

TIMOR-LESTE

EMPLOYMENT AND ENVIRONMENTAL SUSTAINABILITY FACT SHEETS 2017

The *Employment and Environmental Sustainability Fact Sheets* series provides key features of employment and environmental sustainability performance. Jobs that are green and decent are central to sustainable development and resource productivity. They respond to the global challenges of environmental protection, economic development and social inclusion. Such jobs create decent employment opportunities, enhance resource efficiency and build low-carbon, sustainable societies. The fact sheets include the most recent available data for selected indicators¹ on employment and environmental sustainability: (i) employment in environmental sectors; (ii) skill levels; (iii) vulnerability of jobs; (iv) jobs in renewable energy; and (v) scoring on the Environmental Performance Index.

Figure 1. Map of Timor-Leste



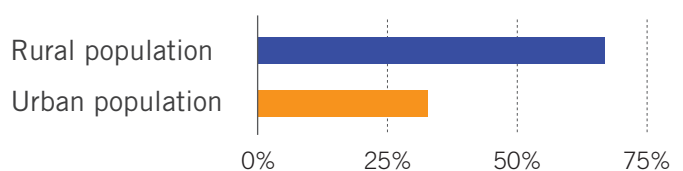
Timor-Leste² is located in South-East Asia and occupies the eastern half of Timor island (Fig. 1). Its population is mostly rural and growing, with a fertility rate of 5.6 children and life expectancy at 68.5 years. Around 53 per cent of the population is of legal working age (15–64 years) (Fig. 2).

Figure 2. Demographics for Timor-Leste

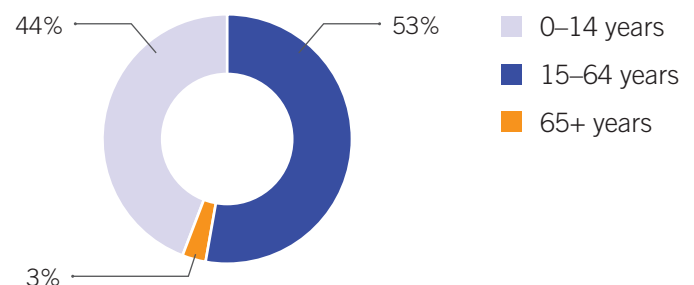
Population: 1.3 million



Population growth rate	Fertility rate	Life expectancy at birth
2.2%	5.6 children	68.5 years



Population age categories



Note: All data for 2016, except fertility and life expectancy, which are 2015.

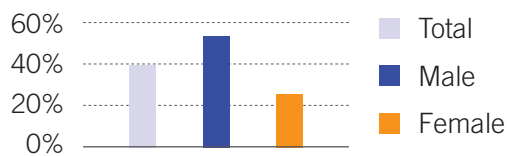
Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, <http://databank.worldbank.org> (accessed 30 July 2017).

1. The fact sheet is based on available data only.
2. Timor-Leste became a member of the International Labour Organization in 2003.

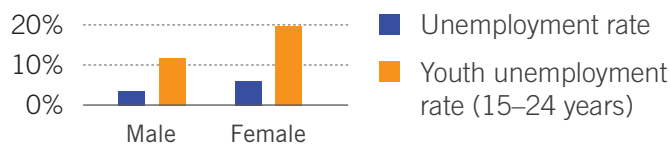
As of 2017, the labour force participation rate is 41.4 per cent and the employment-to-population ratio is 39.6 per cent. Both of those rates for men are more than 28 percentage points higher for men than for women. The total unemployment rate is 4.3 per cent, and the youth unemployment rate is 14.7 per cent, with the female youth unemployment rate 7.8 points higher than the male rate. Formal employment is heavily reliant on agriculture and services and on medium-skilled occupations (Fig. 3).³

Figure 3. Basic employment statistics for Timor-Leste, 2017

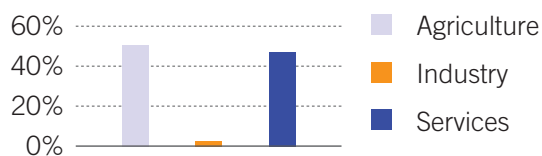
Employment-to-population ratio (15+ years)



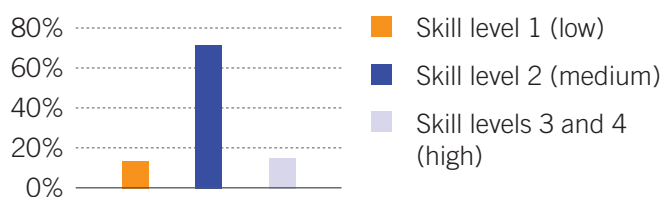
Unemployment



Employment by sector (15+ years)



Employment by occupation

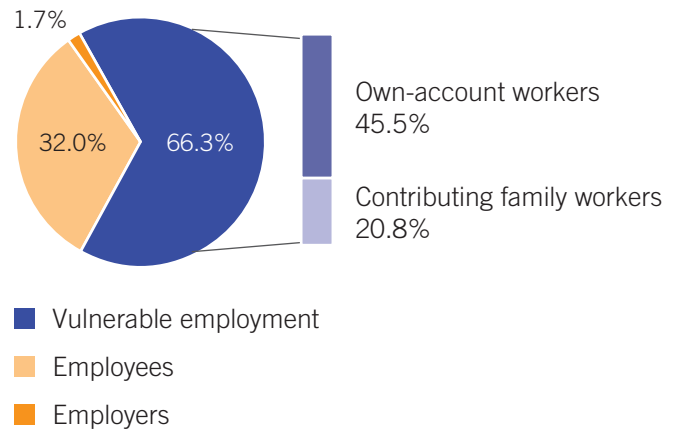


Note: ILO estimates; labour force participation rate and unemployment: aged 15 years and older. Youth unemployment: aged 15–24 years. Employment by occupation: skill level 1 (low) for elementary occupations; skill level 2 (medium) for clerical, service and sales workers, skilled agricultural and trade workers, plant machinists and assemblers; and skill level 3 and 4 (high) for managers, professionals and technicians.

Source: ILO compilation using ILOSTAT, <http://www.ilo.org/ilostat> (accessed 17 July 2017).

Vulnerable employment in Timor-Leste as of 2017 accounts for 66.3 per cent of the labour force, with the majority of those workers having own-account status (Fig. 4). Own-account and contributing family workers are more likely to experience low job and income security than employees and employers, as well as lower coverage by social protection systems and employment regulation.

Figure 4. Vulnerable employment, by status, 2017



Note: Vulnerable employment includes own-account workers and contributing family workers.

Source: ILO compilation using ILOSTAT, <http://www.ilo.org/ilostat> (accessed 17 July 2017).

According to the *World Risk Report 2016*,⁴ Timor-Leste has a very high World Risk Index score. It ranks 12 (of 171 countries) because of its very high exposure to natural hazards and limited institutional capacity to cope and adapt. Additionally, the 0.9 per cent of the total population who lived in the 0.7 per cent of the total land area below 5 meters above sea level in 2010 contributes to the country's vulnerability.⁵ According to the Emergency Events Database,⁶ since 2001 there have been eight natural disasters⁷ which resulted in five deaths and more than US\$130 million in damages. The natural disasters in that time were mostly storms, floods and droughts. Developing preventive measures to limit infrastructure and property damage and increase institutional capacity, particularly for small businesses to respond to climate events, can be a source of decent job creation while building resilience.

3. Informal employment (self-employed and contributing family members) is excluded from the agriculture calculations.

4. Bündnis Entwicklung Hilft and United Nations University: *World risk report 2016* (Berlin, 2016), <http://weltrisikobericht.de/english/>.

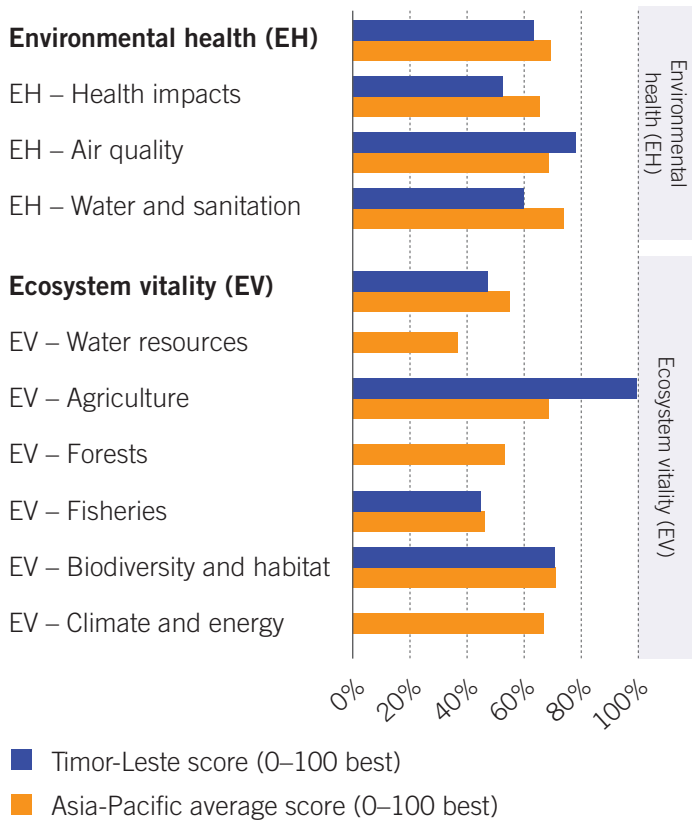
5. World Bank: World development indicators, last updated 20 July 2017, <http://databank.worldbank.org/> (accessed 30 July 2017).

6. EM-DAT: The Emergency Events Database – Université catholique de Louvain (UCL) – CRED, D. Guha-Sapir – www.emdat.be, Brussels, Belgium.

7. Climatological, hydrological and meteorological disasters.

Timor-Leste ranks 138 of 180 countries in the Environmental Performance Index (EPI), with a score of 55.79 (with 0 furthest from the high-performance benchmark target of 100). Timor-Leste outperforms the average score for Asia and the Pacific (Fig. 5) in two of the EPI categories (for which scores were calculated) of air quality and agriculture. There is significant room for improvement in the majority of the environmental categories, especially in environmental health (in health impacts, and water and sanitation) and ecosystem vitality (in water resources, fisheries, and biodiversity and habitat). Action to improve environmental health, ecosystem vitality, climate change and resilience to weather disasters all have the potential to provide job creation, green economy growth and innovation in Timor-Leste.

Figure 5. Environmental Performance Index 2016 for Timor-Leste

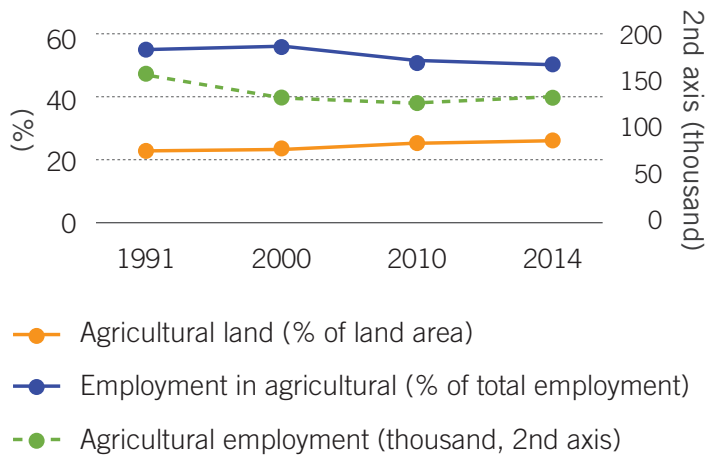


Note: Score 0–100 best. Timor-Leste: No score for EV–Forest and EV–Climate and energy due to lack of data. Asia-Pacific: Each score is an average of all data for ILO member States in the region, excluding four countries with no data (Cook Islands, Marshall Islands, Palau and Tuvalu).

Source: ILO compilation using A. Hsu et al.: 2016 Environmental Performance Index (New Haven, CT, Yale University, 2016), www.epiyale.edu.

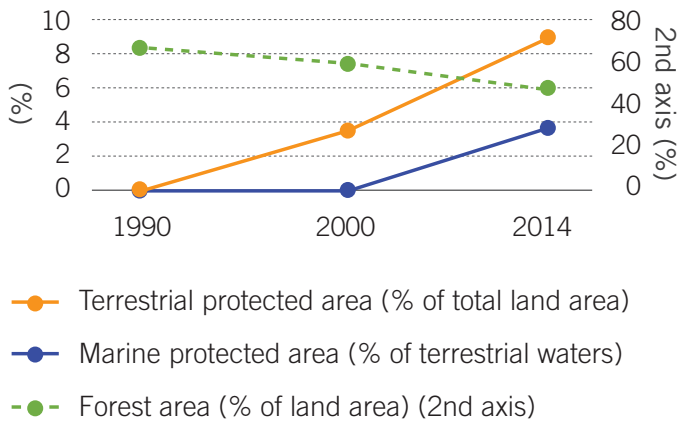
Rural population growth was 1.3 per cent in 2015. The share of agricultural land in total land area increased by 3.4 percentage points between 1991 and 2014, while agricultural employment dropped from 158,000 to 133,000 people. The share of agricultural employment in total employment fell by approximately 5 percentage points due to the combination of job losses in agriculture and job creation in other sectors (Fig. 6). Forest area decreased between 1990 and 2014 by 18.1 percentage points, to approximately 46.9 per cent of total land area. During that same period, the share of terrestrial protected area increased, reaching 8.7 per cent of total land area, while the proportion of marine protected area rose from none to reach 3.8 per cent of total territorial waters (Fig. 7). In 2013, 40.5 per cent of total employment was in the agriculture, forestry and fishing sector (Fig. 8). Although reliance on agriculture is significant, there are opportunities for job creation for sustainable production and organic farming. There will be greater prospects for employment opportunities if there is commitment to transition to a low-carbon and resource-efficient economy, such as jobs in resource management and environmental services.⁸

Figure 6. Agricultural land and agricultural employment, 1991-2014

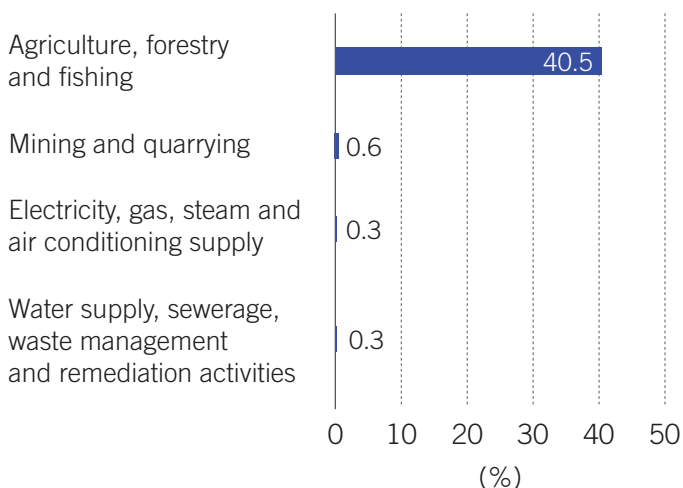


Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, <http://databank.worldbank.org/>; ILOSTAT, <http://www.ilo.org/ilostat> (accessed 30 July 2017).

8. Organisation for Economic Co-operation and Development: The jobs potential of a shift towards a low-carbon economy, *OECD Green Growth Papers*, No. 2012/01 (Paris, 2012), <http://dx.doi.org/10.1787/5k9h3630320v-en>.

Figure 7. Forest area and terrestrial and marine protected areas, 1990–2014

Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, <http://databank.worldbank.org/> (accessed 30 July 2017).

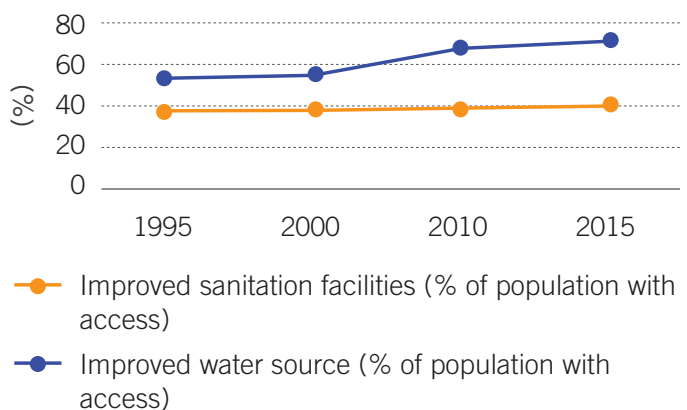
Figure 8. Employment in sectors with strong green jobs potential, 2013

Note: These sectors have the most potential for green job opportunities. Employment by selected 1-digit sector level (ISIC-Rev. 4, 2008).

Source: ILO compilation using ILOSTAT, <http://www.ilo.org/ilostat> (accessed 16 November 2017).

Since 1995, the percentage of the population with access to improved water supply has increased 19.1 percentage points, to 71.9 per cent in 2015. There was a 3.5 percentage-point increase in access to improved sanitation between 1995 and 2015, reaching 40.6 per cent (Fig. 9). Both rates, however, are well below the ideal threshold of 100 per cent. According to the Asian Development Bank,⁹ there was limited data on waste generation and composition as of 2014. Waste collection

points are scattered across the country, and waste is then emptied into collection vehicles that are not fully enclosed, causing waste to overflow. This results in pollution and risk to local populations. Also contributing to pollution and public health risks is the illegal dumping and burning of waste. All waste that is collected is transported to the Tibar dump, where it is sorted into mixed rubbish, construction waste, scrap metal and expired goods. The dump has minimal environmental protection measures, with frequent burning of waste; families living within the dump manage the waste picking. The Tibar dump employs 11 staff members.¹⁰ Only 0.3 per cent of the country's labour force was employed in water supply, sewerage, waste management and remediation activities in 2013 (Fig. 8). Improvements in safe water supply and sanitation access and the much-needed implementation of a municipal waste management system for collection, safe and sustainable disposal, recycling and composting practices will provide decent job opportunities in the future.

Figure 9. Improved sanitation and water supply access, 1995–2015

Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, <http://databank.worldbank.org/> (accessed 30 July 2017).

In 2014, less than 5 per cent of the population relied primarily on clean fuel and technology, in the sense that they do not create indoor pollution within the home.¹¹ The share of renewable energy in total energy consumption has not kept pace with overall consumption. In 2002, it was 47.8 per cent but fell to 38.9 per cent in 2008 and continued to drop, to 19 per cent in 2014 (Fig. 10). Renewable energy generation is minimal and remained

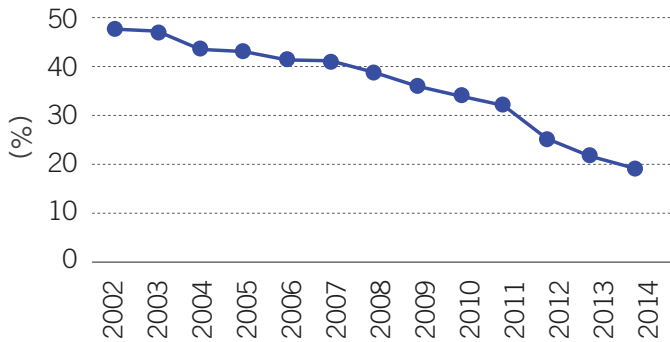
9. Asian Development Bank: *Solid waste management in the Pacific: Timor-Leste country snapshot* (Manila, 2014), <https://www.adb.org/sites/default/files/publication/42661/solid-waste-management-timor-leste.pdf>.

10. *ibid.*

11. The proportion of population with primary reliance on clean fuels and technology is calculated as the number of people using clean fuels and technologies for cooking, heating and lighting divided by total population reporting any cooking, heating or lighting, expressed as a percentage. "Clean" is defined by the emission rate targets and specific fuel recommendations (against unprocessed coal and kerosene) included in the normative World Health Organization guidelines for indoor air quality; see the data for household fuel combustion, <https://unstats.un.org/sdgs/metadata/files/Metadata-07-01-02.pdf>.

the same from 2011 to 2014, with hydropower the main source in 2015 (Fig. 11). There are no data available on renewable energy employment. The country's employment rate in electricity, gas, steam and air conditioning was only 0.3 per cent in 2013 (Fig. 8). With the push for increasing reliance on renewable energy, there will be potential for decent job opportunities in the future.

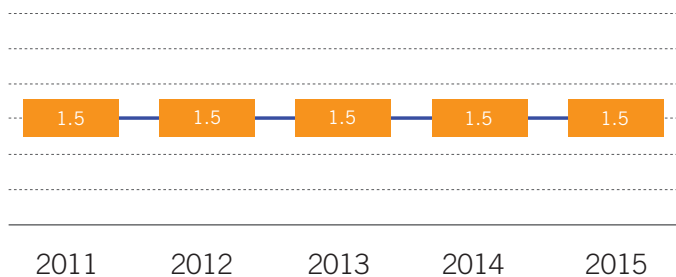
Figure 10. Renewable energy share in total final energy consumption, 2000-14



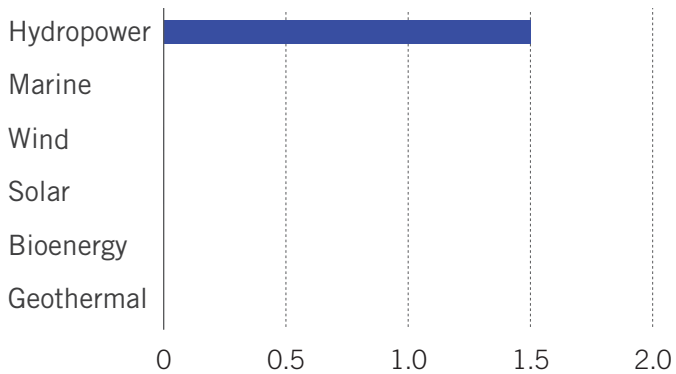
Source: ILO compilation using UN: SDG indicators: Global database (2017), <https://unstats.un.org/> (accessed 17 July 2017).

Figure 12. Renewable energy generation, 2011-15

Total renewable energy electricity generation (GWh)



Renewable energy electricity generation (GWh), by technology 2015



Source: ILO compilation using International Renewable Energy Agency: Dashboards (2017). <http://resourceirena.irena.org/gateway/dashboard/> (accessed 17 July 2017)

Better data collection relating to the green economy and the environmental sector would be valuable for policy-makers in Timor-Leste and Asian-Pacific countries. Better data on green and decent jobs is particularly needed to assess the impact of climate change and climate-related policies on social inclusion. Without better data, it will be difficult to determine what policy changes are needed to assure a just transition to environmental sustainability and to monitor progress going forward.

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