

# Statistical Yearbook for Asia and the Pacific 2015

**4** QUALITY  
EDUCATION





## Sustainable Development Goal 4

# Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4.1 Achieving equitable and good-quality basic education for all.....	1
4.2 Youth and adult literacy.....	2
4.3 Tertiary education.....	4
4.4 Financing education.....	6
4.5 Data and monitoring issues.....	8

The new education agenda, also known as “Education 2030”, is fully captured in Sustainable Development Goal 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all) and its corresponding targets. Further, the World Education Forum 2015 (WEF 2015) adopted the Incheon Declaration<sup>1</sup> which calls for “meaningful education and training opportunities for the large population of out-of-school children and adolescents, who require immediate, targeted and sustained action ensuring that all children are in school and are learning”.

In adopting the 2030 Agenda for Sustainable Development, Governments globally committed to:

*providing inclusive and equitable quality education at all levels – early childhood, primary, secondary, tertiary, technical and vocational training. All people, irrespective of sex, age, race, ethnicity, and persons with disabilities, migrants, indigenous peoples, children and youth, especially those in vulnerable situations, should have access to life-long learning opportunities that help them acquire the knowledge and skills needed to exploit opportunities and to participate fully in*

*society. We will strive to provide children and youth with a nurturing environment for the full realization of their rights and capabilities, helping our countries to reap the demographic dividend, including through safe schools and cohesive communities and families.<sup>2</sup>*

### 4.1 Achieving equitable and good-quality basic education for all

Basic education is broader than just primary education. While the importance of universal primary education is emphasized in both the Millennium Development Goals and the UNESCO-led Education for All agendas, there is a growing consensus that equitable, inclusive access to and participation in “quality” learning should be ensured for all children, youth and adults, and that basic education encompasses higher degrees of educational attainment, such as that afforded in lower-secondary and eventually upper-secondary schools. As the typical average duration of schooling has increased in countries in the region, so has the importance of higher forms of schooling for all groups in society. Many countries in the region have already extended their compulsory education requirements, with only six countries in the region having a minimum required duration of schooling that is primary education

(equivalent to about six full years of schooling).<sup>3</sup> Recognition of the importance and relevance of secondary education has resulted in increased efforts in Asia and the Pacific to improve access to education across a wider range of ages.

---

**The overall regional gross enrolment ratio for secondary education in Asia and the Pacific increased from 55.6 per cent in 2000 to 76.6 per cent in 2013**

---

Notable improvements have been made in the region with regard to secondary education enrolment. The Asia and the Pacific gross enrolment ratio (GER) for secondary education increased from 55.6 per cent in 2000 to 76.6 per cent in 2013. One impact of these improvements is that the region's GER for secondary schools was slightly less than the global average for every year prior to 2007, but exceeded the global ratio each year thereafter.

However, disparities across income groups remained pronounced in 2013. With an estimated GER of 56.6 per cent, the region's low income countries lagged behind the gross enrolment ratio of 92.1 per cent in upper middle-income economies.

To achieve universal primary and secondary participation by 2030, many countries and areas in the region will need to dramatically increase enrolment rates for both primary and secondary schools, increase the years of compulsory schooling and address wide-ranging questions of equity and affordability of access.

---

**Of every 20 children of primary school age in Asia and the Pacific, 1 is out of school**

---

Participation in education has increased at all levels in the region. Consequently the percentage of out-of-school children of primary school age has also decreased, from 11.4 per cent in 2000 to 5.0 per cent in 2013. Based on analysis conducted by the UNESCO Institute for Statistics (UIS)<sup>4</sup>, this equates to 17.3 million out-of-school children of primary school age in

the region,<sup>5</sup> or 29 per cent of the global total. Despite long-term reduction in the rate of such children being out of school, the rate is higher than the 4.7 per cent recorded in 2010. UIS attributes this increase in part to an increase in the number of male out-of-school children in South and South-West Asia,<sup>6</sup> from 4.3 million in 2010 to 5.5 million in 2013, which equates to 32 per cent of the out-of-school children of primary school age in the region as a whole.

Recent increases in the number of male out-of-school children of primary school age are likely to have contributed towards gender parity in the region. In 2000, the rates for males and females were 8.4 per cent and 14.7 per cent respectively, while in 2013 the rate was 5.0 per cent for females, only marginally lower than the 5.1 per cent observed for males.

There are, however, disparities in the percentage of out-of-school children of primary school age among countries grouped by stage of economic development, decreasing from 10.6 per cent in low income economies in 2012 to 1.4 per cent in high income economies in 2013.

The children beginning their education now can expect to spend longer studying than was previously the case. In 2013, children could expect to spend 12.3 years (girls) and 12.4 years (boys) in school compared with 8.7 years (girls) and 9.7 years (boys) in 2000. Thus, not only has the duration of education increased in Asia and the Pacific but the disparity between girls and boys has also narrowed. Disparities remain, however, between countries at different stages of economic development. In 2012, children in low income economies could expect to spend approximately five fewer years of education than those in high income economies.

## 4.2 Youth and adult literacy

Literacy is a basic human right, guaranteed under the right to education enshrined in the Universal Declaration of Human Rights.<sup>7</sup> It is a fundamental tool to empower people and, through them, communities and countries. Through the Education for All movement,

the global adult literacy rate increased by 3.3 percentage points, from 81.9 per cent in 2000 to 85.2 per cent in 2013.

**In Asia and the Pacific, 478 million adults cannot read and write, accounting for 3 of every 5 adult illiterates in the world**

Of the 757 million adults around the world who could not read and write in 2013, three fifths of them – a total of 478 million adults – were living in Asia and the Pacific.

The South and South-West Asian subregion alone had 389 million adult illiterates in 2013, accounting for more than half (51 per cent) of the adult illiterates globally and more than four fifths (81 per cent) of the illiterates in Asia and the Pacific.

South and South-West Asia also had the lowest adult literacy rate in the region at 69 per cent in 2013, compared with literacy rates of 90 per cent or more in South-East Asia and the Pacific (93 per cent), East and North-East Asia (96 per cent) and North and Central Asia (100 per cent).

In addition to the subregional variations, literacy rates also vary by levels of economic development, ranging from 69 per cent in low income economies in 2013 to nearly universal literacy rates in high income economies for 2000, the most recent year with data.

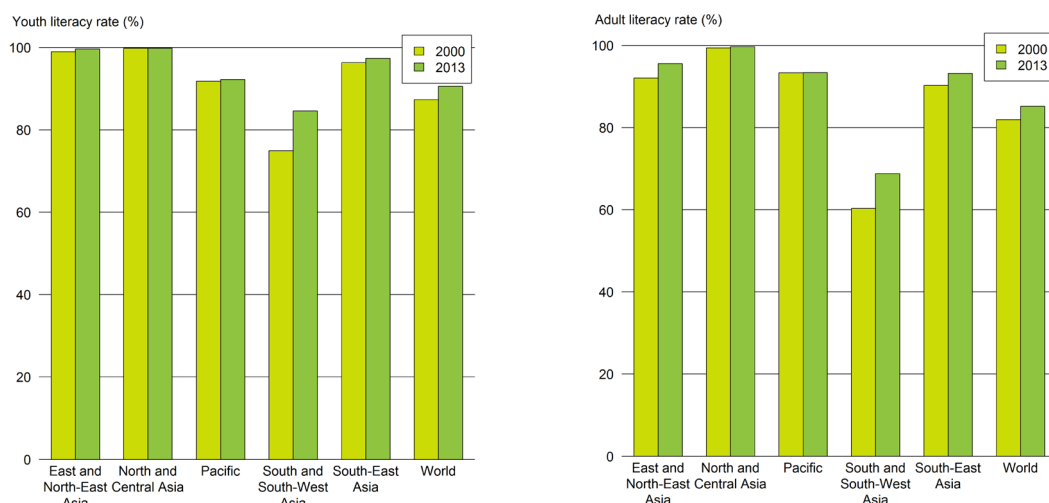
Another source of disparity in literacy rates is gender related. In 2013, 65 per cent of all adult illiterates living in the region were female. This disparity is greatest in East and North-East Asia where nearly three quarters (73 per cent) of adult illiterates are female. However, literacy rates are high in East and North-East Asia, and 93 per cent of adult females and 98 per cent of adult males can both read and write. (Fig 1)

The widest gender disparity in the proportions of the adult population that are literate is in the South and South-West Asian subregion where only three fifths (60 per cent) of adult females and a bit more than three quarters (78 per cent) of adult males were literate in 2013.

**Of every 10 youths aged 15-24 years in Asia and the Pacific, 9 can both read and write**

Literacy rates in Asia and the Pacific for those aged 15-24 (youths) are generally higher than for adults. In 2013, 91 per cent of female youths were literate compared with 80 per cent of female adults, and 94 per cent of male youths were literate compared with 90 per cent of male adults. The literacy rate for male youths is, therefore, 4 percentage points higher than for female youths, which is lower than the equivalent gender disparity for literacy in the adult population, which is 9 percentage points higher for males.

**Figure 1**  
Youth and adult literacy rate, by sub-region, 2000 and 2013



There are other similar disparities in youth literacy rates across subregions and income groupings compared with those observed in the adult population.

Youth literacy rates were lowest in South and South-West Asia at 88 per cent for males and 81 per cent for females in 2013, and the disparity of 7.6 percentage points is the widest. By contrast, the other subregions have nearly achieved gender parity.

In 2013, youth literacy rates also increase with economic development, from 82 and 83 per cent for female and male youths respectively in low income economies to nearly universal literacy levels for both male and female youths in upper middle-income and high income economies.

### 4.3 Tertiary education

Owing to the socioeconomic progress achieved during past decades, many countries in Asia and the Pacific have called for highly skilled human resources who can further advance the development of the country against the backdrop of globalization and the knowledge economy. As a corollary, with growing participation and completion of basic and secondary education, the demand for tertiary education, whether studying in domestic or foreign institutions, has been increasing explosively in the region.

**Between 2000 and 2013, the proportion of people in Asia and the Pacific enrolled in tertiary education more than doubled, from 14 to 30 per cent of those eligible**

During the last decade, there has been explosive growth in tertiary education<sup>8</sup> in Asia and the Pacific<sup>9</sup> against a backdrop of growing participation and completion of basic and secondary education, as well as increasing demands for highly skilled individuals. Between 2000 and 2013, the proportion of people in Asia and the Pacific enrolled in tertiary education more than doubled, from 14 to 30 per cent of those of eligible official school age in the total population in a given academic year. Based on UIS estimates, that proportion equates to 101 million students enrolled in tertiary education in the region in 2013, more than half of total global enrolments and an increase of 62 million enrolments compared with that of 2000.

The proportion of people enrolled in tertiary education is typically higher in countries with higher levels of economic development, and in 2013 ranged from 15 per cent in low income economies to 74 per cent in high income economies. The fastest growth, however, has taken place in upper middle-income economies where rates more than trebled, from 11 per cent of those eligible in 2000 to 34 per cent in 2013.

In 2000, a higher proportion of eligible males than females from the region were enrolled in tertiary education. However, this gap has been narrowing, and in 2010 gender parity was achieved. In 2013, the gender parity index for the region was 1.03, indicating that tertiary enrolments were higher for females than males.

#### Box 1

#### Gender Parity Index

The gender parity index (GPI) is used to assess the degree of gender disparities at primary, secondary and tertiary levels for selected indicator. In this context, a GPI value of less than 1 shows that the indicator for boys is higher than the indicator for girls, and vice versa for a GPI value of more than 1. A GPI value of between 0.97 and 1.03 is generally considered to reflect gender parity.

**Graduation from tertiary educational institutions is growing at more than 20 per cent per annum in Cambodia, the Lao People's Democratic Republic and Myanmar**

Significant growth in the number of people graduating from tertiary educational institutions has been taking place in most countries throughout Asia and the Pacific. In absolute terms, China alone has seen the number of people graduating from tertiary educational institutions rise from 1.8 million in 2000 to 9.4 million in 2013, an average growth rate of 13.6 per cent per year over that period. Even higher growth rates have been recorded in other countries in the region, with the major ones being in South-East Asia where growth of 25.4 per cent per annum took place in the Lao People's Democratic Republic from 2000 to

2013, 25.3 per cent in Cambodia from 1999 to 2011 and 23.1 per cent in Myanmar from 2007 to 2012. Surprisingly, for some countries there has been a decline in the number of tertiary graduates, with Georgia experiencing a 1.7 per cent decline from 1999 to 2013, Azerbaijan a 1.1 per cent decline from 2008 to 2012 and Japan a 1.0 per cent decline from 1999 to 2012. It should be noted that the period covered in terms of growth differs from country to country depending upon the data available.

**In Asia and the Pacific, more people (1 in 3) graduated with tertiary degrees in social sciences, business and law than in any other programme in 2013**

Based on statistics for the 13 countries in the region where data are available, the distribution of tertiary graduates, according

**Box 2**

**Between 2000 and 2013, the number of outbound internationally mobile students increased by 1 million**

Students from the region are pursuing their tertiary education abroad in increasing numbers. Between 2000 and 2013, the number of outbound internationally mobile students from Asia and the Pacific enrolled in tertiary educational institutions outside of their home country increased from 644 thousand to 1.7 million students in 2013, an increase of 1.0 million students. China sent the largest number of students abroad in 2013 (712,157), followed by India (181,872), the Republic of Korea (116,942), Malaysia (56,260) and Viet Nam (53,546). These five countries account for about two thirds (66 per cent) of outbound students in Asia and the Pacific.

The number of outbound students in a country, expressed as a percentage of total tertiary enrolment in that country and referred to as the outbound mobility ratio, in 2013 was 8 per cent in Central Asia, 2 per cent in East Asia and 1 per cent each in the Pacific and in South and West Asia. It should be noted that, despite the increase in the number of outbound students during the last decade, these figures have remained almost constant since 2000, except in Central Asia.<sup>a</sup> This increase means that the growth in the number of students seeking outbound tertiary study abroad is roughly proportionate to the growth in enrolment in tertiary education domestically.

About 860,000 foreign students studied at tertiary educational institutions in Asia and the Pacific in 2012. This figure accounts for 22 per cent of inbound mobile students worldwide. The inbound mobility rates<sup>b</sup> were 1.6, 1.3 and 0.1 per cent in the UNESCO subregions of Central Asia, East Asia and the Pacific, and South and West Asia respectively in 2013.

a The outbound mobility ratio rose by 3.9 percentage points in the UNESCO Central Asian subregion between 2000 and 2013.

b The number of students from abroad studying in a given country is expressed as a percentage of total tertiary enrolment in that country.



to the International Standard Classification of Education (ISCED), varies widely. Some countries have a relatively large share of graduates at ISCED level 5, such as China (48 per cent), the Lao People's Democratic Republic (55 per cent) and Viet Nam (48 per cent). In other economies, students are more likely to attain a tertiary degree at ISCED levels 6 and 7, such as Macao, China (91 per cent), Mongolia (97 per cent) and the Philippines (87 per cent). Less than 2 per cent in the region are graduates at ISCED level 8.

Further analysis of the programmes of study of tertiary graduates over the five years from 2009 to 2013 reveals that approximately one in three graduates in Asia and the Pacific received degrees in social sciences, business and law programmes. This ratio remains reasonably constant across countries grouped from low- to high income economies. Nepal is the only low income country with data available for the reference period.

Agriculture is the least popular field of tertiary study, accounting for about 3 of every 100 graduates in the region.

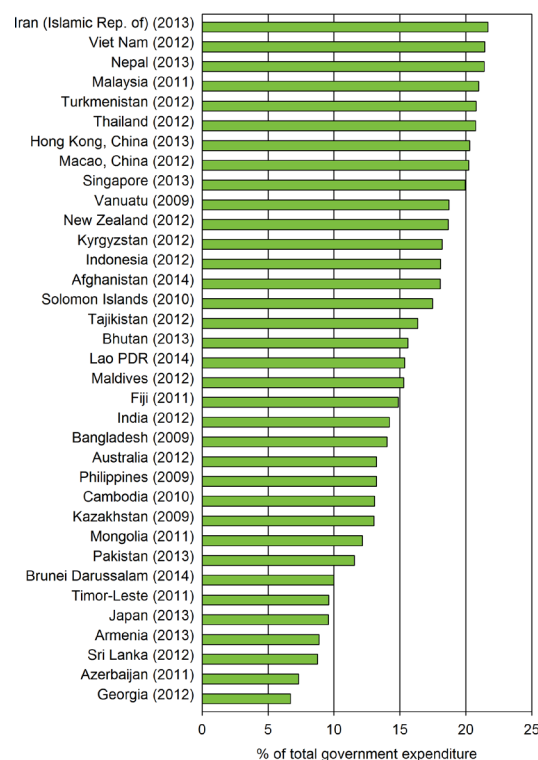
#### 4.4 Financing education

The global community has been advocating for countries, especially developing countries, to invest more in education to increase access and participation and also to improve the quality of education.

In the Incheon Declaration, Governments, the primary bearer for efficient, equitable and sustainable financing of education, reiterated the importance of well-targeted increases in their education expenditures. Public investment should help address the equitable distribution of resources across education subsectors and geographic locations, and support programmes for marginalized groups. An enhanced focus on innovative financing strategies that do not burden the poor but do support good-quality public education is needed; funding of education will need to be drawn from multiple sources.

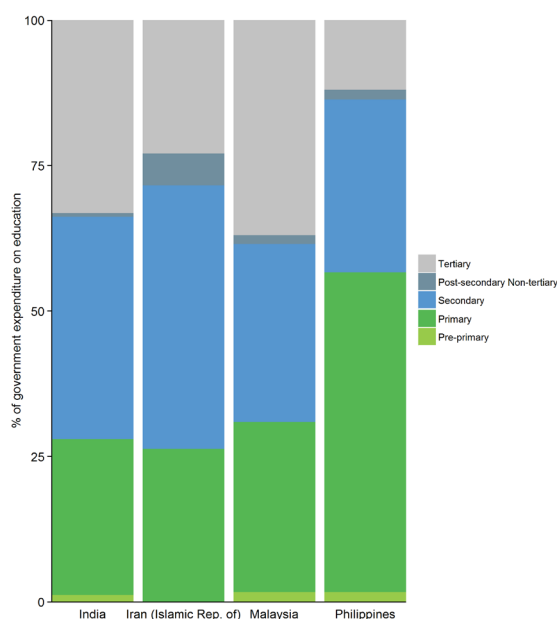
#### The proportion of public expenditure made on education in Asia and the Pacific ranges from 6.7 per cent to 21.7 per cent

Figure 2 shows the largest proportion of public expenditure made on education by the 35 countries of Asia and the Pacific for which data are available over the five years from 2009 to 2013.



**Figure 2**

Education expenditure as a percentage of total government expenditure for selected countries, latest data available



**Figure 3**

Education expenditure by level of education as percentage of government expenditure on education, latest data

Expenditure ranges from 6.7 per cent of total government expenditure in Georgia (2012), one of six countries in the region where less than 10 per cent of public expenditure is on education to 21.7 per cent in the Islamic Republic of Iran (2013), one of nine countries where more than 20 per cent of public expenditure is on education. (Fig 2)

Based on analysis by UIS, countries in the region allocate from less than 1 per cent to less than 10 per cent of their government expenditure on education - on pre-primary education, which has recently been promoted as one of the strongest factors in school success. Post-secondary and non-tertiary education, which is used in many countries for school-to-job transitions, receives less than 2 per cent of total education expenditures in three countries; Brunei Darussalam, India and Malaysia.

The largest shares of government funds in most countries go to primary and secondary education. For example, in 2012, Indonesia spent 16 and 25 percentage points more on primary compared to secondary and tertiary education. Out of 19 countries with available data between 2010 and 2014, only 4, Hong Kong, China; Singapore; Malaysia and India, reported spending more of their total government expenditure on tertiary education, with respectively 14, 13, 8 and 6 percentage points difference between the proportion spent on primary and tertiary.

### Box 3

#### Teacher shortage to achieve universal primary and lower secondary education

According to a projection produced by the UNESCO Institute for Statistics on teacher demand globally and by UNESCO subregions, there will be an acute shortage of teachers at the primary level beyond 2015 if the world wants to achieve universal primary education. The Asia-Pacific region will be short by 213,000 primary teachers in 2015; by 2030, the gap will be 331,000. The teacher shortage at the lower-secondary level is even more severe. If the goal of universal lower-secondary education is to be achieved by 2015, the gap would be 1.3 million teachers in the Asia-Pacific region. If the goal of universal lower-secondary education is to be achieved by 2020, it will be necessary to recruit 1.4 million new teachers; if it is to be achieved by 2030, 1.3 million new teachers will be needed in the Asia-Pacific region.

Region	Number of Primary teachers in 2011 (1000s)	New Teaching post needed to achieve universal primary education (1000s)				New Teaching post needed to achieve ULSE (1000s)	New Teaching post needed to achieve universal lower-secondary education (1000s)			
		By 2015	By 2020	By 2025	By 2030		By 2015	By 2020	By 2025	By 2030
World	28,870	1,577	2,381	2,886	3,335	17,280	3,512	4,263	4,823	5,086
Central Asia	340	26	68	64	45	406	8	39	71	67
East Asia and Pacific	10,378	57	52	65	90	5,833	282	308	274	230
South and West Asia	5,000	130	187	187	196	2,460	991	1,065	1,081	1,040
<b>Total in Asia-Pacific</b>	<b>15,718</b>	<b>213</b>	<b>307</b>	<b>316</b>	<b>331</b>	<b>8,699</b>	<b>1,281</b>	<b>1,412</b>	<b>1,426</b>	<b>1,337</b>

Source: UNESCO Institute for Statistics, *A Teacher for Every Child: Projecting Global Teacher Needs from 2015 to 2030*. UIS Fact Sheet, No. 27 (October 2013).



**In 2013, for every 29 pupils in low income economies in Asia and the Pacific there was 1 secondary school teacher; for high income economies, the number of pupils per teacher was 11**

If graduates are the primary outputs of investing in education, teachers are the most important inputs. Every country should have a sufficient number of teachers at each level of education, and they should receive sufficient training before they begin teaching. However, analysis by UIS has shown that in some countries in Asia and the Pacific not all teachers have been properly trained in pedagogical methods. Indeed, only 72 per cent of primary teachers were trained in 2012 in Kyrgyzstan. In Vanuatu, only 60 per cent of them were trained at the primary level. In Brunei Darussalam, the Lao People's Democratic Republic and Nepal only between 2 and 15 per cent of teachers at the primary level were not trained.

The number of pupils per teacher, the pupil-teacher ratio, in Asia and the Pacific in 2013 was, on average, 1 teacher for every 24 primary school pupils and 19 secondary school pupils. These ratios vary across the subregions and with the level of economic development consistent with other disparities observed in this chapter.

Pupil-teacher ratios in South and South-West Asia are the highest in the Asia-Pacific region for primary education (35:1) and secondary education (25:1). Similarly the number of pupils per teacher tends to decrease with the level of economic development: in primary schools, from 35:1 in low income economies to 18:1 in high income economies; and in secondary schools, from 29:1 to 11:1 respectively.

## 4.5 Data and monitoring issues

**Measuring inequalities in education will require better integration of data sources**

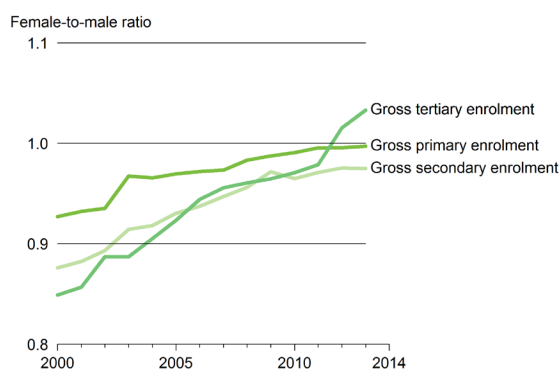
The Education 2030 agenda is aimed at providing more inclusive basic educational opportunities by addressing marginalized groups and their current exclusion from the

education system. This will increase the need for disaggregated data that will support analysis of inequalities in education.

Until now, gender gaps between boys and girls were typically based on administrative data, but by integrating these data with additional sources, such as an education module in household surveys, further aspects or indicators of inequality could be assessed, such as wealth quintiles, geographic location, subnational disparities and, in some cases, ethnic groups and disability. (Fig 4)

Since the Education for All goals were declared at the World Conference on Education for All, which was held in Jomtien, Thailand, in March 1990, and the World Education Forum, which met in Dakar in April 2000, many countries in the region have improved their educational monitoring and information systems. For the new Education 2030 agenda and for achievement of Sustainable Development Goal 4, it will be necessary for these systems not only to monitor access, participation and progress but also to be focused on monitoring equality and equity, by integrating much more disaggregated data and analysis of results of assessments of student learning. For monitoring education beyond 2015, it will be necessary to evaluate and ensure not only that every child has access to education, but that every child is also learning.

The new education goal under the framework of the Sustainable Development Goals involves a new literacy target (4.6): "By 2030, ensure



**Figure 4**

Gender parity index of the gross enrolment ratio, by level of education, ESCAP average, from 2000 to 2013

that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy". This new target requires data on the literacy and numeracy skill levels of youth and adults, which is more involved than providing data on just literacy rates. Such data should come from reliable tests of literacy and numeracy. Currently such skills or other indicators of the quality of education are lacking for many countries and territories in Asia and the Pacific.

### More disaggregated data will be required to monitor SDG 4

The education data presented in the Statistical Yearbook cover a range of concepts relating to literacy, enrolment, gender balance, duration of studies, and financial and human resources in education, among others, and are often disaggregated by sex, age or level of instruction. While these data do not represent the status of data production in individual countries, they do give a good indication of the range of internationally comparable data available to the general public across a range of topics related to education.

Data availability is greatest for indicators relating to number of inbound and outbound students and enrolment, such as the enrolment rate, or the gender parity index in enrolment, where between two thirds and four fifths of countries in the region generally have had at least one data point during the past 10 years. For some indicators, relatively fewer countries show values for disaggregated series, such as the enrolment rate stratified by educational programme, and the series tend to show a greater number of missing years. Countries and areas in the Pacific subregion are more likely than those in other subregions to be missing entire series for education-related indicators.

Certain concepts are presented only for specific levels of education, such as the transition rate from primary to secondary, or do not present data disaggregated by sex, as is the case for attendance in secondary school technical programmes or the distribution of tertiary enrolment by area of study.

### Endnotes

- 1 The Incheon Declaration: Education 2030 – towards inclusive and equitable quality education and lifelong learning for all, was adopted at the World Education Forum 2015, held in Incheon, Republic of Korea, from 19 to 22 May 2015. Available from <http://en.unesco.org/world-education-forum-2015/incheon-declaration>.
- 2 General Assembly resolution 70/1, para. 25.
- 3 UNESCO Institute for Statistics Data Centre.
- 4 See [http://www.unescobkk.org/fileadmin/user\\_upload/library/edocuments/18\\_Nov\\_Fact\\_Sheet.pdf](http://www.unescobkk.org/fileadmin/user_upload/library/edocuments/18_Nov_Fact_Sheet.pdf).
- 5 Reference to the UIS Asia-Pacific region (49 countries and Territories; the Russian Federation and Turkey are not included).
- 6 South and South West Asia, excluding Turkey.
- 7 General Assembly resolution 217 A (III), art. 26.
- 8 The International Standard Classification of Education, maintained by the UNESCO Institute for Statistics, categorizes tertiary education into four levels: level 5 (short-cycle tertiary education); level 6 (bachelor's or equivalent level); level 7 (master's or equivalent level); and level 8 (doctoral or equivalent level).
- 9 According to the UNESCO Institute for Statistics countries' grouping, the Asian and Pacific region consists of 49 countries and territories in 3 subregions: Central Asia; East Asia and the Pacific; and South and West Asia.



1 NO POVERTY

2 NO HUNGER

3 GOOD HEALTH

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER AND SANITATION

7 RENEWABLE ENERGY

8 GOOD JOBS AND ECONOMIC GROWTH

9 INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

16 PEACE AND JUSTICE

17 PARTNERSHIPS FOR THE GOALS

2 NO HUNGER

3 GOOD HEALTH

4 QUALITY EDUCATION