Most of the rural roads in Timor-Leste are in poor condition and surveys\(^1\) indicate this is considered a major constraint to local development, and thereby also to access to decent employment opportunities. R4D is designed as Timor-Leste’s leading program in the rural roads sector to address above issues.

R4D started in March 2012 and its first phase ends in December 2016. During the 2013/2014 and 2014/2015 construction seasons R4D rehabilitated more than 100 kilometers of core rural roads and maintained 230 kilometers of rural roads (with a total contract value of US$ 15.5 million).

R4D provides strategic and operational capacity development support to the Ministry of Public Works, Transport and Communications and the private construction sector – on the back of capital investments in rural roads. The contribution committed by the Government of Timor-Leste for phase 1 of R4D is USD 20 million and the Australian Government has contributed AUD 36 million. Technical assistance to the Program is provided by the International Labor Organization (ILO).

**R4D applies local resource-based work methods.** This entails the use of an approximate mix of labour, equipment and local materials, thereby ensuring short-term employment opportunities are optimized without compromising the quality of the work. As of August 2015 R4D had created about 420,000 labour-days of direct short-term jobs. This translates to a cash transfer into the local economy of about USD 2.7 million. **Women’s participation in the workforce is 30%** which is relatively high as construction works are traditionally mainly undertaken by male workers. R4D aims at achieving a 50% women’s participation in the workforce.

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\(^1\) Tatoli Survey, 2014
A key objective of R4D is to strengthen the capacity of the Ministry of Public Works, Transport and Communications in planning and delivering investments in rural roads. Capacity development support includes staff training, the development of key systems and standards, and technical advice and assistance on relevant operational, institutional and strategic aspects.

Another objective of R4D is to develop the capacity of the local contractors' industry in using appropriate local resource-based work methods. R4D outsources construction and business management training to an accredited Timorese private sector training provider which is supported by the ILO Project ‘Enhancing Rural Access (ERA)’. ERA developed training modules that are certified by the National Institute for Labour Force Development (INDIMO). The training also covers occupational safety & health requirements, social safeguards, gender dimensions and environmental/climate resilience aspects.

Social and environmental safeguards are fully integrated into R4D’s approach and these safeguards are aligned with national legislation and international good practice.

The inclusion of social and environmental safeguards in rural roads programs in Timor-Leste is one of the innovative activities of R4D in the rural roads sector. Key achievements include:

- An agreement between the Ministry of Public Works, Transport and Communications and the Secretariat of State for Professional Training and Employment Policy on minimum wages for casual workers;
- The provision of accident insurance for casual workers in contracts for works and measures to ensure workers’ occupational safety and health;
- The inclusion of contractual conditions in works contracts that require contractors to recruit a minimum percentage (30%) of female workers;
- The training and orientation of workers on the various aspects of the construction works;
- Full compliance with the Government’s comprehensive requirements regarding obtaining environmental licenses for rural road works.

R4D also introduced Rural Road Standards that match Timor-Leste’s terrain and climate with feasible technical and costing measures.

As part of the rural road standards a new pavement type has been introduced (plum concrete) and the initial results of this pavement type are very promising.

By enhancing skills of local contractors, R4D contributes to the creation of jobs that result from these acquired skills; these jobs are referred to as skill development employment effects. Ongoing R4D Contractors’ Tracer Studies provide information about the effect of R4D capacity development activities on increased business & employment opportunities for contractors.

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2 National Directorate of Pollution Control and Environmental Impact.
Apart from the direct short-term job opportunities provided to casual workers during the rehabilitation and maintenance of rural roads, indirect jobs are also generated through R4D. These include for example jobs created within contractor companies and among material suppliers. In the period 2013 – 2015 R4D awarded contracts to more than 100 local construction companies, generating an estimated 100,000 labour-days of indirect employment.

Another type of additional job creation that is expected from R4D’s activities is the generation of **induced employment opportunities**. These are typically jobs that are supported by increased consumer expenditures that result from the additional income earned from jobs created directly and indirectly.

The last, and most important, employment effect is a growth in sustainable employment opportunities—triggered by the improved condition of the rural roads.

Examples are an increase in jobs created by an increase in agricultural activities and the creation of additional employment opportunities in the transport sector. Other examples are the establishment of new local businesses (30% increase in businesses along rehabilitated R4D roads3), and an increase in the turnover of existing local businesses.

50% of the labourers who worked on R4D road works reported an improvement in their skills, applicable to possible other infrastructure employment opportunities in the future.

Increased job opportunities are also expected to arise from improved access to schools, leading to better education (potential for better jobs) and increased access to health services, leading to a reduction in illness (i.e. less unproductive time).

Other positive effects identified in R4D impact studies4 that are brought by the improvement of the road condition after R4D interventions include:

- **50% reduction in travel times**
- **200% increase in the transport of persons**
- **Substantial increase in the transport of goods**
- **Increased availability of public and private motorized transport**
- **80% reduction in walking times to public transport facilities**
- **Improvement in access to local markets**
- **Increased availability of consumer products at local level**
- **Increase in the sales of agricultural products by farmers**

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3 Observations during Local Business Activity Survey.
One of R4D’s key strategic activities has been the development of a comprehensive Rural Roads Master Plan & Investment Strategy (RRMPIS) for Timor-Leste.

The RRMPIS will provide the Government of Timor-Leste with a strategy that focuses on an optimum return on investments in improving the rural roads network and, associated with this, local economic development and employment generation.

The RRMPIS will also provide the Government of Timor-Leste with a roadmap on creating an enabling environment for private sector development (in particular for rural roads) and for the development of the necessary capacities and mechanisms within the Government for the effective planning and delivery of rural road investments.

As part of Employment Intensive Investment Programme’s (EIIP) South-South Cooperation, ERA and R4D hosted in 2014 a Nepalese Government Delegation whose officials are involved in the implementation of an employment-intensive rural roads program in Nepal (to which ILO provides technical assistance). Technical study tours like this are considered very valuable to further develop the knowledge base about the various aspects in the planning and implementation of labour-based rural road rehabilitation and maintenance works.

Specific benefits reported by women included improved access to health care services and facilities. These include 24-hours ambulance service, regular access to health mobile services, the establishment of new health clinics, better access to drinking water and improved nutrition.

Furthermore, more than half of the women reported that their income had doubled. Increased self-confidence in household decision-making, as an effect of their engagement with R4D as a construction worker, was also mentioned as a benefit.