Providing quality education for every child and youth - how much would it cost?

Sustainable Development Goal 4 presents a significant broadening of the education agenda compared with that of the Millennium Development Goals; it is aimed at universal enrolment, from pre-primary to upper-secondary levels (rather than just primary), and emphasizes learning outcomes, such as higher labour market remuneration, but it also fosters economic growth through human capital accumulation and reduces poverty. At the same time, Goal 4 calls for equity in education opportunities, through additional support for marginalized children to gain access to school and catch up with their peers in learning. Among previous studies on education costing, the global estimate for low- and lower-middle income countries varies from $191 billion (UNESCO, 2015) to $311 billion (Education Commission, 2016) annually for the period 2015-2030.

Costing methodology and results

ESCAP Survey 2019 contains an extension of the UNESCO model to include upper-middle income countries and to cover a total of 43 countries in Asia and the Pacific. It finds that total education expenditures from pre-primary to upper-secondary will increase marginally from about $642 billion in 2015 to an annual average of $780 billion during the period 2016-2030. This reflects an increase in the size of the student population at all levels, except for primary, such that by 2030 there will be about 230 million more students compared with the number today, including 91 million more in upper-secondary education. South and South-West Asia contributes to much of this growth, due to its large pupil population and ambitious progression targets. At the same time, per pupil costs will increase, primarily reflecting income growth but also due to smaller class size or better-paid teachers in some countries.

Low- and lower-income countries in the region will see relatively large increases compared with today’s spending, with costs rising from $149 billion to $248 billion. However, for countries with limited financial resources, there are ways to achieve the education targets in a more gradual manner; for instance, while enhancing teacher training, class size could be reduced at a less ambitious pace, lowering the price tag by $61 billion per year.

Additionally, Survey 2019 extends the UNESCO model to include post-secondary education, both tertiary and non-tertiary, such as TVET, in line with targets 4.3 and 4.4. Indeed, post-secondary enrolment is expanding rapidly in the region and is vital for achieving Goal 8 on productivity growth and decent jobs as well as in supplying professionals, such as teachers, doctors, nurses and environmental engineers, needed for achieving various
Goals. Public and private spending on post-secondary education is estimated to rise from $716 billion in 2015 to an annual average of $1.3 trillion during the period 2016-2030. However, based on two alternative scenarios – slower progression in post-secondary enrolment and partial online provision of education – the price tag would decline by $236 billion and $219 billion per year, respectively.

Policy and financing options

The efficiency of monetary investment can be enhanced through numerous non-monetary initiatives in the education system, such as child-oriented teaching methods focused on skill formation, using languages that pupils understand, teachers making full use of class time and not shirking, and responsible and responsive school management. For instance, in India attendance-monitoring using tablets and mobile-based applications resulted in a lower teacher absenteeism rate and improved outcomes in student performance (Kedia, 2018). Such factors will prove to be vital for monetary investment to contribute to achieving good-quality and equitable education for all. Moreover, strengthening expenditure efficiency will require attention to both quality and equity (see box below).

In general, countries already spending 6 per cent of GDP or more on education could absorb the additional needs within the existing education budget, but others would need to meet the gap through budgetary reallocation from other sectors and/or overall increase in the government budget backed by higher tax revenues. The above model places a cap on government and household expenditures,

Box 1. It’s time people learned

Significant savings could be achieved through greater emphasis on education quality and outcomes, and through better allocation of educational resources to target vulnerable groups. Globally, for instance, in UNESCO (2014), it was estimated in 2014 that $129 billion was wasted annually due to the disconnect between schooling years and acquisition of basic skills alone.

Using an efficiency frontier approach, the chapter finds that Asia-Pacific developing countries on average could save more than 30 per cent through efficiency gains without compromising on education performance. The efficiency gaps could be even greater across individual countries. Pakistan, for instance, spends 20 per cent more than Tajikistan in per capita public education expenditure, but underperforms Tajikistan by a significant margin in all the five indicators on education coverage and quality (see table below). Pakistan could save close to 80 per cent of its current education spending to achieve the same results if it were to achieve the same efficiency level of its best performing peers.

Efficiency scores on public spending for education, in selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Input efficiency (percentage)</th>
<th>Primary education enrolment, net (percentage)</th>
<th>Secondary education enrolment, gross (percentage)</th>
<th>Quality of the education system, 1-7 (best)</th>
<th>Quality of primary education, 1-7 (best)</th>
<th>Quality of math and science education, 1-7 (best)</th>
<th>Public education spending per capita (in PPP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>56</td>
<td>91.6</td>
<td>56.2</td>
<td>3.4</td>
<td>3.0</td>
<td>3.3</td>
<td>57.4</td>
</tr>
<tr>
<td>Myanmar</td>
<td>38</td>
<td>90.8</td>
<td>51.6</td>
<td>2.6</td>
<td>2.3</td>
<td>2.7</td>
<td>75.9</td>
</tr>
<tr>
<td>Nepal</td>
<td>99</td>
<td>97.1</td>
<td>62.8</td>
<td>3.6</td>
<td>3.6</td>
<td>3.8</td>
<td>80.0</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>100</td>
<td>97.3</td>
<td>87.4</td>
<td>4.0</td>
<td>4.0</td>
<td>3.9</td>
<td>92.5</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>58</td>
<td>95.7</td>
<td>52.4</td>
<td>3.9</td>
<td>3.6</td>
<td>3.7</td>
<td>102.3</td>
</tr>
<tr>
<td>Pakistan</td>
<td>21</td>
<td>72.7</td>
<td>39.2</td>
<td>3.6</td>
<td>3.0</td>
<td>3.5</td>
<td>112.4</td>
</tr>
<tr>
<td>Philippines</td>
<td>100</td>
<td>91.7</td>
<td>86.2</td>
<td>4.4</td>
<td>4.0</td>
<td>4.0</td>
<td>141.6</td>
</tr>
<tr>
<td>India</td>
<td>81</td>
<td>92.9</td>
<td>68.6</td>
<td>4.4</td>
<td>4.1</td>
<td>4.5</td>
<td>168.9</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>59</td>
<td>91.5</td>
<td>89.5</td>
<td>3.0</td>
<td>3.1</td>
<td>3.0</td>
<td>187.0</td>
</tr>
</tbody>
</table>

Strengthening teaching quality and teacher training is key to achieving better educational results. The Asia-Pacific region significantly increased education access and average schooling years over the past several decades, but quality remains an issue. As of today, 92 million children in the region fail to obtain basic literacy and numerical skills even after completing primary school (World Bank, 2018a). In South Asia, it has been estimated that only one third of children reaching grade 4 were able to read basic texts compared with 96 per cent in developed regions (UNESCO, 2014).
Access to and quality of education should and can be achieved simultaneously. Setting up proper teacher governance mechanisms to address problems of misconduct, such as absenteeism, putting in place performance benchmarks and well-designed incentive schemes for teachers, and prioritizing teacher training to ensure that teachers themselves have the required skills are among the important steps towards achieving this objective. Education authorities would need to be held accountable in this process, while technology, especially digital connectivity, could be leveraged to make not only teaching but also teacher training more cost-effective.

Reorienting education spending and policies to prioritize vulnerable groups is another urgently needed measure for greater efficiency. In Asia and the Pacific, domestic migrants, especially rural-to-urban migrants, are a unique vulnerable group who are often excluded or neglected by public education systems. Rural-to-urban mobility restrictions have been a main source of barriers denying the migrant population access to urban schools and other education opportunities, resulting in significant disparities and inequality. In China, for instance, the majority of migrant children have often attended unauthorized informal migrant schools as an alternative (Han, 2004). In Viet Nam, the enrolment ratio to upper-secondary school of those with temporary status is only a third of the ratio of those with permanent status (World Bank and Viet Nam Academy of Social Sciences, 2016).

Even without explicit policy discrimination, domestic migrants remain susceptible to education disruptions caused by seasonal migration, child labour and workplace hazards, and often end up in slums where access to basic services, including education, is always a challenge. In Bangladesh, for instance, merely one quarter of slums were estimated to have a government school up to 2007 (UNESCO, 2019). Similar challenges also exist for children left behind, who are more likely to underperform vis-à-vis their peers in terms of cognitive ability and school achievement, mainly due to family separation and related mental health and social relationship problems (UNESCO, 2019).

Such regressive allocation of public education resources represents a huge drag on the pursuit of education targets. Although many fruitful reforms and proactive policy measures have been undertaken by Asia-Pacific countries in recent years, the misallocation inefficiency in public education spending remains to be fully addressed.

Endnotes

1 A total of 250 million children are not learning basic skills, even though half of them have spent at least four years in school.

2 Over the last 50 years, Asia-Pacific countries have converged to the global average of 8 years of schooling per capita, starting from an average of 1.3 years.

3 Extreme examples of such restrictions include two systems in the region: China's hukou (registered residency status of an individual) and Viet Nam's ho khau (household registration book), both of which were created during the command economy era to prevent voluntary domestic migration.

References
