Decent Work

TUVALU

EMPLOYMENT AND ENVIRONMENTAL SUSTAINABILITY FACT SHEETS 2019

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 recently available data for selected indicators on employment and environmental sustainability: (i) employment in environmental sectors; (ii) skill levels; (iii) vulnerability of jobs; (iv) jobs in renewable energy; (v) scoring on the Environmental Performance Index; and (vi) air quality.

DEMOGRAPHICS

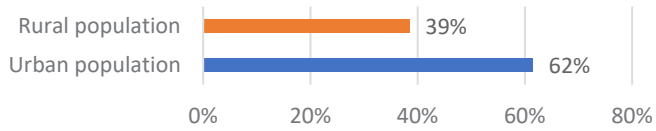
Tuvalu[1], located in the Pacific Ocean (Fig. 1) is the fourth smallest country in the world in terms of geography[2]. Its population is mostly urban and growing, with a fertility rate of 3 children and life expectancy of 66.9 years. Around 65 per cent of the population is of legal working age (15–64 years) (Fig. 2).

Figure 1. Map of Tuvalu

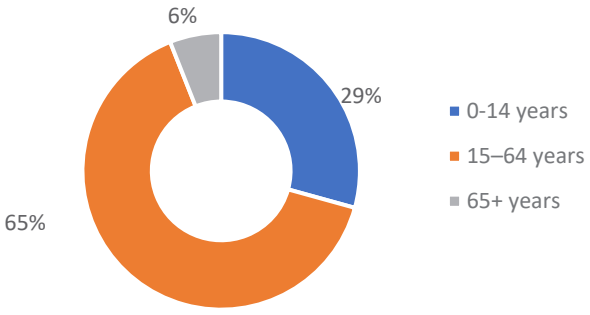
Figure 2. Tuvalu population statistics

Population:[3] 0.01 million

Population growth rate	Fertility rate	Life expectancy at birth
0.9%	**3.0 children**	**66.9 years**



Population age categories



Note: All data are for 2017. Fertility rate and Life expectancy at birth (2018 data).

Source: ILO compilation using World Development Indicators, Last updated: 28/06/2018. http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators# and Central Intelligence Agency: The world factbook 2013–2014 (Washington, DC, 2013), https://www.cia.gov/ (Accessed on 30 December 2018).

[1] Tuvalu became a member of the International Labour Organization in 2008.

[2] See http://www.ilo.org/suva/countries-covered/tuvalu/lang--en/index.htm

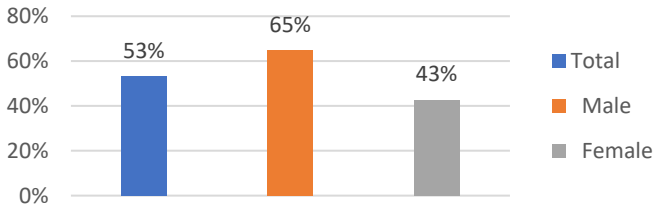
[3] Population data based on 2017 data.

LABOUR FORCE

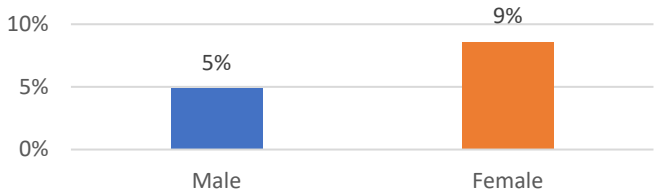
In 2005, the labour force participation rate was 58.2 per cent and in 2002 the employment-to-population ratio was 53.3 per cent. Both these rates are more than 21 percentage points higher for men than for women. The total unemployment rate was 6.5 per cent in 2005, with the female rate almost 4 percentage points higher than the male rate (Fig.3). No data is available for youth unemployment, employment by sector or by occupation.

Figure 3. Basic employment statistics for Tuvalu

Employment-to-population, 2002 (15+ years)



Unemployment, 2005

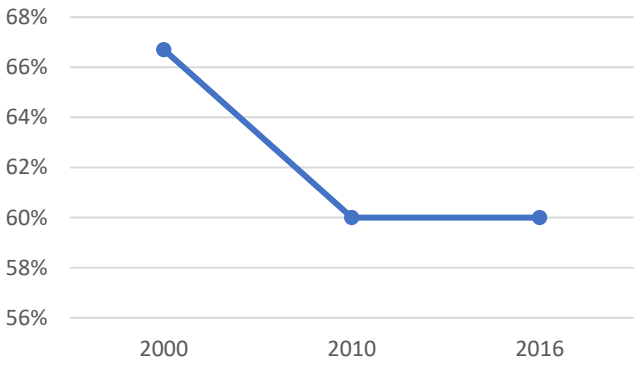


Note: ILO estimates. Labour force participation rate and unemployment: aged 15 years and older.

Source: ILO compilation using ILO: *Key indicators of the labour market (KILM)*, Ninth edition (Geneva, 2016); and ILO in Tuvalu, http://www.ilo.org/wcmsp5/ groups/public/---asia/---ro-bangkok/---ilo-suva/documents/publication/ wcms_366546.pdf (accessed 30 December 2018).

Rural population growth was negative 1.4 per cent in 2017. The share of agricultural land in total land area decreased by 7 percentage points between 2000 and 2010. It then remained steady at 60 percentage points between 2010 and 2016 (Fig. 4). There is no data available to determine the trends in agricultural employment.

Figure 4. Agricultural land, 2000-2016 (% of land area)



Note: Data for agricultural land is from 2016.

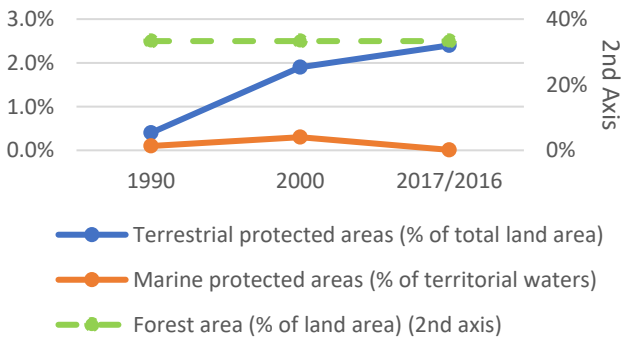
Source: ILO compilation using World development indicators, last updated: 28/06/2018; http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators# (accessed on 30 December 2018).

ENVIRONMENTAL ISSUES

Tuvalu is not listed in the Environmental Performance Index due to lack of data. Tuvalu's forest area remained steady between 1990 and 2016, at approximately 33 per cent of total land area. From 1990 to 2017, the share of terrestrial protected area increased slightly, reaching 2.4 per cent of total land area, while the proportion of marine protected area decreased by 0.09 per cent (Fig. 5). There will be greater prospects for employment opportunities if there is a commitment to transition to a low-carbon and resource-efficient economy, such as jobs in resource management and environmental services.[4]

[4] 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 5. Forest area, terrestrial and marine protection area, 1990-2017

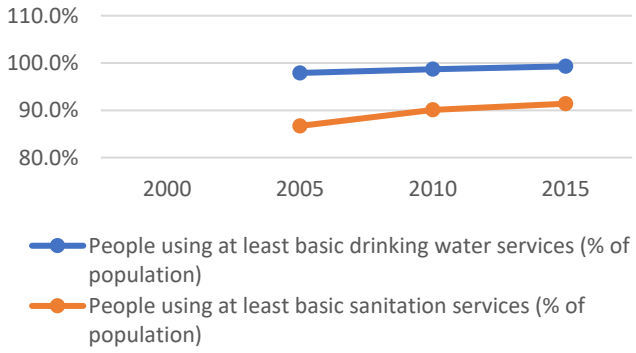


Note: Data for forest area is from 2016 and other data is from 2017.

Source: ILO compilation using World development indicators, last updated: 28/06/2018; http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators# (accessed on 19 February 2019).

Since 2005, access to basic drinking water has increased slightly, to an average of 99.3 per cent in 2015, and access to basic sanitation also increased slightly, to an average of 91.4 per cent in 2015 (Fig. 6). Both are below the ideal threshold of 100 per cent. Around 0.6 per cent of the labour force was employed in water supply, sewerage, waste management and remediation activities in 2016 (Fig. 9). Improvement in water supply and sanitation access could provide more decent job opportunities in the future.

Figure 6. Basic drinking water and sanitation access, 2000-2015



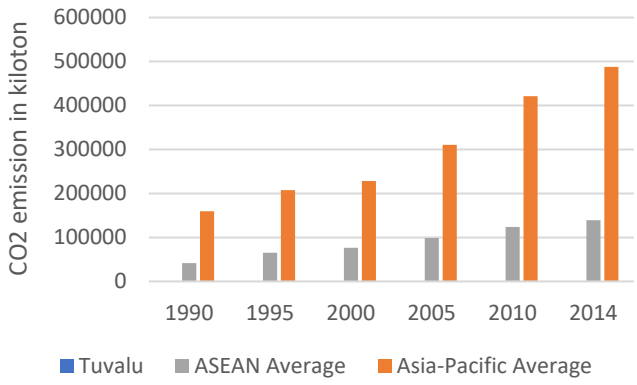
Data before 2005 is not available.

Source: ILO compilation using World development indicators, last updated: 21/05/2018; http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators# (accessed on 30 December 2018).

AIR QUALITY

The carbon dioxide (CO^2) emission levels for Tuvalu increased slightly by an average of 2 per cent from 1990 to 2014 (Fig. 7).[5] The energy sector is the main contributor to CO^2 emissions. Within the energy sector, emissions from electricity generation are the highest contributor, followed by the transport sector. This is because Tuvalu is heavily reliant on imported oil-based fuels for transportation, electricity generation and household use.[6] The level of emissions is so much lower than both the Asia-Pacific and ASEAN averages that it appears negligible.

Figure 7. CO^2 emissions for Tuvalu, 1990-2014



Note: Data for ASEAN and Asia-Pacific are the average of all the ILO member states of the regions. Asia-Pacific: data excludes Cook Islands, Timor-Leste (1990, 1995, 2000).

Source: ILO compilation using World Bank indicators; https://data.worldbank.org/indicator/EN.ATM.PM25.MC.M3?view=chart (accessed on 30 December 2018).

Applying the Just Transition Guidelines, an area of possible intervention includes efforts to reduce harmful emissions, which could potentially generate green jobs in high emitting sectors such as transportation and fuel-intensive industries. Reducing emissions is a significant challenge, which can be achieved not only by mitigation methods, but also by adapting to, and coping with, the changes required by the transition to a low-carbon economy.

CLIMATE CHANGE IMPACTS

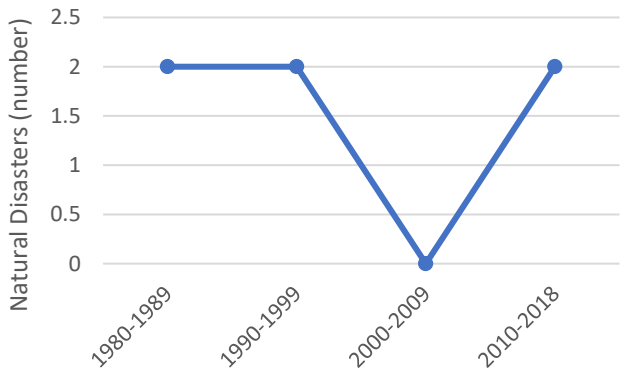
Tuvalu has a low-lying topography. Part of the country's vulnerability relates to the 47.5 per cent of the total population who, in 2010, lived in the 32.7 per cent of

[5] The value is calculated on the basis of CAGR (compound annual growth rate).

[6] Government of Tuvalu Intended Nationally Determined Contributions Communicated to the UNFCCC on 27 November 2015; http://www4.unfccc.int/ndcregistry/PublishedDocuments/Tuvalu%20First/TUVALU%20INDC.pdf

the total land area below 5 metres above sea level.[7] According to the *Emergency Events Database,*[8] Tuvalu has experienced on average two natural disasters per decade since the 1980s[9] (Fig. 8). The natural disasters in that time were mostly tropical cyclones and droughts. Developing preventative measures to limit infrastructure and property damage and increase institutional capacity to respond to climate events, particularly for small businesses, can be a source of decent job creation while building resilience.

Figure 8. Natural disaster occurrence in Tuvalu



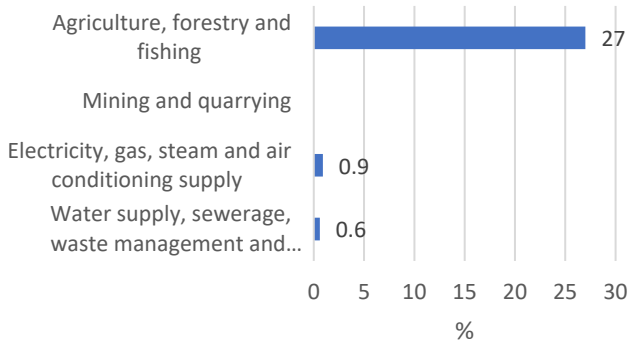
Note: Natural events include climatological, hydrological and meteorological disasters.

Source: EM-DAT: The emergency events database - Universite catholique de Louvain (UCL) - CRED, D. Guha-Sapir - www.emdat.be, Brussels, Belgium. Data accessed on: 30 December 2018.

GREEN JOBS POTENTIAL

In 2016, 27 per cent of total employment was in the agriculture, forestry and fishing sector (Fig. 9). Although reliance on agriculture is significant, there are opportunities for job creation for sustainable production and organic farming.

Figure 9. Employment in sectors with strong green jobs potential in 2016

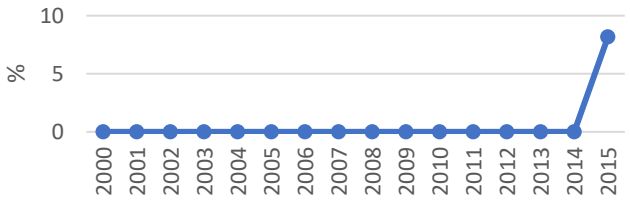


Note: These sectors have the most potential for green job opportunities. Employment by selected 1-digit sector level (ISIC - Rev. 4, 2008).

Source: ILO estimates and compilation using ILOSTAT, www.ilo.org/ilostat (accessed on: 30 December 2018).

In 2016, approximately 50 per cent of the population relied primarily on clean fuel and technology, in the sense that these do not create pollution within the home.[10] The share of renewable energy in total energy consumption remained negligible from 2000 to 2014. In 2015, it reached 8.16 per cent (Fig. 10). Renewable energy electricity generation has increased over the last 16 years, with solar power being the main renewable energy source in 2016 (Fig. 11). The country's employment rate in electricity, gas, steam and air conditioning was only 0.9 per cent in 2016 (Fig. 9). With the push for increasing reliance on renewable energy, there is the potential for decent job opportunities in the future.

Figure 10. Renewable energy share in total energy consumption, 2000-15

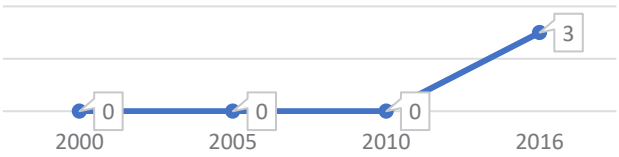


Source: ILO compilation using United Nations statistics division. SDG indicators: Global database. Available at: https://unstats.un.org/sdgs/indicators/database/ (accessed on 30 December 2018).

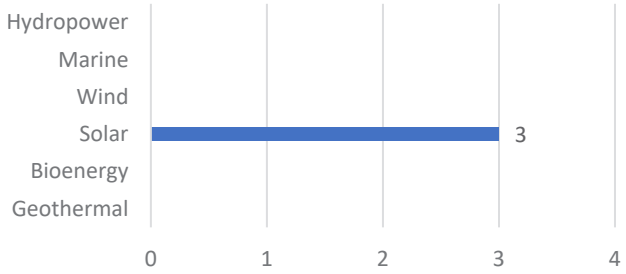
[7] World development indicators; http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators# (accessed on 7 August 2018)
[8] EM-DAT: the emergency events database - Universite catholique de Louvain (UCL) - CRED, D. Guha-Sapir - www.emdat.be, Brussels, Belgium. Data accessed on:20v July 2018.
[9] Climatological, hydrological and meteorological disasters.
[10] The proportion of the 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 the 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.

Figure 11. Renewable energy electricity generation, 2000-2016

Total renewable energy electricity generation (gigawatt hours - GWh)



Renewable energy electricity generation (GWh) in 2016, by technology



Source: ILO compilation using source: IRENA (2018); Renewable electricity capacity and generation statistics, June 2018. Available at: http://resourceirena.irena.org.

Better data collection relating to the green economy and the environmental sector would be very valuable for policy-makers in Asia-Pacific countries. In particular, better data on green and decent jobs is 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 ensure a just transition to environmental sustainability and to monitor progress going forward.