An ILO Specialist on occupational safety and health (OSH) visited ERA project sites in October 2013 and provided recommendations to improve safety procedures.

An independent mid-term review (MTR) of the overall RDP IV including the Rural Roads Component was conducted in October/November 2013 (commissioned by the EU). This review reported positively on implementation and progress. At the same time, an independent MTR of the ERA project was conducted (commissioned by the ILO). An overall Evaluation of the European Union's Cooperation with Timor-Leste (EDF 10) was undertaken in November 2014 and referred very positively to the ERA activities.

ERA has provided six monthly progress reports to ILO which included provided updates on progress, changes to identified risk areas, issues to be addressed and other aspects. The; parallel Roads for Development (R4D) project funded by DFAT and implemented by the ILO also had a MTR in 2014. Some of the experience and lessons from R4D are relevant to the ERA experience has been included in this evaluation.

2 The Independent Final Evaluation

As part of ILO project management processes, ILO commissioned an independent final evaluation (the evaluation) of the ERA. This evaluation has not addressed the high level overall RDP IV objectives / goals which are to be assessed using data from regular national surveys. The evaluation terms of reference (ToR) are provided in Annex 2 with the evaluation plan / inception report provided in Annex 3.

2.1 Evaluation Background

The evaluation purpose is to assess the relevance, performance and success of the activities undertaken by the project. It will examine achievements, impacts, good practices and lessons learned from the project in order for the ILO, IADE, MECAE, Don Bosco, DRBFC, MPWTC and or other relevant technical Ministries, and the Government of Timor Leste to identify key areas which are replicable and the necessary conditions for sustainability. The evaluation is based around

the ILO and OECD Development Assistance Committee (DAC) evaluation criteria[3] of relevance, validity of design, effectiveness, efficiency, effectiveness of management, sustainability and impact.

Knowledge and information obtained from the evaluation will be used as basis for better design and management for results of the potential next phase of the project or future ILO activities in Timor Leste. The evaluation also supports public accountability of the GoTL and the ILO.

2.2 Evaluation Methodology

The evaluation used ILO and OECD DAC evaluation criteria. The evaluation covered activities during the project period (November 2011 to February 2016), and included all districts and organisations participating in project activities or responsible for ongoing implementation of rural road rehabilitation and / or maintenance, and capacity building of implementing agencies or contractors.

The evaluation team visited five of the six districts where ERA supported road rehabilitation and maintenance activities. Due to the limited time available for field visits, Covalima was not visited as it is the most distant project district with a full day needed just for travel and had the smallest proportion of project interventions (11 km of roads compared to an average of 23 km).

The evaluation process has been results focused using participatory processes. The evaluation combined document and database information reviews with key informant interviews, and field visits to rehabilitated roads, the communities benefiting from the improved roads and the district governments responsible for planning and implementing future maintenance and rehabilitation activities. The evaluation examined the cross-cutting issues of gender and environmental issues across all project activities.

Impact and outcome data has been sourced from both ERA M&E system information and from M&E activities undertaken by the parallel R4D project which has used ERA developed training and coaching systems to implement similar rural road rehabilitation and maintenance activities.

A stakeholder workshop (see Annex 8 for the presentation and attendance list) after the field work broadened the knowledge base, tested initial findings and outlined preliminary conclusions, recommendations and lesson.

A list of meetings and people met is provided in Annex 4. Logistics support were provided by the ERA and ILO offices in Dili. Their assistance was greatly appreciated.

2.3 Stakeholders

The main evaluation stakeholders are: (i) the ILO Programme office in Timor Leste and ILO Country office for Indonesia and Timor Leste (CO-Jakarta); (ii) the GoTL as the client and main beneficiary (includes IADE, MECAE, Don Bosco, DRBFC and MPWTC); (iii) the communities and contractors who were involved with, and have and will benefited from the project activities and improvements in road access; (iv) The Chamber of Commerce and Industry of Timor Leste (CCI-TL) and the labour union organisation (KSTL); (v) the ERA implementation team and the design teams for any follow-on rural road projects in Timor Leste; (vi) the ILO headquarters and DWT-Bangkok; and, (vii) the EU as the funding agency.

[3] As defined in the ILO Policy Guidelines for results-based evaluation, 2012.

2.4 Key Evaluation Questions and Evaluation Criteria

The Evaluation Criteria (based on ILO / OECD Development Advisory Committee (DAC) criteria are addressed in Section 3 and cover relevance, effectiveness, efficiency, sustainability and cross-cutting issues. Outputs, outcomes and impact are also addressed in Section 3.

The evaluation ToR posed key evaluation questions addressed under Section 4.2. The key questions are:

1. What progress has the project made against its immediate objectives, expected outputs and outcome targets, as well as the delivery of quality outputs?
2. Has the project contributed to the broader objectives of SDP, RPD IV and the DWCP for Timor Leste?
3. What has been the sustained impact of the project on:
   (i) Local civil works contractors and supervisors, and their competency in and use of labour-based road rehabilitation;
   (ii) The mobilisation of the communities to rehabilitate and maintain rural roads, and their earning from labour based construction and maintenance activities;
   (iii)The local economy by improving road access; and,
   (iv)Improved access to social and other services (including personal and goods transport).
4. To what extent was the (ERA) management system appropriate to achieve desired results and outcome within a timely, effective and efficient manner?
5. What was the appropriateness of the results framework, its indicators and targets, and the overall M&E system and practices?
6. How has the project engaged with the tripartite constituents (Government, employers -the Chamber of Commerce and Industry of Timor Leste (CCLTI), and the Union – Confederation of Trade Union of Timor Leste (KSTL) and the direct beneficiaries? What are the outcomes of this engagement?
7. What was the quality of operational work planning, budgeting and risk management?
8. What internal and external factors have contributed to the pace of project implementation? Identify lessons learnt on substantive and project management issues?
9. How effective were the implementation arrangements put in place by the project to ensure appropriate capacity building of its institutional counterparts?

2.5 Limitations of Evaluation

All evaluations and reviews have limited resources and time available so are not exhaustive. As the ERA project has operated for over four years and is supported by appropriate M&E activities for both ERA and the R4D project, there is substantial evidence to support assessment of delivery of outputs, the quality and degree of outcomes and their contributions to achieving the intermediate objectives. The project team has been able to manage around the constraints of limited capital investment in rural road works, the low educational capacity of some of the rural road contractor workers and the limited resources of the small construction contractors.

2.6 Evaluation Ethics

The evaluation team has followed relevant ILO standards and guidelines outlined in the ToR and adhere to strict ethical standards during the course of the review.

3 Evaluation Findings

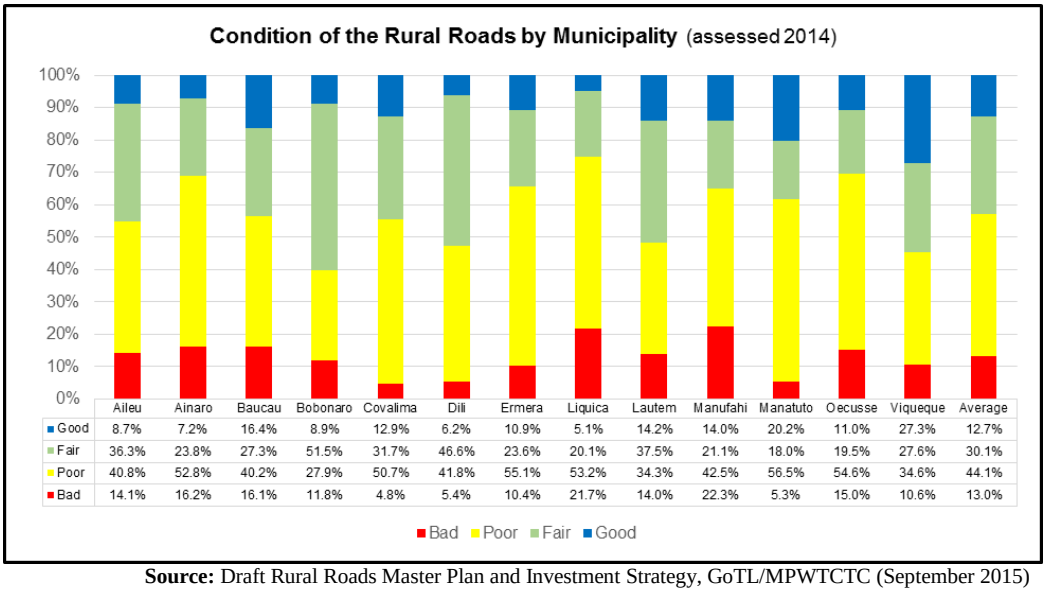
In the following assessment of implementation, findings are addressed under the two main ERA technical areas – rural road rehabilitation and maintenance (Rural roads), and road construction contractor capacity development (Contractor capacity development).

3.1 Project Relevance

Rural roads

ERA aligns with national priorities, documented in the Draft Rural Roads Master Plan and Investment Strategy, GoTL/MPWTCTC (September 2015) (RRS) currently being finalized by the GoTL. In the period 1975 to 2000, rural road conditions had been improved. However, in the period from 2000 to 2010, rural road conditions deteriorated severely due to a lack of maintenance, see the RRS for details of road condition surveys undertaken by the World Bank over this period. This has led to most rural roads being in poor condition as summarized in Figure 1 below. Note that as these assessments of all rural roads in Timor-Leste were made during 2014, the current rural road conditions are probably not as good as those documented below.

Figure 1: Condition of Timor-Leste Rural Roads



	Aileu	Ainaro	Baucau	Bobonaro	Covalima	Dili	Ermera	Liquica	Lautem	Manufahi	Manatuto	Oecusse	Viqueque	Average
Good	8.7%	7.2%	16.4%	8.9%	12.9%	6.2%	10.9%	5.1%	14.2%	14.0%	20.2%	11.0%	27.3%	12.7%
Fair	36.3%	23.8%	27.3%	51.5%	31.7%	46.6%	23.6%	20.1%	37.5%	21.1%	18.0%	19.5%	27.6%	30.1%
Poor	40.8%	52.8%	40.2%	27.9%	50.7%	41.8%	55.1%	53.2%	34.3%	42.5%	56.5%	54.6%	34.6%	44.1%
Bad	14.1%	16.2%	16.1%	11.8%	4.8%	5.4%	10.4%	21.7%	14.0%	22.3%	5.3%	15.0%	10.6%	13.0%

Source: Draft Rural Roads Master Plan and Investment Strategy, GoTL/MPWTCTC (September 2015) - awaiting GoTL endorsement. Restricted use only.

Investment since independence on rural roads has been low as the new GoTL reassessed its priorities and allocated limited capital investment resources. Table 1 sets out rural road investments over the past three years.

Table 1: Funding for Rural Roads

Source of Funding	Delivery Channel	2013 (USD Million)	2014 (USD Million)	2015 (USD Million)
Government	MPWTCTC*	2.6	1.6	4.0
	PDID	3.0	5.1	6.9**
	PNDS	-	0.9***	0.8***
	SEPFOPE	10.0	5.7	10.6
Donors	DFAT (MPWTCTC)*	10.5	0.5	-
	EU (SoS Private Sector Development)*	**4.7**	**3.8**	**1.0**
Total Funding for Rural Roads		**30.8**	**17.6**	**23.3**

Notes: *Including funding for maintenance of rehabilitated roads.
**Based on the estimate of previous years that 20% of the PDID projects are Rural Roads project under the 2015 budget for PDID of USD 34.4 Million (Budget Book 2015 State Budget).
***Source: PNDS

Source: Draft Rural Roads Master Plan and Investment Strategy, GoTL/MPWTCTC (September 2015) - awaiting GoTL endorsement. Restricted use only.

The relevance of the EU investment in rural roads was also highlighted in the EDF 10 report[4] which reported a survey of Timor-Leste public opinion in October 2014 placing roads as respondent's highest priority issue (P. 11, Figure 2).

Contractor capacity development

Number of small road contractors. The very limited investment in rural road construction and maintenance after independence contributed to a decline in contractor numbers and capacity in the districts. This greatly limited district based rural road rehabilitation capacity but is now needed for MPWTC, R4D, SEPFOPE and other rural road rehabilitation and maintenance activities. The remaining large road construction contracting companies only seek large road construction contracts (national and district roads) where they can use their machinery based large project management skills.

Technical and contracts management training delivery capacity. Following its independence, Timor-Leste lost its institutional capacity to develop and support rural road (and other) contractor capacity[5]. Due to higher priority activities to build the school and tertiary education systems, including development of certification processes supported by ILO with other donors, the in-country capacity to delivery rural road construction vocational education was close to zero when ERA was proposed.

Links to labour-based road construction technologies. ILO had demonstrated the potential in Timor-Leste for using labour based technologies (LBT) on small scale rural road construction projects which were within the financial capacity of the smaller district based construction companies with limited machinery capacity and more potential to use LBTs.

Decentralisation. The GoTL is working towards Disconcentration / Decentralisation policies to devolve delivery of some government services back to municipal and district levels where they may be more effectively planned and implemented. Stakeholders observed that rural roads could be one of the first areas where decentralised services could be developed but would rely on accessing a pool of experienced and skilled district based small contractors.

ASEAN membership. The GoTL plans to join the Association of Southeast Asian Nations (ASEAN) group of countries in the near future. The Chamber of Commerce and Industries – Timor Leste (CCI-TL) acknowledges that the road (and other sector) construction contractors will need to significantly lift their technical and management capacity and competitiveness to compete effectively with contractors from other ASEAN nations, after Timor-Leste joins the group.

3.2 Validity of Design

Rural roads

The ERA (and R4D) road construction activities addresses the shortage of rural road contractors by creating opportunities for contractors to secure rural road rehabilitation and maintenance work within a supporting environment. Necessary rural road rehabilitation could proceed while small construction companies and staff developed their skills. As set out in Figure 1 above, three of the target project districts (Ainaro, Ermera and Liquica) had lower than average standard roads with the other three about average for the country – Liquica had the lowest standard roads. The technologies proposed align with MPWTC road standards outlined in the proposed RRS guidelines are presented in Table 2.

Table 2: Recommended Rural Road Pavement Finishes

[4] Evaluation of the European Union's Cooperation with Timor-Leste. Draft Final Report Volume 1. November 2014
[5] As the capacity was based on Indonesia trainers/teachers who left the country in 1999.

Vertical Road Gradient (%)	Recommended Pavement Standard	
	Wet Suco (> 2000 mm rainfall/year)	**Dry Suco** (< 2000 mm rainfall/year)
0-2%	Gravel	
2-6%	Hand-packed stone or Sealed gravel base	Gravel
6-10%	Hand-packed stone	
10-15%	Plum concrete or Penetration macadam	
> 15%	Plum concrete	

Source: Draft Rural Roads Master Plan and Investment Strategy, GoTL/MPWTCTC (September 2015) - awaiting GoTL endorsement. Restricted use only.

Contractor capacity development

Practical skill and experience development. The ERA training and support provides needed practical technical and management skills to entrepreneurs (contractors) and their engineering staff (graduate engineers) and supervisors who did not have practical training.

Integrated approach. Linking of classroom training to trial road rehabilitation contracts supported by coaching strengthens the learning processes, and develops additional rural roads cost-effectively.

Use of LBT. With the relatively low level of road rehabilitation technology used, labour based construction approaches were appropriate.

Ongoing training resource. ERA addressed the lack of GoTL institutional capacity to develop and support rural road (and other) contractor capacity. Development of the Don Bosco Training Centre and IADE technical and management training capacity provides an ongoing training resource with accreditation and compliance with national competency standards.

3.3 Effectiveness

Rural roads

A total of 62 rehabilitation contract packages, in eight batches, have been issued and completed, with the exception of very minor finishing works remaining on several contracts. These contracts cover a total of 140 km of rural roads, in the six districts included for works.

49 contracts (79%) were completed on time and to agreed budget including approved time and cost extensions, seven contracts (11%) were completed but with a reduced budget and six contracts (10%) had to be terminated due to poor performance. This failure rate of about 10 % should be seen as a positive outcome as it shows that a wider pool of new contractors had been included in the training and tender, and that the ERA supervision and coaching processes quickly identified where problems were arising and addressed the issues. All planned work has been completed as quantities in terminated and reduced contracts were included in new contracts.

Additional ERA road funding. As shown in Table 1 above, the additional ERA road rehabilitation funding was a valuable additional contribution to rehabilitation and maintenance of rural road resources while GoTL mobilised its own resources.

Appropriate road construction technologies. The evaluation field visits covered a cross-section of roads in different districts and construction periods. The evaluation team found the roads are generally well constructed and are constructed using an appropriate level of technology. An ongoing discussion during the evaluation was that of the appropriate final pavement of the rehabilitated roads and the link between the pavement selected and the likely whole of life costs[6] of building and maintaining rural road.

[6] The evaluation team appreciates the issue of 'whole of life' costs for roads including the initial capital costs and ongoing maintenance costs. Without capital constraints, high quality pavements on roads are a good solution, however in practice, political issues of sharing the benefits of longer sections of improved rural roads and allocation of enough recurrent funding for maintenance is a very common problems in Third (and First) World problem.

The evaluation team appreciates these points but observes that the ERA roads have met the national pavement standards set out above in Table 2. The team did not observe any systematic failure or under-design of supporting road infrastructure (stone lined drains, stone supported embankments, culverts and other structures) which would indicate the newly rehabilitated roads are going to decline quickly. In practice, the project has taken a focused approach to installing appropriate structures such as the large geo-engineering installation supporting the floodway near Balibo and the large poured concrete box culverts on the Luirai road.

A SEPFOPE funded road in Aileu

Joining onto the ERA rehabilitated road

Road pavements. The issue of community preferences for final pavement finishes is complicated by the extensive use of asphalt surfaces on (lightly trafficked?) rural roads during the 1975-2000 period. This led to almost universal requests to the evaluation team from communities visited for all the ERA roads to be upgraded to these final pavements despite the significantly higher costs which would greatly reduce the length of rural roads that could be rehabilitated each year.

In late 2015, the New Zealand development assistance agency, the Ministry of Foreign Affairs and Trade (MFAT), funded special training courses on preparing and treating pavements using asphalt products. These courses were designed to train the Don Bosco trainers and, engineers and supervisors from rural road contractors. Both hot bitumen and more environmentally sound cold bitumen finishes were demonstrated as part of the training activity which concluded with the trainees preparing and laying road scale examples of the road finishes on a rural road on the outskirts on Dili near the Don Bosco centre. Two of the Don Bosco trainers have undertaken a work experience placement in New Zealand to consolidate their learnings and experience in early 2016.

Work quality. The evaluation team assessed several of the structures and observed the roads traversed. Only one section of road (Falubosa-Luirei) was not up to the standard of the other roads. The structures checked were generally well constructed[7] and fit for purpose.

Use of LBT. The small ERA (and R4D) contractors have been trained in LBTs. As shown in the following table, the average proportion of labour used (over a sample of 15 roads) was about 18 % which is less than would expected for LBT construction.

[7] Some porous concrete and surface malformation caused by poorly placed formwork on the large box culvert on the Daisoli-Falubosa road had not been sealed with plaster. In the large four pipe culvert on the Falubosa-Luirei section, the temporary traffic by-pass had not been removed from the upstream side so stream flows were being directed behind the abutment on the south side.

Table 3: Average Road Construction Costs for ERA Roads (USD)

Company	Contract Price (USD)	Actual cost for road trial contract as reported by the contractor (USD)						Total Spent	Profit
		Labour	Material	Equipment	Supervision	Admin	Other		
Average Cost	119,894	22,039	32,986	34,366	10,273	3,051	3,829	106,544	13,350
% of Total		18 %	28 %	29 %	9 %	3 %	3 %	89 %	11 %

Source: Draft ERA Contractor Training Strategy, Delivery & Impact (Report). Dili February 2016

Reported reasons for these lower labour cost proportion included the need to construct more structures (with higher materials costs) than projected in the original project design.

Use of improved rural road rehabilitation / maintenance capacity. The improved capacity of ERA trained contractors is not being used to improve implementation of rural roads activities funded through SEPFOPE, the Planeamento Desenvolvimento Integrado Distrital (Integrated District Development Planning) (PDID) and the Programa Nasionál Dezenvolvimentu Suku (PNDS) the National Program for Village Development. This is an institutional issue within GoTL which funds the rural road activities through separate annual budgets allocations to the different agencies without any requirement for that agency to meet the national rural road standards or to use the services of the lead rural road agency, DRBFC of the MPWTC, to advise on or assist in construction of rural roads under these programs. The team was advised that SEPFOPE used labour intensive road construction techniques but there are no formal links to DRBFC to make use of best practice in this area.

Contractor profitability. Trial contractors interviewed mostly reported that they had generated profits from the contracts to allow them to reinvest in their businesses. An ERA PMU survey of 22 contractors (see Table 3) reported average profits from the rehabilitation contracts of 11 % ($13,350).

Contractor capacity development

The ERA developed training courses have addressed the lack of capacity in the small road contractor sector caused by a lack of practical experience for engineering graduates as roads engineers or supervisors, and a lack of business and contract management capacity in the directors of the developing small contracting companies. The ERA training and support provided practical technical and management skills to entrepreneurs (contractors) and their engineering staff (graduate engineers) and supervisors.

The project has provided more than 200 contractors with classroom and practical training in the technical and business management aspects of rural road rehabilitation and maintenance.

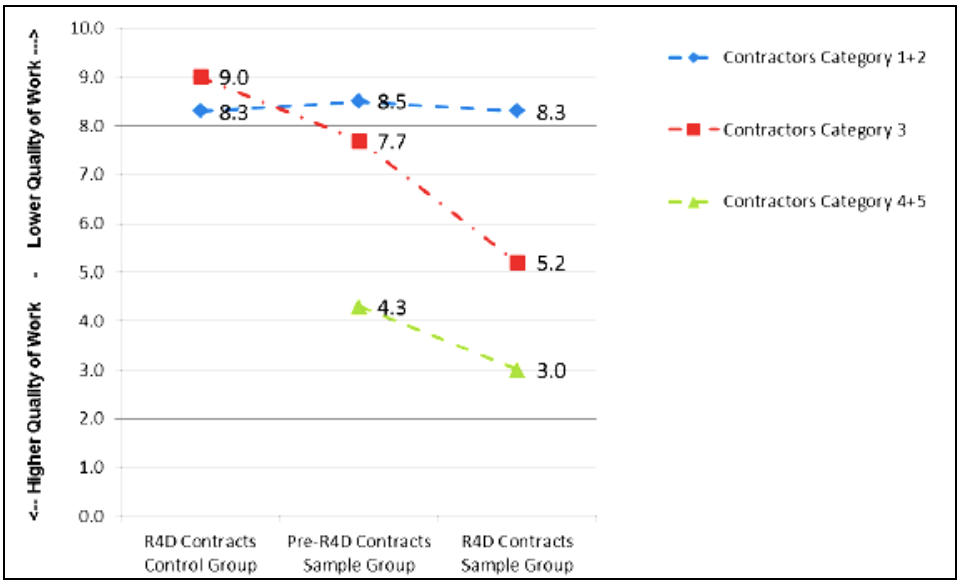
ERA training courses. The initial training packages are highly regarded by contractors and R4D. The training and coaching processes have worked well but currently rely on project funding. Annex 5 provides a summary of all the training activities.

The following graph, extracted from the First R4D Contractor Tracer Study 2014, illustrates the standard of work achieved by different size contractors before and after training provided by ERA where the lower the score, the better the construction quality. Note, a lower score is better so the degree of improvement is reflected by how far the graphs decline on the right hand side. The sample included a control group of contractors who did not undertake any ERA / R4D training.

The data shows that the physical contract work performance for the Category 3 contractors, (turnover USD 100,000 to USD 250,000) who had received ERA / R4D training improved significantly (7.7 to 5.2, where lower is better). This improvement is demonstrated through only

two out of the 16 contractors awarded R4D contracts, being excluded from further R4D contracts because of poor work quality (R4D Tracer Study, P25). Performance of the larger Category 4 and 5 contractors did not improve as markedly after the ERA / R4D training and support – but started from a much better standard than the Category 3 contractors. This could be explained by the greater experience and larger staff resources of the Category 4 and 5 contractors.

Figure 2: Contractor Performance (Pre and post ERA / R4D Training and Coaching Support)



Source: R4D Contractors' Tracer Study. July 2014

Table 4 reports on the training provided by Don Bosco and IADE to R4D contractors in 2015, participating contractors scored the ERA provided training as either 'very useful' or 'mostly useful'.

Table 4: Assessment by Contractors of the Usefulness of the Training Received (a lower score is better)

Type of Training Received	Average Score
How do you rate the quality and usefulness of the training received from ERA/ Don Bosco to carry out your work?	1.66
How do you rate the quality and usefulness of the supervision and on-the job training received by R4D?	1.44

Note: Ratings used:

1	Very useful: can apply in our daily work most of what I and my staff learned
2	Mostly useful: can apply in our daily work some of what I and my staff learned
3	Not really useful: can apply only little in our daily work of what I and my staff learned
4	Not at all useful: cannot apply anything in our daily work

Source: Extract from R4D Contractor Tracer Study November 2015

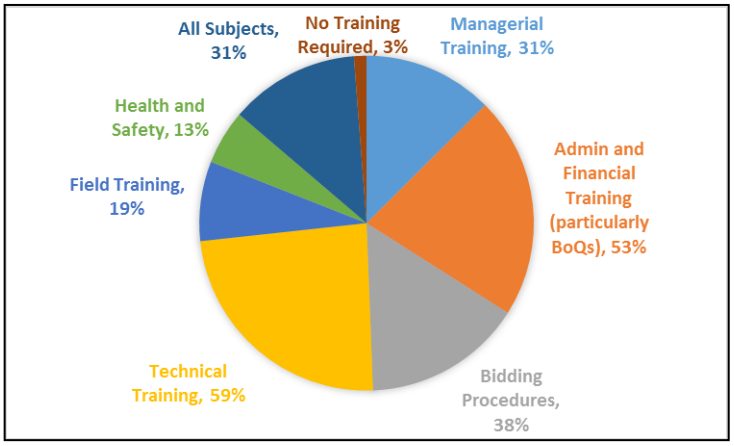
A feature of the ERA capacity building activities is the combination of formal class room training, on-the-job training constructing a short section of road using the skills taught, a trial road construction contract for companies that successfully tendered for ERA rehabilitation contracts and the ongoing coaching / mentoring of construction company staff. The feedback from all contractors interviewed during the review was that this combination was very useful and greatly assisted embedding the new technical and management approaches into the construction company operations.

The degree to which this has been achieved is illustrated in two sets of data collected by ERA and the R4D projects. For the ERA refresher trainings undertaken in LBT rehabilitation and also maintenance in 2015, the pre-test scores[8] **increased** from an average of **2.1** (0-10 range) to **7.3**.

ERA has been providing coaching support to R4D rehabilitation contractors. In the January 2016 report of activities[9], the assessors showed that the performance assessment of ten company directors had **increased** from **5.2** to **5.9** and, for supervisors, from **5.4** to **6** (for both groups the maximum score possible was 10).

The R4D contractors were also asked about further trainings requirements with their responses summarized in Figure 3. This indicated contractors are particularly interested in receiving more (and more advanced) training on: technical training; administrative and financial training (in particular on the preparation of bills of quantities (BoQ); bidding procedures; and, managerial training.

Figure 3: Priorities of R4D Contractors for Further Training



Source: Extract from R4D Contractor Tracer Study November 2015

The data above aligns with feedback during the evaluation field work that the level of training provided to date may not be adequate to allow contractors to implement current rural road contracts un-assisted or to undertake contracts with more complex road rehabilitation activities.

Need for further capacity development. Of the estimated 200 plus small rural road contractors who have undertaken training, about 2/3 (44 R4D and 62 ERA) have had the opportunity to implement ERA trial contracts or R4D rehabilitation contracts plus 44 contractors won R4D road maintenance contracts. This was complicated by the limited GoTL funding through R4D available for road rehabilitation during 2014/15. A very small number of contractors, who have received training, have had the opportunity to use their developing skills on a second road rehabilitation contract, although some have won road maintenance contracts. Therefore, about 70 trained small contractors have not won a rehabilitation contract to add value to the classroom training through coaching support while implementing a trial or R4D rehabilitation contract.

Further development / support to small contractor sector will be needed if an adequate pool of qualified contractors is to be available across Timor-Leste to bid for, and undertake, the needed 30-40 bid packages (3-4 per district) needed to implement a rural roads rehabilitation / construction program of about USD 20 million per year (ie. packages of about USD 500,000). At least at least 7-10 suitably trained and experienced contractors will be needed in each district to support genuine competitive bidding processes. Thus at least 100-120 ERA trained and coached contractors with

[8] Source: ERA Training Report Labour-Based Technology (LBT) for Companies Selected by R4D. Don Bosco, Dili, December 2015.
[9] Coaching/mentoring for Contractors implementing MPW/R4D road rehabilitation contract. Dili, January 2016

experience on at least one trial or R4D contract is needed in Timor Leste for the larger contracts with up to the same number of smaller trained contractors needed for rural road contracts funded by other agencies (PDID, PNDS and SEPFOPE).

ERA has already experienced issues of limited suitable tenders in its second round of rehabilitation tenders[10] of limited numbers of eligible companies for bidding. In one district, only two companies were assessed as suitable to be considered for two roads rehabilitation contracts. Each company was awarded one of the contracts.

The analysis above and feedback from ERA and R4D staff, contractors[11] and other stakeholders, indicates that the ERA capacity building activities are only partly completed.

Training providers. Don Bosco training is highly regarded by respondents and is supported by the packages of high quality training materials and training guidelines in both Tetum and English. There is now a cadre of experienced practical engineering trainers available to Don Bosco to support ongoing training activities rural roads, providing funds are available for the training.

IADE had some challenges to deliver the business management parts of the training curriculum. ERA assisted IADE to modify its delivery approach to meet the contractor needs by including an experienced roads engineer in the training team to address technical questions from participants. In addition, ERA assisted Don Bosco to develop a training package of basic business management and tender documentation, and preparing tender documentation which Don Bosco delivered to training groups to complement the IADE training.

The road rehabilitation and maintenance courses prepared and delivered by Don Bosco and IADE have received certification through the national qualifications systems overseen by the national certification agency, INDMO.

Don Bosco, with strong support from ERA resources, has developed a strong cadre of skilled trainers who have delivered very good work and outcomes. However ongoing funding through training contracts and / or incremental funding is required to support the Don Bosco rural roads training team as Don Bosco does not have resources / ongoing contracts to maintain the team.

Possible conflicts of interest. In the early stages of ERA, there have been potential issues with engineers from the same organisation (ERA / Don Bosco) supervising work and also providing coaching / mentoring support. This is less so for R4D where R4D supervises the work and ERA provides the coaching support. Further implementation of the ERA integrated capacity development approach with ERA type project funding new road rehabilitation contracts will need to reassess this issue.

Institutional Linkages

Government of Timor-Leste. The ERA implementation processes have not formally linked with district administrations to ensure that information on project roads and contractors is provided to the administrations for their planning and further implementation of rural roads activities. The project initiated the activities in each district with a formal district meeting at the start of the community engagement process and has regularly informally updated district administrations on progress.

At central level, a Letter of Intent was agreed between ERA and the MPWTC on collaboration between the two organisations.

[10] Evaluation Report for Proposals Received for the 8th batch of ERA Road Rehabilitation and Maintenance Contracts, September 2014.
[11] The R4D Contractor Tracer Study 2015 showed only 3% of respondents did not want further training.

The challenge for ERA and further rural road development in the current situation is that DRBFC is responsible for rural roads but does not have a strong presence at municipality or district level.

Private sector. ERA has formal link with the CCI-TL, involved the CCI-TL members in the pre-qualification requirements of contractors, and CCI-TL is working with ERA in the identification of trainee contractors

Development agencies. ERA has built on the experience of the preceding ILO implemented Tim Works in using LBT for rural roads and other works in Timor-Leste. This work identified the need to develop the capacity of local road contractors which required inputs to strengthen the supporting vocational and business management training organisations. At the same time, the Australian Government, through the R4D project supported by AusAID then DFAT, funded institutional development support to the MPWTC (and some initial rural roads investment funds) to complement planned investment in rural roads by the GoTL. R4D is addressing government agency institutional strengthening and the design assumed that the ERA activities developing the private sector small roads contractors and the necessary training organisations would complement this institutional capacity development.

3.4 Efficiency

Project Budget

The initial project budget was Euro 10 million. By the time of the ERA MTR, it was clear that road rehabilitation unit costs had been underestimated and less unskilled community labour could be used. To minimise the reduction in roads that could be rehabilitated, the EU agreed to transfer Euro 1.6 million to ERA which allowed the target length of rehabilitated roads to be only reduced from 150 km to 140 km.

Table 5 sets out a summary of the ERA budget showing the broad costs categories. Over 56 % of project expenditure was on road rehabilitation and maintenance with direct training costs of 7 %. Most of the technical specialist inputs supported the training and provided specialist technical support. If the project technical assistance, administration and overhead costs are allocated proportionally to the two main activities, about 89 % of resources went into road construction while about 12 % supported the training and capacity building activities.

Table 5: ERA Project Expenditure (Actuals and estimated at Feb 2016)

Cost Category	USD	%
Road Rehabilitation Costs	8,577,036	55%
Road Maintenance Costs	188,314	1%
Don Bosco and IADE	1,018,823	7%
Other training costs	30,652	0%
Visibility activities and publications	79,613	1%
Technical specialists (incl. CTA)	3,299,934	21%
Local support staff (incl. travel/per diems)	399,767	3%
Project administration (incl. ILO support fee)	1,888,153	12%
Total	15,482,292	

Source: ERA financial records

Rural roads

The final rehabilitation costs for the roads in each district are set out in Table 6. The rehabilitation costs per kilometre (USD 50,000 to USD 72,000/km) are less than other indicative[12] local rural road rehabilitation costs.

[12] These were reported to be from USD 125,000 to USD 250,000 per km, depending on the topography in which the road is constructed.

As some of these contracts were bid and completed in 2012 and 2013/14, there have been increases in unit costs of road construction materials and other costs since. These cost increases may have increased the unit costs now by 15% to 25 % of the average unit costs up to the equivalent of USD 70,000 / km in early 2016. Also the costs per kilometre are largely influenced by the number of drainage / erosion management structures required, the number of culverts required and the size of streams to be crossed and the specification of the final pavement.

Table 6: ERA Rural Road Rehabilitation Costs

District	Km	Total Cost (USD)	Av. Costs (USD/km)	No. of contracts	Av. Costs Per Contract (USD)
Aileu	20.60	1,208,836	58,681	9	134,315
Ainaro	20.80	1,050,427	50,501	10	105,043
Bobonara	20.20	1,360,140	67,334	9	151,127
Covalima	11.00	772,598	70,236	5	154,520
Ermera	45.7	1,898,919	41,552	20	94,946
Liquica	21.50	1,272,686	59,195	9	141,410
Total	**139.80**	**7,563,606**	**54,103**	**62**	**121,994**

Source: ERA construction records

As observed in Section 3.4, no major construction or environmental issues were observed along the roads travelled by the evaluation team so the balance of spending on lined drains, stone reinforced embankments, drainage and stream crossing structures and the roads surfaces appears to be satisfactory. As noted above, the pavements provided on the newly constructed roads largely align with the specified surfaces defined in the forthcoming RRS document.

Balancing Construction Costs with Operational Life
An example of the challenges of balancing construction costs with operational life is on the new three cell poured culvert near Fatubosa. To save costs, more expensive (per m^2) but also more durable, reinforced concrete was specified for only 3 metres of road on each side of the culverts with the remaining concrete surfaces on the steep entry and exit sections being made from cheaper 'plum' concrete. Unfortunately the plum concrete is already starting to break down because wheel torque from vehicles climbing the steep slopes is causing the thin concrete layer over the rocks to break down.

Anecdotal information indicates that budget costs for rural roads proposed in the RRS are significantly higher than construction costs incurred under successful ERA contracts. The team understands that this could be partially due to the DRBFC specifying higher standards of drainage and bank protection greater use of lined drains and stone lined embankments. However, the evaluation team did not observe any significant negative issues with these aspects along the ERA roads inspected.

Contractor profits. As shown in Table 3 and confirmed by the field discussions, contractor profits from rehabilitation contracts were mostly commercially viable allowing for reinvestment and development of the contracting business. Contractors reported that they had reinvested their profits into trucks, small equipment and reserves for working capital for future construction projects. At least two of the five contractors met during the field visits, indicated they planned to also invest in retail supermarkets in their home area.

Contractor capacity development

Data provided by ERA indicates that costs of training engineers and supervisors was about USD 440 per course participant[13] or USD 25/ training day. This includes the costs of the Don Bosco and

[13] This estimate includes a LBT training activity organised for the women's contractor association. The training was undertaken on the understanding that these contractors would **not** be participating in the ERA / R4D road rehabilitation activities.

IADE training facilitators and specialists plus the course operating costs. Participating contractors paid a participation fee of USD 50 per staff member on the course, about 12 % of the actual costs.

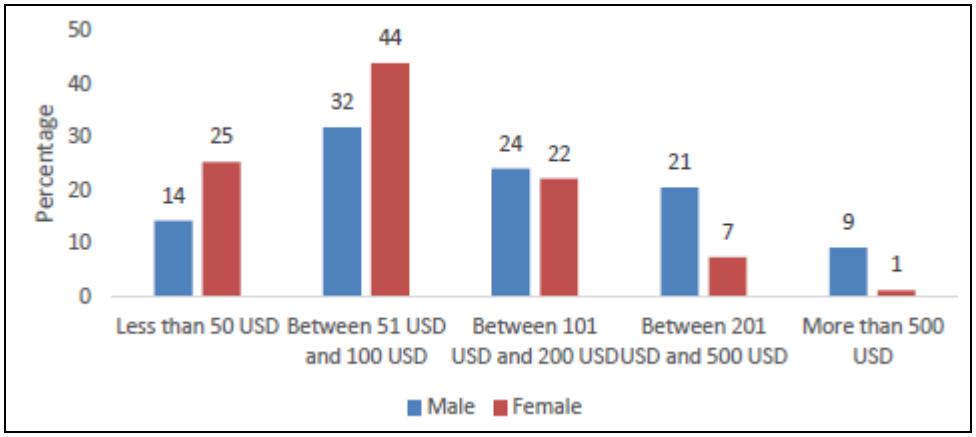
About 2/3 of the trained contractor staff worked for contractors who won ERA and/or R4D contracts, so the estimated costs per successful contractor was about USD 1,000 (including director training). This is about 1 % of the value of the ERA construction contracts and 0.5 % to 1 % of the R4D contract values. Based on the information analysed in Section 3.4 on effectiveness, these incremental costs provided substantial benefits in immediate improved contractor performance and laid a firm foundation for ongoing improved performance, albeit with a need for ongoing coaching / mentoring and, technical and business management upskilling.

The coaching / mentoring support to contractors was even more cost effective than the training activities as it takes a less time for each activity, 2-3 days per contractor supported, 3-4 times over the 4-6 month contract period. This coaching is very cost-efficient (about 1 % - 2 % of the trial contract values).

Community benefits.

Communities are satisfied with labouring income returned to village households. The following figure shows the distribution of village labour generated from R4D road rehabilitation activities. This data aligns with evaluation feedback that most workers earned USD 50 – USD 100 from the contract work. Women had lower total earnings because they undertook unskilled work and had shorter inputs. Few women were employed on the contract tasks requiring more skilled labour which also had longer employment periods.

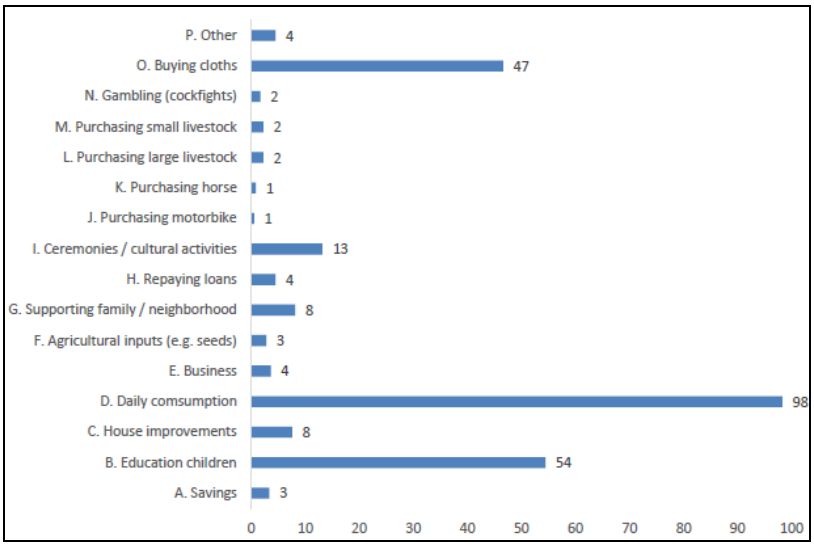
Figure 4: Labouring Wages Earned on R4D Contracts by Gender



Source: R4D Labourers' Survey. The benefits to local labours working on R4D roads. April 2015. Figure 21.

As illustrated in Figure 5, this income was mostly used for household livelihood necessities (daily food consumption, schooling, buying clothes and cultural activities). This aligns with the feedback during the evaluation field visits.

Figure 5: Expenditure of Labouring Income Earned from R4D Road Contracts



Source: R4D Labourers' Survey. The benefits to local labours working on R4D roads. April 2015. Figure 26.

Only a small proportion of earnings were used to develop business activities (~4 %) or to purchase large livestock or transport vehicles (~4 %). These proportions are about the same as the amounts used to repay loans (4 %) or to repay loans (3 %). Feedback during the evaluation field visits indicated there was a large variation in use of the funds. Some communities reported significant business investments in their communities following the road construction, particularly in purchasing motorbikes / transport vehicles and setting up new kiosks – it is not clear if this investment came from the extra labouring income or from other resources.

An issue raised during the field meetings was that, in most cases, women were restricted to lighter manual tasks without opportunities to take on more of the heavier work. This limited the number of days the women could work. Given that the project objective was to encourage women's participation, more opportunities could have been created. The R4D Women's Impact Study did not research this aspect of women's participation in detail.

Project management costs

The ERA project management unit (PMU) operated with a relatively low–cost structure using two regional specialist engineers, supporting the engineer / CTA to train and support local young engineers and, the Don Bosco and IADE trainers. Assuming that half the CTA time was allocated to project management issues, about 17 % of the project budget[14] was allocated to project management costs.

20 person months of inputs by specialised international technical experts supported the technical areas. These included the geo-engineering design and construction inputs on the Builecun-Leohitu Road near Balibo and the poured three cell box concrete culvert on the Fatubosa-Liurai Road in Aileu district. In both cases, the activities have cost-effectively demonstrated two different approaches to addressing technical issues which will apply to other roads in Timor-Leste.

The business development services (BDS) and MIS advisers had shorter specialised inputs (24 months and 14 months respectively). Based on experience on other large rural infrastructure development projects, the MIS development costs appear high. This adviser also developed the Don Bosco / ERA website, which has attracted interest[15] and visibility for Don Bosco and the project, and provided IT support during the project start-up. The evaluation team would have expected more

[14] Including the ILO 7 % management fee on all costs.
[15] It is reported that several external clients including, Lloyds Register, contacted Don Bosco after accessing the website.

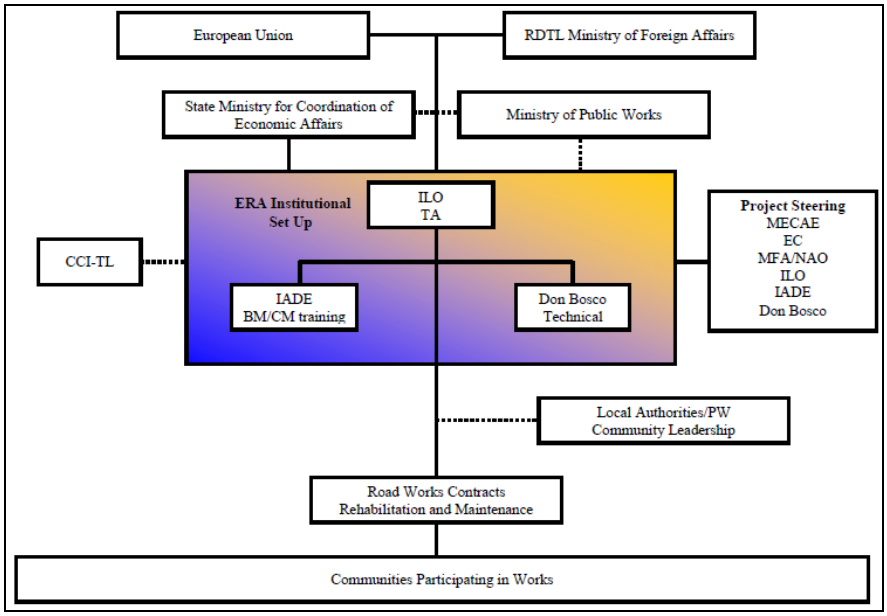
inputs to development of the M&E plan within the budget for the MIS activity with ongoing implementation of the M&E plan by the ERA / Don Bosco M&E officer.

3.5 Management of Implementation

Institutional structure

The ERA institutional structure is provided in Figure 6. This highlights the lack of formal links to the MPWTC rural road activities and rural road activities of other agencies and programs such as SEPFOPE and PNDS.

Figure 6: ERA Institutional Relationships



Source: ERA ILO Progress Report No. 7 July 2015

The evaluation team acknowledges that there have been changes in the oversight arrangements for ERA due to GoTL institutional changes but no formal process is in place to include the major rural road stakeholders in the PSC or other high level coordination activities.

The current MPWTC arrangements for rural road rehabilitation and maintenance do not formally include district administrations. These administrations have inputs to other GoTL rural road activities (SEPFOPE, PDID and PNDS) where sharing of ERA experience and details on the ERA roads and contractors used would improve future implementation.

Rural roads

Based on the review of implementation documentation and the outputs generated, the road rehabilitation contracting processes have worked smoothly and efficiently.

Contractor capacity development

The training / trial contract / coaching model has been implemented well by ERA's partners with technical assistance provided as required.

In at least six cases (out of 68 contracts), selected contractors who could not achieve the work rate and/or the work quality required by their contracts, were replaced by more proficient contractors working on other sections of the same roads.

The failure of some contractors to meet project standards should be seen as part of the contractor capacity building process in which not all small contractors could apply the technical and

management skills they had learned. This failure rate after the intensive training / selection / supervision / coaching inputs highlights the quality and timing issues that must be impacting on other GoTL rural road activities. These are funded under the SEPFOPE, PDID and PNDS programs where non-competitive sourcing of contractors, no skills development and no supervision must reduce the quality (therefore operational life) of the roads constructed.

ERA Management

The ERA PMU structure using two regional specialist engineers, supporting the engineer / CTA to train and support local young engineers and the Don Bosco and IADE trainers provided cost-effective support with about 17 % of the project budget allocated to project management costs.

All feedback and the earlier analysis indicates that ERA management worked well and, apart from reservations on the MIS inputs, cost effectively.

Don Bosco, with strong support from ERA resources, has developed a strong cadre of skilled trainers who have delivered very good work and outcomes. The challenge now is that ongoing funding through training contracts and / or incremental funding is required to support the Don Bosco rural roads training team as Don Bosco does not have resources / ongoing contracts to maintain the team.

IADE has delivered the required services and, because of its place as a GoTL agency, will remain in place to provide on-going training, if at least incremental funding is available for additional rural road related training.

Routine reporting through the six monthly progress reports and to the project steering committee (PSC) has been very comprehensive. The CTA has used these milestone reports / PSC meeting briefings to document all the project activities.

ERA – R4D Links. The R4D design is based on using the ERA developed training and coaching capacity to develop and support contractors working on R4D contracts. All of the contractors who were shortlisted for R4D contracts have to undertake the ERA LBT training activities with successful contractors undertaking further training and receiving coaching / mentoring support.

Some concerns were expressed by respondents during the evaluation that there were some gaps in the relationship between the ERA and R4D projects. This is understandable given that ERA is located within the economic development ministry while R4D is based in the GoTL agency responsible for rural construction. The evaluation team noted the good informal cooperation (well documented when services were being procured) between the two projects and did not find major negative outcomes from the informal interaction.

Project Steering Committee (PSC)**.** The PSC is chaired by the MECAE, with the EC, MFA/NAO, IADE, Don Bosco and ILO as members. The recent PSC meetings have been well attended by senior officials of the PSC member agencies. The structure of the PSC is a little unusual in that the service providers (Don Bosco and the IADE) are represented but the main stakeholders in rural roads rehabilitation and maintenance (DRBFC, SEPFOPE and the municipal and district governments) are not. This creates issues of a lack of links with the GoTL agencies receiving funds for and implementing rural roads projects (DRBFC, SEPFOPE, PDID and PNDS) and training implementation (SEPFOPE).

No formal processes are in place to include the major rural road stakeholders in the PSC or other high level coordination activities.

Response to MTR recommendations. The ERA implementation team addressed the main recommendations of the MTR which were within its mandate.

3.6 Sustainability

Rural roads

Appropriate technologies. The low technology rehabilitation technologies suit local contractors and community based road maintenance so ERA has increased the pool of experienced and trained local contractors, particularly in the use and management of LBT which reduces the amount of specialised equipment required by these contractors to implement the work.

Shortage of specialised equipment. For several reasons, there is a shortage of specialised road construction equipment in Timor-Leste which makes it difficult for small district based road contractors to source this equipment and also makes hire of the equipment more expensive. This problem is accentuated by the lack of consistent GoTL investment in rural roads being a disincentive for an investor and / or contractor to buy additional equipment for rental. Also road funding is being directed through several agencies (SEPFOPE, PDID, PNDS) which are not committed (or required) to meet national rural road standards.

A major achievement of ERA is that ERA, with R4D, have developed LBT maintenance systems and techniques for rural roads which are now being used by the DRBFC. These are being implemented on ERA funded roads through GoTL funded contracts managed through R4D. GoTL funding for maintenance of ERA and R4D rehabilitated roads for one year is in place with maintenance included in ongoing DRBFC budgets.

Restricted access to finance services. Current banking services do not support development of a robust network of rural construction contractors (as entrepreneurs). Banks are largely Dili based and have little experience in lending to small rural businesses with limited collateral to support the proposed borrowing. One contractor interviewed had borrowed working capital from the Banco Nacional de Commercio de Timor Leste but had to use other family assets to secure the loan. For these reasons, contractors rely on contract progress payments to fund contracts. Three of the contractors interviewed indicated that they would retain profits from the ERA or R4D contracts to provide working capital for the next contract.

An issue that is now creating more difficulties for R4D contractors is that payments for R4D contracts are processed through the GoTL systems which can be slow to give payment approval. This is in contrast to the ERA system where project staff check and approve claims for payment which are then be processed through ILO payment systems. This places much more pressure on the cash-flow of small road contractors who cannot quickly access working capital if invoices submitted (and technically approved) are not paid on time.

ERA and R4D construction contract processes. Anecdotal feedback and discussions with contractors during the field visits indicated that the developing road contractors appreciated the ERA / R4D contract design and competitive tendering processes. The design and tendering processes meant that the successful contractors had greatly reduced risks in the estimated BoQ that were used for preparing contract costs and also provided a mechanism for including the costs of unforeseen changes to the road design or specification through a formal contract variation process.

Labour-based approach. ERA has documented[16] how LBT can be more cost – effective than using specialised equipment in rural road construction. R4D has undertaken an analysis of the

[16] See 'Cost comparison of equipment based and labour based for some road work activities' prepared for the PSC, June 2014

availability of labour for rural road construction using LBT technologies[17]. This study confirmed that about 75 % of the contractors did not have problems sourcing village labour for LBT approaches but the remaining contractors had some difficulties sourcing labour (an estimated 40 % shortfall). The study found that contractors with a low number of low skilled village labourers had a higher turnover of labour. This may have been due to the contractor not having well developed unskilled labour management skills.

The study observed that contractors who were able to mobilise and manage larger number of unskilled village workers would be able to complete their contracts more cost-effectively. As the study was across Timor-Leste, it found that districts with lower Living Standard Indexes (LSI) had a higher unskilled labour participation rate than districts with higher LSI as the overall labour participation rates are higher (18 %) in the poorer districts compared to more wealthy districts (5 %). An ongoing challenge for rural road (and other rural infrastructure development activities) is the shortage of skilled labour to build the supporting drainage and culvert infrastructure.

A future project may need to address the shortage of skilled labour, possibly as part of upskilling unskilled road workers to improve their incomes and to provide skills that can be used in other types of construction, thus broadening their potential work base.

Maintenance. A major achievement of ERA is that ERA, with R4D, have developed maintenance systems and techniques for rural roads which are now being used by the DRBFC. These are being implemented on ERA funded roads through GoTL funded contracts managed through R4D. The labour based approach with workers from neighbouring villages is appropriate. During the evaluation field visits, maintenance crews were observed working along most of the roads. The sides of these roads had had the vegetation trimmed (in some cases more than once) and most of the drains and structures noted were clean and operational. Feedback from the communities visited was that the maintenance processes were operating smoothly.

A village-based road maintenance team on the Fahilebo Road, Liquica

GoTL funding for maintenance of ERA and R4D rehabilitated roads for one year is in place with maintenance included in ongoing DRBFC budgets.

The challenges of rural road maintenance – Kirelo Road

An issue noted during the field visits was that of the management of more substantial problems (usually water erosion from road run-off) which could have a major impact on the roads. An example of this was on the Libaloa-Fahilebo Road in Liquica where the road embankment across a narrow ridge was being under-cut by drain run-off which had not been directed to a stable run-off area. The evaluation team assumes that the ERA / R4D engineering team

[17] Labour Availability Study. Study on Labour Mobilization and the Availability of Local Labour during 2013/14 R4D Rehabilitation Works. March 2015.

would be inspecting the road more than once per year to ensure that these more significant potential problems are addressed.

Contractor capacity development
ERA has increased the pool of experienced and trained local contractors, particularly in the use and management of LBT which reduces the amount of specialised equipment required. The ERA project has supported 150 local small contracting companies to implement small rural road rehabilitation and maintenance contracts.

However, until the small ERA / R4D trained and coached construction companies have undertaken 2-3 road contracts, they will not have the capacity to undertake two road rehabilitation contracts at the same time as their management and supervision resources will be stretched too thinly.

The developing road contractors appreciated the ERA / R4D contract design and competitive tendering processes which reduce tendering risks and provide a mechanism for including the costs of unforeseen changes to the road design or specification through a formal contract variation process.

Training packages. Currently the training providers are dependent on GoTL or donors funding rural road rehabilitation to fund training, coaching and refresher training of R4D rural road contractors. If Don Bosco and IADE can retain their ERA trained contractor trainers, with limited further guidance and technical inputs, the organisations are capable of delivering the current well-documented training material

The challenge is that the current training packages are probably not well enough developed to meet all the needs of the developing small road contractors to reach a level where they can implement rural road rehabilitation and maintenance activities with limited supervision, ie. without further coaching and access to engineering advice and guidance. Figure 3 highlights the priority given to further technical and contractor business and contract management training by the surveyed contractors.

Institutional linkages for project implementation
The ERA project is now under the MECEA. This means it has no direct institutional linkages to the main agencies (DRBFC and SEPFOPE) responsible for the rehabilitation and maintenance of rural roads. Because of the capacity building focus of ERA with Don Bosco and IADE, SEPFOPE would provide some appropriate institutional linkages (also noted during the evaluation wrap-up workshop). There are also the potential linkages with the SEPFOPE community infrastructure investment activities including rural road construction. However, these linkages have not been developed.

Ownership of project activities
The ERA project is addressing road rehabilitation and maintenance issues at village level. Some of the project roads are part of the link roads from suco centres to district towns while other ERA roads link suco centres. Under the definitions used[18] in the new RRS, the ERA supported roads are D or E1 class roads. The evaluation team notes that ERA ran a major community engagement[19] process with participating municipalities, districts and sucos during the pre-construction phase activities. The team observes that local ownership of the rural roads may be limited as:

- Communities want to be paid for all inputs to road rehabilitation and maintenance.

[18]Draft Rural Roads Master Plan and Investment Strategy, GoTL/MPWTCTC (September 2015) - awaiting GoTL endorsement. Restricted use only. P 6, Table 2: Classification of Different Classes of Roads.
[19] The process was to provide information rather than to encourage community participation in the planning, prioritising and ongoing maintenance activities. The process also mobilised potential paid workers for the construction activities.

- Communities see GoTL as responsible for delivering roads and on-going maintenance.

The small contractors / CCI-TL provided some support to fund ongoing training / capacity building activities, contributing about 12 % of the cost of their training activities.

3.7 Risk Management

ERA has had a comprehensive risk monitoring and management process in place since the start of the project. The risk monitoring and management matrix in the project design / inception report has been updated in Annex 6. It shows that the ERA management team most recent assessment of risks is largely shared by the evaluation team. None of the risks identified at design and in the inception report have escalated. The project processes have been able to manage the identified risk within the project resources.

This is a very good outcome considering that ERA was not closely linked with appropriate GoTL institutions.

3.8 Cross-cutting Issues

Gender. As outlined in earlier sections, ERA has created work opportunities for village women (about 25 % of community labour) but mainly in unskilled areas without value-adding training. This is less than initial targets of about 30 %, possibly due to perceptions that some of the unskilled work was too difficult / heavy for women. The R4D Women's Impact Study and the evaluation field visits provided feedback that this limitation on women's inputs may have been overstated and more women could have participated. Data from the R4D labourer's Survey 2015, indicated that, on average, female labourers undertook 21 days of work while men undertook 32 days of labouring work. The evaluation team expects that the ratio would have been similar on the ERA trial contracts.

An impressive part of the ERA contracting was how > 30 % of construction contractors securing ERA trial contracts were controlled by women and were implemented successfully. The three women contractors met by the evaluation team were impressive business women who had clear business development plans to build on the opportunities created by their initial ERA contracts.

A disappointing aspect of gender issues was that ERA field implementation teams did not include women. ERA management reported that no suitably qualified women had applied for the field implementation positions. Discussions in the field indicated that there were no cultural issues which would have created difficulties for women engineering staff and the work required was well within the capacity of female engineers. There may have been advantages in having women on the frontline of project implementations to provide role models for young village based female students looking at career options.

Environmental issues. ERA roads are being built in areas with significant environment risks due to the geology / soil types and climatic conditions. ERA engineers addressed potential environmental issues during the design phase but there was no formal process to monitor how these issues were addressed and the outcomes after construction was completed. Road designs and mitigation activities largely reduced environmental impacts, including ILO providing innovative practices from other similar environments in the region[20].

On the Builecun-Leohitu Road site in Balibo the geo-engineering solutions installed to assist stabilisation of the large area of unstable slopes are being undermined by a lack of fence maintenance and control of grazing goats in the rehabilitated areas. The project erected fences have

[20] A Nepalese engineer was contracted to advise on and design a major crossing across a large unstable hill slope on the Builecun-Leohitu Road near Balibo.

disappeared. This is an example of a lack of community ownership of / responsibility for an investment that has provided substantial community benefits through improved access as demonstrated by the number of new and improved houses along the road.

Rehabilitated roads are showing limited environmental problems that can be largely addressed through the scheduled simple ongoing maintenance (mainly maintaining drainage and filling potholes) activities. An extreme case was on the Lihu-Samalete Road in Ermera, west of Railaco, where the R4D road maintenance teams had not stopped water from the side drains crossing onto the road then running down and eroding the main pavement where vehicle wheels travel.

Occupational safety and health. ILO provided guidance on occupational safety and health (OSH) conditions through inputs from an OSH specialist. There have been varying levels of compliance – all contractor workers sighted during field work were using basic safety equipment but some photographs of work sites showed varying use of safety equipment. Contractors had to report on OSH issues on their work sites in their reporting to the ERA managers but, as with the environmental monitoring, the ERA databases did not systematically collect data.

3.9 Project Monitoring and Evaluation

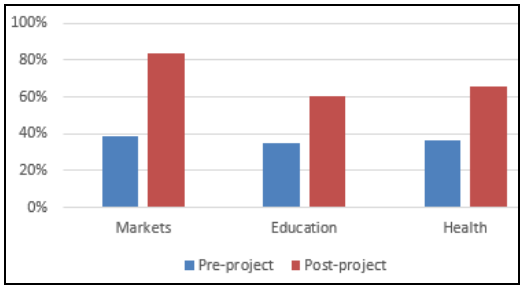
ERA has a monitoring system for all the activities using three custom built databases with on-site monitoring by ERA staff complemented by regular visits by ILO and EU monitoring teams. The databases are:

(i) **A Training database** which captures information for all companies registered with the ERA Project, all training courses that has been delivered and information on each individual trainee.
(ii) **The Contracts database** which captures all information relevant to the contracts issues by the ERA Project, including profile of beneficiaries and progress of each contracts.
(iii) **The M&E database** developed around the Community Snapshot process and pre / post project traffic counts.

The ERA monitoring system worked well – however for evaluation, some of the tools could have better designed to inform management. Also the small ERA management team with only one person[21] allocated for M&E had limited time and resources to analyse and make use of all the M&E information. The project used a number of evaluation tools.

Community snapshots. Because of the limited M&E resources in the PMU[22], an early decision was made not to undertake a conventional baseline study, but rather to systematically collect a range of data for each community which could then be recollected after the roads had been rehabilitated. Figure 7 provides an example of the changes that communities in Ermera reported. These measures were condensed down into three main access areas: markets, health and education using 7-10 indicators for each area to rate the pre and post project situations. This has been implemented for most communities and has been summarised in simple graphs showing the changes in access from before the project started to when the road work was completed. The scores were combined as a percentage with a higher

Figure 7: Improvements in Community Access Pre to Post Project (Using the Community Snapshots Tool)



Source: ERA M&E database

[21] The M&E officer was paid significantly less than the local engineers which could make it difficult to recruit a highly experienced person.
[22] R4D may have a larger budget for M&E and has contracted more experienced longer term staff to implement the M&E activities.

percentage score being better. Consolidated data for the project is provided in the first graph under project impact.

ERA video snapshots[23]. To complement and make the community snapshot information more accessible, ERA arranged production of 20 x three minute videos to highlight the benefits that have arisen from project activities. These have been made to a high production standard and use an initial standard presentation on ERA activities followed by a tailored 1-2 minute section of feedback from a range of stakeholders in each project area.

Traffic counts. ERA has undertaken a comprehensive series of seven day traffic counts on many of the project roads with pre and post project traffic counts to produce information on the numbers and types of traffic that was using and now uses the roads. The data for 15 roads has been collated.

3.10 Visibility

In the ERA inception report (2012), the ERA team had proposed an integrated set of activities to enhance the visibility and awareness of the project. The proposed activities included: development of an ERA website, brochures, newsletters, regular press releases, the community snapshots, posters and banners for use at ERA events, and short video presentations (ERA video snapshots) suitable for use as standalone information / promotional activities. The promotional material reviewed by the evaluation team is all very well prepared and includes the branding / visibility requirements of the EU and ILO. The series of ERA Snapshots have been an important part of that activity as have regular press releases and exposure in the local press.

A prominent part of the visibility activities has been the signage at the start / ends of the project roads. The adjoining photographs show the adjoining signage for an ERA road rehabilitation project and for the road maintenance contracts on that road that are now being implemented by R4D. The ERA sign is the project sign which complemented a contractor sign erected during construction which indicated the contractor name, contract duration and contract value. There is much more information on the R4D sign (in English and Tetum) to inform communities and people reading the signs.

Based on experience in Indonesia and other third world countries, providing more information on signs placed on activity sites increases the transparency of the procurement and contract implementation processes, and allows communities to understand what work and funds the project plans to use.

Neither sign indicates the degree to which LBTs are planned to be used and the funds that will be paid back into the communities as wages or other supplies.

[23] These are available from the project office or ILO in Timor-Leste.

3.11 ERA Outcomes and Outputs

The ERA logframe and M&E framework described outputs to be delivered by the project. The final results are set out below and show that the project has achieved its (revised[24]) outcome and outputs which have contributed to the improvements in access outlined above.

R.1 Road contracts implemented

- 140 km of rehabilitated road (Revised target 140 km)
- 7,300 households have improved access to rural roads (Target 5,600)
- 500,000 worker-days for 8,000 beneficiaries (Target 430,000 worker days for 7,200 villagers, reduced from 780,800 due to higher unit costs/reduced road length rehabilitated)
- Constructed roads are an appropriate level of technology

R.2 Local contractors and supervisors implement construction contract management

- 552 contract managers complete accredited training (Target: 500)
- IADE accredited by INDMO to deliver contract and business management training

R.3 Local contractors and supervisors competent in labour-based rural road works

- 550 contractor staff, 34 MPWTC supervisors and 23 others trained (Target: 400 contractor technical staff and 15 MPWTC supervisors complete accredited technical training for rural road rehabilitation and/or maintenance)
- 89 % completed trial contract to specifications (Target >65% of trial contracts completed as per specifications on time and within budget)
- 206 contracting companies completed rehabilitation training and 67 companies trained in routine maintenance (Target: 45 companies ERA certified[25] for rural road rehabilitation and 15 certified for rural road maintenance)
- 100 % of trained contractors engaged in competitive bidding and/or implementing small LBT rehabilitation and maintenance contracts (Target 70 % of trained and eligible companies participate in tenders)
- Don Bosco Foundation Training Centre in Comoro accredited by INDMO to deliver technical training modules for rural road rehabilitation and/or maintenance.
-

3.12 Project Impact

The ERA goal was: '*The access of rural communities to services and to income opportunities is improved through the rehabilitation and maintenance of rural roads'.*

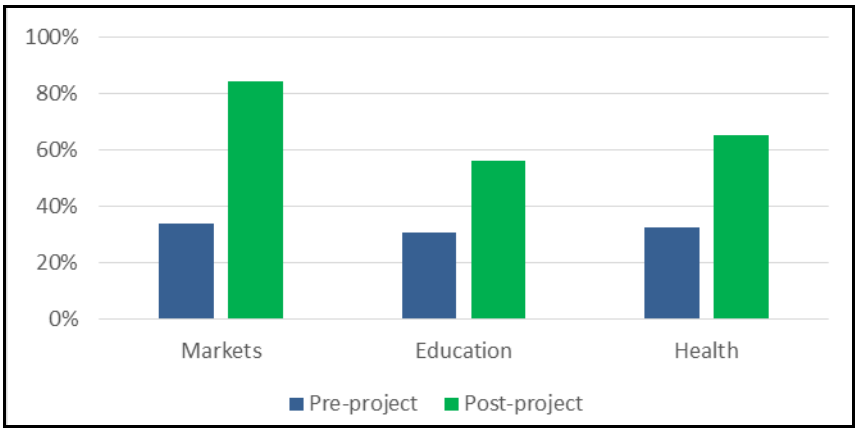
As outlined above, the ERA M&E team collected pre-project baseline and post construction information on measures of access for villages along the roads to be rehabilitated and information on changes in the numbers and types of traffic using the roads. This data has been collated and summarized into the following tables which highlight the improvements in access that the roads have provided.

[24] As noted in the description of the targets set, the distance of planned road to be rehabilitated was reduced because the actual unit rehabilitation costs were higher than planned in the design. The EU contributed a further Euro 1.6 million (about 30 %) to support road rehabilitation but these funds were not enough to construct the 150 km or rural roads originally planned.

[25] ERA only provided national certification for participants in the ERA supported training activities, not the companies which employ the participants. A project certification was provided for companies successfully improving their capacity. Anecdotal information indicates that company director capacity is a major factor in company performance so there has been a focus on ensuring company directors participate in the training, particularly on the business and contract management aspects. The issue of national company accreditation to be used as a short-listing requirement for future rural road contracts has not been addressed by ERA. Other aspects of company performance (financial capacity, previous contract performance, other measures of staff skills and training) would need to be incorporated into a company accreditation process. This was beyond the scope of ERA and would be a challenging addition for an ERA Mark 2 project. However at present, contractors budding for MPWTC contracts must include staff with certificates.

Figure 8 summarizes information from the Community Snapshots and shows there has been a marked increase (more than doubled) in the communities perceived views on market access with smaller improvements in access to education and health services. The percentage ratings are a summary for each community of 7-10 measures of how access to the three areas has improved. The same question formats were used pre and post-project. A higher proportion or score is an improvement.

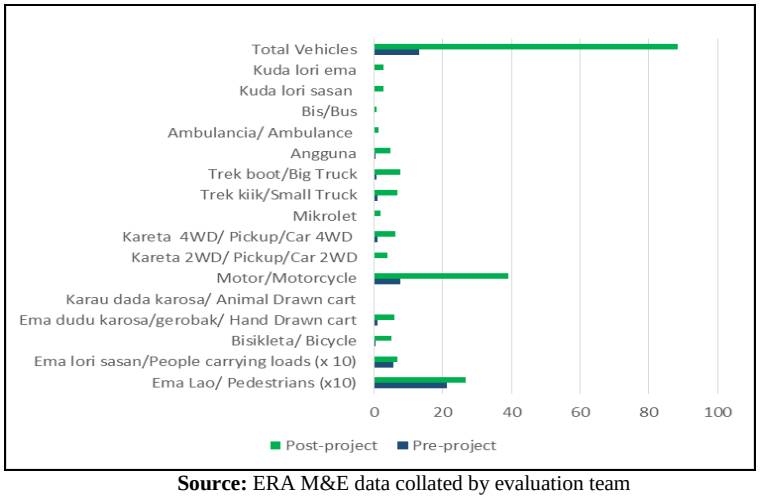
Figure 8: Project Impact – Improvements in Community Access



Source: ERA M&E data collated by evaluation team

As often used on road construction / rehabilitation / maintenance projects, the M&E team undertook detailed seven day (Monday to Sunday) traffic counts pre and post-project at the same locations along the roads. Figure 9 summarizes this data on average daily vehicle counts pre and post-project.

Figure 9: Pre and Post Project Daily Traffic Counts



Source: ERA M&E data collated by evaluation team

;

This information aligns with other impact data collected by R4D and collated in the Impact Monitoring Report October 2015 (R4DIMR15). For example, R4D data showed a reduction of 20 minutes in travel times (46 %) along the sample of 9 R4D rehabilitated roads (P 19, R4DIMR2015). The improvement on roads with R4D maintenance programs was 13 minutes (33 %). An ERA survey in 2015 (Workers and Business Survey in Zumalai, Road Boardaikun Mapo) had similar findings.

The EDF10 evaluation of 2014 reported that: '*The two rural road projects (including ERA) are the only projects scoring in monitoring reports with a full A for "impact" prospects" in the ROM reports. Effectiveness and impact opportunities were enhanced by the ILO approach, working within institutions and developing trust and dialogue with counterparts156. Implementation of the*

EU Cooperation underpinned an improvement in national procurement mechanisms and procedures, influencing the development of stronger national allocations for rural roads' (P.35).

Other benefits
In addition to the points highlighted below, short significant change stories on how the project has impacted on three project participants are provided in Annex 7.

(a) **Capacity development to support new small road contractors**
As documented earlier and reinforced during the field visits, ERA has started to develop the capacity of Don Bosco and the IADE to build small contractor capacity through a balanced mix of classroom and hands-on training, trial (or R4D) contracts to apply the skills learned supported by coaching / mentoring support from the experienced training engineers.

However, assessment of the progress of contractors in applying the skills and knowledge they have learned and contractor feedback to the evaluation team indicates further work is needed.

(b) **New businesses.** The evaluation field work identified some villages where workers reported investment of road work income into income generating businesses. This was largely into kiosks and transport services, largely with motorbikes. The R4DIMR15 reported that only new kiosks had had enough time to stabilise their businesses. The survey found kiosk turnover had increased by USD 20 (USD50 toUSD70) (P.39). At least one example was observed (Kirelo) during the evaluation where a coffee processing facility is being developed, partially to take advantage of the improved road access.

(c) **Transport services.** Most villages reported village members had purchased motorbikes for transport services and, in some cases, trucks for transport services.

(d) **Improvements in access to markets** included:
- Easier access to suco and district markets.
- More traders coming into the villages to compete for purchasing production.
- An ability to move larger volumes of production quickly (leading to up to 50 % increases in production and changes to more valuable crops)
- Farmers can access better seeds and production technology driven by market needs

(e) Improved access allowed earlier connection to the developing electricity supply network.

(f) **New contractor business.** None of the ERA contractors met during the field visits advised that they had secured new road rehabilitation contracts (although one had won one of the road maintenance; contracts). At least eight of the ERA road rehabilitation contractors have won road maintenance contracts under the R4D road maintenance activities.

4 Key Questions

The evaluation ToR included key questions as set out below to guide the evaluation process.

4.1 Achievement of Immediate Objectives, Outcomes and Outputs

As outlined in Section 3.11 and 3.12, ERA has achieved all its designed objectives and outcomes (improved access with flow-on community benefits), has developed the capacity of more than 200 small construction to undertake rural roads and developed and developed two local institutions, Don Bosco (private sector) and IADE (public sector), to deliver well-prepared training packages which include hands-on practical training supported by structured programs of trial commercial scale road

contracts complemented with coaching / mentoring resources to strengthen the initial training activities. The training packages with complementary mentoring support have been used by the larger GoTL / DFAT R4D project to implement their road rehabilitation and maintenance activities as part of developing the capacity of DRBFC.

4.2 Contribution to RDP IV, SDP and DWCP

SDP 2011-2030. The GoTL 20-year Strategic Development Plan (SDP 2011-2030) emphasised the importance of infrastructure, including roads, in achieving accelerated sustainable development. SDP 2011-2030 targeted the rehabilitation of all rural roads by 2015[26] to minimum standard using locally based contractors.

The MPWTC Five-Year Action Plan linked to the SDP 2011-2030 outlined a strategy to improve the road network. By the end of 2017, the MPWTC aims to have 1,270 km of priority roads in good condition and being maintained. The MPWTC also plans to have a workforce with adequate capacity to implemented and maintain the roadwork program[27].

The government also incorporated 'Foster Private Sector Growth' as a major goal of its SDP. The SDP acknowledges that there is a need to increase investment in the building of a national capacity to implement the SDP which ERA has supported through the development of the training capacity and resources of Don Bosco and the IADE.

RDP IV. ERA has delivered all the agreed[28] road related outcome included in the RDP IV design as the ERA design incorporated the RDP IV rural roads related outcomes.

ILO. Guiding the ILO contribution to the development of Timor-Leste was the Timor-Leste Decent Work Country Programme (DWCP) 2008-2013, which aligned with the Timor-Leste United Nations Development Assistance Framework (UNDAF) 2009-2013. Both UNDAF and DWCP supported Timor-Leste's efforts to achieve the Millennium Development Goals (MDGs): specifically MDG 1: Eradicate extreme poverty and hunger; MDG 3: Promote gender equality and empower women; and MDG 7: Ensure environmental sustainability. ERA contributes to three main parts of the DWCP 2008-2013 through:

A. **Enhancing Youth Employment.** ERA improved the quality and relevancy of skills training courses in public (IADE) and private (Don Bosco) training institutions

B. **Integrating Employment into Rural Economic Development.** ERA generated more employment directly through the roads developed under the rural infrastructure investment programme (also included under new DWCP 2016-2020)

C. **Creating Labour Market Governance.** Increased institutional capacity of employers' (contractors) and workers' organisations to assist small rural contractors become profitable and growing businesses that employ more workers and develop the skills of their workers.

The ERA project addressed and aligned with the three pillars of the new (2016-2020) and old (2008-2013) DWCPs and contributed to the social and economic development in Timor-Leste through:

26 This was an ambitious target which has not been achieved due to restricted GoTL budget allocations, the need to develop the pool of suitably trained contractors and, at that time, very limited service provider capacity to deliver the required capacity building and support to the small local road contractors needed to implement the SDP rural roads objective.

27 Developing the capacity of the GoTL agencies is a major activity of the Roads for Development (R4D) Project implemented by ILO.

28 Modified slightly with the agreement of and extra funding from the EU.

(a) Enhancing Rural Access (ERA) - The ERA project, aimed to improve access to rural areas through the rehabilitation and maintenance of priority rural roads identified by the local communities.

(b) Contributed to the development of Timor –Leste, leading to improved quality of life for rural people and assisting in reducing the incidence of poverty.

(c) Two national training institutions, the Institute for Business Development Support (IADE) and Don Bosco Training Centre, were supported by ERA in developing their capacities to deliver comprehensive training courses for small domestic contractors, supervisors and contract managers, to ensure the long term availability of institutions capable of delivering quality training to small scale contractors in a sustainable manners.
(d) ERA supported and assisted these training institutions also in their accreditation in compliance with national competency standards. This strengthened the capacities of the training providers for further enhance the sustainability of the project's capacity building outputs.

4.3 Impact on local contractors, community mobilisation and contributions, the local economy and improved social conditions

Local contractors. The project has provided more than 200 contractors with classroom and practical training in the technical and business management aspects of rural road rehabilitation and maintenance. Most (90%) completed their trial contracts or R4D contracts successfully and coaching records (see Section 3.3) indicate the ERA trained and coached have improved their capacity to deliver rural road rehabilitation and maintenance activities.

However, the coaching activities and feedback to the evaluation team from contractors also demonstrated that the contractor capacity building process is still developing and is not complete with only a few small contractors ready to bid for and deliver a rural road contract without assistance. Further coaching support with additional higher level technical and business management training will be required before the participating small contractors will be capable of successfully completing road contracts for the GoTL or other donor clients.

The ERA trained contractors also have challenges hiring the small road rollers needed for the LBT construction. They also can have cash flow issues during the construction period, particularly if working on GoTL funded contracts. Some banks will provide working capital to the small contractors but these loans have to be secured with physical assets (houses, land or cars).

Community mobilisation and contributions. ERA ran a community engagement program before the road rehabilitation activities commenced in each suco. Community mobilisation of construction workers was managed by the suco committee which also managed selection of workers to work with the contractors. The project processes[29] precluded[30] suco committee members from participating in the paid work activities.

All community contributions (except the suco committee members organising the activities) were paid by the roads contractors at the agreed hourly rate (USD 4.50/day). There was some feedback that workers being paid on piece rates may not have always achieved this payment rate but there were no direct complaints to the evaluation team on payment rates.

[29] This exclusion of suco committee members from working on contracts was a local, rather than ERA, decision.
[30] During the field work, the evaluation team was informed by several suco chairperson and committee members that they felt disadvantaged by this process.

Given that the project was constructing low technology rural roads (Classes D and E1), there is an overriding question of whether a more participatory community led approach (as used for PNDS or PDID activities) may have led to community members being more committed to or even prepared to contribute voluntarily to the construction and/or maintenance activities. In addition to saving some construction or maintenance costs (or allowing more road to be constructed) this may have led to enhanced community ownership and commitment.

The local economy. The project has had two main impacts on the local economy. The initial impact was through the wages paid to the women and men who worked on the roads which was spent in the local economy. Most of this (see Figure 5) was spent on immediate domestic needs with about 7 % invested and 7 % used to pay off debts. An average of 18 % of each construction contract was spent on labour with 30 % to 40 %[31] spent on unskilled labour. With the average value of contracts being about USD 120,000, this indicates about USD 21,600 was recycled through wages into communities along the roads with about USD 1,500 of this being invested in new businesses.

Local social conditions. The community Snapshot process has provided a systematic approach to assessing the changes in access to education and health services due to the upgraded roads. As shown in Figure 8, community respondents estimated that access to education and health facilities had improved by about 100 % compared to before the project. The largest improvements were through better access to market services.

The much safer upgraded stream crossing near Falubosa.

Discussions with community members during the field work provided consistent feedback that conditions in the communities with improved roads were better with better access to shops, district centres and health facilities.

A valuable side benefit has been that in several cases the road work has replaced a dangerous water crossing that could leave school children returning from school unable to cross a stream that had risen quickly after heavy rain. The suco head at Falubosa highlighted this as a major benefit of the project.

4.4 Implementation Management

The project has been implemented very efficiently by the ILO implementation team. The balance of experienced regional rural roads engineers and locally employed training engineers has worked well, complemented by the engineering background of the CTA. Communities and contractors met during the evaluation gave positive feedback on their interaction with the ERA implementation team.

Short term specialised engineering inputs provided valuable new approaches (such as the in-place poured box culverts near Falubosa and the geo-engineering on the very difficult section of the Builecun-Leahita Road near Balibo which can now be used as examples of good practice for training other construction companies.

[31] Anedotal estimate by ERA engineer.

The outputs from the business development adviser and the MIS adviser are judged as being only moderate considering the time inputs they had.

4.5 Assessment of the M&E Results Framework and M&E Implementation

The ERA M&E results framework (See Annex 1) was well prepared and proposed practical approaches to assessing progress towards the outputs and outcomes. As noted in Section 4.1, ERA has not directly addressed the high level RDP IV goal as this was to be assessed using nationally collected indicators and was outside the brief of the ERA M&E system.

As used for the evaluation assessment, ERA has collected information to address most of the outcome and output indicators (under Results areas R1, R2 and R3) with the information stored in the three ERA databases.

Some gaps were found in the information on the project purpose indicators relating to: ERA worker investment in productive activities, increased economic activity at suco level and improvements in life and livelihood opportunities. These have been addressed through the ERA Snapshots video series and some village surveys but, due to limited ERA M&E resources, have not been implemented and / or documented for all villages.

As R4D has had access to more M&E resources, it has undertaken and documented more relevant studies to address most of the areas not fully covered or yet documented by the ERA M&E system. This evaluation has made use of these additional studies which complemented and added to the outputs from the ERA M&E system. A change that could be made to the ERA (and R4D) evaluation tools would be to ensure that when goal achievement scoring tools are used, the best or highest positive assessment is given the highest score[32] (eg. 4 out of a 1-4 score range). This scoring process also provides a more logical approach to systematically quantifying respondents' assessments.

Another weakness in the evaluation tools used by the ERA project (and, possibly the R4D M&E system) is that when respondents were asked to note the 2 or 3 most important issues, outcomes or outputs, they were not rated in importance so that the results could not be totalled to show which issues were given the greatest importance.

Overall, ERA M&E implementation is rated highly and has produced useful M&E information which is complemented by information from the R4D M&E system. There is much more valuable information captured in the ERA M&E system which could be used to document the project impact and outcomes, if analytical resources could be available to the ERA team.

4.6 Engagement with Stakeholders

ERA has largely engaged with its stakeholders as planned. The stakeholders were: (i) as the client and main beneficiary, the GoTL and its direct rural road and training agencies including MECAE, MPWTC and DRBFC, and IADE; (ii) the Ministry of Foreign Affairs, the National Authorising Office, SEPFOPE, PDID and the PNDS; (iii) the communities and contractors who were involved with, and have and will benefited from the project activities and improvements in road access; (iv) The Chamber of Commerce and Industry (CCI-Timor-Leste) and the labour union organisation (KSTL); (v) Don Bosco as the private technical training provider; (vi) the ERA implementation team and the design teams for any follow-on rural road projects in Timor Leste; (vii) other rural road focused projects, particularly the R4D project; (ix) the ILO Programme office in Timor Leste and ILO Country office for Indonesia and Timor Leste (CO-Jakarta); (x) the ILO headquarters and DWT-Bangkok; and, (xi) the EU as the funding agency.

[32] This scoring system may be more useful to a lay reader of the document who often assumes higher is better.

The community engagement process was implemented as a consultation rather than community participation activity. No negative feedback on the engagement processes was received from community members during the evaluation FGDs.

The formal stakeholder engagement process was through the PSC and did not include two of the major stakeholders – DRBFC and SEPFOPE. Informal (and contracted) interactions between ERA and R4D worked successfully, possibly greatly assisted by ILO being the implementing contractor for each project.

Engagement with SEPFOPE was not a major priority and the lack of engagement has not had major impacts on project implementation. INDMO, a section of SEPFOPE, has accredited the Bon Bosco and IADE rural road related courses. Until GoTL requires all agencies receiving funding for rural road construction to use engineers and supervisors trained and accredited in LBT road construction, a future ERA type project is unlikely to benefit from closer linkages to SEPFOPE.

As identified earlier, the ERA implementation processes have not formally linked with district administrations to ensure that information on project roads and contractors is provided to the administrations for their planning and further implementation of rural roads activities.

Tripartite arrangements

Overview. ERA has engaged with most of its stakeholders through a range of mechanisms. The PSC structure did not included all the main stakeholders and may have been improved if a technical working group including the DRBFC, SEPFOPE, the service providers and municipal representatives had been created to advise a smaller PSC.

Government agencies. MECAE were chair of the PSC. The Ministry of Foreign Affairs / the National Authorising Office were on the PSC together with IADE. MPWTC and DRBFC, SEPFOPE, PDID and the PNDS were not part of the PSC.

Employers. ERA has developed close linkages with CCI-TL as the representative organisation for rural road contractors and has worked closely with CCI-TL in developing and implementing the contractor training programs. CCI-TL is very positive about the ERA contractor development activities as the organisation believes it is addressing an important area of developing small contractor capacity to fill an increasing demand for capable construction contractors. CCI also places a high priority on having improved local contractor capacity in place when GoTL joins ASEAN which would make access to GoTL contracts by contractors from other ASEAN countries easier.

The municipality branches of the CCI have difficulty generating income from their members to support lobbying and training activities to benefit the members.

Unions. Discussions with the Konfederasaun Syndikat Timor-Leste (KSTL) (Confederation of Trade Unions in Timor-Leste), indicated that they were satisfied with how ERA was working and that workers were being paid a basic wage[33], comparable with those earned by other unskilled workers in Timor-Leste.

KSTL had no direct engagement with ERA implementation which was surprising given the stated ILO policies of tripartite engagement.

[33] Anecdotal feedback in the field is that the wages paid to ERA unskilled road workers may be higher than what unskilled labourers are paid in Dili where living costs would be higher.

4.7 Project and Risk Management

None of the risks identified at design and in the inception report have escalated. The project processes have been able to manage the identified risks within the project resources and, formal and informal institutional linkages.

The higher risk areas identified in the risk matrix: contractors accessing equipment and financial services and continued GoTL investment of rural roads have not constrained ERA project implementation but will continue to be constraints on the ERA trained road contracting businesses developing and expanding their businesses. ERA training activities have addressed issues relating to accessing equipment and financial services while ERA engagement with GoTL and its agencies have highlighted the benefits of continued GoTL investment in rural roads.

4.8 Factors affecting project implementation

No significant factors impacted on implementing the ERA activities as the EU funding for the trial road construction contracts meant that the project capacity building activities continued separately to the (varying) GoTL budget allocations to rural road rehabilitation and maintenance.

The shortfall in GoTL roads funding in 2014/15 restricted the R4D road rehabilitation program which used ERA trained road contractors who had already completed an ERA or R4D contract to undertake the limited contracts available rather than train new potential road contractors. This also reduced the demand for ERA training services through Don Bosco and IADE in that year.

4.9 Capacity building of institutional counterparts

A feature of ERA has been the development of its two service provider partners – Don Bosco and the IADE. Both organisations now have the capacity to deliver the well prepared basic training material and provide follow-up support for technical training (Don Bosco) and business / contract management training (IADE and Don Bosco). The improvement in capacity can be assessed by improvements in contractor performance measured during the contractor coaching process (see Section 3.3).

ERA has provided capacity building to supervisors and engineers from its (informal) engineering related institutional counterpart in the DRBFC through their participation in ERA training programs for contractor's engineers and supervisors.

It was reported that ERA made efforts to link to other local agencies such as SEPFOPE which may have been an appropriate training counterpart organisation. However, there was limited interaction except for the participation of four SEPFOPE and four PDID engineers in the ERA Pavement training course.

5 Conclusions

The initial findings, conclusions and recommendations were presented at a stakeholder workshop on Friday 12 February 2016 in Dili. The presentation used and attendance list are provided in Annex 8. Group discussions on the initial findings and conclusions have been incorporated in the following sections.

5.1 **ERA has developed a successful capacity building model.** The ERA model of integrated training, trial contracts and, initial coaching and mentoring support has been a cost-effective model for upgrading the skills of the local small construction contractors.

5.2 **Additional capacity development is needed.** The small contractors trained through ERA will require further training and coaching to consolidate their acquired skills. Most will also

need further technical and business management training at a higher level to become sustainable road construction businesses. If additional donor or GoTL support (on a fee for service basis) is not available to continue the existing training and coaching, the ERA work will be largely; wasted. There is currently no national certification process for road contracting companies.

5.3 **Wider use of ERA developed rural road skills.** Other GoTL agencies (SEPFOPE, PDID and PNDS) which implement rural roads activities are not using the improved capacity of ERA trained contractors to improve their rural roads activities.

5.4 **The ERA integrated training model is not sustainable** without strong institutional linkages to and support from the GoTL and private sector, through the CCI-TL.

5.5 **Formal institutional linkages.** The high level ERA coordination group, the PSC, did not include the major ERA and, rural road rehabilitation and maintenance stakeholders, such as the DRBFC, SEPFOPE and district governments but included service providers. This is not an appropriate governance structure.

5.6 **Linkages to district administrations.** As the Disconcentration / Decentralization processes proceed, rural road rehabilitation and maintenance activities need to more closely link with district administrations to share information and develop capacity.

5.7 **Tripartite issues.** ERA has developed a strong working relationship with the GoTL and the private sector construction contractors and their representative organisation, the CCI-TL, which has been developed with ILO assistance. ERA has developed the capacity of and used both GoTL (IADE) and private (Don Bosco) training organisations. All these organisations participated in the PSC. The labour union organisation (KSTL) had very limited involvement in the project activities.

5.8 **Gender**. ERA almost achieved the target of 30 % of construction labourers being women with 25 % being achieved. Contractors restricted women's work inputs to lighter manual work activities which limited their potential inputs and earnings. Interviewed women indicated they could have undertaken heavier manual labouring work. The lower women's inputs were also due to more skilled labourers, usually men, being used for to build more than planned road structures. The project did not include a skills upgrading activity targeting women. About 30 % of construction contracts were won and implemented successfully by women owned construction companies.

5.9 P**roject signage.** The project awareness signage used on the project roads provided limited information to inform communities or users of the project activities or provide information that would improve the transparency of contracting and implementation arrangements. The project site signs used by R4D were much more informative and are a good example of Best Practice.

6 Lessons Learnt and Good Practices

6.1 Lessons Learned

The following lessons are more fully documented in ILO format in Annex 9.

(i) Participants in ERA training courses need to meet a minimum standard of knowledge and skills or they will have great difficulties completing the classroom and practical training. Pre-testing of knowledge in the technical area at the start of a course will both assist in screening out participants with limited potential and provide a baseline for assessing improvements in knowledge and skills generated by the training activity.

(ii) Contractor management is a major factor in developing successful small road contractors. Despite many new contractors being entrepreneurs who are motivated to run a contracting business, they do not have the business management knowledge and skills, such as director capacity, cash flow management, preparation of tenders and managing contracts, to profitably manage their businesses and, possibly, expand the businesses.

(iii) Changes in traffic loads after upgrading a rural road which provides an alternative to a low quality district road for through traffic need to be assessed at the design stage to ensure the planned rehabilitation is appropriate to the probable traffic load.

In at least one case, the upgrading of an inter-suco road has provided an alternative (and faster) route compared to a nearby district road in poor condition. This has led to the traffic load being higher than expected for an E1 class road and increasing the maintenance requirements.

6.2 Good Practices

The following emerging good practices used by ERA are more fully documented in ILO format in Annex 10.

(i) Integrated road rehabilitation and maintenance implementation, supervision and management training package including use of coaching / mentoring. The benefits of integrating the training processes have been demonstrated by ERA and provide a cost-effective approach to improving contractor performance and improving road contract outcomes.

(ii) Use of experienced specialised technical assistance to provide innovative engineering solutions. There is extensive road rehabilitation experience in very difficult third world environments where cost-effective appropriate technologies have been tried. Introducing regional engineers with experience in similar conditions to design and supervise implementation of alternative approaches is a cost-effective way of transferring technology.

(iii) Developing the capacity of established appropriate training providers to deliver project funded and ongoing training services. A weakness of many infrastructure development projects is that they rely on on-the-job training to transfer knowledge from expatriate engineering specialists to local engineering and contractor staff. By developing and making use of local vocational educational providers, the training modules and appropriate support can be embedded in these organisations. A key constraint is that ongoing national government (or donor) funding is needed to pay for the service provider inputs. However, as locally based and staffed organisations, the costs of providing these services will be relatively small compared to the road contract costs.

(iv) The Community snapshot model for impact assessment is a valuable tool for cost-effectively creating a baseline on community access to important services and then to assess the benefits achieved from the improved roads. (This practice was documented in the ILO ERA MTR 2013 Page 66)

6.3 Opportunities

The training and roads contractor capacity building resources at Don Bosco developed through ERA could also be used for other activities to develop rural road technical and implementation capacity in Timor-Leste. These opportunities could include:

(i) **Providing practical road engineering skills to civil engineering undergraduate students** The road rehabilitation and maintenance vocational education packages developed and used by ERA could provide a valuable addition to the training of young engineering students. As part of their undergraduate course, students interested in road construction engineering courses could be given the opportunity to take some or all of the training modules used by ERA and R4D.

(ii) **Upgrading contractor equipment operators to supervisor level**
A structured accredited program could be provided to upgrade suitable equipment operators working for small and medium size contractors to be works supervisors. The accredited learning modules (broadened with the additional higher level learning modules proposed in the recommendations) could provide credits towards a formal certificated qualification.

(iii)**Providing commercial coaching / support services to small contractors**
Don Bosco could offer commercial coaching / technical support services to small contractors implementing GoTL funded rural roads activities to assist these contractors develop their capacity to profitably bid for and implement these contracts. As noted earlier, the costs of these additional coaching / mentoring inputs are a small proportion of the contract values and would still be less than 10 % of the likely profits from a well-managed contract.

7 Recommendations

7.1 Additional capacity development is needed (Conclusion 5.2) The small contractors trained through ERA will need further technical and business management training and coaching support at a higher level to become sustainable road construction businesses.

R.7.1.1: **The ERA integrated rural road contractor capacity development model should be continued.** (High priority)
In the short term this can be partially achieved through ongoing R4D funding of R4D contractor training and support. This training/ support should make use of the existing capacity and resources that have been developed within Don Bosco and the IADE.

In the next 1-2 months, R4D will need to work closely with Don Bosco and IADME to specify the R4D training and coaching requirements for the next 12 months. This will allow Don Bosco to retain the required rural road training resources as staff or contracted session trainers / coaches. These resources would not be able to further develop the ERA training courses as recommended under **R.**7.1.2.

R.7.1.2: **New higher level technical and management training modules and support.** (High priority but requires significant donor and /or GoTL funding) This is to ensure the participating road contractors have the necessary skills and experience to independently implement rural road contracts that meet DRBFC construction and maintenance standards
.
This will require additional subject matter and ToT training to deliver courses for more advance skill levels. Specialised regional engineering trainers as used by ERA will be needed to guide development of the training materials and training courses. In addition to the technical assistance inputs, project management and funding for on-the-job training will be needed. This would need to come through an existing (R4D) or new (ERA Mark 2) rural road project.

As with **R.**7.1.1, this recommendation needs to be implemented before the existing rural roads training / support resources at Don Bosco are disbanded and the incumbents take other positions. Action will be needed in the next 3-6 months.

R.7.1.3: **Recognised certification of rural road contractors.** If recommendation R.7.1.2 can be implemented, certification of rural road contractors should be included as a second priority activity. Incremental donor, complemented with GoTL, funding would be required to implement this recommendation.

7.2 Wider use of ERA developed rural road skills. (Conclusion 5.3) Other GoTL agencies implementing rural roads activities are not using the improved capacity of ERA trained contractors to improve implementation of their rural roads activities.

R.7.2 **Rural road activities implemented by contractors with ERA trained staff.** (Medium priority) The MPWTC, as the GoTL technical agency responsible for rural roads, should encourage other GoTL non-technical agencies implementing rural road activities to use ERA / R4D trained road contractors and apply the appropriate road and construction standards using these contractors. The GoTL would need to implement this recommendation as it allocates rural road funding.

7.3 Linking the ERA integrated rural road training model to the GoTL and private sector. (Conclusion 5.4) The sustainability of the ERA integrated training model requires ongoing demand, supported by funding, from Timor Leste based organisations.

R.7.3 **GoTL and the CCI-TL lead development of a sustainable rural roads skills development model.** (Low Priority) GoTL and the CCI-TL, with its member contractors, be encouraged to lead development of a sustainable funding and organisation model to support the two ERA developed road contractor training organisations.) If recommendation R#7.1.2 can be implemented, development of the sustainable process should be included as a low priority activity which would need limited facilitation support funding.

7.4 Formalising institutional linkages. (Conclusion 5.5) The high level ERA coordination group, the PSC, did not include all the major ERA and, rural road rehabilitation and maintenance stakeholders.

R.7.4 **Project coordination groups.** (High priority for new donor funded projects) Coordination bodies for future projects such as ERA should distinguish between policy / strategic level participation at the PSC with implementation partners (service providers, service users and clients) becoming part of a lower working group structure which provides requested inputs to the PSC and addresses technical and implementation issues. The GoTL and donor organisations are responsible for defining the members of a PSC and associated working groups. This should need very limited facilitation support for the working group.

ILO INDEPENDENT EVALUATION REPORT

Annexes

March 2016

ANNEX 1 RDP IV and ERA Logframe and Results Framework

1.1 Rural Development Programme IV and ERA Logframe

Narrative Summary	Indicators	Sources of Verification	Assumptions
RDP IV Objective: Rural communities have adequate food, either directly from agricultural production, or through other employment and entrepreneurial activities.	Proportion of the rural population suffering at least one month low food consumption reduced from 79% (2007) to 60% by 2020.	DNE Living Standards Survey.	No major natural disasters
	Proportion of under-five year old children who are under-weight decreased from 49% (2007) to 31% by 2020.	Demographic Health Survey (2007)	Continued economic growth
Income generating opportunities and access to public infrastructure and services allows rural communities a basic quality of life and prospects for further improving livelihoods	Proportion of the population living above the poverty line (US$0.88/person/day) increased from 50% (2007 equivalent) to 75% by 2020.	DNE Living Standards Survey.	Continued support from development partners
	Access to all main facilities for rural households increased by at least 40% by 2020.[1]	DNE Living Standards Survey.	Political stability and peace
	Target Sub-district Net Enrolment Ratio (NER) for SMP and SMA increased from 2010 baseline by at least 50% by 2020.	National Census	
	Proportion of women giving birth assisted by skilled health personnel increased by at least 50% by 2020. (from 19.2% in 2007)	TL DHS 2007	
ERA Project Purpose: The access of rural communities to services and to income opportunities is improved through the rehabilitation and maintenance of rural roads.	Reduced travel time to education, health facilities and key markets.	Community Snapshot baseline and endline	Local conditions of peace and stability allow works to proceed and access to completed roads.
	Increased public and private transport in and to target sucos.	Community Snapshot baseline and endline	
	Increased economic activity in target sucos	Community Snapshot baseline and endline	GoTL invests in rural road maintenance.
	Proportion of workers who have invested their income in productive activities.	Worker interviews	
RESULTS			
R.1. Labour-based rural road rehabilitation contracts effectively executed.	I1.1 100 contracts awarded for rehabilitation and routine maintenance	Monthly Contract Management Update	No abnormal weather patterns and natural disasters affecting road work progress
	I1.2 At least 70% of contracts issued by ERA are completed as per specifications on time and within budget.	Monthly Contract Management Update	
	I1.3 75% of communities rank their satisfaction with the contractor performance as high or very high.	Six-monthly Progress Report	Communities support project approach to rehabilitate and maintain rural roads.
	I1.4 At least 150 km of roads rehabilitated and maintained by EoP.	Six-monthly Progress Report	
	I1.5 5,600 HH have improved access to rural roads.	Six-monthly Progress Report	Small contractors can access

Narrative Summary	Indicators	Sources of Verification	Assumptions
	I1.6 780,000 worker-days of short-term employment generated and 13,000 workers and their families benefited directly from the offered employment opportunities by EoP.	Monthly Contract Management Update	equipment and financial services
	I1.7 At least 30% of workers and worker-days are women.	Monthly Contract Management Update	
R.2. Local civil works contractors and supervisors competent in contracts management.	I2.1 By the end of project, 500 contract managers successfully complete accredited contract and business management training.	Monthly Training Reports	Sufficient demand from companies to invest staff time in the training
	I2.2 IADE accredited by INDMO to deliver contract and business management training to civil works contractors.	Training Provider Accreditation Certificates	
R.3. Local civil works contractors and supervisors competent in labour-based rural road rehabilitation and maintenance	I3.1 400 technical staff of target contracting companies and 15 MOI supervisors successfully complete accredited technical training for rural road rehabilitation and/or maintenance.	Monthly Training Reports	Suitable local civil works contractors are interested and available to invest time and resources to attain ERA certification for LBT rehabilitation and maintenance contracts.
	I3.2 At least 65% of the trainee-contractors awarded trial contracts have completed their first trial contracts as per specifications on time and within budget.	Monthly Contract Management Update	
	I3.3 45 contracting companies certified by ERA for rural road rehabilitation and 15 companies certified for rural road maintenance.	Contractor Accreditation Certificates	
	I3.4 At least 70% of the trained contractors are engaged in competitive bidding and/or implementing small LBT rehabilitation and maintenance contracts by EoP	Contractor interview Mid-Term and Final Evaluations.	GoTL will continue to utilise LBT approaches to rural road rehabilitation and maintenance.
	I3.5 Don Bosco accredited by INDMO to deliver technical training modules for rural road rehabilitation and/or maintenance.	Training Provider Accreditation Certificates	

1.2 ERA Performance Framework (embedded file, click to open)

Annex 1 ERA Logframe Performanc

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ANNEX 2 Evaluation Terms of Reference (embedded file, click to open)

Adobe Acrobat Document

Independent Final Evaluation of the Enhancing Rural Access Project

8 Dec 2015

Project Title	Fourth Rural Development Programme (RDP IV, Enhancing Rural Access, ERA)
TC project code	TIM/11/01/EEC
Donor	European Union
Total approved budget	Euro 11,600,000
ILO Administrative unit	ILO Country Office for Indonesia and Timor Leste (CO-Jakarta)
ILO Technical Units	EMP/INVEST: Employment Intensive Investment Programme (EIIP) for Asia and the Pacific
Type of Evaluation	Independent
Evaluation date and field work dates	Final Evaluation (Jan – Feb 2016)
Evaluation Manager	Miaw Tiang Tang
TOR preparation date	8 Dec 2015

Introduction and Rationale for the Final evaluation

This terms of reference (TORs) covers the final evaluation of the Fourth Rural Development Programme, Component 2 (RDP IV, Enhancing Rural Access, ERA) in Timor Leste. The project is implemented by the ILO, under the auspices of the Minister Coordinator for Economic Affairs[34] (MECAE) in collaboration with the following institutions:

- Instituto de Apoio ao Desenvolvimento Empresarial (IADE) Business
- Don Bosco Foundation, Training Centre in Comoro (Don Bosco) and
- Directorate of Roads, Bridges and Flood Control (DRBFC) of the Ministry of Works, Transport and Communications (MPWTC) Infrastructure (MoI)

The project was planned to start on 1 September 2011 and to be ended by 31 August 2015, however the actual starting date was from 1 Nov 2011 and supposed to be ended by 31 August 2015. A no cost extension was given, thus the completion date of the project has been extended until 21 February 2016.

In accordance with ILO policy governing technical cooperation projects, an independent final evaluation is required for projects of this budget size and duration. The final evaluation will apply the key criteria of relevance, validity of design, effectiveness, efficiency, gender equality as well as monitoring and evaluation to determine the completed results of the intervention.

The final evaluation aims to assess the continued relevance of an intervention and the progress made towards achieving its planned objectives. The independent final evaluation will be conducted by a team of independent evaluators and will be managed by the ILO Evaluation Manager based in Decent Work Team (DWT) Bangkok with quality assurance provided by Regional M&E Officer, ILO Regional Office for Asia and the Pacific.

The evaluation manager will prepare TORs and will subsequently finalize it in a consultative process involving key stakeholders of the programme including the donors. The evaluation will

[34] The Government counterpart has changed during the course of the Project due to changes to the government structure both in the 2012 elections and in the 2015 reshuffle. These changes have been documented and agreed through exchange of letters.

comply with United Nations Evaluation Guidelines (UNEG) Norms and Standards and the ethical safeguards will be followed.

Background of the Project

The ILO implemented ERA project is part of the EU funded 4th Rural Development Programme (RDPI IV). The RDP has the overall objective to contribute towards the realisation of the Government's vision for rural development, as described in Strategic Framework for Rural Development.

The ERA project has been scheduled for implementation over a period of 4 years, it was started from 1 November 2011 and to be completed by 21 February 2016, including a no cost extension. The project has been implemented in the Western part of the country including the districts of Aileu, Ainaro, Bobonaro, Covalima, Ermera and Liquica.

The project immediate objective is: "The access to rural community to services and to income opportunities is improved through the rural rehabilitation and maintenance of rural roads." The three Expected Results are:

- Labour-based rural road rehabilitation contracts effectively executed;
- Local civil works contractors and supervisors competent in contract management;
- Local civil works contractors and supervisors competent in labour-based rural road rehabilitation and maintenance.

Timor Leste is one of the least developed countries in the region, its economy is essentially agriculture-based, with approximately 70% of its total population of about 1.1 million living in rural area. The overall unemployment rate is estimated at 11% as the economy is unable to create sufficient employment opportunities for the expanding labour force. In addition, the poor condition of rural infrastructure particularly the road network has been the largest constraint to local economic development and major cause of poverty in the rural area as it severely limits access for rural population to markets, schools, health centre and other economic and social services and facilities.

Project Strategies

The project rehabilitates and maintains rural roads in the selected districts by providing support to capacitating small-scale domestic contractors in Timor-Leste who will carry out road construction and maintenance works using a labour-based approach. The project ensures the sustainability of its capacity building activities by selecting and working with national training institutions in developing their capacities in delivering comprehensive training courses for small-scale domestic contractors and their staff. Don Bosco Training Centre has been identified to provide the technical training to contractors and IADE (Business Management Support Institution) trains contractors in contracts and business management. The capacity building efforts are also extended to the Directorate of Roads Bridges and Flood Control (DRBFC), Ministry of Public Works' supervisors and contract managers regarding the planning, design, implementation and management of labour-based rural road rehabilitation and maintenance works. ERA has supported and assisted these training institutions in accreditation in compliance with national competency standards. Capacity building strategy and training modules are based on the lessons learned from ILO experiences in Timor-Leste and elsewhere, including the TIM-Works project.

Around 2/3 of ERA's budge is allocated to construction related activities and the remaining 1/3 to implement capacity building activities for management of rural roads. The project liaises closely with various key stakeholders e.g. MECAE - the official government counterpart institution, Ministry of Public Works, Don Bosco, IADE, and SEPFOPE (Secretariat of State for Vocational Training and Employment Policy), and other projects involved in road constructions, maintenance and capacity building projects, donors, and other government institutions.

Linkages with other development frameworks: Strategic Development Plan, UNDAF and DWCP:

In April 2010, the Government of Timor-Leste announced its 20-year Strategic Development Plan (SDP 2011-2030). The SDP emphasises the importance of infrastructure, including roads, in achieving accelerated sustainable development. The Government also incorporated 'Foster Private Sector Growth" as a major goal of its National Priority 1. The SDP also acknowledges that there is a need to increase the investment in the building of a national capacity to implement the SDP.

The Project directly contributes to the ILO's Country Programme Outcome *TLS 176 - Enhanced rural employment, safety net, and economy through infrastructure investment, livelihoods programmes, and*

business development support. The ILO, as part of the Timor-Leste United Nations Country Team, seeks to support Timor-Leste in realizing its national development goals, specifically with regards to transforming the current subsistent agriculture-based rural economy into a vibrant job-rich economy. Guiding ILO's contribution until end of 2013 was the Timor-Leste Decent Work Country Programme (DWCP) 2008-2013, which is aligned with the Timor-Leste United Nations Development Assistance Framework (2009-2013). Both UNDAF and DWCP support Timor-Leste's efforts to achieve the Millennium Development Goals: specifically MDG 1: Eradicate extreme poverty and hunger; MDG 3: Promote gender equality and empower women; and MDG 7: Ensure environmental sustainability.

The ERA Project shares the same institutional counterpart (IADE) with the ILO BOSS project and has natural synergies with the TESP (Training and Employment Support Project) - ended 2014, and the R4D (Roads for Development) Project, both funded by AusAID.

Mid-term Evaluation

In accordance to the project requirement, a mid-term independent evaluation has been carried out in October 2013 to analyse progress made towards achieving established outcomes, to identify lessons learnt so far and to propose recommendations for improved delivery of quality outputs and achievement of outcomes. The evaluation assessed and made recommendations on:

(i) The relevance and strategic fit;
(ii) Progress made towards achieving the immediate objective, results, and delivery of quality outputs;
(iii) The impact (or initial impact);
(iv) The likelihood of sustained impact and proposes recommendations;
(v) Internal and external factors affecting the project;
(vi) Lessons learnt.
(vii) The extent of government and social partners support and participation; and
(viii) The implementation arrangements.

The primary clients of the evaluation at the mid-term evaluation was the ERA project management, Government, Project partners, ILO staff involved in the project and the EU who all share responsibility for deciding on the follow-up to the findings and recommendations of the evaluation. The evaluation has been carried out through a participatory approach and has evolved through a logic step-by-step method from desk review to interviews and site visits and final presentation and discussion of findings.

The evaluation team recognised the specific local context under which the ERA project operated and therefore appreciates limitations caused by post conflict period, high demand for immediate infrastructure improvement and therefore rapid training programmes, an emerging but under-capacitated construction sector, generally low educational level of trainees, and serious constrained access to resources for contractors.

Management set-up:

The project is administered by the ILO Country Office for Indonesia and Timor-Leste, and implemented by the ILO through the ILO Programme Office in Timor Leste, originally with the following staffing:

- Project Coordinator (PC) (P5:2 years) – Overall guidance, facilitate linkages between ministry on project implementation and ensure cooperation and synergies with other relevant ILO initiatives in TL. The position was cost-shared on 50:50 basis with the BOSS (Business Opportunities and Support Services) project.
- Project Chief Engineer PCE) (P5:4 years) - Overall responsible for project implementation.

Other international experts include:

- A Labour-based Field Engineer (P2:4 years) – to support the implementation of the rehabilitation and maintenance works.
- A Labour-based Training Specialist (P3:2 years) – to support the development of training modules and delivery of the training courses.
- A Business Management expert (P2:2 years) – to support the technical development, accreditation and implementation of the training capacities to IADE. The position was cost-shared on a 50:50 basis with the BOSS project.
- A Management Information System (MIS) Expert (P2:1 year) – to support the establishment of MIS for the project.

From 1 January 2014, arrangement has been made to split the two projects (BOSS and ERA) and each project is managed by its own Chief Technical Advisor (CTA).
In term of administrative support, the project is supported by:

- 2 local project admin support staff
- 3 local drivers
- 1 local programme officer based in Jakarta
- Other local technical and administrative staffs for delivery recruited through Don Bosco and IADE.

The Decent Work Technical Support Team (DWT) in Bangkok provides technical backstopping and monitoring support while the CO-Jakarta provides administrative backstopping.

Donor Management Mechanism – the only donor of the project is the European Union and has its mechanism to review and monitor. Other than the inception report and six-monthly progress reports, the project will be subject to yearly assessments by the European Commission's independent monitors.

Purposes and Objectives of the Evaluation:

The main purpose of this evaluation is to assess the relevance, performance and success of the activities undertaken by the project. It also shall examine achievements, impacts, good practices and lessons learned from the project in order for the ILO, IADE, MECAE, Don Bosco, DRBFC, MPWTC and or other relevant technical Ministries, and the Government of Timor Leste to identify key areas which are replicable and the necessary conditions for sustainability.

The evaluation process will be participatory. Knowledge and information obtained from the evaluation will be used as basis for better design and management for results of potential next phase of the project or future ILO activities in Timor Leste. The evaluation also supports public accountability of the Government of Timor Leste and the ILO.
Clients and users of the evaluation:

- ILO Programme office in Timor Leste and ILO Country office for Indonesia and Timor Leste (CO-Jakarta),
- Government of Timor Leste as main beneficiary [IADE, MECAE, Don Bosco, DRBFC, MPWTC)
- Communities and Contractors who were involved and benefited from the project
- ILO HQ and DWT-Bangkok
- EU as the funding agency

Scope of the assessment:

The proposed evaluation will examine the progress, achievements, impacts, good practices, and lessons learned from the implementation of the project's interventions aims to improve the access of rural community to services and income opportunities through the rural rehabilitation and maintenance of rural roads.
The evaluation shall include all activities undertaken by the project during the current project period (Nov 2011 – Feb 2016), and will cover all geographical coverage of the project. The evaluation shall integrate gender equality as a cross-cutting concern, and look into achievement of project objectives and outcomes in improving the access to services and income opportunity of the rural community through the rural rehabilitation and maintenance of rural roads. The evaluation shall also refer to the report of the mid-term evaluation conducted in Oct 2013, particularly the achievement, lessons learned and recommendations particularly progress made since then.
The evaluation shall verify good practices, impacts and lessons learned from the implementation of the project. At the end of the evaluation, a set of practical recommendations for immediate adoption/ application should be made available, and further integrated in to ILO practices in similar future projects. The evaluation shall identify approaches and/or activities that can be scaled up in the extended period and issues to be further worked on in regard to rural rehabilitation and maintenance of rural roads of Timor Leste.

The evaluation will focus and assess on the following:

- To evaluate the outcomes of the project and assess whether the project has achieved its immediate objectives as well as contributed to the broader context of SDP, RPD IV and the DWCP of Timor Leste.
- Assess the progress of the programme against its immediate objectives, expected outputs and outcome targets, as well as the delivery of quality outputs.
- The overview of sustained impact of the projects on
    - the local civil works contractors and supervisors and their competency in labour-based road rehabilitation;
    - the mobilisation of the communities to rehabilitate and maintain rural roads and their earning;
    - the local economy by improving road access;
    - the improved access to social and other services (including transport)
- To what extent the management system appropriate to achieve desired results and outcome within a timely, effective and efficient manner.
- Assess the appropriateness of the results framework and appropriateness of its indicators, targets and the overall M&E practices
- How has the project engaged with the tripartite constituents (Government, employers -the Chamber of Commerce and Industry of Timor Leste (CCLTI), and the Union – Confederation of Trade Union of Timor Leste (KSTL) and the direct beneficiaries?
- Assess the quality of operational work planning, budgeting and risk management.
- Internal and external factors that have contributed to the pace of project implementation. Identify lessons learnt on substantive and project management issues.
- The implementation arrangements put in place by the project to ensure appropriate capacity building of its institutional counterparts.

Gender Mainstreaming

The gender dimension should be considered as a cross-cutting concern throughout the methodology, deliverables and final report of the evaluation. In terms of this evaluation, this implies involving both men and women in the consultation, evaluation analysis and evaluation team. Moreover the evaluators should review date and information that is disaggregated by sex and gender and assess the relevance and effectiveness of gender-related strategies and outcomes to improve lives of women and men. All this information should be accurately included in the inception report and final evaluation report.

Evaluation Criteria and Questions

The evaluation should address the overall ILO evaluation concerns such as relevance, effectiveness, efficiency and sustainability as defined in the ILO Policy Guidelines for results-based evaluation, 2012 (http://www.ilo.org/eval/Evaluationguidance/WCMS_176814/lang--en/index.htm). The evaluation will be conducted following UN evaluation standards and norms.

In line with the results-based approach applied by the ILO, the evaluation will focus on identifying and analysing results through addressing key questions related to the evaluation concerns and the achievement of the immediate objectives of the project using data from the logical framework indicators. The evaluator shall also take into consideration the outcomes, recommendation and lesson learned from the mid-term evaluation. The specific issues and aspects to be addressed in the evaluation were be guided by the preliminary consultations with stakeholders. Other aspects can be added as identified by the evaluation team in accordance with the given purpose and in consultation with the evaluation manager.

The evaluation instrument (as part of inception report) to be prepared by the evaluator will indicate and or modify (in consultation with the evaluation manger), upon completion of the desk review,

the selected specific aspects to be addressed in this evaluation. The suggested evaluation criteria and questions are included in Attachment 1.

Methodology

ILO's policy guidelines for results-based evaluation (2nd edition) 2012 provides the basic framework, the evaluation will be carried out according to ILO standard policies and procedures. ILO adheres to the United Nations Evaluation Group (UNEG) norms and standards on evaluation as well as to the OECD/DAC evaluation quality standards.

The evaluation will use a combination of methods and the final methodology will be determined by the evaluation team in consultation with the evaluation manager. The detailed methodology will be elaborated by the evaluation team on the basis of this TORs and documented in the Inception Report, which is subject to approval by the evaluation manager.

It is expected that the evaluation will apply mixed methods that draw on both quantitative and qualitative evidence and involve multiple means of analysis. These include but not limited to: -

- Desk review of relevant documents and related to performance and progress related to the project, including the initial project document, progress reports, Mid-term evaluation report, monitoring and evaluation plan, in-built project knowledge etc.
- Interviews with the project team in Timor-Leste including key staff of other ILO projects, and ILO staff responsible for financial, administrative and technical backstopping of the project in Decent Work Technical Support Team in Bangkok and at ILO HQ. An indicative list of persons to interview will be prepared by the project in consultation with the evaluation manager.
- Interviews with the project steering committee and other key project stake-holders e.g. tripartite constituents, donors, implementing partners, direct recipients (staff of relevant government departments) and direct beneficiaries.
- Field trips to selected districts for more in depth reviews at outcomes level of the respective project components. The criteria for selecting the districts will be specified by the evaluation team in the inception report.
- Stakeholders' validation workshop in Dili – upon completion of the field trips, to present the preliminary findings to key stakeholders.

While the evaluation team can propose changes in the methodology, any such changes should be discussed with and approved by the evaluation manager, and provided that the research and analysis suggests changes and the indicated range of questions are addressed, the purpose maintained and the expected outputs produced at the required quality.

All data should be sex-disaggregated and different needs of women and men and those marginalized groups should be considered throughout the evaluation process.

Main deliverables

The expected outcome of this evaluation is a concise document detailing:

- An analysis of the relevance of the ERA project document, and of the strategies applied to implement the project;
- The overall and specific outcomes and progress towards impact of the project in terms of (a) progress made against indicators of achievement; (b) contribution to the DWCP and broader national processes; and (c) relevance, effectiveness, efficiency and sustainability as defined in the ILO Guidelines for the Preparation of Independent Evaluations of ILO Programmes and Projects.
- An evaluation of the programming and administrative processes applied within ERA in terms of their conductivity to the timely delivery of the project outcomes;
- Whether gender is properly mainstreamed in the project cycle, from planning to implementation, to monitoring and evaluation;

The main deliverables of this evaluation are:

(1) **An inception report** - upon the review of available documents and an initial discussion with the project management. The inception report should set out any changes proposed to the methodology or any other issues of importance in the further conduct of the evaluation. The inception report will
- describe the conceptual framework that will be used to undertake the evaluation;
- sets out in some detail the approach for data collection, the evaluation methodology, i.e. how evaluation questions will be answered by way of data collection methods, data sources, sampling and selection criteria, and indicators;
- sets out the detailed work plan for the evaluation, which indicates the phases in the evaluation, their key deliverables and milestones;
- set out a plan for data collection, interviews or discussions;
- sets out the list of key stakeholders to be interviewed

(2) **Facilitation and Power Point presentation at stake-holders workshop –** Upon completion of the field trips**,** to present the preliminary findings at the stake-holders workshop.

(3) **Draft evaluation report**

(4) **A final evaluation report** with Executive Summary (in standard ILO format).

The contents of the report should include:
- Title page (standard ILO template)
- Table of contents
- Executive summary
- Acronyms
- Background and project description
- Purpose of evaluation
- Evaluation methodology and evaluation questions
- Project status and findings by outcome and overall
- Conclusions and recommendations
- Impacts, lessons learnt and good practices - to provide also standard annex templates (1 lesson learnt per page to be annexed in the report) as per EVAL guidelines.
- Annexes (list of interviews, overview of meetings, proceedings stakeholder meetings, other relevant information)

The final report shall not exceed 40 pages excluding annexes with executive summary (as per ILO standard format for evaluation summary). The quality of the report will be assessed against the EVAL checklist 5, 6 and 7 (see annexes).

All draft and final outputs, including supporting documents, analytical reports and raw data should be provided in electronic version compatible with WORD for Windows. Ownership of the data from the evaluation rests jointly with the ILO and the ILO consultants. The copyright of the evaluation report will rest exclusively with the ILO. Use of the data for publication and other presentation can only be made with the agreement of ILO office for Indonesia & Timor-Leste. Key stakeholders can make appropriate use of the evaluation report in line with the original purpose and with appropriate acknowledgement.

(5) **Evaluation summary –** according to ILO standard format – will also be drafted by the evaluation team leader after the evaluation report is finalized. The evaluation manager will assess it against EVAL checklist 8.

Management Arrangement

Evaluation team

Team leader (International Consultant)

The final evaluation will be led by an international evaluator who will be responsible to deliver the above deliverables. He/she will be supported by a national consultant. He/she will be required to ensure the quality of data (validity, reliability, consistency, and accuracy) throughout the analytical and reporting phases. It is expected that the report will be written in an evidence-based manner.
Qualification of the team leader:

- A minimum of 8 year experience in design, management and evaluation of development projects;

- Experience in designing evaluation tools that fit the need of the exercise, conducting desk reviews and evaluation missions, drafting of evaluation reports;
- Experience in evaluations of EU funded programmes and projects and/or evaluations of ILO and the UN System would be an asset;
- Experience in the technical areas of rural infrastructure, labour intensive methods of road construction and maintenance and preferably with road engineering background, capacity building and contractor development approaches would be an added advantage;
- Experience and knowledge of rural road construction in terrain and climate similar to Timor-Leste (mountainous and torrential rain falls) is an advantage;
- Ability/ experience in facilitating an evaluation stakeholders' workshop;
- Ability to write concisely in English;
- Experience or knowledge in the region and in Timor Leste and ability to communicate in Tetum and Bahasa is an asset.

Evaluation team member (National consultant)
The team member will provide support to the team leader during the whole process of the evaluation. Evaluation team member reports to the evaluation team leader. Specifically, the national consultant will be responsible for the following tasks:

- Conduct a desk review of relevant documents
- Pro-actively provide relevant local knowledge and insights to the team leader
- Be available and present during the evaluation mission
- Take part in the interviews with ILO constituents and key stakeholders, assist the team leader including interpreting between Tetum or Bahasa to English and vice versa, to make notes during interviews, and to write brief reports on main observations and conclusions
- Contribute to the main report to be written by the team leader - the national consultant may be asked to contribute to certain sections in the draft and final report as requested by the Team Leader (International Consultant).
- Participate and jointly facilitate the stakeholders' workshop.
- Provide interpretation, where needed.

Qualification of the team member:
Preferably a local consultant with expertise in evaluation and/or rural development in Timor Leste. Knowledge of local context, of other related local programmes/projects, and of associated local institutions and government structures will be a great asset.

Evaluation manager
The Senior Specialist – Employers' Activities of DWT Bangkok, Miaw Tiang Tang (tang@ilo.org) will take the responsibility as Evaluation Manager for this final evaluation of the project, and will develop TOR in consultation with all concerns and manage the whole evaluation process. Evaluation team leader reports to the evaluation manager.

Quality assurance
Regional M&E officer ILO Regional Office for Asia and the Pacific, Bangkok will provide quality control throughout the evaluation process.

Administrative and logistic support
ILO Country Office for Indonesia and Timor Leste and the ILO programme office in Dili, Timor Leste will provide relevant documentations, administrative and logistic support to the evaluation. The project management will also assist in organizing a detailed evaluation mission agenda, and to ensure that all relevant documentations are up to date and easily accessible by the evaluation team.

Roles of other key stakeholders

All stakeholders particularly those relevant ILO staff, the donors, tripartite constituents, relevant government agencies, NGOs and key other partners – will be consulted throughout the process and will be engaged at different stages during the process. They will have the opportunities to provide inputs to the TOR and to the draft final evaluation report.

Task	Responsible Person	Time Frame
Preparing TOR	Evaluation Manager	By 26 Nov 2015
Sharing the TOR with all concerned for comments/inputs	Evaluation Manager	By 8 - 14 Dec 2015
Finalization of the TOR	Evaluation Manager	16 Dec 2015
Approval of the TOR	EVAL	17 Dec 2015
Expression of Interest and Selection of consultant and finalisation	Evaluation Manager/ROAP and EVAL	18 Dec 2015
Draft mission itinerary for the evaluator and the list of key stakeholders to be interviewed	Project Manager	20 Dec 2015
Ex-col contract based on the TOR prepared/signed	Project Team	By 14 Jan 2016
Brief evaluators on ILO evaluation policy	Evaluation Manager	By 15 Jan 2016
Inception report submission	Evaluation team	27 Jan 2016
Evaluation Mission	Evaluator	1 – 12 Feb 2016
Stakeholder consultation workshop	Evaluator/Project Manager	11 Feb 2016
Drafting of evaluation report and submitting to the Evaluation Manager	Evaluator	By 24 Feb 2016
Sharing the draft report to all concerned for comments	Evaluation Manager	25 Feb – 10 March 2016
Consolidated comments on the draft report, send to the evaluator	Evaluation Manager	15 March 2016
Finalisation of the report	Evaluator	By 21 March 2016
Review of the final report	Evaluation manager/ROAP Monitoring and Evaluation Officer	21 - 24 March 2016
Submission of the final evaluation report	Evaluation Manager	25 March 2016
Approval of the final evaluation report	EVAL	28 March 2016
Follow up on recommendations	Management of project and ILO Jakarta	28 – 31 March 2016

Resources

Funding will come from ERA Project in Timor Leste and the extension of coverage include:

1) the consultant's fee and the Daily Subsistence Allowance (UN rate) and international travel as per ILO rules and regulations
2) stakeholders workshop(s)
3) transportation during the on-site visit(s)
4) interpretation (if needed)

Senior Consultant Evaluator: TOTAL: US$
27 Working day fees @$

- Desk Review : 6 days (including inception report)
- Field Visit/Mission : 12 days (including ½ day stakeholders' workshop)
- Draft Report : 7 days
- Final Report : 2 days

Travelling cost/mission cost: USD (approximately)
Return economic airfares : estimated US$1,000 (to be paid based on actual cost)
Daily Substance Allowance (DSA @UN rate): 13 days @ USD156/day = USD2,128 (based on Jan rate)

National Consultant: Total US$
20 Working day fees@ /day
Desk Review : 3 days
Field Visit/Mission : 12 days
Draft Report : 4 days (including inputs to inception report and draft evaluation report)
Final Report : 1 days

Travelling cost/mission cost:
Daily Substance Allowance
Actual mission days out of Dili to be arranged by the project management

Stakeholder workshop : 1/2 day
To be arranged by project management

LIST OF ANNEXES:

Annex 1: The suggested evaluation criteria and questions are included in Annex 1
Annex 2: Project logical framework and M&E matrix
Annex 3: Suggested organization and persons to meet (to be prepared by the project)
Annex 4: Key Documentation List
- 4.1Project Agreement
- 4.2 Project Document (Latest version dated 7 March 2012)
- 4.3 ERA Organogram
- 4.4 Mid-term Evaluation Final Report
- 4.5 ERA agreement with Don Bosco and IADE
- 4.6 ERA community engagement strategy
- 4.7 ERA Community snapshot
- 4.8 ERA Gender Aspects
- 4.9 ERA visibility and communication plan
- 4.10 ERA labour policy and practice

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Annex 5: all relevant ILO EVAL guidelines, checklist and standard templates
5.1 Code of conduct form
5.2 Checklist No. 3 Writing the inception report
5.3 Checklist 5 Preparing the evaluation report
5.4 Checklist 6 Rating the quality of evaluation report
5.5 Template for lessons learnt and Emerging Good Practices
5.6 Guidance note 7 Stakeholders participation in the ILO evaluation
5.7 Guidance note 4 Integrating gender equality in M&E of projects
5.8 Evaluation title page (standard template)
5.9 Evaluation summary (standard template)

Annex 1:

The suggested evaluation criteria and questions

Criteria	Questions
- Relevance	- The extent to which the project continued its relevance and responsive to address the issues and the needs of the beneficiaries. - Was a gender analysis included during the initial needs assessment of the project? - To what extent has the project made strategic use of coordination and collaboration with other ILO projects (e.g. BOSS, R4D, TESP projects), other development agencies and on-going initiatives of the government of Timor-Leste to increase its effectiveness and impact? - To what extent are the project perceived as an effort by the ILO to support Timor-Leste in addressing the capacity in the road rehabilitation and maintenance sector in Timor Leste?
- Validity of design	- Are the planned project design (outcomes, outputs, activities) relevant and realistic to the situation on the ground? - Are the timeframe for programme implementation and sequencing of project activities logical and realistic? - Do outputs causally link to the intended outcomes that link to broader impact? - What are the main strategic components of the program? How do they contribute and logically link to the planned objectives and development objective? - What are the main means of action? Are they appropriate and effective to achieve the planned immediate objectives? - Did the design identify risks and key assumption and whether the project has a mitigation strategy taking into account the situation of Timor Leste? - Which strategies has the project undertaken to address challenges? - How relevant and useful are the indicators and means of verification described in the project document and the M&E matrix for assessing the project's progress, results and impact? Are the means of verification appropriate? - To what extend was the ILO's gender mainstreamed strategy adequately and appropriately included in the project framework? - Was the capacity of various project's partners taken into account in the project's strategy and means of action? - Did the project design adequately plan for an effective participation of governments and social partners (employers' organization and workers union)? - Is the implementation strategy used by the project effective to enhance the capacity of the counterparts? - Is the strategy for sustainability of impact defined clearly at the design stage of the programme?
- Effectiveness	- Has the projects achieved the immediate objectives as per the relevant indicators? - How is the project contributing to the achieving RDP IV objectives? - To what extent has the project contributed to achieving relevant

	outcomes in Timor-Leste DWCP. - How have stakeholders including the social partners (employers' organization and workers union) been involved in project implementation? - Have the quantity and quality of the outputs produced satisfactory? - What were the main challenges, constraints, problems and areas in achieving the results? - Assess how gender considerations have been mainstreamed throughout the project cycle (design, planning, implementation, M&E), including that of implementation partners. - Assess the ILO's role in coordinating the stakeholders and implementing partners. - To what extent the project has managed the practice of knowledge management and lessons dissemination and visibility effort on project branding. - How has the project been responding to the changing situation of the country and/or of the constituents and partners' priorities? - Do results (effects of activities and outputs) affect women and men differently? If so, why and in which way?
- Efficiency of resource used	- Have the project funds and activities been delivered in a timely manner? If not why? What mechanism has been put in place to mitigate the problems? - Have resources (funds, human resources, time, expertise etc.) been allocated strategically to achieve the project objectives? - How economically have the various inputs been converted into outputs and results? - The extent to which the project has leveraged resources/collaborated with other projects? - Were resources (funds, human resources, time, expertise, etc.) allocated strategically to achieve gender-related objectives?
- Effectiveness of Management arrangement	- Given the size of the project, its complexity and challenges, were the existing management structure and technical capacity sufficient and adequate? - Did the project receive adequate political, technical and administrative support from the ILO and its national implementing partners? If not why? How that could be improved? - How effective was the monitoring mechanism set up including the role of the Project steering committee and the regular/periodic meetings among project staff and with donors and key partners? - How effective is the project steering committee and the donor management mechanism? - How well did the project manage finances? This should include budget forecasts, spending and reporting - Did the project have an M&E system in place that collect sex-disaggregated data and monitor results?
Impact and Sustainability	- What has been the overview of the impact of the project on local civil works contractors and supervisors and their competency in labour-based rural road rehabilitation? - Has the project developed a feasible strategy for sustainability of those interventions that held potential to become sustainable? To what extent has this been implemented? And to what extent has it succeeded?

	- What is the impact of the mobilization of the communities to rehabilitate and maintain rural roads? What has been the impact of the improved roads? - How effectively has the project leveraged additional domestic and donor resources, partners and initiatives to be part of the ERA project to ensure continued efforts after completion of the project? - How effective and realistic is the exit strategy of the project? Is the project gradually being handed over to national partners? Is the project's knowledge and experience effectively transferred to national partners?

Annex 2:

Annex 1 ERA Logframe Performanc

Annex 5: All relevant ILO evaluation guidelines and standard templates

5.1Code of conduct form (To be signed by the evaluator)
http://www.ilo.org/eval/Evaluationguidance/WCMS_206205/lang--en/index.htm

5.2 Checklist No. 3 Writing the inception report
http://www.ilo.org/eval/Evaluationguidance/WCMS_165972/lang--en/index.htm

5.3. Checklist 5Preparing the evaluation report
http://www.ilo.org/eval/Evaluationguidance/WCMS_165967/lang--en/index.htm

5.4 Checklist 6 rating the quality of evaluation report
http://www.ilo.org/eval/Evaluationguidance/WCMS_165968/lang--en/index.htm

5.5 Template for lessons learnt and Emerging Good Practices
http://www.ilo.org/eval/Evaluationguidance/WCMS_206158/lang--en/index.htm
http://www.ilo.org/eval/Evaluationguidance/WCMS_206159/lang--en/index.htm

5.6 Guidance note 7 Stakeholders participation in the ILO evaluation
http://www.ilo.org/eval/Evaluationguidance/WCMS_165982/lang--en/index.htm

5.7 Guidance note 4 Integrating gender equality in M&E of projects
http://www.ilo.org/eval/Evaluationguidance/WCMS_165986/lang--en/index.htm

5.8: Template for evaluation title page
http://www.ilo.org/eval/Evaluationguidance/WCMS_166357/lang--en/index.htm

5.9 Template for evaluation summary: http://www.ilo.org/legacy/english/edmas/eval/template-summary-en.doc
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ANNEX 3 Evaluation Plan / Inception Report (embedded file, click to open)

ILO EVALUATION – INCEPTION REPORT

- **Evaluation Title:** Independent Final Evaluation of the Enhancing Rural Access Project
- **ILO TC/SYMBOL:** TIM/11/01/EEC
- **Type of Evaluation :** Final
- **Country :** Timor Leste
- **Date of the evaluation:** February 2016
- **Name of consultant(s):** Ian Teese, Team Leader (International Consultant)
  Fernando Encarnacao, National Consultant
  (Please send the CV to EVAL@ilo.org)
- **ILO Administrative Office:** ILO Country Office for Indonesia and Timor Leste
- **ILO Technical Backstopping Office:** Bangkok
- **Date project ends:** 21 February 2016
- **Donor: country and budget US$** European Union Euro 11.6 million
- **Evaluation Manager:** Miaw Tiang Tang
- **Evaluation Budget:**
- **Key Words:** (click here for the ILO Thesaurus)

ANNEX 4 People Met and Meetings

Date	Activity / People Met	Contact No. / Email
Monday 1/2		
10.00-11.00	ERA Project Briefing, Tomas Stenstrom, ERA CTA, and staff at Don Bosco	77304055 ; stenstrom@ilo.org
11.00-12.00	Don Bosco. Fr Gui da Silva, Head of Programme Development office Fr Jose Vattamparambil CENTEC	77239133 77271970
14.00-17.00	Meeting with ERA staff to understand contract, training and M&E databases. Van Sam San. ERA International Field Engineer Evodio de Andrade Administration and Financial Assistant ERA National Engineer Aderito Noronha Maria Cabral (F), ERA M&E Officer Dom Bosco Trainer Coordinator Donato da Costa Pinheiro	 77475666 77256666 78037225 77232921 77341321
Tuesday 2/2		
9.00-10.00	**European Union** Paolo Toselli, Rural Development Adviser. Ms Dulce Gusmao, Rural Development Programme Officer.	Paolo Toselli(M) Tel: 77082758
11.00-12.00	**CCI-TL**, President Oscar Lima, Vice President Joao Alves	77388888 oscarlima0407@gmail.com 77239999
14.00-15.00	**SEPFOPE.** Jacinto Gusmao Director General	Jacinto Gusmao(M) Tel: 77326632
16.00-17.00	**INDMO.** Mrs Isabel Fernandes de Lima, Director INDMO. Agostinno Cabral, National Advisor	77006644
Wednesday 3/2		
10.00-11.00	**New Zealand Embassy**. Alison Carlin, Aid Manager	77293257
14.00-15.00	**KSTL.** Jose da Conceicao, President	77239824;77321408
15.30-16.00	**MECAE**. Ms Rita Pires, Head of Technical Cabinet. Arcanjo da Siva, Interim president of TradeInvest (ERA PSC Chair)	
Thursday 4/2		
9.00-10.00	**DFAT**. Ms Neryl Lewis, Counsellor Development Cooperation	77327620
11.00-12.00	**IADE**. Hernani Soares, Executive Director	77180802
14.00-14.30	**MPW.** Rui Guterres Director DRBFC	77230164
15.00-16.00	**Roads for Development** (R4D). Bas Athmer, CTA	77006049
Friday 5/2	**Field Visit Liquica**	
9.15-10.30	**Meetings in Suco Fahilebo** Suco chief,, Community Maintenance Group, Community Members Group of 8 women including Maria Savio (breadmaker) and Cecilia Dos Santos (Kiosk) Local Business – small kiosk, Leonel Alves da Silva Farmer, Martinho dos Santos Trial Contractor Director, Espada Metagou Unipessoal, Jorge da Silva Trial Contractor Director, Vicaroma Unipesoal,Guilhermina Soares Mouzinho Trial Contractor Director Engineer Adao da Silva Ribeiro	 77252703 77237947 77248126
11.30 -12.00	**Metagou-Darulete Road** Contractor Director Cai Casa Lara, Contractor Vicaroman and staff	
	Trave to Maliana	
17.15-18.00	**Meeting with Bobonara District Administration in Maliana** Former Administrator : Domingos Martins New Appointed District Administrator : Zeferino Soares	 77311664
19.00	Dinner with local contractors and R4D staff R4D Contractor Director Kevkel Unipessoal Director,Adelino Goncalves Bobonaro CCI President and ERA Trial Contractor H'foun Unipessoal Norberto Jose R4D International Engineer Sam Vanda Evagelino Carmona(M) Training Engineer Liquica and Maliana	 77324661 77252061 77006048 77470614
	Overnight Maliana	

Date	Activity / People Met	Contact No. / Email
Saturday 6/2 9.00-10.00	Builecun-Leohitu-Ferik Katuas	Technical briefing along road alignment
10.00-12.00	Meetings in Suco Leohitu Trial Contractor Director Barver Unipessoal Teresa Verdial Suco chief Suco committee. Victorino, secretary, Frederick Gama, chief, sub-village. Armanda Cardosa, traditional leader, Anna Dagloria, women's representative Small Business Kiosk Elias Barreto Local Business Kios Domingos Lopes	77373935
Afternoon	Return to Dili	
Sunday 7/2	**Dili Hotel** – reviewing data, drafting presentations for stakeholder workshop	
Monday 8/2 **Morning**	**Field visits** Sucos Fatbosa, Aileu Trial Contractor Director Maputo Unipessoal Zacarias de Fatima Trial Contractor Engineer Aleixo Ximenes Chefe de Suco Fatubossa,Jose da Costa	 77388806 77418236
Afternoon	Suco Liurui Chefe de Suco Liurai, Domingos Lopes Chefe de Aldeia Graca Araujo Chefe de Aldeia Domingos de Conceicao Chefe de Aldeia Marcos Semedo Chefe de Aldeia Pedro Mendonca Community Members. Madalena Mendaica, Recardino de Orleans, Quintao Tilman Mendoca, Franscisco do Rego, Fortnato da Conceitai Soares, Domingos do Rego	
15.30	Brief meeting in Lekite: Manager, Community Eco Lodge	
	Overnight Maubisse	
Tuesday 9/12 **Morning** **Afternoon**	**Field visits** Suco Kirlelo Chefe de Suco, Domingos Pinbairo Chefe de Aldeia Kirkelo Manuel da Costa Chefe de Aldeia Rui da Costa Juliao Benevides Youth Leader. Anita Lipa Community member Director Weditto Milena Maria Miranda Branco Engineer Suco Liurai Maubisse, Inacio Falo Suco Railaco Kraik Chefe de Suco Afonso Maia Chefe de Suco Railaco Kraik Domigos Soares Suco Counsselor Domimgos Salsinha Suco secretary, John Madeira Chefe de Aldeia Lourenco Maia Chefe de Aldeia Alphonso Mayer Council member Armise de Coste Farmer Avelino Carvalho Farmer Damiao Soares	 77262982 77332026
16.30 – 17.30	Return to Dili	
Wednesday 10/12	Preparing workshop presentation and draft executive summary	
Thursday 11/12	Preparing workshop presentation and draft executive summary	
Friday 12/12		
10.00-12.40	Stakeholders workshop (see attendance list in Annex 8)	
14.00-16.00	Wrap up with ILO	
Saturday 13/12	Travel	

ANNEX 5 Summary of ERA Training Activities

Type of Training	No of Companies	% female headed	Directors	Engineers	Supervisors	Gov Supervisors	ERA Staff	R4D Staff	Total technical staff	No failed (incl insuff. attend.)	% failed	No Training Days
LBT (CERT)	**206**	**32%**	**105**	**195**	**355**	**34**	**11**	**12**	**607**	**58**	**10%**	**13,304**
(LBT ERA)	*70*	*54%*	*53*	*70*	*170*	*14*	*10*	*0*	*264*	*25*	*9%*	*5,952*
(LBT R4D)	*136*	*20%*	*52*	*125*	*185*	*20*	*1*	*12*	*343*	*33*	*10%*	*7,352*
Pavement (CERT)	**37**	***19%***	**0**	**37**	**0**	**14**	**17**	**15**	**83**	**1**	***1%***	**1,072**
Maintenance	**74**	***15%***	**61**	**61**	**28**	**9**	**2**	**14**	**114**	**6**	***5%***	**833**
(MTC ERA)	*10*	*40%*	*7*	*7*	*7*	*0*	*2*	*0*	*16*	*0*	*0%*	*107*
(MTC R4D)	*64*	*11%*	*54*	*54*	*21*	*9*	*0*	*14*	*98*	*6*	*6%*	*726*
Refresher Training	**16**	***38%***	**13**	**13**	**30**	**0**	**4**	**1**	**48**	**0**	***0%***	**669**
TOTAL Technical	**333**	***27%***	**179**	**306**	**413**	**57**	**34**	**42**	**852**	**65**	***8%***	**15,878**
IADE PB+BM (CERT)	**515**	**35%**	**515**	**37**	**N/A**	**N/A**	**N/A**	**N/A**	**552**	**0**	**0%**	**3,875**
Other Training	Comp/gr.	% female	Directors	Engineers	CMG Lead	CMG	ERA Staff	IADE	All trainees	No failed	% failed	Train. days
CMG	8	N/A	0	9	14	51	9	N/A	83	0	0%	189
TOT, Pre-bid, etc.	51	24%	51	51	N/A	N/A	34	14	150	0	0%	273
TOTAL Trainee Days												**20,215**

Source: ERA Training Records

ANNEX 6 Updated Risk Management Matrix

Key Assumptions	Risk level		
	Start-of-project	November	Evaluation Assessment
Development assumptions			
No major natural disasters	Low to Medium - Yellow	Low to Medium	Low to Medium - Yellow
Continued support from development partners	Low to Medium - Yellow	Low to Medium Yellow	Low to Medium Yellow
Local conditions of peace and stability allow works to proceed and access to completed roads.	Medium – yellow	Low - Green	Low - Green
GoTL invests in rural road maintenance.	Medium - Yellow	Medium – High Yellow	Medium – High Yellow
Implementation assumptions			
Result Area 1 Labour-based rural road rehabilitation contracts effectively executed.			
Suitable roads can be identified	Low – Green	Low - Green	Low - Green
No abnormal weather patterns and natural disasters affecting road work progress	Low to Medium – Yellow	Medium - Yellow	Low to Medium - Yellow
Communities support project approach to rehabilitate and maintain rural roads.	Low – Green	Low - Green	Low – Green As communities are being fully paid for contributions to road rehabilitation and maintenance
Small contractors can access equipment and financial services	Medium - Yellow	Medium to High - Yellow	Medium to High – Yellow Contractors still limited by equipment and by financial resources. ERA has not addressed these constraints yet.
Continued investments by Government for rural road rehabilitation & maintenance	Medium to High - Yellow	Medium to High - Yellow	Medium to High – Yellow While GoTL has allocated funds for maintenance, there are competing agencies for the funds with different operating modalities not linked to ERA processes
Result Area 2 Local civil works contractors and supervisors competent in contract management.			
Sufficient demand from companies to invest staff time in the training	Low – Green	Low – Green	Low – Green
IADE/BDCs trainers and counsellors motivated and willing to participate in the training activities	Low – Green	Low - Green	Low - Green
Result Area 3 Local civil works contractors and supervisors competent in labour-based rural road rehabilitation.			
Suitable local civil works contractors are interested and available to invest time and resources to attain ERA certification for LBT rehabilitation and maintenance	Low - Green	Low – Green	Low – Green
Key staff and resources will be trained by the Training Provider	Low - Green	Medium - Yellow	Low – Green Contractors willing to participate in training
Long term market for LB contractors and continued demand for training	Low to Medium – Yellow	Low to Medium Yellow	Low to Medium – Yellow
Identified training provider willing to make long term commitment	Low - Green	Low – Green	Low – Green
GoTL will continue to utilise LBT approaches to rural road rehabilitation and maintenance.	Medium - Yellow	Medium – Yellow	Medium – Yellow
MoI and other relevant government entities will release staff for training	Medium - Yellow	Low – Green	Low – Green

ANNEX 7 Significant Changes Stories from Project Participants

Anita Lipa: 'My family benefited from the cash I earned and improved access to health and markets'
By: Fernando da Encarnação

Anita Lipa is a mother to six at the age of 46. She is a subsistence farmer and the ERA trial contract allowed her to earn some valuable cash as an unskilled worker.

Anita Lipa and her husband, both worked as unskilled labourers, at the Kirkilo ERA road. Recruited by the WEDITTO director with the support of the local Chefe de Suco, Anita is very happy with the ERA project.

When the local authorities, informed me that ILO was planning to implement work activity for local community in their suco, Anita and her husband were very happy, and decided to join in immediately. They worked for 20 days each in the project.

Anita was trained by the company supervisors and engineers on basic labour based tasks.

For Anita, this work activity became a good opportunity to extra income especially to be support her family, children's basic able to cater for the $ 4.50 per day is demands. Anita stated that like to work more reasonable, but she would regularly.

Rairema-Kirlelo road under construction

Anita and the community hope that there will be another ERA project to rehabilitated two important links from her suco to Ermera and Aileu.

She believes that the activity and work methods will improve their knowledge and encourage them to pay more attention to rural roads maintenance; however, she would like the road to be upgraded to asphalt.

Rairema-Kirlelo road works completed

Domingos Martins: 'Today it is an important day, it was the handover day to the new Bobonaro Municipality administrator, my last day in office and I left the job with some good quality roads thanks to ERA project!

By: Fernando da Encarnação

Domingos Martins has been the Bobonaro Municipality administrator since the beginning of the ERA project. He praises ERA project objectives and methodology. 'They built quality rural roads, using local contractors trained by the project staff and using labour-based approach, allowing the local communities to benefit not only from improved access but also provide them with valuable incomes.

Domingos Martins, Former Bobonaro Municipality Administrator

When asked about suggestions to improve an ERA like future project, Domingo's suggestion was to improve the line of communication at all levels, between high government officials, donors and project techical staff. 'that will smooth the implementation process of the projects, avoiding wasting of energy and resources with petty issues like, recruitment of local workers, payments procedures etc.'

Domingos expect the European Union to continue support similar projects. 'Rural roads are important for rural development. Roads are the veins for everything'.

Domingos added 'In 2018, Timor–Leste will commence the decentralization process, though the legal framework for the decentralization is still been developed, good rural roads are imperative for the decentralization. We also required good rural roads because we are in the border with Indonesia and good access is important for security purposes".

'I like the quality of the roads build by ERA but would prefer the surface to be with asphalt' he said.

Bobonaro Municipaly rural road under construction
Company Barver, Bulecun-Leohito Road

Gulhermina Soares Mouzinho: "ERA opens my business mind! "
By: Fernando da Encarnacão

Guilhermina Soares Mouzinho is a 43 years old mother of 5 children. Guilhermina is a former Ministry of Foreign affairs public servant and in 2011 she opted to become an entrepreneur. "Á friend set up a construction company and I decided to follow her steps. I don't regret the decision, today I'm an independent woman, I am the boss of myself, and my life has improved both financially and socially.

Prior to ERA Project, Guilhermina's company, VICAROMAN, won some small contracts with the Government, but she struggled to implement the projects and control her staff.

'The ERA integrated package of technical and business management training linked to trial contracts allowed me, my engineers and supervisors to learned skills and implement them under the mentoring and coaching of the ERA staff. The results are amazing, I'm happy with the work I done, I feel that I contribute to the development of my country and my community people's life'.

Guilhermina has tendered for PDD contracts and it is currently implementing one.

She used the profits from the ERA trial contract, to purchase equipment, a small roller, one truck and office equipment. Guilhermina wants to continue attend more training in Don Bosco and IADE, she speaks highly about the two institutions. She would like a similar project to continue support small rural contractors and suggest that the Project should support the mobilization of the equipment.

The three phases of the road rehabilitated by Guilhermina's company. Before, during and after construction.

ANNEX 8 Stakeholder Workshop

8.1 Workshop Presentation (embedded file, click to open)

24/02/2016

1. The Enhanced Rural Access (ERA) Project

- The European Union Rural Development Project IV (RDP IV) funds the ERA project (Euro 11.6 million)
- ERA addresses the second RDP IV goal through the ERA project purpose / immediate objective of:

'The access of rural communities to services and to income opportunities is improved through the rehabilitation and maintenance of rural roads'.

1. The ERA Project

- Expected results
  - R1. Labour-based rural road rehabilitation contracts effectively executed;
  - R.2 Local civil works contractors and supervisors competent in contract management;
  - R.3 Local civil works contractors and supervisors competent in labour-based rural road rehabilitation and maintenance.
- ERA is an integrated package of technical and business management training linked to trial contracts to apply the learned skills.
- Integrates with the Australian Government funded Rural Roads for Development (R4D) project and other Ministry of Works, Transport and Communications (MPWTC) rural road activities.
- ERA and R4D are implemented by ILO.

1. The ERA Project

1

8.2 Participants in Stakeholder Workshop (embedded file, click to open)

List Participants

ERA STAKEHOLDERS WORKSHOP MEETING 2016

Date: 12 February 2016

Venue : Hotel Ramelau

Time : 10 AM - 12:00 AM

No	Naran	Institution	Position	No.HP & Email Address	Signature
1	Teresa Verdial	BARVER Unip Lda.	Directora.	77373935	
2	Bas Athmer	ILO	CTA R&D	77006049	
3	Simão Carvalhinha	DNEPCC	[illegible] Projetos	77509211	
4	Domingos Martins	Mediana/Bobo	Funcionario	77311654	
5	Adelino Gonçalves	Kevlael Brothers	Director	77324661	
6	Milena M. M. Branco	Wedatto	Directora	70401607	
7	Araci V. Soares	IADE	DE	77130809	
8	Pe. José V.	Don Bosco	Center.	77271970.	
9	P. Gui C. S.	Don Bosco	PDO/ERA	77239133	
10	Donato Pinheiro	ERA	"	77341321	

ANNEX 9 Detailed Lessons Learned

9.1	ILO Lesson Learned Minimum entry standards for trainees
Project Title: Enhancing Rural Access ERA	Project: TIM/11/01/
Name of Evaluators: Ian Teese and Fernando d Encarnação	Date: February 2016

The following lesson learned has been identified during the course of the evaluation. Further text explaining the lesson may be included in the full evaluation report.

LL Element	Text
Brief description of lesson learned (link to specific action or task)	Two of the three expected results from ERA were related to building the capacity of small road contractors to implement rural road rehabilitation and maintenance activities. The capacity building addressed both technical labour-based road construction and also business and contract management. The early training activities undertaken by Don Bosco and IADE found that some of the nominated contracting company directors, engineers or supervisors did not have a basic understanding of road construction or business management. This led to course participants being failed on completion as not achieving the basic standards set by the course and wasting valuable training time and resources and seats in the courses being offered. A process of initial screening of possible contractors and then pre-testing trainees on the first day of the training activity was introduced to reduce the problem. This pre-test was also used as part of the course assessment.
Context and any related preconditions	The training activities were a key element of the capacity building requiring a substantial investment of trainer time and resources. For ERA (and R4D), there was a limited period of time to prepare possible contractors and their staff for inclusion in the trial contracts which had seasonal constraints and for tenders for the R4D road rehabilitation contracts.
Targeted users / Beneficiaries	The pre-testing activity was targeted at the contractor staff and directors proposed for the training courses to reduce the number of trainees who could not complete the training courses successfully. The beneficiaries of the pre-testing/screening were firstly the trainee employers who did not waste the USD 50 / person training contribution they made for each employee in the training course. More importantly, the pre-screening improved the training effectiveness by having trainees who were more likely to absorb the training material and capable of interacting / sharing knowledge with other trainees and the trainers
Challenges /negative lessons - Causal factors	The challenge is to encourage employers to be more selective in proposing candidates for ERA training courses. Often the employer has a limited number of employee / candidates who may have a limited educational background and limited or no practical experience in rural road construction and maintenance techniques

Success / Positive Issues - Causal factors	The results of the pre and post training testing showed that trainees with limited initial knowledge were less likely to complete the courses successfully. The early screening processes helped make the training more efficient by screening out technically weak trainees.
ILO Administrative Issues (staff, resources, design, implementation)	Simple pre-training course testing should be included in all capacity building activities as, when combined with post-training testing, it provides a valuable M&E tool for assessing the effectiveness of training delivery and suitability of content. Inclusion of pre (and post) testing should have little impact on training resources needed and will improve the outcomes.

9.2 ILO Lesson Learned

Contractor management capacity

Project Title: Enhancing Rural Access ERA **Project: TIM//11/01/**

Name of Evaluators: Ian Teese and Fernando da Encarnação **Date: February 2016**

The following lesson learned has been identified during the course of the evaluation. Further text explaining the lesson may be included in the full evaluation report.

LL Element	Text
Brief description of lesson learned (link to specific action or task)	Two of the three expected results from ERA were related to building the capacity of small road contractors to implement rural road rehabilitation and maintenance activities. The capacity building addressed both technical labour-based road construction and also business and contract management. The ERA training, trial contract and coaching activities have demonstrated that the entrepreneurs who establish and operate the small construction contracting businesses need to develop their skills in cash flow management, preparing tender quotations and managing contract implementation in addition to the expected general business management skill development.
Context and any related preconditions	The general business management training activities were an initial element of the capacity building for contractor directors. The pre-condition is that the construction company managers have the time to participate in the training and, more importantly, are open to follow-up coaching / mentoring to apply the learned skills while implementing a contract.
Targeted users / Beneficiaries	New and existing construction company owners and managers are the targeted users of this specialized capacity development. The company owners will be the main beneficiaries through improved profitability and client satisfaction during implementation. The road contract owners (largely GoTL) will also benefit from having contract managers who are capable of responding to guidance from works supervisors and can manage the contract resources more efficiently to meet the quality targets set.
Challenges /negative lessons - Causal factors	The major challenge is for contractor owners to be aware of their own limitations so that they are prepared to take on the advice provided. The experience to date highlights that most of the participating ERA trained contractors require further refresher and higher level training plus coaching support before the contractors can confidently tender for and implement rural road rehabilitation contracts.
Success / Positive Issues - Causal factors	For ERA, the training engineers have had good success in demonstrating to participating contractors the benefits of improving their contract management processes to contribute to improved profits and for preparing future tender documents.

ILO Administrative Issues (staff, resources, design, implementation)	The business and contract management coaching and training activities have been included in the project design and are partly funded by contractor contributions. The estimated cost of the training / coaching activities for a construction company is 1 % to 2 % of the contract value so the business improvement activities are a cost-effective activities. Making use of local training institutions and local training engineers greatly improves the cost effectiveness of this contractor director training.

9.3 ILO Lesson Learned

Induced Changes in Traffic Loads

Project Title: Enhancing Rural Access **Project: TIM/01/EEC/ERA**

Name of Evaluators: Ian Teese and Fernando da Encarnação **Date: February 2016**

The following lesson learned has been identified during the course of the evaluation. Further text explaining the lesson may be included in the full evaluation report.

LL Element	Text
Brief description of lesson learned (link to specific action or task)	The first results area for the ERA project was to improve rural roads in the target districts. This was to be achieved by using trial construction contracts to rehabilitate rural roads prioritized by the GoTL. When upgrading rural roads, more detailed traffic analysis is needed to assess if upgrading the road will lead to diversion of additional traffic that would change the design requirements for the road.
Context and any related preconditions	In at least two cases (Lihu to Samelete in Ermera and Fatubosa-Liurai-Hatubuilico across Ainaro and Aileu), the new project roads have created shorter and, in the short term, faster alternatives to the existing district roads. The new roads (rated as E1) were not designed to take the additional traffic now created (or induced) through replacing a lower standard, poorly maintained or much longer B Class inter-district road or a D Class suco to district town.
Targeted users / Beneficiaries	The users of this lesson will be the Government land transportation strategic planners and Road design engineers. The beneficiaries will be the communities living along the road who will have a longer lasting road designed to take the actual traffic load.
Challenges /negative lessons - Causal factors	The ERA project did not have the opportunity to investigate the proposed roads to be upgraded before they were selected. Also most of the trial road contracts were selected in the ERA start-up phase. The lack of a detailed projection of future traffic flows induced by the planned road improvement will lead to under-specification of the required road standard. This will lead to the newly constructed road requiring more maintenance than expected for the assumed standard of road (in this case E1) with the road likely to fail or require major rehabilitation sooner.
Success / Positive Issues - Causal factors	More rigorous analysis of the traffic flow patterns before design would lead to improved road designs. These improvements in pre-design assessment processes would need to be institutionalized within the DRBFC as part of their overall rural road rehabilitation and maintenance activities.

ILO Administrative Issues (staff, resources, design, implementation)	In this case, ERA was not able to significantly influence the selection of rural roads to be rehabilitated. The ERA engineers had adequate resources to design the selected roads to the expected (E1) standard but did not have time or engineering resources to undertake a full analysis of the likely changes to and final traffic loads the rehabilitated roads would probably carry.

ANNEX 10 Detailed Emerging Good Practices

10.1 ILO Emerging Good Practice **Implementation of an integrated training package with coaching / mentoring** **Project Title: : Enhancing Rural Access Project: TIM//01/EEC/ERA** **Name of Evaluator: Fernando da Encarnação Date: 15 February 2016** **The following emerging good practice has been identified during the course of the evaluation. Further text can be found in the full evaluation report.**	
GP Element Text	
Brief summary of the good practice (link to project goal or specific deliverable, background, purpose, etc.)	Two of the three expected results from ERA were related to building the capacity of small road contractors to implement rural road rehabilitation and maintenance activities and also the capacity of the organisations to provide this training. The good practice implemented by ERA has been to develop and implement an integrated road rehabilitation and maintenance implementation, supervision and management training package including use of coaching / mentoring. The benefits of integrating the training processes have been demonstrated by ERA and provide a cost-effective approach to improving contractor performance and improving road contract outcomes. ERA linked and coordinated its activities with key stakeholders and other relevant initiatives in the sector to ensure synergies and development of harmonized systems. Class Room Training carried out in Dili and successful companies participated in trial contract following the class training. Successful contractors bided for works under the ERA project. The implementation of trial contracts as a means of combining training and capacity building of contractors with the actual construction of the works found to be the most effective way in contractor development.
Relevant conditions and Context: limitations or advice in terms of applicability and replicability	The challenge for all capacity building activities is to address all the constraints to successful implementation, rather than just provide training which does not led to a change in attitudes and application. The ERA integrated training model has been successful because it addresses the issue of applying classroom theory into small-scale and then large scale (through trial contracts) application. To reinforce and enhance the learnings the on-the-job coaching and mentoring provides ongoing support during application of the new skills. The approach is applicable to most socio-economic environments but is not often used because the integrated approach appears more complex and difficult to implement and, initially may require more intensive support.
Establish a clear cause-effect relationship	The quality of rural roads built and rehabilitated can be linked to the benefits of the training model. The ERA and R4D M&E systems have clearly established that the capacity to deliver from local contractors is linked to the training model in especially the mentoring/coaching after the class room training. The impact on ERA access improvement ; Education, Health and Markets

Indicate measurable impact and targeted beneficiaries	The benefits of the integrated approach has been demonstrated in the assessed improvement of contractor performance both through assessing the knowledge and capacity of the main contractor staff (as done through the ongoing contractor assessment through the coaching process. Also the R4D Contractor Tracer Study 2014 assessed the quality of work from contractors trained through the ERA integrated system compared to other contractors who had not participated. The ERA trained contractors had a greater improvement in the quality of their work. This quantitative data supports feedback to the evaluation team The direct beneficiaries of the integrated training package will be the participating contractors, who should improve their competitiveness in tenders and achieve higher profits, and the contract owners who should see improved quality in the contract outputs in a more timely way. Indirect beneficiaries will be the road users who should have better quality and longer lasting roads to service their communities.
Potential for replication and by whom	The integrated training package is appropriate to most developing countries where rural road rehabilitation and maintenance is a priority activity. The small incremental costs should be outweighed by the improved efficiency and longer life of the roads. Institutional issues including lack of transparency in the contractor selection and / or supervision processes will mitigate the integrated approach being used. The integrated training approach needs to be driven by the government agency responsible for overall supervision of rural roads even if supervision of implementation is delegated to local government.
Upward links to higher ILO Goals (DWCPs, Country Programme Outcomes or ILO's Strategic Programme Framework)	ERA addressed several areas of the ILO Decent Work Country Program – 2008-13 A. Enhancing Youth Employment. ERA improved the quality and relevancy of skills training courses in public (IADE) and private (Don Bosco) training institutions B. Integrating Employment into Rural Economic Development More employment generated by rural infrastructure investment programme (also included under new DWCP 2016-2020)
Other documents or relevant comments	See Annex 11.

10.2 ILO Emerging Good Practice – Introducing appropriate new road construction technologies from regional countries

Project Title: Enhancing Rural Access **Project:** TIM/01/EEC/ERA

Name of Evaluators: Ian Teese and Fernando da Encarnação **Date:** **February 2016**

The following emerging good practice has been identified during the course of the evaluation. Further text can be found in the full evaluation report.

GP Element Text	
Brief summary of the good practice (link to project goal or specific deliverable, background, purpose, etc.)	Two of the three expected results from ERA were related to building the capacity of small road contractors to implement rural road rehabilitation and maintenance activities. In addition to the formal training / capacity building activities, ERA has demonstrated the use of two significantly different road rehabilitation and construction initiatives from regional countries. These were: (i) Geo-engineering of a large unstable gully across a rural road (Builecun-Leahita Road near Balibo) (ii) Constructing a three cell poured concrete box culvert near Falubosa). This was built to improve trafficability across a steep stream crossing and to improve the safety of school children who regularly use the crossing. In both cases, specialist roads engineers from south Asia were recruited to assess the situations and design and construct cost-effective solutions.
Relevant conditions and Context: limitations or advice in terms of applicability and replicability	A challenge in all rural infrastructure projects is to use appropriate cost-effective technologies that can be implemented and replicated by local construction companies. The two examples above meet this criteria and could be replicated in other parts of Timor-Leste.
Establish a clear cause-effect relationship	The technologies to address specific Timor-Leste related situations were introduced after close assessment of the local needs by the ERA resident engineers who then identified regional engineers with appropriate skills and experience to design and supervise the structures constructed.
Indicate measurable impact and targeted beneficiaries	In both cases, the structures are fit-for-purpose and are delivering the planned benefits. In case (i) this has led to a stable gully crossing which has not required further protection or work to maintain trafficability on the road. This new section of road provides a much shorter route for households from Ferik Katuas and Leohitu to travel to Maliana, rather than travelling through Balibo. For (ii) there is now an all-weather crossing for all size vehicles which will be above high flood water levels providing a safe crossing for school children (and emergency vehicles)

Potential for replication and by whom	The contractors who constructed the two structures and the local training engineers who supervised and guided them, now have the capacity to construct similar structures, albeit with some further guidance for their second attempts. These training engineers should also be able to work with road design engineers to adapt the structures to other situations.
Upward links to higher ILO Goals (DWCPs, Country Programme Outcomes or ILO's Strategic Programme Framework)	These innovations have contributed to the ILO DWCP though: B. Integrating Employment into Rural Economic Development. ERA generated more employment directly through the roads developed under the rural infrastructure investment programme (also included under new DWCP 2016-2020)
Other documents or relevant comments	See Annex 11 with a bibliography of documents and reports used.

10.3 ILO Emerging Good Practice

Developing capacity of established training providers

Project Title: Enhancing Rural Access **Project:** TIM/01/EEC/ERA

Name of Evaluators: Ian Teese and Fernando da Encarnação **Date:** **February 2016**

The following emerging good practice has been identified during the course of the evaluation. Further text can be found in the full evaluation report.

GP Element Text	
Brief summary of the good practice (link to project goal or specific deliverable, background, purpose, etc.)	Two of the three expected results from ERA were related to building the capacity of small road contractors to implement rural road rehabilitation and maintenance activities and also the capacity of the organisations to provide this training. ERA has demonstrated good practice by developing the capacity of established appropriate training providers to deliver project funded and ongoing training services. Technical (with some contract oriented business management) training resource developed at the long established Don Bosco Foundation training centre on the edge of Dili. Business management skill development resources have been developed and improved at the government agency, IADE, in Dili. With training costs recovered from a user-pays process, these facilities can continue to deliver the rural road focused training material and coaching support services developed with ERA. ERA also supported and assisted these training institutions in their accreditation and compliance with national competency standards. ERA linked and coordinated its activities with key stakeholders and other relevant initiatives in the sector to ensure synergies and development of harmonized systems.

Relevant conditions and Context: limitations or advice in terms of applicability and replicability	A weakness of many infrastructure development projects is that they rely on on-the-job training to transfer knowledge from expatriate engineering specialists to local engineering and contractor staff. By developing and making use of local vocational educational providers, the training modules and appropriate support can be embedded in these organisations. A key constraint is that ongoing national government (or donor) funding is needed to pay for the service provider inputs. However, as locally based and staffed organisations, the costs of providing these services will be relatively small compared to the road contract costs.
Establish a clear cause-effect relationship	As the existing rural road construction training resources were not available after Timor-Leste gained its independence, a vacuum existed in how new small contractors could learn the basic skills and knowledge needed to implement road rehabilitation and maintenance on the severely degraded rural road network. The ERA activities have addressed this gap by developing the capacity of Don Bosco and the IADE to deliver needed training courses using material tailored to Timorese needs and in the local languages. This was an essential step needed before substantial investments could be directed to rural road rehabilitation and maintenance.
Indicate measurable impact and targeted beneficiaries	Providing ongoing funds are available to pay for the existing training and coaching services and possibly developing new slightly more sophisticated modules, the two training providers will have a significant impact on improving the capacity of the small road contractors to cost-effectively deliver rural road rehabilitation and maintenance services. Data collected during the coaching support to R4D contractors demonstrated the improved capacity of the contractors. This was confirmed by the contractors met during the evaluation field work. The estimated costs of training and coaching services would be less than 2 % of the contract values or <10 % of the estimated profits from the contracts with the added benefits of improved work quality and timeliness.
Potential for replication and by whom	The model is replicable but unlikely to be required in most other countries which have not had major disruption in government services where most of the training agencies and their facilities have been dismantled or destroyed. Replication of the model requires significant donor support and focused inputs by the ILO.
Upward links to higher ILO Goals (DWCPs, Country Programme Outcomes or ILO's Strategic Programme Framework)	The support to and development of the Don Bosco and IADE training capacity aligns with the ILO Timor-Leste DWCP though: A. Enhancing Youth Employment. ERA improved the quality and relevancy of skills training courses in public (IADE) and private (Don Bosco) training institutions
Other documents or relevant comments	See Annex 11 with a bibliography of documents and reports used.

ANNEX 11 Data Collection Instruments

Evaluation Tool	Comments / Issues
1. Desk review of relevant documents including: the project design document; the ERA M&E plan and results framework; ILO progress reports; EU monitoring reports; ILO and EU MTR reports; ERA M&E case studies; R4D reports and documentation of other donor activities supporting road rehabilitation and maintenance in Timor Leste.	The recommendations, agreed action plans and subsequent follow-up from the progress reports and MTRs will be assessed.
2. Interviews with: (a) ERA project team members (b) Relevant staff of other ILO projects in Timor Leste (c) ILO staff responsible for financial, administrative and technical backstopping of the project in Decent Work Technical Support Team (DWT) in Bangkok and at ILO HQ. (d) Implementing partners: Don Bosco and IADE, MPW roads staff and district government agencies responsible for rural roads (e) Roads contractors, their staff and MPW staff who completed capacity building activities (e) The project steering committee and other key project stake-holders e.g. tripartite constituents, donors, (f) Direct recipients (staff of relevant government departments) and direct beneficiaries	Telecon being arranged with ILO regional technical adviser A priority issue will be the ongoing funding of rural road works and capacity building support to contractors and government agencies. A major question is how many of the contractors will have the opportunity to use their new skills Integration of ERA activities into overall rural roads program Has labour-based construction provided ongoing benefits to communities?
3. Review and access information in the project M&E and implementation databases	If possible, the R4D M&E database will also be accessed to see if there may be additional use and benefits information to assist the B:C analysis
4. Field trips to selected districts for more in depth reviews at outcomes level of the respective project components. At village level, a combination of key informant (leader), individual household and focus group discussions (FGD) will be used to efficiently collect a range of project experiences.	The evaluation team requested that the team visit areas which have not been regularly visited by monitoring teams. The initial proposal is to visit Aileu, Ainaro, Bobonara and Liquica districts
5. Qualitative and quantitative analysis of information held in the ERA databases and collected during the field work	Information on outcomes of training activities and community benefits will assist in assessing the benefits and costs of LBC and the ERA activities.
6. Assessment of capacity building activities will be based around a model that places equal importance on the training provided, the resources available to implement the training and the institutional support and capacity to use the skills developed.	The evaluation team will assess the three components of capacity building support to identify the strengths (and weaknesses) which should be built on or addressed to support the longer term sustainability of the LBC approach.
5. Stakeholders' validation workshop in Dili to present the preliminary findings to key stakeholders.	This workshop will test the findings and assumptions, and outline initial conclusions and recommendations

ANNEX 12 Bibliography

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ERA Project Document rev 12 September 2013
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ERA Community Engagement Strategy
ERA Environmental Screening Guidelines
ERA Labour Policies and Practices
ERA Gender Aspects
ERA Visibility and Communication Plan
ERA Road Selection Procedures and Processes
ERA Procedures for Identification and Selection of Contractors

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ILO Evaluation Lessons Learned and Good Practice
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Checklist 5 Preparing the evaluation report
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Checklist 6 Rating the quality of evaluation report
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Template for lessons learnt and Emerging Good Practices
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Template for evaluation summary: http://www.ilo.org/legacy/english/edmas/eval/template-summary-en.doc

ERA Video Snapshots

ERA Snapshot Fatubosa Chefe Suko ILO & EU Rural Development in Timor-Leste
ERA Snapshot Fatubosa Contractor ILO & EU Rural Development in Timor-Leste
ERA Snapshot Fatubosa Supervisor ILO & EU Rural Development in Timor-Leste
ERA Snapshot Fatubosa Worker ILO & EU Rural Development in Timor-Leste
ERA Snapshot Ilat Laun Chefe Suko ILO & EU Rural Development in Timor-Leste
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1a LBT Manual English Final
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