

## Introduction

Across the world, individual economies are working towards achieving the 17 goals and 169 targets set within the framework of the Sustainable Development Goals (SDGs). Progress towards meeting the SDGs by 2030 is being monitored through a global indicator framework, currently consisting of 232 statistical indicators.<sup>1</sup> The SDGs were developed through a participatory process<sup>2</sup> and are more ambitious than the Millennium Development Goals (MDGs), with double the goals, triple the targets, and four times the number of indicators.

A key feature of the SDGs when compared with the MDGs is their increased emphasis on level of disaggregation by income, sex, age, race, ethnicity, migratory status, and disability status. In 2017, the Asian Development Bank (ADB) and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) undertook a survey of selected national statistics offices from 22 ADB and UNESCAP member economies on their experience with SDG data compilation. Responses from 16 national statistics offices suggested that, while disaggregation by location was available for several SDG indicators, disaggregation was less common by sex and was far less common, if not absent, for disabled persons and indigenous peoples.

The SDG indicator framework classifies 232 indicators following a three-tier classification of the indicators based on availability of data in the

economies and whether the methodology is well established. Tier I indicators are those with a clearly established methodology, where data are being regularly collected by many economies. Tier II indicators are those with an established methodology, but where data are not regularly collected by many economies. Tier III indicators do not have established standards and estimation methodologies. Of the 232 SDG indicators, 82 belong to Tier I, 61 belong to Tier II, and 84 belong to Tier III. The remaining five indicators fall under multiple tiers. In Asia and the Pacific, only 89% of Tier I indicators have some data, while trend analysis can be conducted for only 25% of SDG indicators (UNESCAP 2017).

The challenges associated with data availability are further amplified by a lack of resources devoted to the development of statistics. This problem is pervasive not just for the SDGs but also for national statistical development plans of economies (PARIS21 2017). The Cape Town Global Action Plan for Sustainable Development Data appeals for a commitment from governments and other stakeholders to undertake key actions, such as using a combination of traditional and innovative data sources, increasing the resources made available to statistical infrastructure, and harnessing strategic partnerships for statistics development.

Part I of *Key Indicators for Asia and the Pacific 2018* presents a statistical narrative on the status of economies in Asia and the Pacific towards the Sustainable Development Agenda. The discussion for selected SDG indicators is accompanied by supporting information presented in figures, boxes, and tables. Most of the statistics presented in the tables and charts are presented for two data points from 2000 to 2017. Data gaps and other data-related issues are also discussed to guide actions aimed at meeting the SDGs effectively.

1 In March 2016, the United Nations Statistical Commission (UNSC) approved a list of 230 indicators for global monitoring of the SDGs. In May 2018, the UNSC approved a revised list of 232 indicators. Given the differences in circumstances and priorities across economies, and a wide and emerging array of analytical tools and innovative data sources, refinements to SDG indicators are expected.

2 The SDGs resulted from a consultation process across 11 thematic groups and 83 national consultations as well as door-to-door surveys by the UN Working Group on Sustainable Development. The UN also conducted an online My World survey, which asked citizens of the world to identify areas that they would like to see addressed in the SDGs.

## Snapshot

- In developing Asia, the proportion of people living on less than \$1.90 a day at 2011 purchasing power parity (PPP) declined from 33.7% in 2002 to 8.9% in 2013. This indicates that nearly 779 million people were lifted out of extreme poverty, largely due to achievements of two populous economies—the People’s Republic of China (PRC) and India.
- The prevalence of stunting in children below the age of 5 years fell or remained the same in 26 of the 30 developing member economies with available data for two points, but the more recent data also showed that at least two-fifths of children below the age of 5 have stunted growth in Afghanistan, the Lao People’s Democratic Republic (Lao PDR), Pakistan, Papua New Guinea, and Timor-Leste.
- Across Asia and the Pacific, the number of women dying during pregnancy, childbirth, or soon after fell from 264 deaths per 100,000 live births in 2000 to 123 per 100,000 live births in 2015.
- In Asia and the Pacific, significant gaps persist, when it comes to the representation of women in national parliaments. While 10 of the 43 reporting economies in Asia and the Pacific had from 25% to 40% representation of women in parliaments, in 11 economies of Asia and the Pacific this representation was lower than 10%.
- Drinking water is essential to life. From 2000 to 2015, Armenia, Azerbaijan, and New Zealand increased by more than 20 percentage points the proportion of their respective populations using safely managed drinking water services.
- In 11 of the 46 economies with available data for 2016, more than 95% of the population had access to clean fuels and technology for cooking, heating, and lighting. This compares with seven economies in 2000.
- Across economies, the PRC registered the highest total domestic material consumption by volume in 2017 (over 35 billion metric tons). However, Australia, Mongolia, and Singapore had the highest consumption in per capita terms in 2015.
- In developing Asia, manufacturing value added per person was over \$5,000 per person (at constant 2010 prices) in the Republic of Korea, and Singapore in 2017. Since 2000, 14 of the 43 reporting developing economies have doubled their manufacturing value added per capita, with increases of over \$1,500 per person in the PRC, the Republic of Korea, Singapore, and Turkmenistan.
- Inequality, measured by the growth rate of household expenditure or income per capita of the poorest 40% of people relative to the overall population, was reduced in 11 of the 16 economies with recent available data.
- Of the 48 regional ADB member economies, 28 had formulated, by at least 2015, strategies and regulatory mechanisms for disaster risk reduction and management in line with the Sendai Framework.
- Resources made available to strengthen statistical capacity increased from \$31.6 million in 2006 to \$52.9 million in 2015.

## SDG 1. End Poverty in All its Forms Everywhere



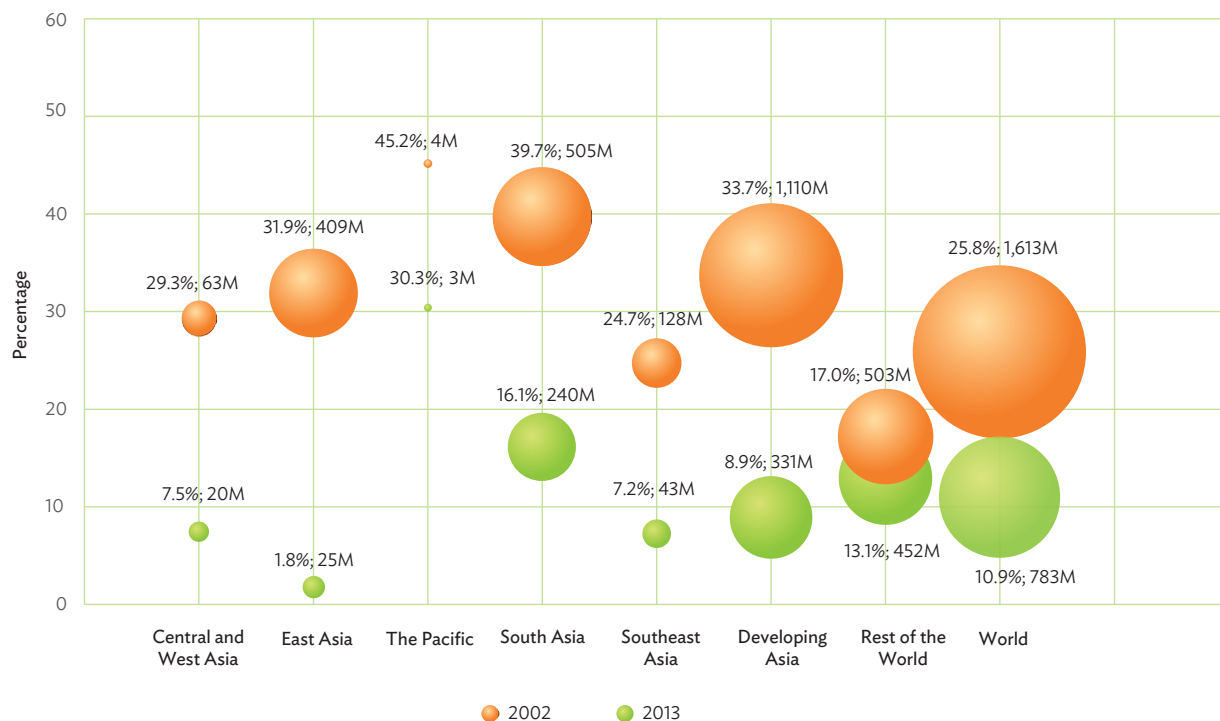
Eliminating extreme poverty is the first objective of the SDGs. To achieve this goal, economies must generate gainful employment opportunities for the poor and vulnerable and provide requisite social protection benefits to them.

In 2013, extreme poverty, measured by the threshold of \$1.90 a day at 2011 PPP, affected nearly 8.9% of the population in developing Asia, declining from 33.7% in 2002. This indicates that nearly 779 million people were lifted out of extreme poverty, largely due to the achievements of two populous economies—the PRC and India. Notwithstanding this reduction, over 330 million people across the region still live in extreme poverty.

Although rates of extreme poverty fell in developing Asia from 2002 to 2013, considerable variation was observed across the regions. In 2013, the proportion of the population living in extreme poverty ranged from 1.8% in East Asia to 30.3% in the Pacific (Figure 1.1.1). However, South Asia with 16.1% population under \$1.90 a day at 2011 PPP continues to have the largest number of people living in extreme poverty (240 million), followed by Southeast Asia (43 million).

In 2017, the proportion of the employed population living in extreme poverty or the working poor was less than 1% in 4 of the 28 reporting economies—Azerbaijan (0.2%), Malaysia (0.1%), Mongolia (0.2%), and Turkmenistan (0.8%)—but was greater than 40% in three economies—Afghanistan (83.4%), the Lao PDR (47.7%), and Bangladesh (41.5%). In 11

Figure 1.1.1: Proportion and Number of People Living in Extreme Poverty, 2002 and 2013



M= million.

Note: The numbers next to the bubbles represent the proportion of population in extreme poverty and the number of extreme poor in millions.

Source: Asian Development Bank estimates using World Bank PovcalNet Database: <http://iresearch.worldbank.org/PovcalNet/home.aspx> (accessed 18 May 2018).

[Click here for figure data](#)

of the 28 economies with available data, the rates of working poor are higher among females than among males (Table 1.1.1). In 22 of 28 reporting economies, the proportion of working poor was higher for youths between the ages of 15 and 24 than it was for adults aged 25 years and older.

**In 28 of 33 regional economies with available data, poverty rates using national poverty lines fell from 2000 to 2015.** Methodologies and definitions of national poverty lines vary across economies. Hence poverty rates based on national definitions are not comparable. Figure 1.1.2 plots the rural poverty rate against the urban poverty rate, using national-level poverty data. The red line is indicative of equal rural and urban poverty rates. Points above this line represent economies in which rural poverty rates are greater than urban poverty rates, while the opposite applies for points falling below the red line. In all reporting economies, poverty rates for the rural population were persistently higher than those of the urban population.

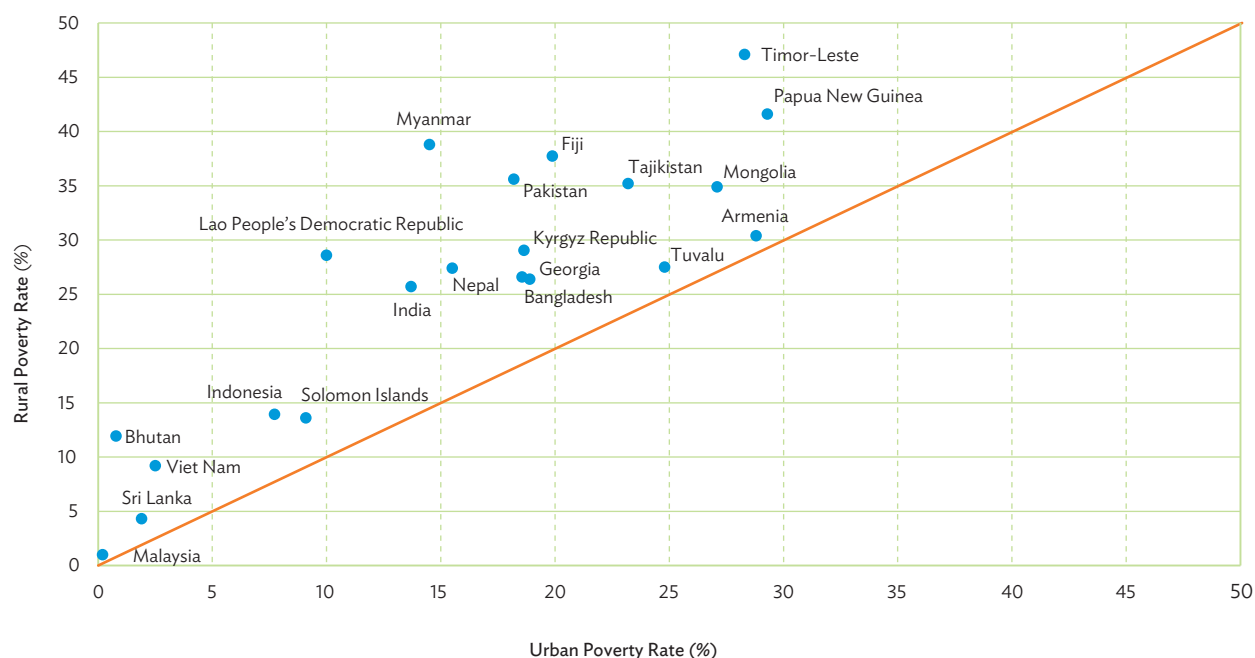
## SDG 2. End Hunger, Achieve Food Security and Improved Nutrition, and Promote Sustainable Agriculture



Although significant progress has been made towards meeting food security and nutritional needs in Asia and the Pacific, hunger and malnutrition persist. Children below the age of 5 years are especially vulnerable to food insecurity and malnutrition. Solutions for ending hunger, reducing food insecurity, and eliminating malnutrition require widespread promotion of sustainable agriculture, increased investment in agriculture, and better access to food.

**In 2015, the prevalence of undernourishment was below 5.0% in 10 of the 35 economies of developing Asia with available data.** As early as 2000, in seven economies in developing Asia

**Figure 1.1.2: Proportion of Population below the National Poverty Line in Urban and Rural Areas, Latest Year**

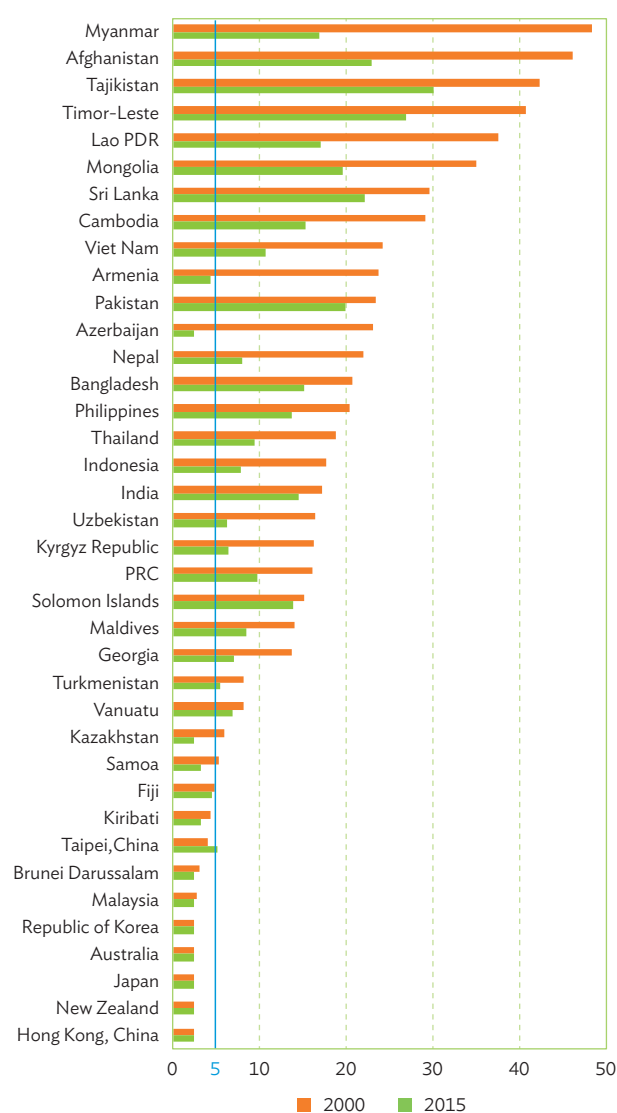


Note: The chart covers the period from 2009 to 2017.  
Source: Table 1.1.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

prevalence of undernourishment was less than 5% (Figure 1.2.1). In all the remaining 28 economies in developing Asia, the prevalence of undernourishment decreased from 2000 to 2015. Despite this progress in reducing undernourishment, the prevalence is greater than one-fifth of the population in Tajikistan (30.1%), Timor-Leste (26.9%), Afghanistan (23.0%), and Sri Lanka (22.1%).

**Figure 1.2.1: Prevalence of Undernourishment (%)**



Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China  
 Note: 2000 values refer to 3-year average for 1999–2001; and 2015 values refer to 3-year average for 2014–2016.

Source: Table 1.2.1, Key Indicators for Asia and the Pacific 2018.

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**Stunted growth among children under the age of 5 is declining in developing Asia.** The prevalence of stunting in children below the age of 5 years fell or remained the same in 26 of the 30 developing member economies that had two data points available for comparison. However, using the more recent data point (ranging from 2009 to 2016), it was evident that at least two in every five children below the age of 5 had stunted growth in Timor-Leste (50.2%), Papua New Guinea (49.5%), Pakistan (45.0%), the Lao People's Democratic Republic (43.8%), and Afghanistan (40.9%).

### SDG 3. Ensure Healthy Lives and Promote Well-Being for All at All Ages



While everyone has the right to live healthily throughout their lifetime, providing adequate health care is a significant challenge. Monitoring SDG 3 will require high-quality, timely, and more disaggregated data on health indicators related to reproductive, maternal, and child health; HIV/AIDS; malaria; tuberculosis; and tropical, noncommunicable, and environmental diseases. Ensuring universal health coverage and access to safe, affordable, and effective medicines and vaccines would be a step forward in achieving the targets set for this goal.

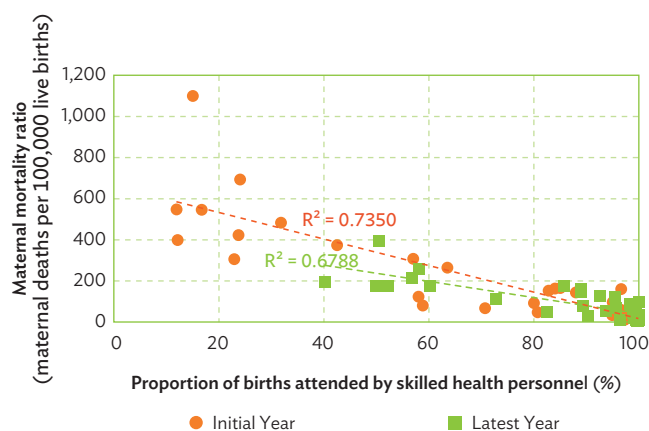
**In developing Asia, the number of women dying during pregnancy, childbirth, or soon after fell from 269 deaths per 100,000 live births in 2000 to 126 per 100,000 in 2015.** All developing regions of Asia and the Pacific experienced a reduction in maternal mortality ratios (MMRs) from 2000 to 2015, with South Asia reporting the largest drop at 203 fewer maternal deaths per 100,000 live births. East Asia reported the lowest reduction in maternal deaths per 100,000 live births, but East Asia already had the lowest ratio among regions of developing Asia in 2000.

From 2000 to 2015, the MMR decreased in 39 of 43 reporting economies across Asia and the Pacific (Table 1.3.1). The exceptions were the Kyrgyz Republic (from 74 to 76 per 100,000 live births); Taipei, China (from 8 to 12 per 100,000 live births); Tonga (from 97 to 124 per 100,000 live births); and Uzbekistan (from 34 to 36 per 100,000 live births). Afghanistan experienced the largest decline in its MMR, with 704 fewer maternal deaths per 100,000 live births in 2015 than in 2000. Aside from Afghanistan, developing economies with a decline in MMR of at least 250 deaths per 100,000 live births from 2000 to 2015 included Timor-Leste (479), the Lao PDR (349), Cambodia (323), Nepal (290) and Bhutan (275). Economies with fewer than 25 maternal deaths per 100,000 live births in 2015 included Brunei Darussalam (23); Thailand (20); Kazakhstan (12); Taipei, China (12); the Republic of Korea (11); Singapore (10); and Hong Kong, China (2) as well as the developed economies of New Zealand (11), Australia (6), and Japan (5). Economies in which maternal deaths were low also had a high proportion

of births attended by skilled health personnel, while those where maternal deaths were high had a low proportion of births attended by medical professionals (Figure 1.3.1).

**Child deaths dropped significantly in Asia and the Pacific, with the under-5 mortality rate declining from 69 deaths per 1,000 live births in 2000 to 33 deaths per 1,000 live births in 2016.** As with MMRs, under-5 mortality rates were reduced across all regions of Asia and the Pacific from 2000 to 2016. South Asia led the way, with a reduction of 48 deaths per 1,000 live births, followed by Central and West Asia, with 38 fewer deaths per 1,000 live births (Figure 1.3.2). By economy, the largest reductions in under-5 mortality rates were seen in Cambodia (76 fewer deaths per 1,000 live births), Afghanistan (59), Timor-Leste (59), Bangladesh (53), and the Lao PDR (53). Fiji was the only economy in which the under-5 mortality rate stayed constant from 2000 to 2016, at 22 deaths per 1,000 live births.

**Figure 1.3.1: Scatterplot of Maternal Mortality Ratios and Proportion of Births Attended by Skilled Health Personnel**



Note: Initial year refers to 2000–2008 and latest year refers to 2009–2016.

Source: Table 1.3.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

**Figure 1.3.2: Under-5 Mortality Rate (per 1,000 live births)**



Source: Table 1.3.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)



## SDG 4. Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities for All

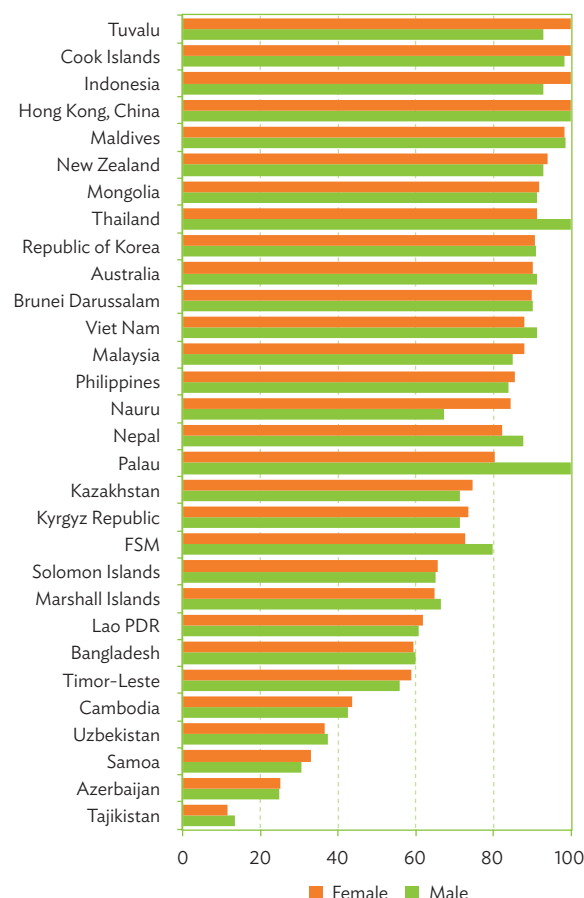


SDG 4 emphasizes that, not only is education a human right, but quality education, relevant training, and opportunities for lifelong learning should be accessible to all. Achieving SDG 4 requires an improvement in the quality of education across the social spectrum, to ensure access to economic opportunities and better income prospects for all.

**In developing Asia, based on the most recent data available, 10 of 28 reporting economies had at least 90% of children participating in organized learning 1 year before the official entrance age to primary school.** Of these economies, the participation rate for both girls and boys was greater than 95% in the Cook Islands; Hong Kong, China; and the Maldives (Figure 1.4.1). Total participation rates were below 50% in Cambodia (43.0%), Uzbekistan (36.9%), Samoa (31.7%), Azerbaijan (24.9%), and Tajikistan (12.5%) (Table 1.4.1). In Asia and the Pacific, in 16 of the 30 economies that provide sex-disaggregated information, participation rates were higher for females than males.

**The proportion of teachers in pre-primary education who had received at least the minimum organized teacher training exceeded 90% in 12 of the 24 member economies with available data.** In primary education, the proportion exceeded 90% in 20 of 31 economies, and for lower secondary education, the proportion exceeded 90% in 13 of 22 economies, and for upper secondary education, the proportion exceeded 90% in 10 of 15 regional economies with available data (Table 1.4.2).

**Figure 1.4.1: Participation Rate in Organized Learning (1 Year before the Official Primary Entry Age), by Sex, 2016 or Latest Year (%)**



FSM = Federated States of Micronesia, Lao PDR = Lao People's Democratic Republic.

Note: For Kazakhstan, Nepal, Tajikistan, and Uzbekistan, data refer to 2017; for FSM, Republic of Korea, New Zealand, Philippines, Solomon Islands, Thailand, and Tuvalu, data refer to 2015; for Palau, data refer to 2014; for Cambodia, data refer to 2012; and for Bangladesh, data refer to 2011.

Source: Table 1.4.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

## SDG 5. Achieve Gender Equality and Empower All Women and Girls



Gender equality is at the core of the SDGs and eliminating discrimination against women due to unfair social norms, general attitudes, and other factors requires women and girls to feel empowered.

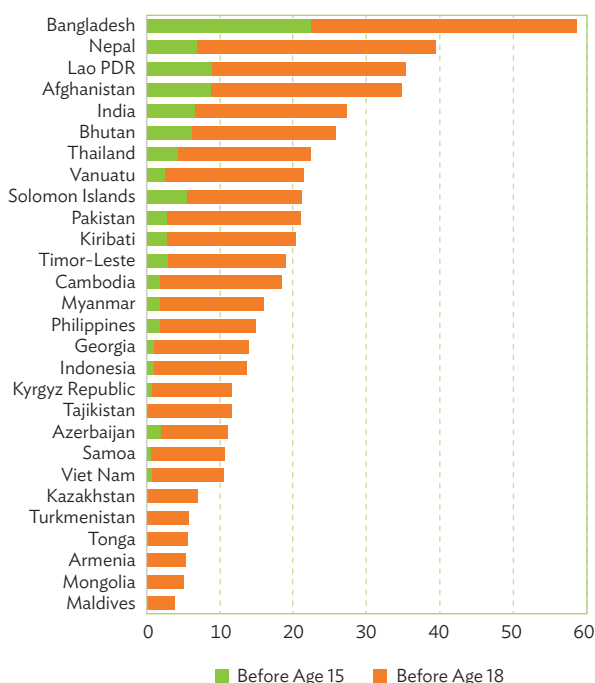
This can only be ensured if both sexes are given equal opportunities to education, paid employment, political leadership, and the power to make decisions that affect their lives. SDG 5 has been designed to monitor progress towards the overall objective of gender equality, but its considerations overlap with all other SDGs.

**In 11 of 28 economies in Asia and the Pacific with available data, at least one-fifth of women between the ages of 20 and 24 years were married or in a union before the age of 18.** Early-age marriage can compromise the education outcomes of a female child; her employment prospects; the type, arrangements, and conditions of her future work; her overall well-being; and the health of her offspring (Nour 2009). At 58.6%, Bangladesh reported the largest proportion of women between the ages of 20 and 24 years being married or in a union before the age of 18 (Figure 1.5.1). Other than

Bangladesh, more than a quarter of women between the ages of 20 and 24 years were married or in a union before the age of 18 in Nepal (39.5%), the Lao People's Democratic Republic (35.4%), Afghanistan (34.8%), India (27.3%), and Bhutan (25.8%). Of these economies, Bangladesh, the Lao People's Democratic Republic, and Afghanistan reported that more than 8% of women between the ages of 20 and 24 years were married or in a union at age 15 years or younger (Table 1.5.1).

**In Asia and the Pacific, significant gaps persist when it comes to representation of women in national parliaments.** While 8 of 40 reporting economies in developing Asia had greater than 25% representation of women in their parliaments in 2017, less than 10% of legislators were women in another 11 regional economies (Figure 1.5.2). Less than 5%

**Figure 1.5.1: Proportion of Women Aged 20–24 Years Who Were Married or in a Union, Latest Year (%)**



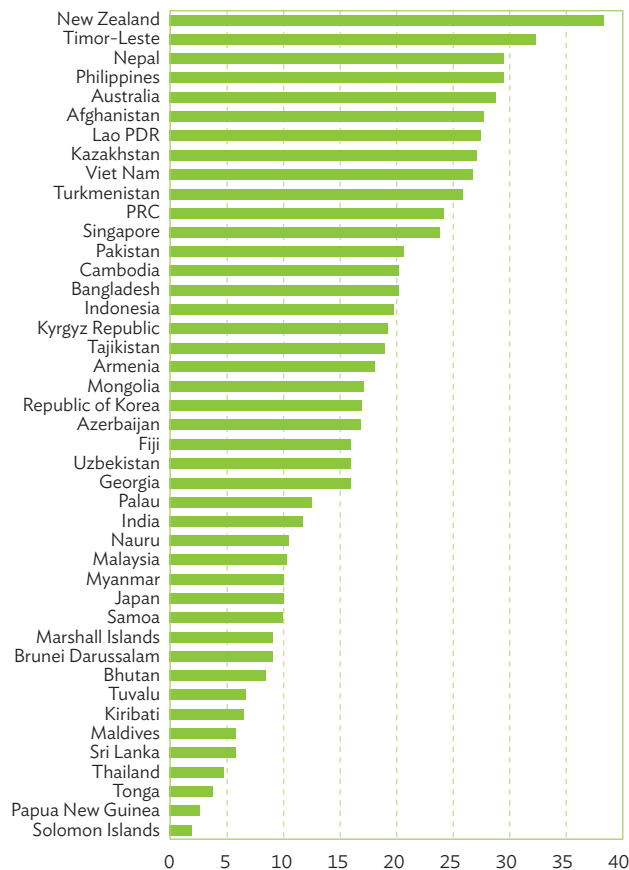
Lao PDR = Lao People's Democratic Republic.

Note: Latest year refers to 2009–2016.

Source: Table 1.5.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

**Figure 1.5.2: Proportion of Seats Held by Women in National Parliaments, 2017 (%)**



Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Table 1.5.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)



representation of women in parliament was reported in Thailand (4.8%), Tonga (3.8%), Papua New Guinea (2.7%), and Solomon Islands (2.0%). Although the population of Asia and the Pacific has an almost even

ratio of women to men, no economy has managed to reach at least 40% representation of women in parliaments (Box 1.5.1).

#### Box 1.5.1: Lack of Female Representation in National and Local Governments

To ensure that issues relevant to both sexes are given adequate attention, women and men should have equitable representation in leadership positions within the public sphere. Across Asia and the Pacific, men dominate in legislative branches of governments, where important directions are set about laws and policies (Asian Development Bank and United Nations [UN] Women, forthcoming). The pursuit of greater female representation in the realm of governance is key to ensuring developments in the pursuit of gender equality. Women should have a voice in the decision-making process for policies that concern their welfare, such as family leave and recruitment and promotion in the workplace (Piterman 2008).

While necessary, monitoring the number of women in political leadership in national parliaments may not be sufficient. A complementary indicator that keeps track of the proportion of women in local government is also included in the Sustainable Development Goal (SDG) framework. What complicates comparability across countries is the variation in how local governments are defined in each national economy. Despite this lack of comparability, economies are working towards compiling the proportion of women among elected positions of legislative and/or deliberative bodies of local government, to mirror the proportion of national parliamentarians who are women. Economies are also monitoring additional indicators of political engagement, such as the participation of women as voters and candidates in local elections. UN Women is working with individual economies and the UN Regional Commissions to collect and compile the “proportion of positions held by women in local government” following a methodology approved by the Inter Agency Expert Group on SDG Indicators in its November 2017 meeting.<sup>a</sup>

At a UN Women Regional Consultation held in Bangkok on 28 March 2018, some preliminary statistics on female participation in local governance were presented. The results show that, as with national level data, female participation at the local level is far below gender parity levels. A case study in the Philippines suggests that the reason women remain underrepresented in political leadership is that too few women enter electoral politics. Data from the Philippine Commission on Elections suggested that only 17% of the national and local candidates from 2004 to 2016 were women (David et al. 2017).

A shortage of women in elected local leadership posts implies that fewer women will continue into higher elected offices, at both local and national levels. It is necessary to examine the barriers that women face when it comes to electoral politics at both local and national levels. Evidence suggests that the use of gender quotas in political leadership influences policy outcomes and reduces gender discrimination (Pande and Ford 2011).

As positions in national legislature (and local governments) continue to be below gender parity, the region needs to work more on having issues related to protecting women and children better represented in the legislative landscape.

<sup>a</sup> The methodology is detailed at <https://unstats.un.org/sdgs/metadata/files/Metadata-05-05-01b.pdf>.

#### Sources:

- ADB and UN Women. Forthcoming. *Gender Equality and the Sustainable Development Goals in Asia and the Pacific: Baseline and Pathways for Transformative Change by 2030*. Bangkok.
- C.C. David, J.R.G. Albert, and J.F.V. Vizmanos. 2017. *Filipino Women in Leadership: Government and Industry PIDS*. Policy Notes No. 2017- 22. Quezon City, Philippines: Philippine Institute for Development Studies.
- R. Pande and D. Ford. 2011. *Gender Quotas and Female Leadership: Background Paper for the World Development Report on Gender*. World Bank: World Development Report 2014.
- H. Piterman. 2008. *The Leadership Challenge: Women in Management*. Greenway, Australia: Government of Australia, Department of Social Services.

## SDG 6. Ensure Availability and Sustainable Management of Water and Sanitation for All

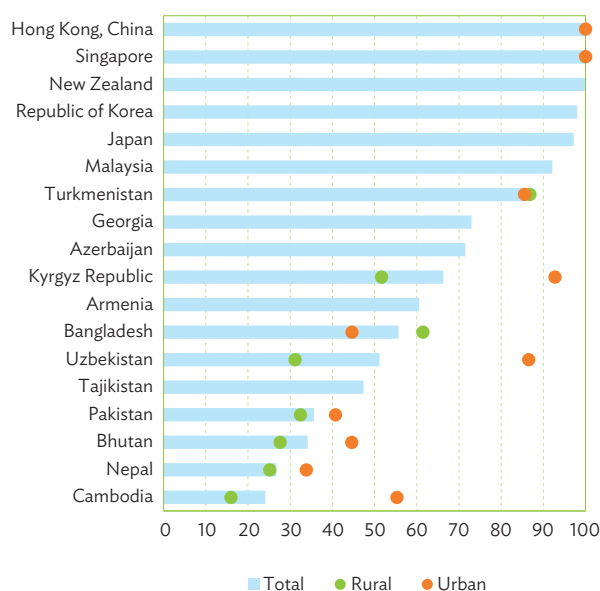


Water supply, sanitation, and hygiene are interlinked with poverty, health, gender, environment, and governance. Improper management of water and sanitation services can put people at risk of contracting a wide range of preventable diseases. SDG 6 aims for universal access to safe water and sanitation as well as promoting adequate hygiene services.

**Although safe water is essential for daily living, access to safely managed drinking water services was available to at least 95% of the population in only 5 of 18 economies with available data for 2015.** These economies include Hong Kong, China (safely managed drinking water services available to 100.0% of the population); New Zealand (100%), Singapore (100%), the Republic of Korea (98.0%), and Japan (97.2%). Meanwhile, less than half of the population in Tajikistan (47.4%), Pakistan (35.6%), Bhutan (34.2%), Nepal (26.8%), and Cambodia (24.1%) had access to safely managed drinking water. From 2000 to 2015, Armenia, Azerbaijan, and New Zealand increased the proportion of their respective populations using safely managed drinking water services by more than 20 percentage points. In the same period, coverage of safely managed drinking water services increased among the rural population in all eight economies of Asia and the Pacific with available data for this measure. This was led by Turkmenistan (36.6 percentage points), followed by the Kyrgyz Republic (23.9 percentage points) and India (20.2 percentage points). From 2000 to 2015, the Kyrgyz Republic improved access to safely managed drinking water in urban areas by 12.3 percentage points. Singapore maintained its coverage at 100% in both 2000 and 2015. Despite an increase in the proportion of

people with access to safely managed drinking water services, urban-rural disparities are exhibited in seven of the eight economies with available urban-rural data (Figure 1.6.1).

**Figure 1.6.1: Proportion of Population Using Safely Managed Drinking Water Services, 2015 (%)**



Note: For Uzbekistan, data refer to 2012 (latest available data). This figure excludes economies that provided only urban and/or rural data, with no national totals provided.

Source: Table 1.6.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

**From 2000 to 2015, eight of nine economies with available data improved the availability of safely managed sanitation services, led by the PRC.** The only exception was Singapore, which already had 100% coverage in 2000 and maintained this to 2015. In the Pacific economies of Palau and Tuvalu, less than 20% of all residents were without access to safely managed sanitation. On the other hand, almost all residents of Japan, the Republic of Korea, and Singapore had access to safely managed sanitation, while four other economies—Australia, Malaysia, New Zealand, and the PRC—reported an access rate greater than 50% (Table 1.6.1). From 2000 to 2015, access to safely managed sanitation services improved in the rural populations of four regional economies, as well as in urban areas of four of the seven economies with available urban data. The scarcity of estimates for safely managed water and sanitation services is discussed in Box 1.6.1.

**Box 1.6.1: Lack of Data for Safely Managed Water and Sanitation in Asia and the Pacific**

Sustainable Development Goal (SDG) 6 is a commitment to provide universal access to safely managed drinking water and sanitation and the provision of adequate hygiene services. SDG 6 is measured under a more sophisticated monitoring framework than that used for the Millennium Development Goals (MDGs), which had a target calling for “sustainable access” to safe or improved drinking water and basic sanitation.

As there were gaps in nationally representative data in many developing economies, economies traditionally reported on coverage in terms of access to “improved” drinking water and sanitation facilities approximated by basic services. Improved drinking water facilities have the potential to deliver safe water by nature of their design and construction, while improved sanitation facilities are designed to hygienically separate human excreta from human contact. The SDG monitoring introduces a more ambitious indicator of “safely managed” services, which represent a higher level of service than the basic level.<sup>a</sup> Safely managed drinking water services take account of the accessibility, availability, and quality of drinking water. Safely managed sanitation means use of improved facilities that are not shared with other households and where excreta are safely disposed of on site or transported and treated offsite.

The Joint Monitoring Program (JMP) of the World Health Organization (WHO) and United Nations Children’s Fund (UNICEF) are publishing regular updates on the progress of the SDGs for water, sanitation, and hygiene (WHO and UNICEF 2017). The JMP has considerably expanded its underlying data sources to cover the additional requirements for SDG monitoring. The updated JMP estimates are based on over 3,400 data sources, for which the administrative data inputs have been increased fivefold. Previously, estimates were based on fewer than 2,000 national data sources, of which two-thirds were household surveys. Despite the expansion of the national data sources, many economies still lack data on one or more criteria for safely managed. For instance, the updated estimates on coverage of safely managed drinking water services are available for only 96 economies around the world and 18 economies in Asia and the Pacific. Similarly, estimates on access to safely managed sanitation services are available for only 96 economies worldwide and 9 economies in the Asia and Pacific region.

The JMP continues to report estimates on lower levels of services, similar to the “improved” categories used in the MDG period. The service level “basic sanitation” for SDG monitoring is equal to “improved sanitation” in the MDG period, while “basic water” is similar to “improved water”. Basic water, however, has an additional criterion related to the time required to collect water (not more than 30 minutes for a round trip, including queuing). Universal access to basic services is the target of SDG 1.4. Estimates on the coverage of at least basic drinking water services and at least basic sanitation services are available for 46 economies across Asia and the Pacific.<sup>b</sup> In Asia and the Pacific, 8.6% of the population lacked access to at least basic drinking water in 2015, down from 19.7% in 2000. This, however, means that, as recently as 2015, almost 348 million people across Asia and the Pacific lack access to at least basic drinking water. The proportion of people without access to at least basic sanitation also declined over the same period, from 51.5% to 35.7%. However, this means that, as of 2015, nearly 1.45 billion of over 4 billion people in the region are without access to at least basic sanitation (compared to almost 1.78 billion in 2000).

Wide disparities exist in water and sanitation coverage across regions within Asia and the Pacific as well as between rural and urban areas. Across Asia and the Pacific, 12% of people in rural areas are without access to at least basic water service, compared to 5.1% in urban areas. Further, 50.3% of people are not having access to at least basic sanitation in rural areas, compared to 21.2% in urban areas.

The “universal access” that is incorporated into the SDG 6 targets for 2030 implies a need to expand monitoring efforts beyond households. Monitoring progress towards these targets will be more challenging in some economies and regions than in others, but estimates are expected to improve as more and better data become available.

- a For water, service definitions include safely managed (improved source on premises, available when needed, and free of fecal contaminants); basic (improved source, provided collection time is not more than 30 minutes for a round trip, including queuing); limited (improved source for which collection time exceeds 30 minutes for a round trip, including queuing); unimproved (source is an unprotected dug well or unprotected spring); and surface water (source is a river, dam, lake, pond, stream, canal, or irrigation canal). For sanitation, service definitions include safely managed (not shared with other households, excreta safely disposed of on site or transported and treated offsite); basic (improved facilities that are not shared with other households); limited (improved facilities shared between two or more households); unimproved (pit latrines without a slab or platform, hanging latrines or bucket latrines); and open defecation (disposal of human feces in fields, forests, bushes, open bodies of water, beaches or other open spaces, or with solid waste).
- b For economies with estimates on safely managed services, at least basic includes safely managed services and basic services. For economies without data on safely managed services, the JMP provides estimates for at least basic services.

Source: WHO and UNICEF. 2017. *Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines*. (Geneva).

## SDG 7. Ensure Access to Affordable, Reliable, Sustainable, and Modern Energy for All



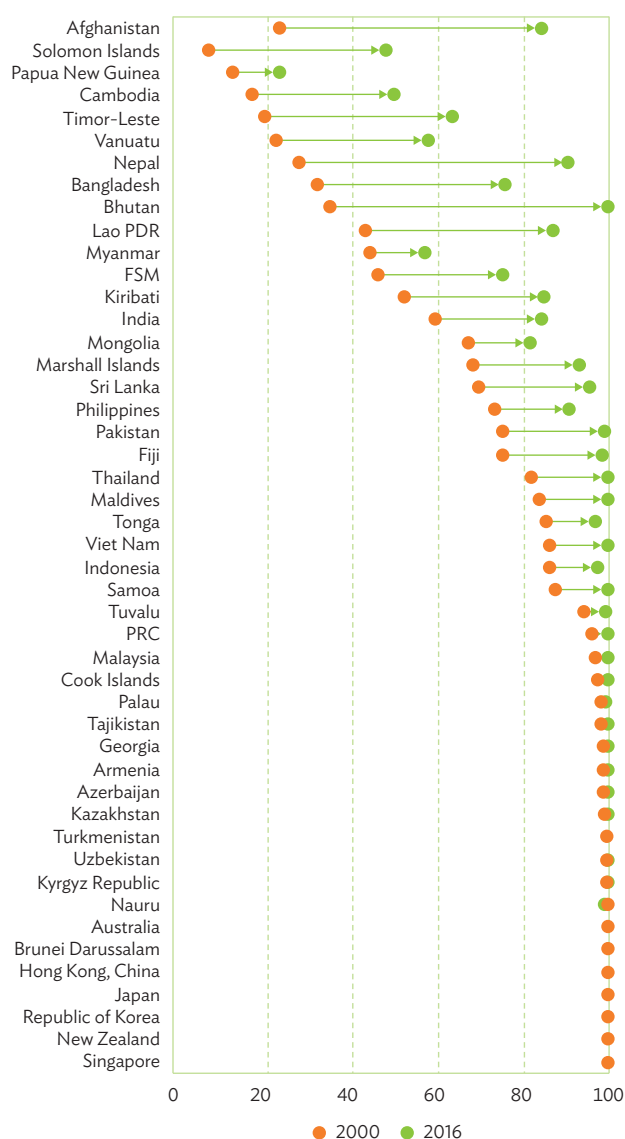
The pursuit of SDG 7 is a path toward broader access to affordable and clean energy and improved use of renewable energy by 2030. This requires expanding access to electricity and clean cooking fuels, building sustainable infrastructure, and increasing the financial capacity and willingness of societies to embrace new technologies.

**As of 2016, at least 95% of residents in 31 of 47 reporting economies in Asia and the Pacific had access to electricity.** Throughout the region, economies generally increased or maintained their levels of electricity access from 2000 to 2016 (Figure 1.7.1). However, less than half of people in Cambodia (49.8%), Solomon Islands (47.9%), and Papua New Guinea (22.9%) had access to this basic service in 2016. The largest disparity in access to electricity between urban and rural areas was observed in Cambodia where the access was 63.5 percentage points higher in urban area, followed by Papua New Guinea (57.2 percentage points), Mongolia (51.6 percentage points), Myanmar (49.7 percentage points), and Vanuatu (45.0 percentage points) (Table 1.7.1). With emerging technologies vastly changing the production and consumption of goods and services, electricity is crucial not only for everyday functions but also to power these technologies.

**In 11 of the 46 economies with available data for 2016, at least 95% of the population had access to clean fuels and technology for cooking, heating, and lighting.** In 2000, only seven economies, including three developed economies, had achieved this 95% access level (Figure 1.7.2). However, less than one-fifth of the population in 10 economies—Myanmar (18.4%), Bangladesh (17.7%), Cambodia (17.7%), Papua New Guinea (13.4%), Vanuatu (12.6%),

the Federated States of Micronesia (12.0%), Solomon Islands (8.5%), Timor-Leste (6.9%), the Lao PDR (5.6%), and Kiribati (5.5%)—could rely on clean fuels and technology in 2016 (Table 1.7.1). From 2000 to 2016, Maldives reported the largest increase in access to clean fuels and technology at 61.7 percentage points, followed by Indonesia (53.0), Viet Nam (52.5 percentage points), and the Marshall Islands (52.1 percentage points). Lack of access to clean energy puts people at risk of contracting respiratory diseases and other health complications.

**Figure 1.7.1: Proportion of Population with Access to Electricity, 2000 and 2016 (%)**

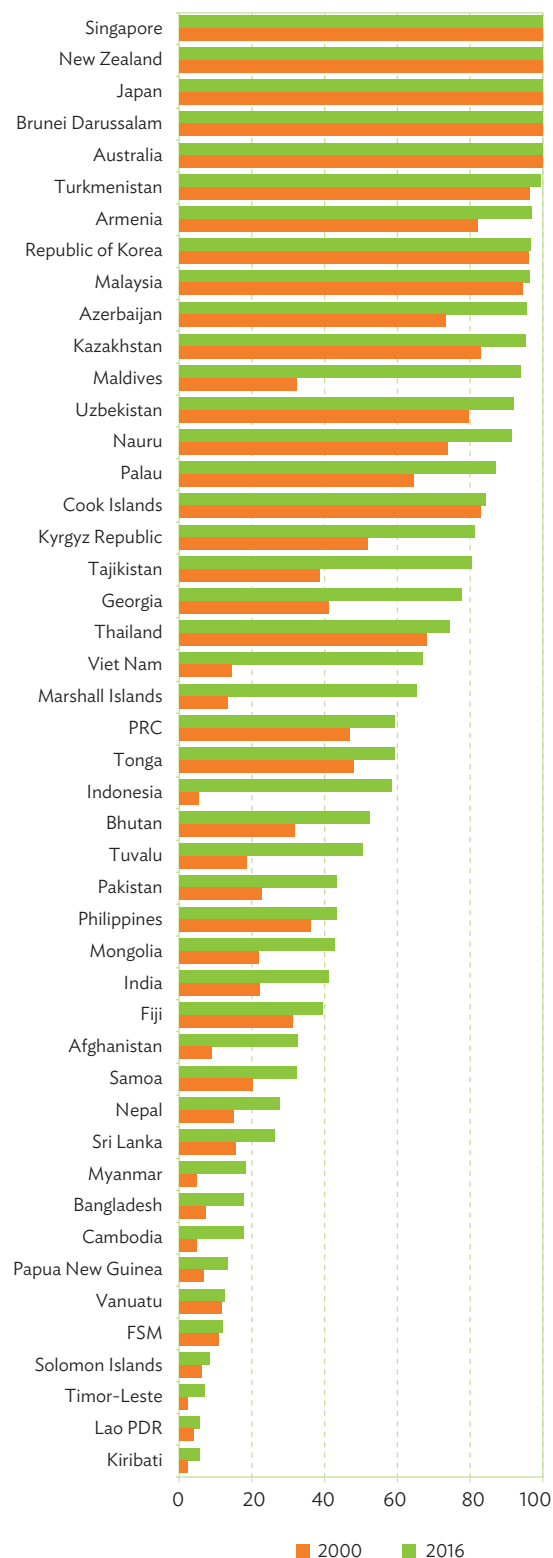


FSM = Federated States of Micronesia, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Table 1.7.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

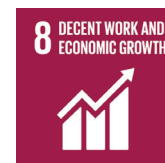
**Figure 1.7.2: Proportion of Population with Primary Reliance on Clean Fuels and Technology, 2000 and 2016 (%)**



FSM = Federated States of Micronesia, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Table 1.7.1, Key Indicators for Asia and the Pacific 2018.

## SDG 8. Promote Sustained, Inclusive, and Sustainable Economic Growth; Full and Productive Employment; and Decent Work for All



Economies aim for broad-based, inclusive, and sustainable economic growth to provide better prospects, welfare, and opportunities for their citizens. Providing access to better jobs is essential to ensure sustainable economic growth and development. It is the core objective of SDG 8. Sustaining high levels of economic growth, achieving full and productive employment, and ensuring decent work for all will be challenging if economies continue to deplete their natural resources and do not leverage technology.

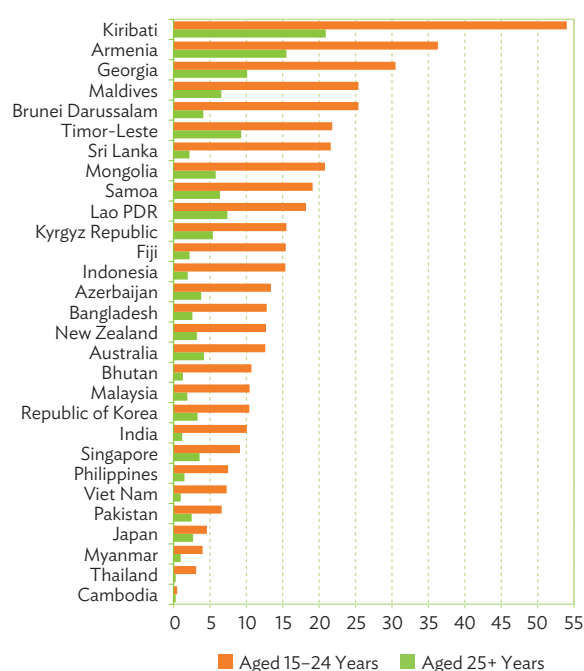
**In 2016, the annual growth rates of GDP per capita for economies in Asia and the Pacific ranged between -3.8% and 9.6%.** Nauru (9.6%), the PRC (6.8%), Bhutan (6.6%), and Bangladesh (6.0%) registered the fastest growth rates in 2016, while Armenia (-0.1%), Fiji (-0.4%), Kazakhstan (-0.4%), the Federated States of Micronesia (-0.5%), Mongolia (-0.7%), Nepal (-0.7%), Azerbaijan (-3.6%), and Brunei Darussalam (-3.8%) experienced negative growth rates (Table 1.8.1). The economic performance of economies in Asia and the Pacific has been supported by robust domestic demand given slowdowns in external demand, and global trade.

**Recent data on annual unemployment rates for 21 of 36 economies in Asia and the Pacific reported values below 5%, while unemployment was over 10% in 7 other economies.** Unemployment rates for youth (15-24 years old) were higher than for adults 25 years or older (Figure 1.8.1). Further, gender disparities could be observed, especially within youth unemployment (Table 1.8.2). The



sole use of the unemployment rate as a measure of success in providing decent work can be insufficient, especially in economies with large informal sectors, where women and the poor tend to occupy vulnerable employment. In these cases, examining underemployment, vulnerable employment, and the extent of unpaid family work is imperative. Due to their lower rates of labor force participation, higher levels of unemployment, and greater likelihood of being in vulnerable employment, women and the poor across Asia and the Pacific are less likely to have access to social protection coverage, unemployment benefits, pensions, and maternity leave (International Labour Organization 2018).

**Figure 1.8.1: Unemployment Rate, by Age Group (%)**



Lao PDR = Lao People's Democratic Republic.

Note: For Armenia, Fiji, Georgia, Indonesia, the Kyrgyz Republic, Mongolia, Singapore, and Sri Lanka, data refer to 2016; for Azerbaijan, Bhutan, Pakistan, and Thailand, data refer to 2015; for Brunei Darussalam and Samoa, data refer to 2014; for Timor-Leste, data refer to 2013; for India, data refer to 2012; for Cambodia, Kiribati, and Maldives, data refer to 2010. For all other economies, data refer to 2017. Only economies with available data for both age groups 15–24 years and 25+ years are included.

Source: Table 1.8.2, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

## SDG 9. Build Resilient Infrastructure, Promote Inclusive Industrialization, and Foster Innovation



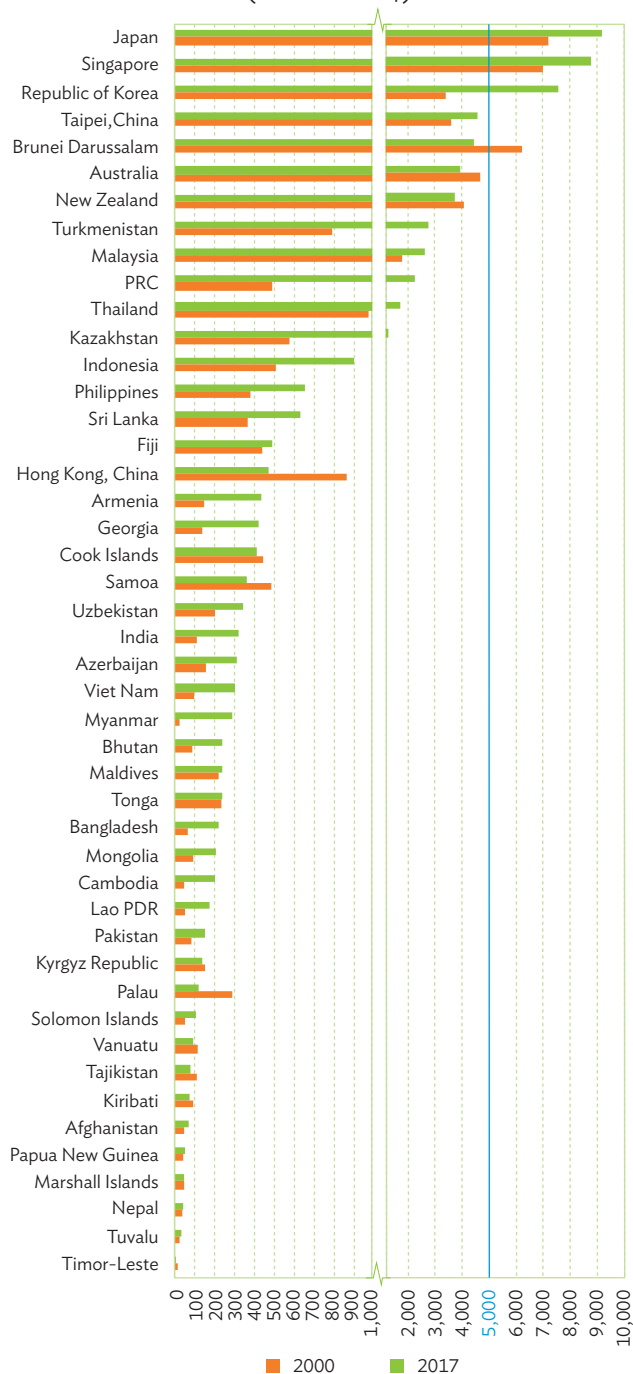
Amid the vastly changing landscape in manufacturing and trade brought about by technological innovations, SDG 9 seeks to strengthen supply chains and retrofit industries across economies. Investments in smart infrastructure and innovation are also needed to stimulate economic activity that ensures sustainable industrialization while achieving growth in wealth and productivity.

**In developing Asia, among 16 of 43 economies the share of manufacturing value added as a proportion of GDP exceeded 15%, manufacturing value added per capita (at constant 2010 prices) was over \$5,000 per person in Singapore (\$8,780), and the Republic of Korea (\$7,573) in 2017.** Manufacturing value added per capita in 2017 was below \$50 per person in Timor-Leste (\$5.8), Tuvalu (\$36.6), Nepal (\$41.6), and the Marshall Islands (\$48.8). From 2000 to 2017, negative growth in manufacturing value added per capita was reported in 10 developing economies. Since 2000, 14 of 43 reporting developing economies have doubled their manufacturing value added per capita, while increases of over \$1,500 per person (at constant 2010 prices) were reported in the PRC, the Republic of Korea, Singapore, and Turkmenistan (Figure 1.9.1).

**From 2000 to 2015, 23 of the 29 reporting economies in Asia and the Pacific lowered carbon dioxide (CO<sub>2</sub>) emissions per unit of GDP (at 2010 PPP).** In 2015, regional economies with the highest levels of CO<sub>2</sub> emissions per unit of GDP



**Figure 1.9.1: Manufacturing Value Added per Capita**  
(constant 2010 \$)



\$ = United States dollars, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Note: For Taipei, China, the latest available year is 2016. Only economies with data for both years 2000 and 2017 are included.

Source: Table 1.9.2, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

(PPP) were the Central and West Asian economies of Turkmenistan, Uzbekistan, Kazakhstan, and the Kyrgyz Republic as well as the East Asian economies of Mongolia and the PRC. (Table 1.9.3). Data on CO<sub>2</sub> emissions per unit of GDP are compiled using emissions from fuel combustion compared to the value-added of associated economic activities.

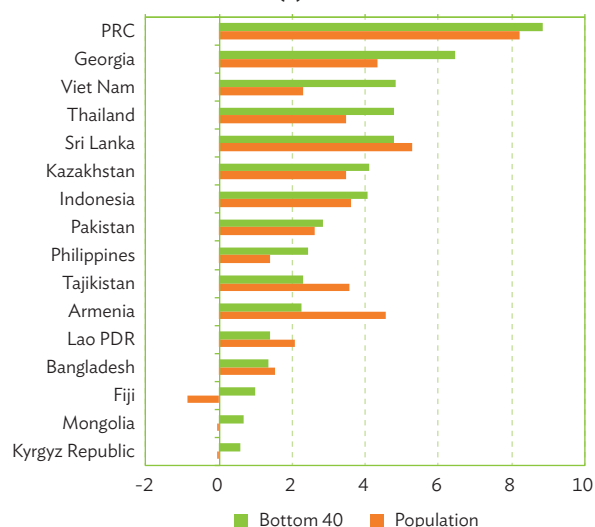
## SDG 10. Reduce Inequality Within and Among Countries



Across Asia and the Pacific, there remains unequal access to opportunities, public goods, and essential services among various groups. Inequality created by factors such as level of wealth, sex, residence, disability status, ethnicity, and migration status can create barriers to social mobility and economic growth. SDG 10 aims to provide more equitable access to opportunities, so that all people can be given a chance to participate in growth processes and fully realize their potential.

**Based on the most recent data available, the growth rate of household expenditure or income per capita was faster among the bottom 40% of the population than it was for the overall population in 11 of 16 reporting economies.** The PRC reported the largest increase (8.9%) in the income per capita of the bottom 40% of its population, while the Kyrgyz Republic reported the lowest increase at 0.6% (Figure 1.10.1). Conversely, Armenia, Bangladesh, the Lao PDR, Sri Lanka, and Tajikistan registered a lower growth rate of household expenditure or income per capita for the bottom 40% of the population than for the overall population.

**Figure 1.10.1: Growth Rates of Household Expenditure or Income per Capita among the Bottom 40% and the Total Population, 2010–2015 (%)**



Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.  
Source: Table 1.10.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

## SDG 11. Make Cities and Human Settlements Inclusive, Safe, Resilient, and Sustainable



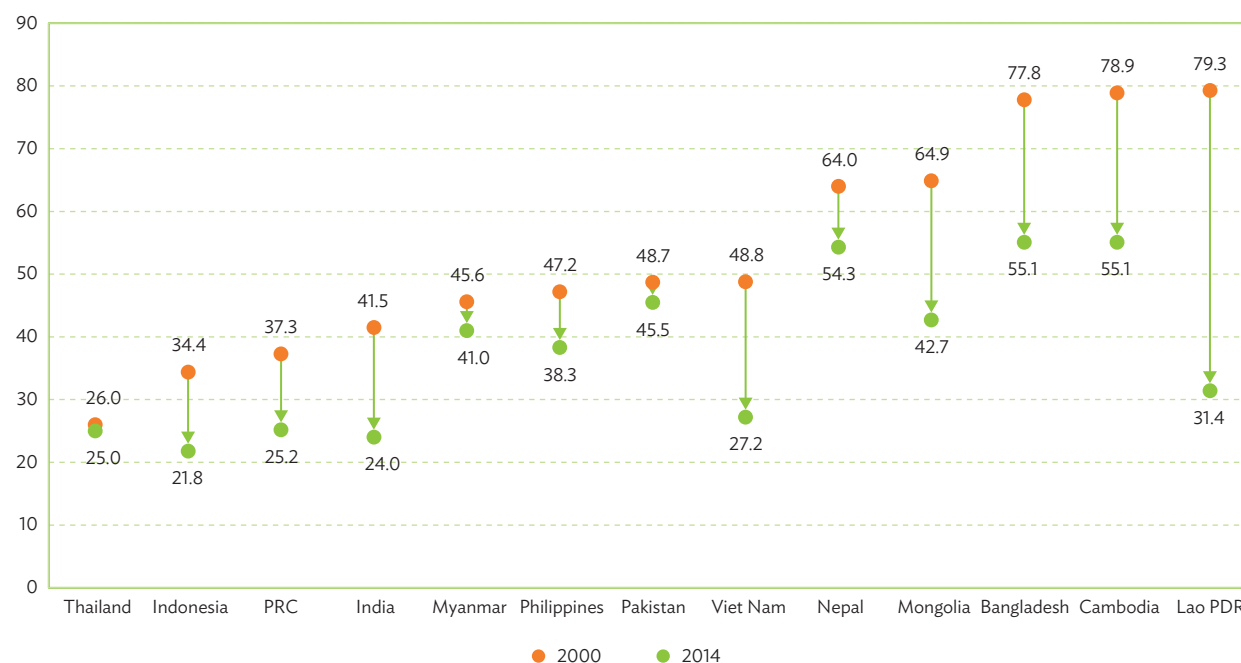
Nearly half the population of Asia and the Pacific resides in urban areas. As cities continue to be engines of economic growth and offer opportunities for improved welfare, urban populations in the region are expected to overtake those of rural areas by 2022 (United Nations Department of Economic and Social Affairs 2018). SDG 11, which aims to ensure access to safe housing and affordable transport and to build resilience in cities for all, will only be achieved if urban planning and management efforts are scaled up. These efforts must address the need to convert informal settlements into sustainable and resilient living communities and to bring air-pollution levels to internationally acceptable standards.

**Notwithstanding growing urbanization, all economies of Asia and the Pacific with**

**available data have reduced the proportion of the urban population living in slums.** From 2000 to 2014, the Lao People's Democratic Republic (47.9 percentage points), Cambodia (23.8), Bangladesh (22.7), Mongolia (22.2) and Viet Nam (21.6) decreased the proportion of their urban populations that live in slum areas by at least 20 percentage points (Figure 1.11.1). However, the decline in the proportion of the urban population living in slums was fewer than 5 percentage points for Thailand (1.0), Pakistan (3.2), and Myanmar (4.6). Inadequate housing facilities persists in several developing economies of Asia and the Pacific, with the latest data suggesting that at least half of the urban population were living in slums, informal settlements, or inadequate housing in Afghanistan (62.7%), Cambodia (55.1%), Bangladesh (55.1%), and Nepal (54.3%) (Table 1.11.1).

**Of 43 reporting economies, 19 were affected by pollution in cities, stemming from fine particulate matter above twice the suggested maximum level set by WHO.** The concentration of people living in finite spaces, coupled with high and rising vehicle ownership in urban areas, can result in pollution of the surrounding environment. Air quality is generally monitored by the levels of fine particulate matter equal to 2.5 microns in diameter or less, or the levels of fine particulates together with coarse particles (between 2.5 microns and 10.0 microns). The maximum level set by the WHO for this indicator is 10 micrograms per cubic meter. According to the data for the year 2016, six economies—Nepal (99.5 micrograms per cubic meter), India (68.0), Afghanistan (59.9), Bangladesh (58.6), Pakistan (56.2), and the PRC (51.0)—had urban concentration levels of more than five times the WHO safety standards. The data also shows that four regional economies have managed to be within the WHO standards. These are the developing economies of Brunei Darussalam (5.8 micrograms per cubic meter) and Maldives (7.7), together with the two developed economies of New Zealand (5.8) and Australia (7.3).

**Figure 1.11.1: Proportion of Urban Population Living in Slums, 2000 and 2014 (%)**



Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Note: Only economies with available data for both 2000 and 2014 are included. For reference year 2000, data for Cambodia, the Lao People's Democratic Republic, Myanmar, and Thailand refer to 2005.

Source: Table 1.11.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

## SDG 12. Ensure Sustainable Consumption and Production Patterns

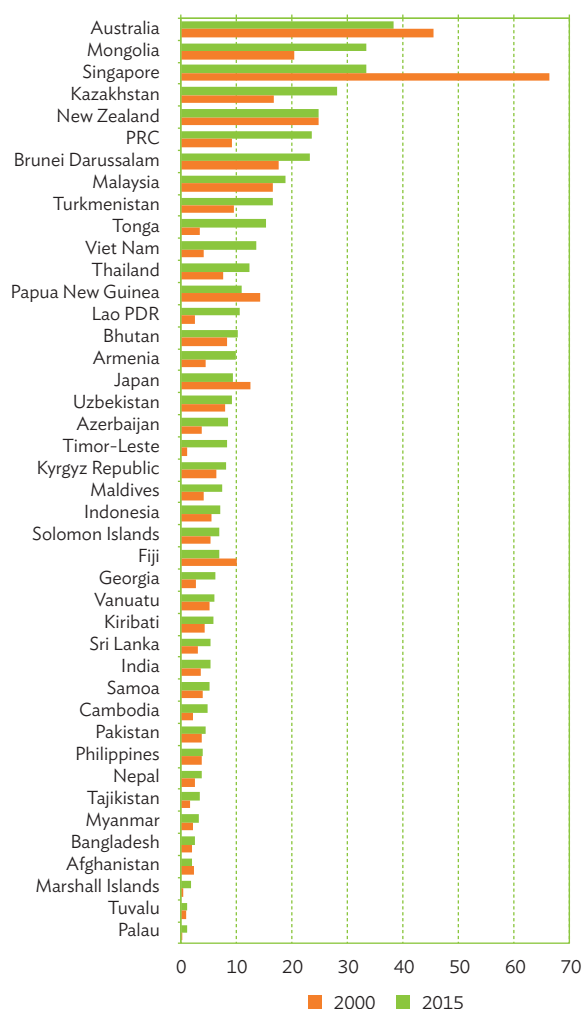


Across the world, increased demands for food, water, energy, and other vital necessities are driven by population growth and rising urbanization. Meeting these demands has affected past and present patterns of consumption and production. SDG 12 aims to reduce the world's ecological footprint by fostering sustainable ways to produce and consume goods, services, and resources. The efficient management of shared natural resources, and the reduction of toxic waste and pollutants throughout the entire production and consumption process, are critical to attaining sustainable development.

**From 2000 to 2017, the material footprint of 36 economies in the Asia and Pacific region with**

**available data increased by 127% from 20.7 billion metric tons in 2000 to 47.0 billion metric tons in 2017.** As of 2017, seven regional economies had over a billion metric tons of material footprint: the PRC (27.7 billion metric tons), India (6.1), Japan (3.1), Indonesia (1.6), Republic of Korea (1.3), Australia (1.1), and Thailand (1.0). The PRC alone accounted for nearly three-fifths of the aggregate material footprint for Asia and the Pacific in 2017. In per capita terms, Singapore (70.4 metric tons), Australia (42.1), and New Zealand (24.4) had the highest material extraction per person in 2015. Three other economies also had material footprint per capita greater than 20 metric tons: Japan (23.8), Malaysia (22.3), and Turkmenistan (21.5). Among 35 economies with available data, only Japan decreased its total material footprint (by 401.1 million metric tons from 2000 to 2017) and its material footprint per capita (by 4.4 metric tons per person from 2000 to 2015) during the review periods for these indicators (Table 1.12.1).

**Figure 1.12.1: Domestic Material Consumption per Capita (t)**



t = metric ton, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Table 1.12.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

**The total domestic material consumption of 43 economies in Asia and the Pacific increased by 134% from 22.9 billion metric tons in 2000 to 53.6 billion metric tons in 2017.** In 2017, the PRC registered the highest total domestic material consumption at 35.2 billion metric tons. In per capita terms, Australia reported highest domestic material consumption at 38.4 metric tons per person in 2015, followed by Mongolia (33.5 metric tons per person), Singapore (33.4), Kazakhstan (28.2), New Zealand (24.9), PRC (23.6), and Brunei Darussalam (23.3) as shown in Figure 1.12.1. The Pacific economies of Palau (1.1 metric tons per person), Tuvalu (1.2), and the

Marshall Islands (1.8) had the lowest consumption of domestic materials per capita in 2015. From 2000 to 2015, 12 economies in Asia and the Pacific more than doubled their levels of consumption per capita. These included Armenia, Azerbaijan, Cambodia, Georgia, the Lao PDR, the Marshall Islands, Palau, the PRC, Tajikistan, Timor-Leste, Tonga, and Viet Nam. Conversely, consumption per capita was reduced over the same period in 6 of the 42 reporting economies, including the two developed economies—Australia and Japan.

## SDG 13. Take Urgent Action to Combat Climate Change and its Impacts



The increasing frequency and intensity of extreme weather events, rising sea levels, and other volatile climatic variables are of global concern. Among other issues, the impacts of climate change can affect livelihoods, food production, energy security, and social cohesion. Consequently, countries have committed to actions to combat climate change. SDG 13 focuses on development that is sensitive to climate change and its impacts, especially for the most vulnerable in society.

**Across Asia and the Pacific, 28 of the region's 48 ADB member economies had, by at least in 2015, strategies and regulatory mechanisms for disaster risk reduction and management in line with the Sendai Framework (Table 1.13.1).** The impact of disaster depends not only on the type of hazard, but also the extent of exposure to the hazard. The Sendai Framework for Disaster Risk Reduction 2015–2030, successor to the Hyogo Framework for Action 2005–2015, outlines seven targets and four priorities for action to build the resilience of nations and communities to disaster and climate risks. The Sendai Framework is a voluntary, nonbinding agreement among nations. It recognizes that the

state has the primary role to reduce disaster risk, but that responsibility should be shared with other stakeholders, including local governments and the private sector. The monitoring and implementation of the Sendai Framework are targeted at devising initiatives for disaster risk reduction, especially for the many economies of Asia and the Pacific that are highly exposed to the harmful effects of climate-related disasters. For a discussion on the frequency of natural disasters, fatalities, and damage costs in Asia and the Pacific please refer to Box 1.13.1.

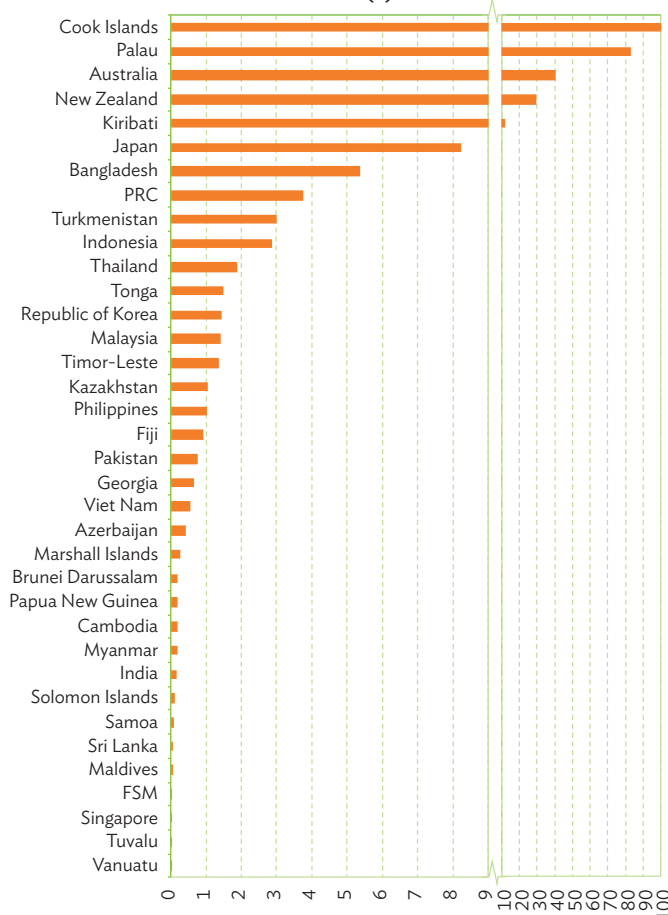
## SDG 14. Conserve and Sustainably Use the Oceans, Seas, and Marine Resources for Sustainable Development



While seas and oceans cover nearly 70% of the planet's surface and play a critical role in the provision of vital ecosystems, their deterioration has been a result of overexploitation, pollution, and the impacts of climate change. SDG 14 emphasizes the use and conservation of the ocean and its resources, including coastal areas. This entails directing human behavior toward sustainable practices and actions to preserve the pristine nature of our oceans, seas, and marine environments.

**In the Cook Islands and Palau, over 80% of marine areas were covered by some form of environmental protection. However, in 19 of 36 reporting economies, the corresponding coverage was below 1%. The remaining 15 economies had coverage rates of oceans reserved for long-term conservation ranging from 1% to around 41% (Figure 1.14.1). Globally, only about 7% of ocean areas are designated as marine protected areas (World Bank 2018). Protecting these marine areas is vital for curtailing declines in biodiversity, rebuilding depleted fish stocks, and ensuring long-term and sustainable use of marine natural resources.**

**Figure 1.14.1: Coverage of Protected Areas in Relation to Marine Areas, 2017 (%)**



FSM = Federated States of Micronesia, PRC = People's Republic of China.

Source: Table 1.14.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

## SDG 15. Protect, Restore, and Promote Sustainable Use of Terrestrial Ecosystems; Sustainably Manage Forests; Combat Desertification; Halt and Reverse Land Degradation; and Halt Biodiversity Loss



Our lives, livelihoods, and continued sustenance hinge on the health of the earth's terrestrial



### Box 1.13.1: Disaster Counts, Fatalities, and Damage Costs

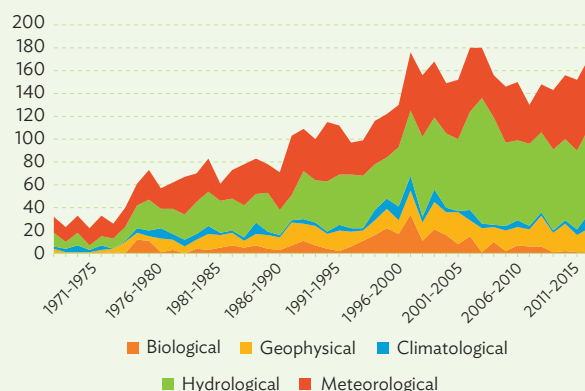
While some economies have started compiling data on the number of disaster-related deaths, missing persons, and people affected by disasters, trends are difficult to establish, given the paucity of data and lack of disaggregation by type of disaster. Alternative disaster databases have been developed by other interested parties such as insurance companies and researchers. Of these databases, the most comprehensive, publicly available database on natural disasters is the Emergency Event (EM-DAT) database,<sup>a</sup> which suggests that over 4,800 natural disasters occurred in Asia and the Pacific from 1971 to 2015 (more information in the figure below). Of these, around half occurred from 2001 to 2015, of which 83% were climate-related disasters comprising meteorological (storms), hydrological (floods and wet mass movements), and climatological (drought and wildfire) disasters. It has been observed that over 9 out of 10 of climate-related disasters occurred in developing economies, while developed economies also have not been spared from these hazards (less than 10%).

From 2001 to 2015, Asia and the Pacific recorded an average of 127 reported fatalities per climate-related disaster. Fatality rates from disasters are sensitive to the chosen reference years, the severity of the hazard, and the coping capacity of an economy. A huge number of deaths were recorded as a result of Typhoon Nargis in Myanmar in 2008, which directly led to over 138,000 fatalities as well as 60,000 deaths in other countries from resulting tsunamis. Accounting for such outliers, fatalities from climate-related disasters do not appear to be increasing, unlike the incidence of climate-related disasters and their respective damages.

Damage costs<sup>b</sup> in absolute terms rose from 1971 to 2015 (more information in the figure below). Such a trend arises largely due to increasing populations and higher infrastructure costs (Economist Intelligence Unit 2012). In the same period, storms, floods, and other climate-related events accounted for 58% of the damages resulting from natural disasters and 42% of total damages due to geophysical disasters. Costs from both climate-related disasters and geophysical disasters have been rising in recent years compared to previous decades. From 2006 to 2015, climate-related damages were three times those of 2 decades earlier, while the damage costs for geophysical disasters in the corresponding period were 3.5 times the costs from 1986 to 1995. From 1971 to 2015, disaster costs in East Asia contributed over half of the total costs of climate-related disasters across Asia and the Pacific, and about a quarter of the costs across Asia and the Pacific from geophysical disasters. In the same period, economies of developed Asia carried a huge bulk (71%) of total disaster costs from geophysical hazards. The 2011 tsunami in Japan alone had a damage bill of \$210 billion, or about 3.6% of the economy's gross domestic product.

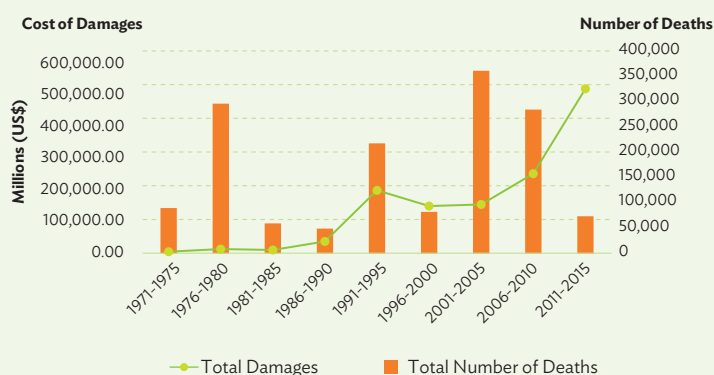
More disaggregation of disaster data by location—as well as data on the sex or age of deaths, missing persons, and affected persons—would be needed to ensure better policies to reduce the exposure of vulnerable communities to climate disasters.

**Frequency of Disasters in Asia and Pacific by Disaster Subgroup, 1971–2015**



Source: Emergency Event Database (EM-DAT) <http://www.emdat.be/>.

**Total Number of Deaths vs. Total Number of Damages: 1971–2015**



Source: Emergency Event Database (EM-DAT) <http://www.emdat.be/>.

<sup>a</sup> The Emergency Event Database (EM-DAT) <http://www.emdat.be/> is maintained by the Centre for Research on the Epidemiology of Disasters (CRED).

<sup>b</sup> EM-DAT's data on disaster damage costs (in nominal United States dollars) reflect both direct and indirect consequences of a disaster on the economy. These data are likely subject to issues of comparability across economies or even within an economy.

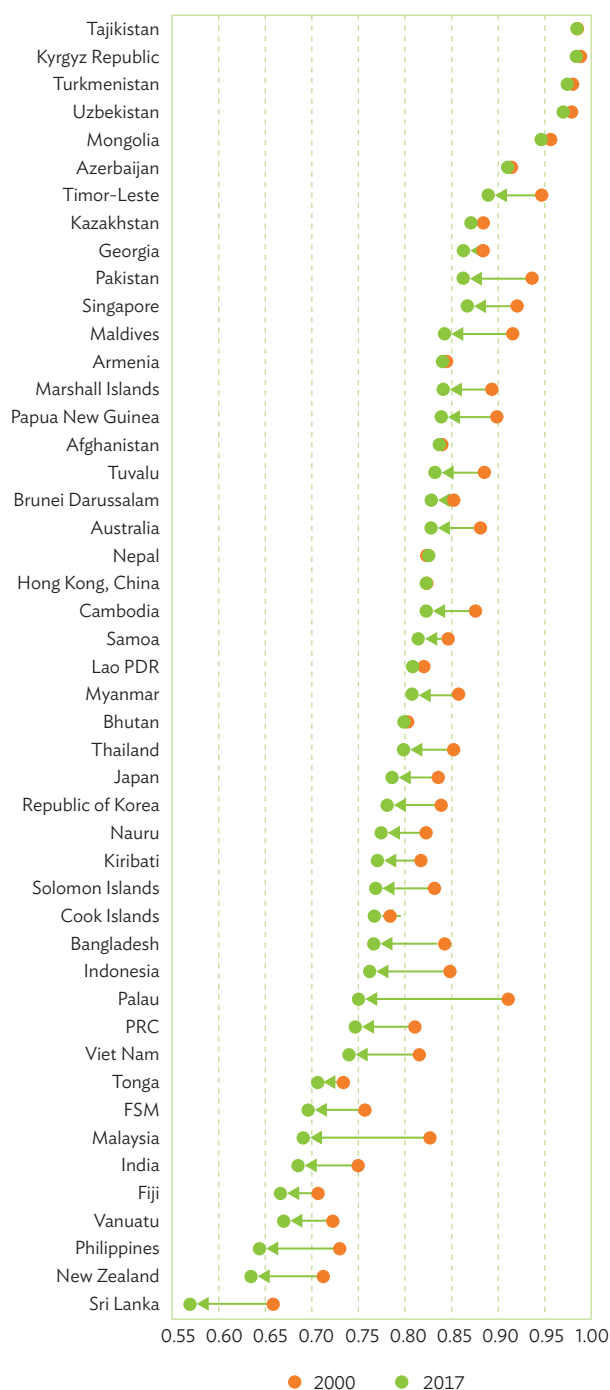
Sources: Economist Intelligence Unit. 2012. Counting the Cost of Calamities. *The Economist*. 14 Jan. <http://www.economist.com/node/21542755> (accessed 15 July 2012). V. Thomas, J.R.G. Albert, and C. Hepburn. 2014. Contributors to the Frequency of Intense Climate Disasters in Asia-Pacific Countries. *C. Climatic Change* (2014) 126: 381. Springer-Verlag.



ecosystems. Human activity, however, can harm the planet's delicately poised habitats and ecosystems. Vigorous efforts are required for promoting the sustainable use of forests, wetlands, drylands, and mountains. Economies of the world must work to reduce the losses of natural habitats and biodiversity, halt and reverse land degradation, halt desertification and revitalize desert areas, and reduce the threat of extinction to many plant and animal species. SDG 15 emphasizes the need for urgent action to improve the management of natural resources to ensure that future generations will continue to benefit from terrestrial and related ecosystems.

**In 2017, 25 of 47 reporting economies garnered a score of at least 0.8 on the Red List Index (RLI), a measure of change in aggregate extinction risk across groups of species. However, eight economies scored 0.7 or lower on the RLI.** The RLI for each economy is a composite measure representing aggregate survival probability (the inverse of extinction risk) for all birds, mammals, amphibians, corals, and cycads occurring within the economy, weighted by the fraction of each species' distribution occurring within the economy. Values of the index range from 0.0 (indicating all species are categorized as "extinct") to 1.0 (indicating all species are categorized as "least concern"). The eight economies which had RLI scores of 0.7 or lower include Malaysia (0.69), the Federated States of Micronesia (0.69), India (0.68), Fiji (0.67), Vanuatu (0.67), the Philippines (0.65), New Zealand (0.63), and Sri Lanka (0.57) as shown in Figure 1.15.1. After Palau, which decreased its RLI score from 0.91 in 2000 to 0.75 in 2017, Malaysia and Sri Lanka registered the largest declines of 0.14 and 0.09 index points, respectively. The RLI scores of all member economies in Asia and the Pacific, except Nepal were lower in 2017 compared with 2000, although the increase in the index score for Nepal was negligible (Figure 1.15.1).

Figure 1.15.1: Red List Index



FSM = Federated States of Micronesia, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Source: Table 1.15.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

## SDG 16. Promote Peaceful and Inclusive Societies for Sustainable Development; Provide Access to Justice for All; and Build Effective, Accountable, and Inclusive Institutions at All Levels

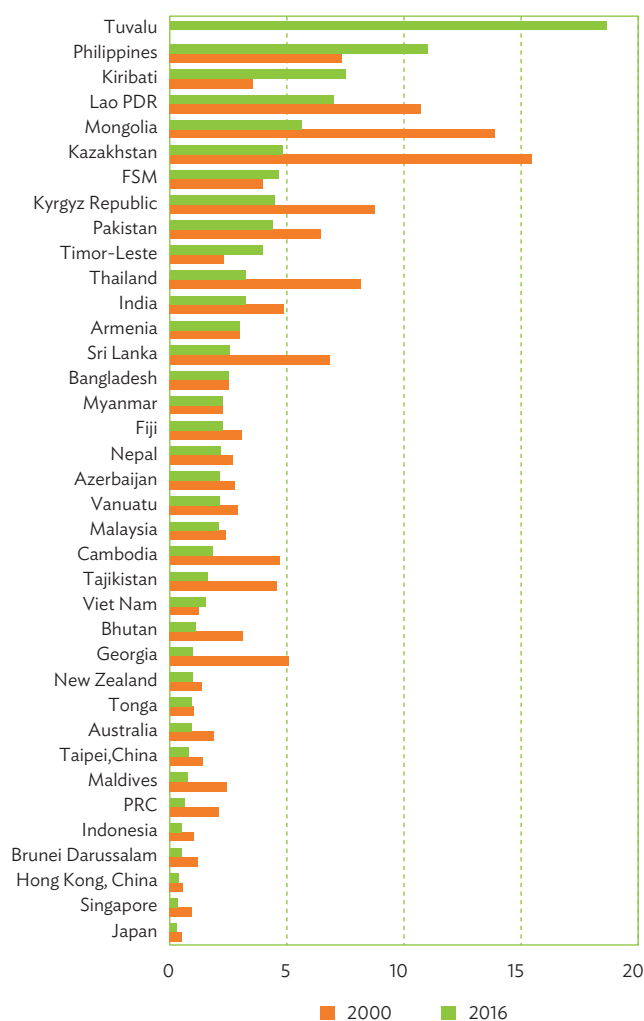


SDG 16 aims to promote peaceful and inclusive societies by providing access to justice for all and building effective, transparent, and accountable institutions at all levels to uphold political stability, human rights, and the rule of law.

**Intentional homicide rates ranged between 0 and 1 per 100,000 population in the three developed member economies of Australia, Japan, and New Zealand and in 11 economies in developing Asia to more than 10 per 100,000 population in two economies of Asia and the Pacific.** Tuvalu (18.6 intentional homicides per 100,000 population) and the Philippines (11.0) recorded the highest rates among the 43 reporting economies in the most recent year (ranging from 2011 to 2016) (Figure 1.16.1 and Table 1.16.1). Across Asia and the Pacific, economies with intentional homicides between 0 and 1 for every 100,000 population include Georgia (1.0); New Zealand (1.0); Tonga (1.0); Australia (0.9); Maldives (0.8); Taipei, China (0.8); the Republic of Korea (0.7); the PRC (0.6); Brunei Darussalam (0.5); Indonesia (0.5); Hong Kong, China (0.4); Japan (0.3); Singapore (0.3); and Nauru (0.0). Although the rate of intentional homicides decreased in 29 economies since 2000, including in populous economies such as the PRC, India, Indonesia, and Pakistan, the rates increased in eight regional economies (Figure 1.16.1). Victims of intentional homicides across Asia and the Pacific are often men, with the share of male victims exceeding 85% for some economies (UNESCAP 2017). Empirical studies also suggest a correlation between crime rates, especially those of violent crime, and inequality (Rufrancos et al. 2013).

While the proportion of firms receiving at least one request for a bribe was not more than 5% in countries such as Bhutan and Georgia, the prevalence of bribery was as high as 25% or more in 15 of the 28 reporting economies. Bribery often enters the public consciousness through media reporting of scandals, investigations, or prosecutions. However, by its very nature, corruption can be challenging to measure. In its Enterprise Surveys, the World Bank asks firms if they are solicited for gifts or informal payments when meeting with public

**Figure 1.16.1: Number of Victims of Intentional Homicide per 100,000 Population**



FSM = Federated States of Micronesia, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Note: This chart includes economies with available data for both 2000 and 2016. For 2000, data included are for 2000 to 2004. For 2016, data included are for 2011 to 2016.

Source: Table 1.16.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

officials. The bribery prevalence rates resulting from these surveys give information on the experience of bribery occurring in the context of service delivery and/or transactions, but these do not cover other forms of corruption.

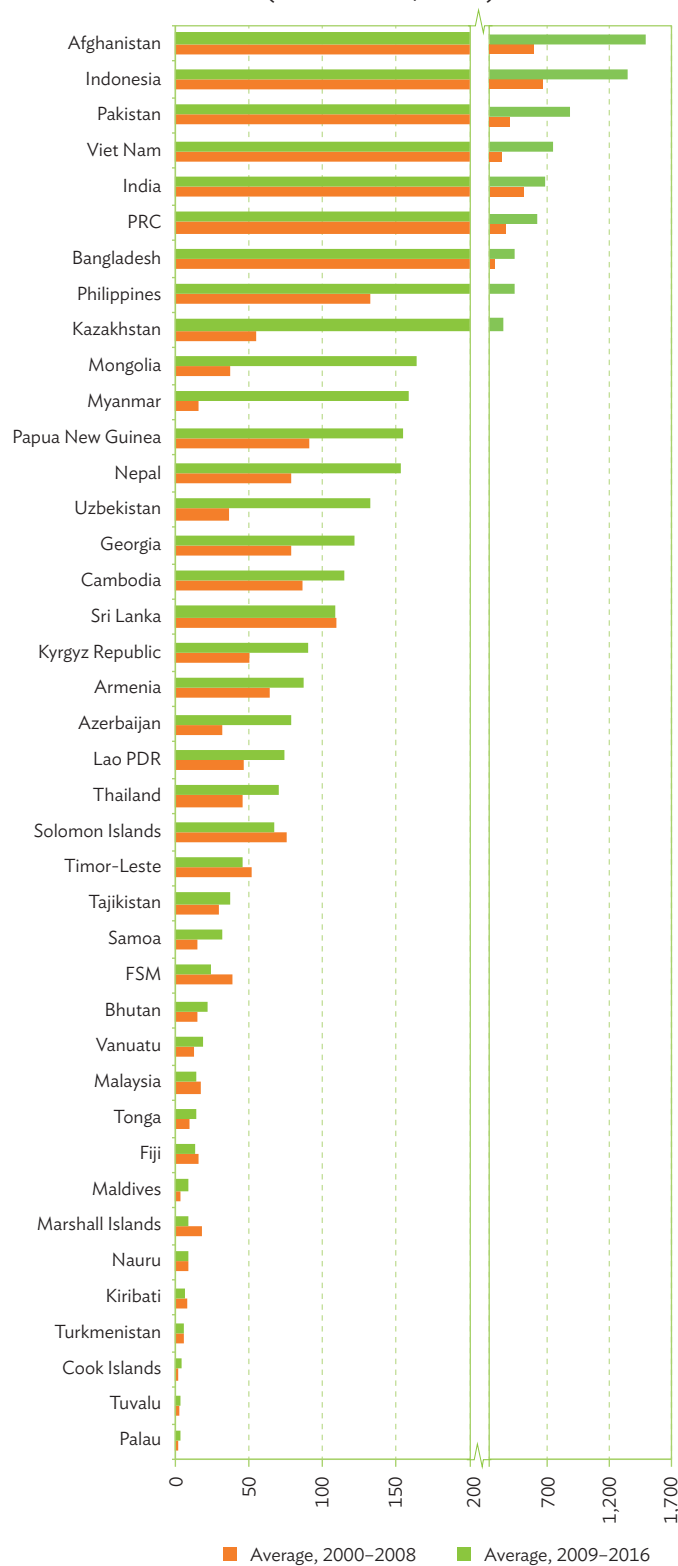
## SDG 17. Strengthen the Means of Implementation and Revitalize the Global Partnership for Sustainable Development



Ensuring that the targets and goals for sustainable development are achieved requires effective partnerships, since the SDGs are more ambitious and larger in scope than their predecessors, the Millennium Development Goals (MDGs). SDG 17 aims to ensure that no one is left behind as economies of the world grow and prosper. It is important that governments, development agencies, and other stakeholders work cohesively towards finding creative solutions to finance better quality statistical data, increase transparency in monitoring and accountability, and leverage partnerships to support the most vulnerable communities, including those in least developed economies, landlocked developing economies, and small-island developing states.

**The dollar value of financial and technical assistance increased in 31 of 40 reporting economies when comparing averages over the periods 2000–2008 and 2009–2016.** The dollar value of the average financial and technical assistance between the two periods of time grew by over 250% in Kazakhstan, Mongolia, Myanmar, and Uzbekistan (Figure 1.17.1). In absolute terms, Afghanistan (\$897.3 million), Indonesia (\$676.1 million), Pakistan (\$480.2 million), and Viet Nam (\$406.3 million) had the largest growth in average financial and technical assistance over the two periods of time. Meanwhile, four Pacific

**Figure 1.17.1: Dollar Value of Financial and Technical Assistance Committed to Developing Countries**  
(constant 2016 \$ million)



\$ = United States dollars, FSM = Federated States of Micronesia,  
Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.  
Source: Table 1.17.1, Key Indicators for Asia and the Pacific 2018.

[Click here for figure data](#)

economies—the Federated States of Micronesia, the Marshall Islands, Solomon Islands, and Timor-Leste—experienced reductions in average assistance of at least \$5 million, comparing 2000–2008 with 2009–2016.

**Resources made available to strengthen statistical capacity increased from \$31.6 million in 2006 to \$52.9 million in 2015.** International resources to strengthen statistical capacity were increased in Central and West Asia, East Asia, South Asia, and Southeast Asia, with only the Pacific receiving fewer resources. In 2015, 20 of the 39 reporting economies had larger amounts of international resources relative to 2006, with increases of at least \$1 million in nine economies: the Philippines (\$5.8 million), the PRC (\$4.7 million), Myanmar (\$4.2 million), Azerbaijan (\$3.6 million), Armenia (\$3.3 million), the Kyrgyz Republic (\$3.1 million), Georgia (\$2.9 million), Bangladesh (\$2.8 million), and Tajikistan (\$1.7 million). The Philippines also reported the highest value for resources made available to statistical capacity development at \$6.6 million in 2015, followed by the PRC (\$6.3 million) and Myanmar (\$5.4 million).

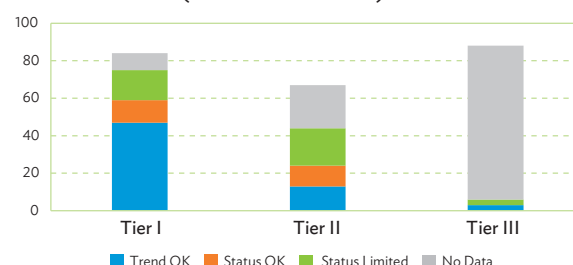
## Data Gaps and Other Data-Related Issues

**New and huge data demands.** The approved framework for global monitoring of the SDGs consists of 232 indicators with greater disaggregation than the MDGs and across a wider spectrum of topics. This requires national statistical systems and the global statistical system to work closely with each other to identify strategies to produce more disaggregated and better-quality data. Currently, national statistical systems, with the assistance of their governments and the development community, are working towards addressing these data demands across all tiers of the SDG indicators.

**Limited data availability for Sustainable Development Goal indicators.** Since the launch

of the SDGs in 2015, significant progress has been made towards closing the gap on data definitions and ensuring their timely availability. However, there is scope for further improvement. An assessment undertaken by ADB and UNESCAP on the extent of data availability for the SDG indicators across Asia and the Pacific revealed that only 52% of the SDG indicators had some data. Moreover, an assessment made by UNESCAP (2017) revealed that 11% of Tier I indicators, 34% of Tier II indicators, and 93% of Tier III indicators do not have any data available (Figure 1.18.1). Only 26% of all SDG indicators are amenable to trend analysis at the regional level, with two or more data points available for these indicators for 50% or more economies in Asia and the Pacific.

**Figure 1.18.1: Distribution of Sustainable Development Goal Indicators, by Tier and by Data Availability**  
(number of indicators)



**Notes:**

1. Trend OK: if a particular indicator has two or more data points available for 50% (or more) of the economies in Asia and the Pacific or relevant economy grouping from 2000 to 2017.
2. Status OK: if a particular indicator has only one data point available for 50% (or more) of the economies in Asia and the Pacific or relevant economy grouping from 2000 to 2017.
3. Status Limited: if a particular indicator has at least one data point available but for less than 50% of the economies in Asia and the Pacific or relevant economy grouping from 2000 to 2017.
4. No Data: if no data points are available for any of the economies in Asia and the Pacific or relevant economy grouping from 2000 to 2017.

Source: United Nations Economic and Social Commission for Asia and the Pacific. 2017. *Statistical Yearbook for Asia and the Pacific 2017 Measuring SDG progress in Asia and the Pacific: Is There Enough Data?* Bangkok.

There may be disparities in data availability for SDG indicators across economic, social, and environmental dimensions as national statistics offices prioritize data production on economic indicators. Further, SDG indicators with a social dimension that overlap with indicators for the MDGs would be expected to have relatively good

data availability. Most national statistics offices across Asia and the Pacific conduct population and housing censuses every decade, and such sources provide baseline data for socioeconomic information requirements, including SDG indicators with economic and social dimensions. Aside from censuses, data (and updates) on SDG indicators are sourced from household surveys—such as labor force surveys, household income, and expenditure surveys; demographic and health surveys, establishment surveys; agriculture surveys; etc.—as well as from administrative reporting systems, but the frequency of data on SDG indicators would depend on the regularity of these data collection activities.

**Gaps in data granularity.** Since the principle of the SDGs is to leave no one behind, many of the SDG indicators require disaggregation by location, sex, gender, age, income, ethnicity, migration status, disability status, and other relevant dimensions. Granular data can illustrate disparities within and across countries. However, the extent to which specific groups are disproportionately at risk, for example, to lack of housing and security of tenure in slums, is currently difficult to decipher given the lack of data disaggregation and interlinkages across indicators. Sex disaggregations, even for basic indicators such as extreme poverty rates based on the \$1.90 a day (at 2011 purchasing power parity), are not currently available. Similarly, poverty numbers are currently unavailable for vulnerable groups, such as persons with disabilities or indigenous peoples, since the sample surveys that form the basis for poverty calculations are only designed to obtain an overall picture of welfare conditions. To obtain poverty data for groups that have a small share of the total population, investments in population registers and/or special surveys need to be made.

With the growing use of information and communication technology, innovative data sources such as big data and crowdsourced data can potentially address gaps in data granularity in monitoring the SDGs. Unlike censuses, sample surveys, and administrative reporting systems (all

of which have well-defined target populations), some types of big data may not represent underlying populations of interest. Careful attention is needed when complementing surveys and other conventional data sources with big data to ensure that reliable statistical inferences can be made (Cox et al. 2018).

**Lack of data comparability.** SDG indicators, such as the proportion of the urban population living in slums or the proportion of the population with access to safely managed sanitation services, require data on housing conditions that may not be fully comparable across countries due to differences in definitions. Comparisons across economies are likewise difficult for urban–rural disaggregation of SDG indicators, due to variations in the definition of “urban” and “rural” across time and countries (Box 2.1.1).

**Sparse data and irregular frequency.** Indicators that provide a useful description of income inequality, such as the growth in household income of those in the bottom 40th percentile of income distribution in relation to national averages, are only currently available for a few economies. Indicators on material footprint and domestic material consumption, which are widely accepted as strategic sustainability indicators of production and consumption, are not produced annually. Data to monitor progress made towards addressing climate change are sparse.

Frequency is also of concern, and some indicators, such as the coverage of protected areas in relation to marine areas, are not regularly collected alongside other challenges such as difficulty in determining whether a site conforms to standards on the definition of a protected area. Further, some protected areas are not assigned management categories. While access to remote sensing data has improved in recent years, these data have their own limitations in assessing land use. For example, forest regrowth cannot easily be detected with remote-sensing techniques.



**Data limitations.** While the indicators included in the framework for monitoring the SDGs are carefully chosen, they may have some limitations. The labor share in GDP, for instance, does not include the income of the self-employed, and yet a sizeable proportion of the employed population in developing Asia is made up of people who are self-employed. Current measures of poverty used by economies are largely based on income or consumption data, while the SDG indicators include a multidimensional poverty measure, which has yet to be tested on a wider scale.

Cities face many challenges in relation to pollution, traffic, and inadequate housing for the poor, and these challenges are further fueled by migration and population growth, changes in family structures, inequalities of opportunity for excluded groups and rising insecurity. The interconnectedness of these issues is not easy to explore using currently available data.

As regards the Red List Index, since the composite index is aggregated across multiple taxonomic groups, it can be updated annually, but the index does not adequately capture the deteriorating status of common species that are abundant and widespread but are declining gradually. Other indicators for monitoring many targets under SDG 15 are also sparsely available. The absence of a framework of monitoring terrestrial ecosystems, low data availability, and the lack of good quality data has ecological implications and must be carefully addressed.

**Measurement errors.** The quality of data for all the SDG indicators needs to be considered when uncovering trends and patterns, as data are subject to measurement issues. Farmer self-reports of land area and production are known to have significant biases (Dillon and Rao 2018). Calculation

of mortality rates in children under the age of 5 years requires complete counts of live births and child deaths by precise age, which are not always available due to lacking civil registration systems in some developing economies of Asia and the Pacific. Maternal deaths are likewise not always accounted for given incomplete or inaccurate records on causes of death. The measurement of quality education is a challenge given the lack of standard definitions for minimum competency. Anthropometric measures of malnutrition (including stunted heights) are subject to measurement errors and issues around reference standards, i.e., local versus international standards. Access to safely managed drinking water services, access to safely managed sanitation, and information on hygiene crucially depend on more and better data, particularly administrative data sources (WHO and UNICEF 2017).

As far as international support to statistics is concerned, full coverage of all statistical capacity development programs cannot be guaranteed in the data compiled by PARIS21 for measuring the dollar-value support for statistics development. Double counting of projects may happen. The data may also be inflated by working with project totals for multisector projects. Further, donor-side commitments do not necessarily translate to actual disbursements to the ODA-recipient economies.

Reliability of data on SDG indicators depends on the quality of the underlying data sources. Economies need to increase investment, look for innovative data sources, and form strategic partnerships with a range of stakeholders to ensure that data quality, comparability, measurement, and timeliness can be enhanced. The result will be good development data that can be used for evidence-based policymaking that eventually translates into better outcomes in sustainable development.



## References

- D.R. Cox, C. Kartsonaki, and R. H.Keogh. 2018. Big Data: Some Statistical Issues. *Statistics & Probability Letters* Volume 136, May 2018, pp. 111–115.
- K.G. Dewey. 2016. Reducing Stunting by Improving Maternal, Infant and Young Child Nutrition in Regions such as South Asia: Evidence, Challenges and Opportunities. *Maternal & Child Nutrition*. John Wiley.
- A. Dillon and L.N. Rao. 2018. Land Measurement Bias: Comparisons from Global Positioning System, Self-Reports, and Satellite Data. Asian Development Bank, Economics Working Paper Series. No. 540.
- European Union and United Nations Human Settlements Programme (UN-Habitat). 2016. *The State of European Cities: Cities Leading the Way to a Better Future*. Brussels, Belgium: European Commission.
- International Labour Organization (ILO). 2018. *World Employment and Social Outlook: Trends 2018*. Geneva, Switzerland: ILO.
- N.M. Nour. 2009. Child Marriage: A Silent Health and Human Rights. Reviews in Obstetrics & Gynecology. Issue. Vol. 2 No. 1 pp. 51-56. Glastonbury, Connecticut, USA: MedReviews-CME.
- [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2672998/pdf/RIOG002001\\_0051.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2672998/pdf/RIOG002001_0051.pdf) (accessed 10 June 2018)
- H.G. Rufrancos, M. Power, K.E. Pickett, and R. Wilkinson. 2013. Income Inequality and Crime: A Review and Explanation of the Time-Series Evidence. *Social Crimonol* 1: 103. doi: 10.4172/2375-4435.1000103.
- Secretariat of the Partnership in Statistics for Development in the 21st Century (PARIS21). 2017. Partner Report on Support to Statistics PRESS 2017. Paris, France: PARIS21.
- UN. 2015. Transforming Our World: the 2030 Agenda for Sustainable Development. A/RES/70/1. Resolution adopted by the General Assembly on 25 September 2015. New York, New York, USA: UN.
- United Nations Department of Economic and Social Affairs (UNDESA). 2018. *World Urbanization Prospects 2018*. New York, New York, USA: UN.
- UNDESA, Population Division. 2015. *World Urbanization Prospects: The 2014 Revision*. New York, New York, USA: UN.
- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). 2017. *Statistical Yearbook for Asia and the Pacific 2017*. Measuring SDG Progress in Asia and the Pacific: Is There Enough Data? Bangkok, Thailand: UNESCAP.
- UNESCAP. 2017. *Economic and Social Survey of Asia and the Pacific 2017: Governance and Fiscal Management*. Bangkok, Thailand: UNESCAP.
- UNESCAP. 2016. *Economic and Social Survey of Asia and the Pacific 2016: Nurturing Productivity for Inclusive Growth and Sustainable Development*. Bangkok, Thailand: UNESCAP.
- WHO and UNICEF. 2017. *Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines*. (location and/or publisher).
- World Bank. 2005. *Global Purchasing Power Parities and Real Expenditures 2005*. International Comparison Program. Washington, DC: World Bank.
- World Bank. 2018. *Atlas of Sustainable Development Goals 2018: From World Development Indicators*. World Bank Atlas; Washington, DC: World Bank.