

# PAKISTAN

## 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 indicators<sup>1</sup> 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 Pakistan



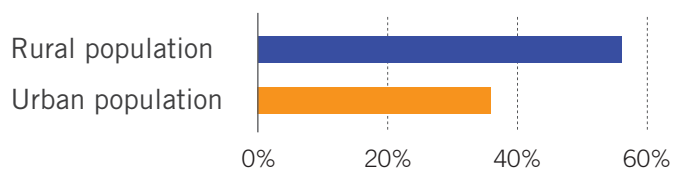
Pakistan<sup>2</sup> is located in South Asia and is bordered by India to the east, Afghanistan to the west, the Islamic Republic of Iran to the south-west and China to the north-west (Fig. 1). Its population is mostly rural and growing, with a fertility rate of 3.6 children and life expectancy at 66.4 years. Around 61 per cent of the population is of legal working age (15–64 years) (Fig. 2).

Figure 2. Demographics for Pakistan

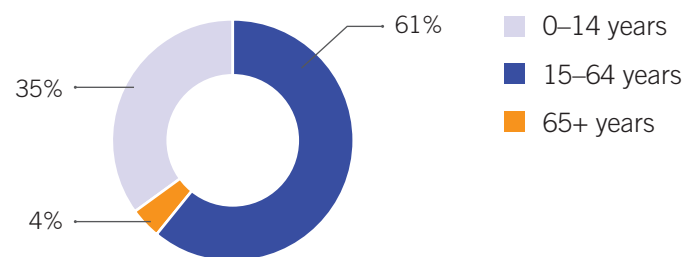
Population: 193.2 million



Population growth rate	Fertility rate	Life expectancy at birth
2%	3.6 children	66.4 years



Population age categories



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

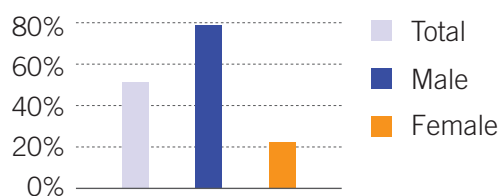
Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, <http://databank.worldbank.org> (accessed 30 July 2017).

1. The fact sheet is based on available data only.  
2. Pakistan became a member of the International Labour Organization in 1947.

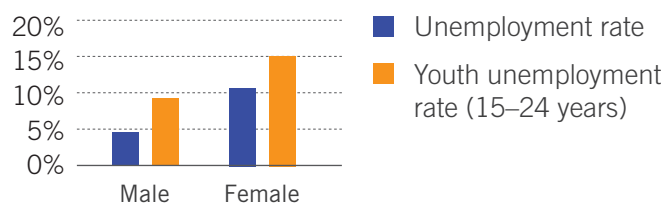
As of 2017, the labour force participation rate is 54.3 per cent and the employment-to-population ratio is 51.1 per cent. Both of those rates are more than 56 percentage points higher for men than for women. The total unemployment rate is 5.9 per cent, and the youth unemployment rate is 10.6 per cent, with the female youth rate 5.9 percentage points higher than the male rate. Formal employment is heavily reliant on agriculture (at 42.1 per cent), followed by services (at 38.1 per cent)<sup>3</sup> and on medium-skilled occupations (Fig. 3).

**Figure 3. Basic employment statistics for Pakistan, 2017**

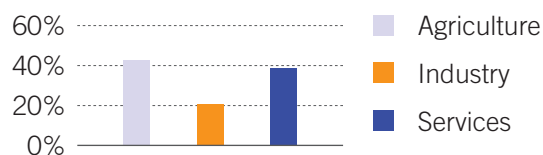
#### Employment-to-population ratio (15+ years)



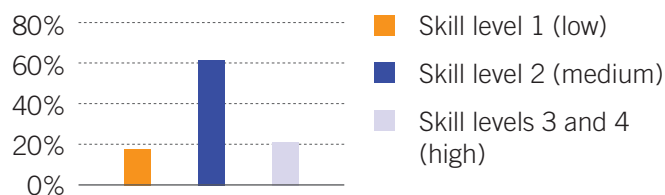
#### Unemployment



#### Employment by sector (15+ years)



#### Employment by occupation

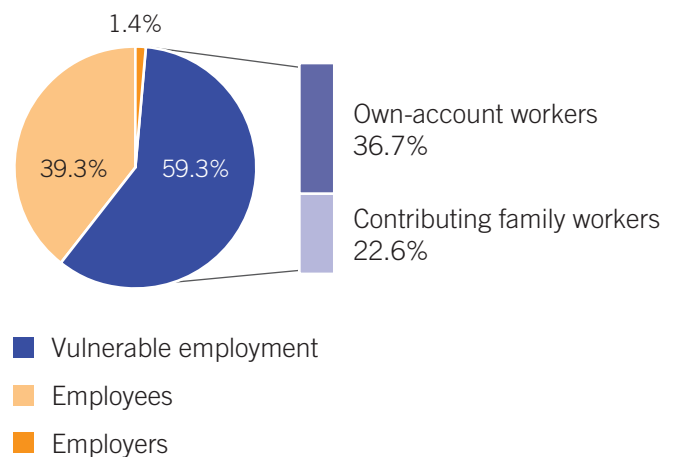


Note: ILO estimates. Labour force participation rate and unemployment: aged 15 years and older. Youth unemployment: aged 15–24 years. Employment by occupation: skill level 1 (low) for elementary occupations; skill level 2 (medium) for clerical, service and sales workers, skilled agricultural and trade 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 Pakistan accounts for 59.3 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*,<sup>4</sup> Pakistan has a medium World Risk Index score. Although it has low exposure to natural hazards, it ranks 72 (of 171 countries) because it has limited coping and adaptive capacity. Only 1.5 per cent of the total land area is below 5 meters above sea level and only 1.1 per cent of the total population lived in that area in 2010.<sup>5</sup> According to the Emergency Events Database,<sup>6</sup> there was a substantial increase in natural disasters<sup>7</sup> and associated damage costs between the 1940s and the 2010s (Fig. 5). The natural disasters in that time were mostly tropical cyclones, storms, floods, avalanches, landslides, droughts and heat and cold waves which resulted in more than 32,800 deaths (1944–2017). 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.

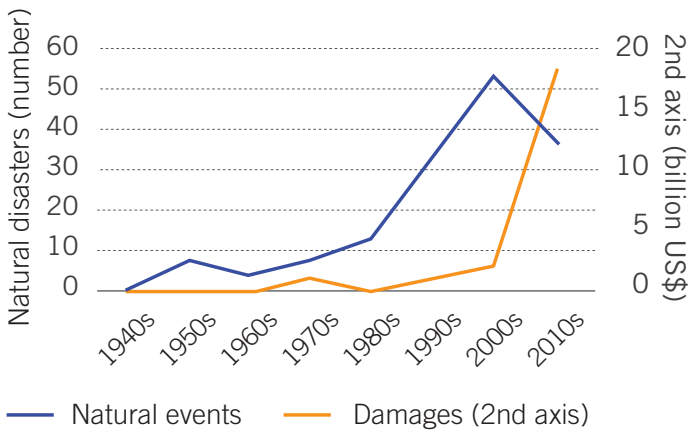
4. Bündnis Entwicklung Hilft and United Nations University: *World risk report 2016* (Berlin, 2016), <http://weltrisikobericht.de/english/>.

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

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

7. Climatological, hydrological and meteorological disasters.

**Figure 5. Natural disaster occurrence and damage costs in Pakistan, 1940s–2010s**

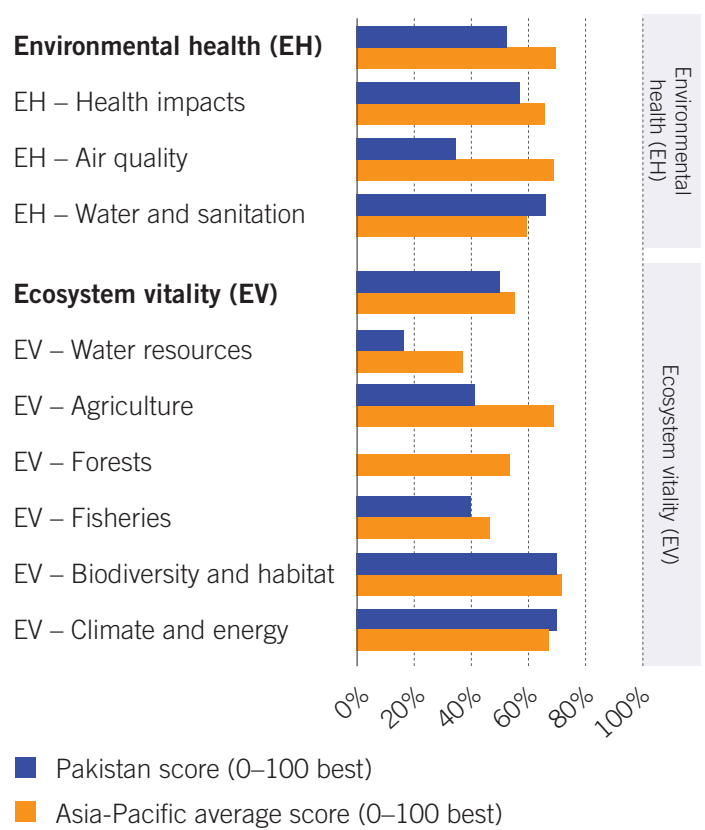


Note: Natural events include climatological, hydrological and meteorological disasters. 2010s data are only for the first half of the decade.

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

Pakistan ranks 144 of 180 countries in the Environmental Performance Index (EPI), with a score of 51.42 (with 0 furthest from the high-performance benchmark target of 100). Pakistan outperforms the average score for Asia and the Pacific (Fig. 6) in only one environmental category (climate and energy). There is significant room for improvement in all of the environmental areas, especially in environmental health (in health impacts, air quality and water and sanitation) and ecosystem vitality (in water resources, forests and fisheries). 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.

**Figure 6. Environmental Performance Index 2016 for Pakistan**



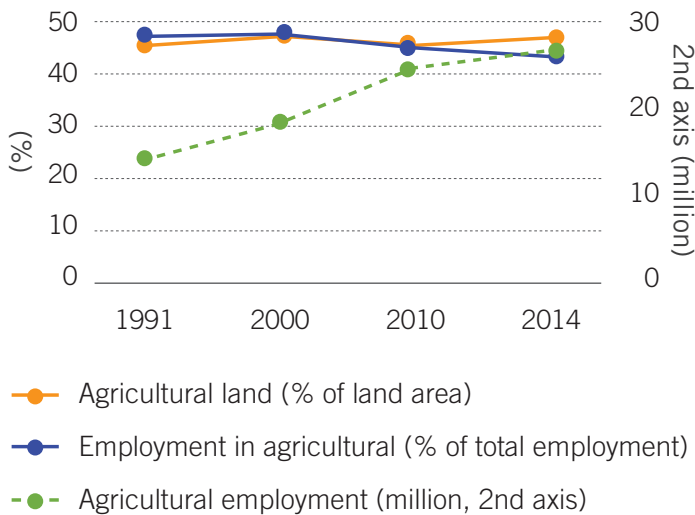
Note: Score 0–100 best. Pakistan: No score for EV–Forests due to lack of data. Asia-Pacific: Each score is an average of all data for ILO member States in the region, excluding four countries with no data (Cook Islands, Marshall Islands, Palau and Tuvalu).

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 area increased slightly between 1991 and 2014, reaching 47 per cent of total land area. Even though agricultural employment grew by 13 million during this period, its share of total employment declined by 4 percentage points as a result of faster job creation in other sectors (Fig. 7). The share of forest area declined by approximately 1.3 percentage points between 1990 and 2014, to 2 per cent of total land area. During that same period, the share of terrestrial protected area remained stable, at 10.8 per cent of total land area. In 2014, the proportion of marine protected area amounted to 5.6 per cent of total territorial waters (Fig. 8). In 2016, 42.3 per cent of total employment was in the agriculture, forestry and fishing sector (Fig. 9). Although reliance on agriculture is large, there are opportunities for job creation for sustainable production and organic farming. There will be greater prospects

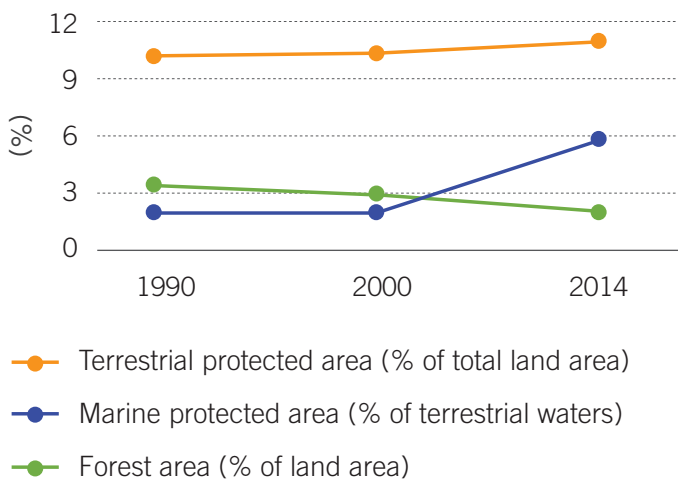
for employment opportunities if there is commitment to transition to a low-carbon and resource-efficient economy, such as jobs in resource management and environmental services.<sup>8</sup>

**Figure 7. Agricultural land and agricultural employment, 1991–2014**



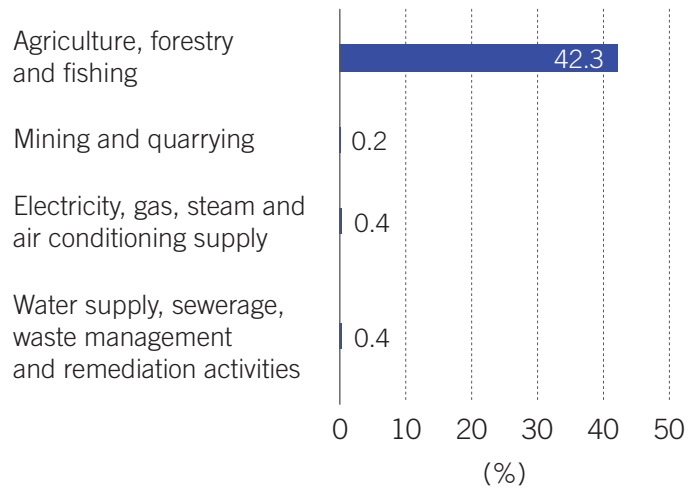
Source: ILO compilation using World Bank: World development indicators, last updated 20 July 2017, <http://databank.worldbank.org/>; ILOSTAT, <http://www.ilo.org/ilostat> (accessed 30 July 2017).

**Figure 8. 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 9. Employment in sectors with strong green jobs potential, 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 compilation using ILOSTAT, <http://www.ilo.org/ilostat> (accessed 16 November 2017).

Since 1990, the percentage of the population with access to improved water supply has increased 5.1 percentage points, to 91.4 per cent in 2015. There was a 39.8-percentage point increase in access to improved sanitation between 1990 and 2015, reaching 63.5 per cent (Fig. 10). Both rates, however, are still below the ideal threshold of 100 per cent. According to the World Bank,<sup>9</sup> municipal solid waste generation was 0.84 kg per capita per day in 2008 and is expected to increase to 1.05 kg per capita per day by 2025.<sup>10</sup> Most of the waste in 2000 was organic (at 68 per cent), followed by plastics (at 18 per cent) (Fig. 11).<sup>11</sup> According to Lew,<sup>12</sup> Pakistan's solid waste management faces a number of challenges, including lack of a waste collection system, that lead to waste being dumped on the streets and burned. Controlled sanitary landfill facilities are limited. Although the Lahore Waste Management Company employs more than 10,000 field workers in the city for waste collection and disposal, recycling is left to the informal sector.<sup>13</sup> Only 0.4 per cent of the country's labour force was employed in water supply, sewerage, waste management and remediation activities in 2016 (Fig. 9). Improvements in safe water supply and sanitation access and the much-needed implementation

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>.

9. World Bank: *What a waste: A global review of solid waste management* (Washington, DC, 2012).

10. *ibid.*

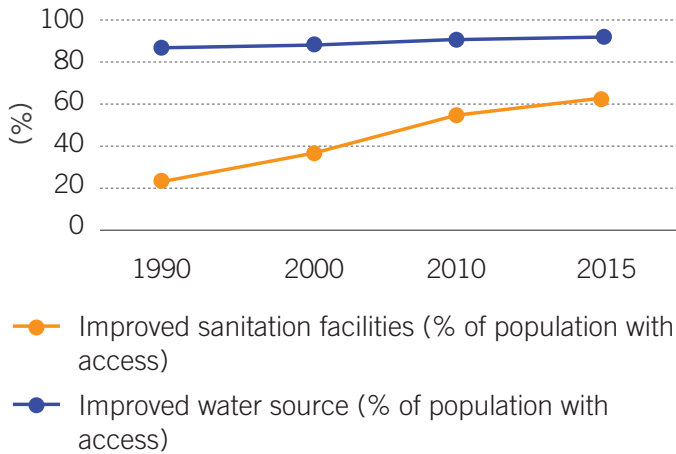
11. World Bank: *What a waste: A global review of solid waste management* (Washington, DC, 2012).

12. R. Lew: *Solid waste management in Pakistan* (Islamabad, BioEnergy Consult, 2017), <https://www.bioenergyconsult.com/solid-waste-management-in-pakistan/>.

13. *ibid.*

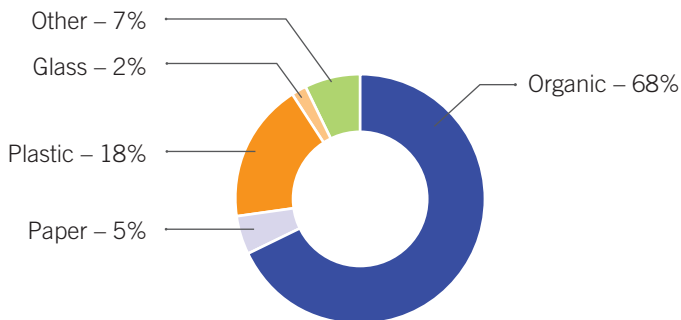
of a municipal waste management system for collection, safe and sustainable disposal, recycling and composting practices will provide decent job opportunities in the future.

**Figure 10. Improved sanitation and water supply access, 1990-2015**



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

**Figure 11. Waste composition, 2009**

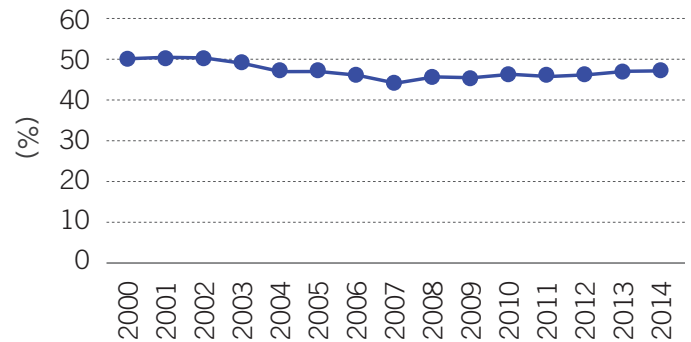


Source: ILO compilation using World Bank: *What a waste: A global review of solid waste management* (Washington, DC, 2012).

In 2014, only 44.8 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.<sup>14</sup> The share of renewable energy in total energy consumption, however, has not kept pace with overall consumption. In 2000, it was 50.4 per cent but fell to nearly 44 per cent in 2003 and recovered to 47.2 per cent in 2014 (Fig. 12). Renewable energy generation dropped between 2011 and 2012 but has since been in a recovering trend, with hydropower the main source in 2015 (Fig. 13). In 2016, more than 73,900 people were employed in the renewable energy sector, with 69

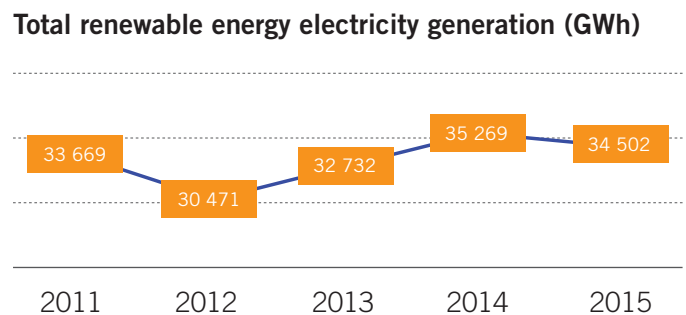
per cent of them in hydropower and 28 per cent in solar photovoltaic (Fig. 14). The country's employment rate in electricity, gas and water supply was only 0.4 per cent in 2016 (Fig. 9). A push for increasing reliance on renewable energy would create greater potential for decent job opportunities in the future.

**Figure 12. Renewable energy share in total final energy consumption, 2000-14**

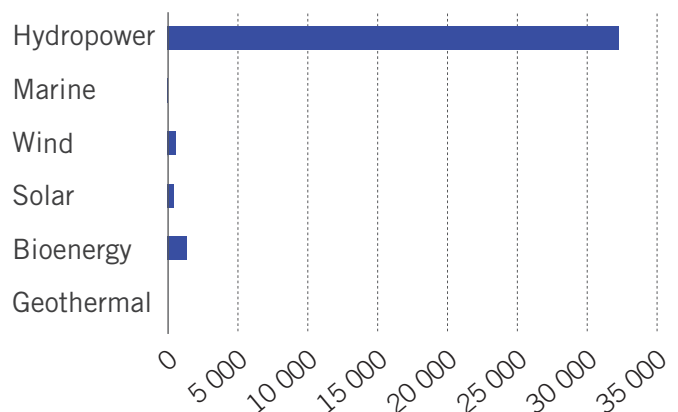


Source: ILO compilation using UN: SDG indicators: Global database (2017), <https://unstats.un.org/> (accessed 17 July 2017).

**Figure 13. Renewable energy generation, 2011-15**



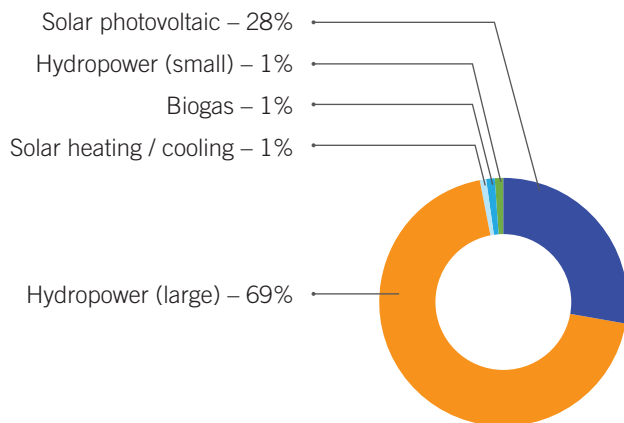
**Renewable energy electricity generation (GWh), by technology 2015**



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

14. 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>.

**Figure 14. Renewable energy employment, by energy source, 2016**



Note: Data limitations apply for certain technologies in certain countries. The lack of data reported for any specific technology may thus be indicative of a data gap, rather than the absence of renewable energy jobs using that technology.

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 Pakistan 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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