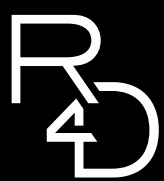




# Financing Upper Secondary Education: Unlocking 12 Years of Education for All



A study by Results for Development Institute,  
commissioned by the Malala Fund

## FOREWORD BY THE MALALA FUND

“Who knows how much brilliance the world was deprived of by millions of girls missing out on secondary education. Perhaps there was a transformative leader in that generation, an inspiring writer, a scientist who might solve the world’s most pressing problems. When I think of the unrealised potential, my sorrow knows no bounds.”

**MALALA YOUSAFZAI, TIME MAGAZINE, MARCH 2015**

Though we have seen impressive gains in access to education in the last 15 years, we know that millions have been left behind both inside and outside the classroom.

And yet a good quality education, from early childhood through upper secondary, is crucial to achieving the collective vision for a sustainable future set out in the draft sustainable development agenda AND the individual visions of a better future held by millions of girls around the world.

Girls like Sakina from Northern Nigeria, Amina from Nigeria, Mezon from Syria, and Tay Thi from Vietnam.

### **Girls like Malala.**

Girls have big dreams for their lives, no matter where they live. These dreams start and — sadly for millions — end with education. The poorest girls in the poorest countries get just three years of schooling. Over the past 15 years the international community has worked to get them six, then nine.

But this is still not enough. It is not enough to meet the challenge of empowering women and girls. It is not enough to realise the full ambition of the new sustainable development agenda. And it is not enough for the millions of girls demanding more for their lives.

Without fully funding universal access to 12 years of good quality primary and secondary education, in line with proposed Target 4.1 of the Sustainable Development Goals, the vision of the sustainable future to be agreed in September cannot be achieved and the world will be robbed of the tremendous potential of girls eager to learn and to lead.

More than this, we will continue to deny millions of girls their right to education.

Funding universal access to 12 years of education is not a choice for governments, donors and the international community; it is a commitment and an obligation that must be realised. Moreover, with strong political will, it is possible. The world does have the money to meet the projected US\$39 billion annual financing gap, the equivalent of just eight days of global military spending.

### **About the Malala Fund:**

Malala Fund is a non-profit organisation that empowers girls globally through education to achieve their potential and be agents of change in their communities. Co-founded in 2013 by student, education activist and Nobel Peace Prize Laureate Malala Yousafzai and her father and teacher Ziauddin Yousafzai, the Malala Fund invests in and advocates for girls’ secondary education and amplifies the voices of adolescent girls globally.

Please visit [www.malala.org](http://www.malala.org)

### **About Results for Development Institute:**

Results for Development Institute (R4D) is a non-profit organisation whose mission is to unlock solutions to tough development challenges that prevent people in low and middle income countries from realising their full potential. Using multiple approaches in multiple sectors, including Global Education, Global Health, Governance, and Market Dynamics, R4D supports the discovery and implementation of new ideas for reducing poverty and improving lives around the world. Its Global Education programme focuses particularly on finance, innovations, out of school children, secondary education, early childhood development and programme evaluation.

Please visit: [www.r4d.org](http://www.r4d.org)

The Malala Fund commissioned this study to begin to identify how 12 years of universal fee-free primary and secondary education — estimated to cost an average of US\$340 billion a year between 2015–2030<sup>1</sup> — might be funded by 2030, whilst supporting greater equity and quality at all levels.

The study arose from Malala’s concern that financing discussions around the Sustainable Development Goals could serve to lower the ambition for education to just nine years for all for the next 15 years, despite commitments to a full 12 years in both the proposed post-2015 education targets and the recently agreed Incheon Declaration. Certainly, no parent in the summit halls and capitals where these decisions will be taken would accept nine years of education for their own child.

### The study makes four things clear:

- 1. Achieving universal fee-free access through upper secondary level is only possible with significant increases in funding** — More money needs to be found if we are to achieve the ambition of universal fee-free secondary education. Leveraging additional domestic resources for primary and secondary education, reversing declining aid to education from donors to fill the projected US\$39 billion annual financing gap, and mobilising new sources of funding will all be critical to making this ambition a reality by 2030.
- 2. The poorest countries face the greatest challenge** — Universalising fee-free upper secondary education places the highest burden on the poorest countries, which will need substantial increases in external funding to meet this ambition. According to the Education for All Global Monitoring Report, 42% of the cost of basic and secondary education will need to be externally financed in low income countries, compared to just 6% for lower middle income countries. This is where aid money will make the greatest difference. The needs in fragile and conflict-affected countries are particularly acute and under-served.
- 3. Careful planning and a phased approach is needed to maintain equity and quality at lower levels of education** — Equitable approaches to providing quality education for all should not focus on higher levels of education at the expense of efforts to improve equitable, good quality provision at lower levels. A phased approach to providing universal upper secondary education, starting with targeted support for the most marginalised girls, may be most appropriate to mitigate equity and quality concerns.
- 4. Political will is the critical success factor** — The over-riding message from this study — illustrated by country case studies such as Cuba, Sri Lanka and Kenya — is that government commitment and political will to expand access and improve quality of education, coupled with careful planning and implementation, is the critical success factor for realising the right to primary and secondary education for all.

The ambition articulated in proposed Target 4.1 of the Sustainable Development Goals, that by 2030 all girls and boys should complete free, equitable and quality primary and secondary education, is the right one for young people everywhere. But, without strong political commitment and significant increases in funding it could be another 100 years before all girls in sub-Saharan Africa have the opportunity to complete 12 years of education.

This study shows how additional finances could be mobilised from a variety of sources if the will exists to do so. And it does not provide an exhaustive list. Many more options should be explored if we are serious about making 12 years of primary and secondary education available to all. World leaders and the education sector must start to think more like venture capitalists and entrepreneurs—it’s time we used every creative solution and innovative mechanism available to finance this cause.

World leaders already know the value of education—they send their own children to good schools. Funding cannot be an excuse to deny this opportunity to the millions who are currently missing out. The money is available.

The challenge is significant but, every day, girls like Malala, Sakina, Amina, Mezon and Tay Thi go to incredible lengths in order to attend and complete school. Malala calls these girls her sisters and we should too.

We must join them in this campaign. Our hope, at the Malala Fund, is that this study will start the conversation of how we might best do so. We hope you will join us.

**Meighan Stone**  
**President, Malala Fund**

1. This figure includes a year of pre-primary education.

## MALALA FUND RECOMMENDATIONS

Based on the analysis in this study, the Malala Fund has identified five key recommendations for meeting the 12-year ambition:

### 1. Governments should make phased, implementable plans aimed at achieving the ambition of access to 12 years of free, good quality primary and secondary education for all by 2030, starting with the most marginalised girls.

Commitments to provide universal primary and secondary education should be accompanied by concrete implementation plans identifying how a phased approach to the introduction of fee-free provision of secondary education could support the progressive realisation of a full course of free secondary education being available to all by 2030, whilst mitigating against any negative impacts on equity and quality at lower levels.

These plans should identify interim “stepping stone” targets to serve as benchmarks of progress between now and 2030, ensuring that every successive government is held accountable for achieving them. These interim targets, set at stages over the 2015–2030 period, should identify desired outcomes for participation and learning across basic and upper secondary education for those who have been traditionally left behind, especially the poorest girls. This would lead to the introduction of targeted measures towards these groups.

National plans of action should be complemented by a global roadmap to achieve the ambition of proposed SDG Target 4.1, particularly with regards to delivering more and better external funding for education over the period 2015–2030.

### 2. Increased global financing efforts should be supported by an expanded Global Partnership for Education (GPE), with the mandate to support resource mobilisation and national action on upper secondary.

The core commitment of the GPE is to basic education. An expansion of its scope to fund upper secondary education will be needed to help mobilise and coordinate the additional funding needed to support 12 years of quality primary and secondary education for all, building on a year of pre-primary. This expansion should be in support of nationally driven education sector plans which focus on the full course of education from pre-primary to upper secondary.

### 3. Low and lower middle income countries must increase the size of their overall budget and allocate a minimum of 20% of their public budgets to education.

Low income countries will, on average, need to pay around 6.5% of GDP, and lower middle income countries around 4.3% of GDP, for universal fee-free education through upper secondary level. Much of this cost can be met by both expanding the size of overall budgets and allocating a greater portion to education.

Revenue generated from taxes remains inadequate in many low income countries, where it accounts for just 10–14% of GDP, compared to tax-to-GDP ratios of 20–30% in high income countries. Expanding the tax base fairly is a crucial strategy for increasing the size of national budgets and, with this, funding for education. But countries also need to prioritise education more in their budgets. Governments in low income countries could raise an additional US\$15 billion for education just by increasing the share of the national budget for education to 20%.<sup>2</sup>

According to the Education For All Global Monitoring Report, if governments in low and middle income countries “modestly increased” their tax-raising efforts and allocated 20% of their public budgets to education, they could increase the average share of GDP spent on education from 3% to 6% by 2015.<sup>3</sup>

### 4. Traditional and non-traditional bilateral donors must commit to meeting a target of 0.7% of Gross National Income in Official Development Assistance and increasing the share of aid to basic and secondary education to at least 10% of total aid budgets.

In 2005, 15 Member States<sup>4</sup> of the European Union (the EU-15) pledged to increase ODA to 0.7% of GNI by 2015. Only four have done so.<sup>5</sup> If all the EU-15 donors met the 0.7% target in 2015 (or 1.0% and above in the case of Denmark, Luxembourg and Sweden) they would raise an additional US\$1.5 billion for basic and secondary education.<sup>6</sup>

However, if EU-15 donors met the 0.7% target, and education was prioritised in aid budgets — with at least 10% of total aid directed to basic and secondary education for low and lower middle income countries — an additional **US\$7.7 billion** could be raised in 2015.

This is in addition to the US\$3.2 billion expected should trends in aid to education stay the same and countries meet projected ODA/GNI ratios in 2015. **This totals a possible US\$10.9 billion in education aid, representing a quarter of the annual financing gap.**

Evidently, filling one quarter of the gap is not enough. However, the responsibility to fill this gap does not just fall on the EU-15 donors: the United States, Canada and other donors who have not reaffirmed their commitment to the 0.7% target must also contribute. New donors, including the BRICS and Arab States, also have a role to play.

A further **US\$20.3 billion — around half the annual financing gap** — could be raised annually if seven non DAC EU-15 donors<sup>7</sup> make and meet this commitment to 0.7% (or in the case of Norway 1.0%<sup>8</sup>) of GNI in ODA and re-prioritise 10% of total ODA to basic and secondary education for low and lower middle income countries. This represents an US\$18.6 billion increase to the US\$1.7 billion expected from these donors in 2015 should trends in aid to education remain the same and countries meet projected ODA/GNI ratios.

2. Based on findings in Education For All Global Monitoring Report. 2013. Education for All is affordable — by 2015 and beyond. Policy Paper 06. February 2013.

3. Education For All Global Monitoring Report. 2014. Teaching and Learning: Achieving Quality Education for All. Paris: UNESCO.

4. These are: Sweden, Luxembourg, Denmark, UK, Netherlands, Finland, Belgium, Ireland, France, Germany, Austria, Portugal, Spain, Italy, Greece.

5. These are: Sweden, Luxembourg, Denmark, UK.

6. Based on previous trends in share of ODA allocated to basic and secondary education.

7. These are: US, Japan, Korea, Australia, Canada, Norway, Switzerland.

8. This is based on ODA/GNI ratios for Norway from 2014 levels.



Commitments to 0.7% of GNI in ODA by the emerging BRICS and Arab donors,<sup>9</sup> with just 10% of total ODA allocated to basic and secondary education for low and lower middle income countries, could raise an additional **US\$13.3 billion**,<sup>10</sup> **closing the annual financing gap completely.**

An indicative benchmark of 70–80% of education aid<sup>11</sup> to support pre-primary through upper secondary education could be helpful in directing and monitoring donor spending in support of the 12-year ambition. A number of donor countries disproportionately target education aid towards post-secondary education, which is often spent in donor countries through post-secondary scholarships and in-country student costs. Reallocating some of this spending — estimated to be about one-quarter of total direct aid to education<sup>12</sup> — towards lower levels of education could also increase the funding available for basic and secondary education.

#### 5. Every effort must be made to identify and capitalise on new sources of funding.

A number of new financing mechanisms for education, with the potential to generate significant funds, merit further investigation. For example, it is estimated that an International Finance Facility for Education, based on similar initiatives in the health sector, has the potential to raise US\$3-4 billion a year; and the introduction of mandatory corporate responsibility schemes in India is estimated to generate up to US\$2 billion in additional revenues toward the country's public services.

9. These are: Brazil, Russia, India, China, South Africa, Qatar, Saudi Arabia, United Arab Emirates, Kuwait.

10. Based on the projected size of their economies in 2015 multiplied by 0.7% (the overall target for ODA) multiplied by 10% (assumed as the minimum necessary to support basic and secondary education for low and lower middle income countries).

11. This builds on the EFA Global Monitoring Report's recommendation that at least 50% of all education aid be channelled to basic education.

12. Education For All Global Monitoring Report. 2013. Education for All is affordable — by 2015 and beyond. Policy Paper 06. February 2013.



Malala Yousafzai walks to a meeting with a member of the US Senate in Washington on June 23, 2015 to advocate for girls' education. Photo credit: Malala Fund





## Sakina, The Future Doctor

**A bright mind, a strong will and 12 years of education helped to create a valued community health worker in Northern Nigeria. Sakina hopes to go on to become a doctor.**

Most girls in her community are unable to continue their schooling for all 12 years due to school fees and cultural barriers. Sakina was only able to continue because of the help of a nonprofit, the Centre for Girls' Education. We want more Sakinas. We need more bright young girls on the path to becoming community health workers and doctors if we are to achieve development goals. This is one girl's story, but it could be many more.



## Amina, The Future Advocate

**Amina speaks to a group of eager girls and their parents. She is telling her story — beaming with pride while she recounts how her parents supported her desire for education, even though she faced many dangers and barriers. Not only has she completed secondary school, she is now attending college. Amina dreams of the day when she will not be the exception.**

She is spreading the +12 message to her community and someday, she will spread it to other girls around Africa and the world.





Mezon  
**+12**  
Journalist

Girls  
**+12**  
Powerful Voices

## Mezon, The Future Journalist

Now in the 11th grade, Mezon is referred to as the “Malala” of the Syrian refugees because of her passion for education. Mezon is also a storyteller who knows that words can bring change and light in the darkness of conflict.

Mezon feels a responsibility towards her community to provide guidance to girls and parents who believe that early marriage, instead of education, is the way to a better life. She hopes to tell empowering stories and stand up for girls’ rights as a journalist.



Girls  
**+12**  
Impact

Tay Thi  
**+12**  
Teacher

## Tay Thi, The Future Teacher

Tay Thi stands before a classroom of eager students. With each question she asks, hands shoot up. They love their teacher and want to show their knowledge, and to show that they could be like her.

She is determined. Her parents burned her books to stop her from going to school, but she kept going anyway. She worked tirelessly to earn enough to pay for her own studies.

With the support of the NGO Room to Read, Tay Thi will soon graduate from college and her dream of becoming a teacher is almost a reality.



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# LIST OF ACRONYMS

<b>ADB</b>	Asian Development Bank
<b>AfDB</b>	African Development Bank
<b>BADEA</b>	Arab Bank for Economic Development in Africa
<b>CDF</b>	Constituency Development Fund
<b>CERF</b>	Central Emergency Response Fund
<b>CHFs</b>	Common Humanitarian Funds
<b>CSR</b>	Corporate Social Responsibility
<b>DAC</b>	Development Assistance Committee of the OECD
<b>ERFs</b>	Emergency Response Funds
<b>EU</b>	European Union
<b>FDSE</b>	Free Day Secondary Education
<b>FPE</b>	Free Primary Education
<b>FTI/EFA</b>	Fast Track Initiative for Education For All
<b>GCE O Level</b>	General Certificate of Education Ordinary Level
<b>GCI</b>	Global Competitiveness Index
<b>GDP</b>	Gross Domestic Product
<b>GER</b>	Gross Enrollment Ratio
<b>GER2</b>	Secondary Gross Enrollment Ratio
<b>GFE</b>	Global Fund for Education
<b>GMR</b>	Global Monitoring Report
<b>GNI</b>	Gross National Income
<b>GNP</b>	Gross National Product
<b>GPE</b>	Global Partnership for Education
<b>HDI</b>	Human Development Index
<b>HSEP</b>	High School Equalisation Policy
<b>IADB</b>	Inter-American Development Bank
<b>IASC</b>	Inter-Agency Standing Committee
<b>IDA</b>	International Development Association
<b>IDF</b>	International Development Finance
<b>IFAD</b>	International Fund for Agricultural Development

<b>INEE</b>	Inter-Agency Network for Education in Emergencies
<b>JICA</b>	Japan International Cooperation Agency
<b>LICs</b>	Low income Countries
<b>LMICs</b>	Lower middle income Countries
<b>MDB</b>	Multilateral Development Banks
<b>MDGs</b>	Millennium Development Goals
<b>MEST</b>	Ministry of Education, Science and Technology
<b>MICs</b>	Middle income Countries
<b>MOOCs</b>	Massive Open Online Courses
<b>NER</b>	Net Enrollment Rates
<b>ODA</b>	Official Development Assistance
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>OPEC</b>	Organisation of the Petroleum Exporting Countries
<b>PISA</b>	Programme for International Student Assessment
<b>REACH</b>	Results in Education for All Children
<b>SAQMEQ</b>	Southern and Eastern Africa Consortium for Monitoring Educational Quality
<b>SDGs</b>	Sustainable Development Goals
<b>SEIA</b>	Secondary Education in Africa
<b>TVET</b>	Technical Vocational Education and Training
<b>UIS</b>	UNESCO Institute for Statistics
<b>UMICs</b>	Upper middle income Countries
<b>UN</b>	United Nations
<b>UNESCO</b>	UN Educational, Scientific and Cultural Organisation
<b>UNICEF</b>	UN Children's Fund
<b>USS</b>	Upper Secondary School
<b>VAT</b>	Value Added Tax





## EXECUTIVE SUMMARY

2015 will mark the launch of the Sustainable Development Goals (SDGs), an ambitious multi-stakeholder effort that builds upon the Millennium Development Goals (MDGs) to outline a set of global outcomes and targets for the next 15 years. The proposed Goal 4, relating to equitable and inclusive education and lifelong learning, is expansive, calling for access to early childhood education and the completion of free, equitable, and quality primary and secondary education for all boys and girls.<sup>13</sup> The Incheon Declaration adopted at the 2015 World Education Forum also supports this message, calling for 12 years of free, publicly funded, equitable quality primary and secondary education.<sup>14</sup> Lower secondary is already increasingly seen in many countries as an extension to primary education, and as part of a compulsory 9-year cycle of basic schooling. The inclusion of upper secondary education in the education agenda is forward-looking, and encourages the global community to set its ambitions higher.

This study from the Results for Development Institute (R4D), commissioned by the Malala Fund, builds on the analysis by the Education for All Global Monitoring Report (GMR) to shed further light on the cost of providing fee-free access to both upper and lower secondary school by 2030. Through interviews with 11 expert stakeholders and a literature review, this technical study explores the cost of universal upper secondary education, lessons that can be drawn from different countries that have embarked on this process, and options for financing its expansion.

The analysis intends to inform the key topics being explored in the run-up to the UN Summit in September 2015 to adopt the post-2015 development agenda, particularly related to the themes of financing strategies for development and education. Four key findings related to fee-free universalisation of upper secondary education are below, with each explored in more depth in the study:

### I. Achieving fee-free education will raise the share of education to between 4.20% – 6.91% of GDP over 2015–2030.

13. United Nations. 2 June 2015. *Zero Draft of the Outcome Document for the UN Summit to Adopt the Post-2015 Development Agenda*. <https://sustainabledevelopment.un.org/content/documents/7261Post-2015%20Summit%20-%202020June%202015.pdf>

14. World Education Forum. 2015. *Incheon Declaration*. Education 2030: Towards inclusive and equitable quality education and lifelong learning for all. <https://en.unesco.org/world-education-forum-2015/incheon-declaration>.



- **The latest estimates from the Education for All Global Monitoring Report (GMR) indicate that the average annual total cost of achieving universal upper secondary education is US\$97 billion between 2015 and 2030 in low and lower middle income countries**, with the cumulative total cost of universal pre-primary, primary, and lower and upper secondary completion at US\$340 billion, or 5.23% of GDP.
- **The model builds on the notion that universal primary and secondary education become more affordable as countries develop.** In turn, country experience has shown that investment in education can be an engine for further growth, creating a virtuous cycle.
- **Our model estimates that achieving fee-free access at all levels of education in low and lower middle income countries will result in education requiring between 4.20% – 6.91% of GDP over 2015–2030**, based on three alternative scenarios that consider variations in access, technical track enrollment, and fertility shifts against the base model. The cost-saving effect of lower fertility is particularly significant, underlining the burden placed by the demographic bulge.

II. Cost projections of fee-free education confirm that universal fee-free access across pre-primary, primary, lower secondary, and upper secondary school place a significant burden on Category 3 and 4 countries. Substantial increases in external financing will be needed to support these countries to gradually provide greater access to fee-free education at post-primary levels.

- **The study distinguishes between four broad categories of countries, each differing by population growth rates, GDP growth, quality and access to primary education, and the political context.** Category 1 countries tend to be well-performing countries, falling near the top of the range for learning outcomes; Categories 2–3 are those countries exhibiting a high quality of education at the primary and lower secondary levels, and are also making progress in expanding reach and quality at the upper secondary level; and Category 4 tend to be fragile and/or conflict-affected states, with low levels of primary school enrollment rates and learning.
- Upper secondary costs in lower middle income countries are projected by the GMR to be US\$83 billion, compared to US\$14 billion in low income countries. The relatively low costs in low income countries mask large projected budget shortfalls: it has been estimated that **42% of the cost in low income countries would need to be financed externally, compared to just 6% for lower middle income countries.**<sup>15</sup>

- **Focusing external funding on low income countries would make a relatively larger difference, as compared to countries with higher incomes.** Many countries in Categories 3 and 4 — in contrast to Category 1 and 2 countries — may not have the financing required to effectively and equitably implement universal access. Both the Revised Draft Outcome Document for the Third International Conference on Financing for Development and the Incheon Declaration call for a renewed commitment to allocate 0.7% of GNI in ODA to developing countries. As of 2014, only five DAC countries had reached the 0.7% target adopted by the UN in 1970.
- Many in the international aid community have lauded the instrumental role the Global Partnership for Education has played in coordinating donor efforts and expanding primary education access and equity. **With the shifting focus beyond the primary level, there are now calls for the GPE's mandate to expand beyond primary education into the secondary level.**<sup>16</sup>

III. Significant care must be taken to ensure inequity is not exacerbated by shifting resources away from ensuring access and quality learning outcomes at lower levels of education.

- **Many country experiences in upper secondary education universalisation show that four foundational and contextual factors are often critical for success:** (i) political stability, (ii) low and stable levels of population growth, (iii) domestic mechanisms for sustainable financing, and (iv) high rates of access and learning at pre-secondary levels.<sup>17</sup>
- **There are four possible detrimental impacts associated with implementing fee-free upper secondary policies. Thoughtful, well-planned mitigation measures need to be implemented to counter these concerns, with a phased fee-free approach providing a potential path for upper secondary universalisation. Importantly, government commitment and political will to expand access and quality is crucial.**
  - › Fee-free provision of upper secondary education without adequate planning of physical infrastructure and stock of well-trained teachers can lead to overcrowded classrooms and a drop in the quality of education.
  - › The quality of education and long-term value of upper secondary education is influenced by the relevance of the curricula. Outdated curricula at the upper secondary level can lead to a skills mismatch and high levels of youth unemployment.

15. UNESCO. 2015b. *Pricing the right to education: The cost of reaching new targets by 2030*. <http://en.unesco.org/gem-report/node/819#sthash.DgM6vCXd.dpuf>

16. This includes calls from the Sustainable Development Solutions Network and the Revised Draft Outcome Document for the Third International Conference on Financing for Development.

17. The factors are not weighted and are in no particular order.



- › Policies to promote equity are crucial in order to ensure all demographic groups have access to quality education. Targeted demand side interventions, gender-focused policies, and broad systems reforms may be needed to mitigate equity concerns.
- › Learning achievements at the upper secondary level can only be as good as the quality of learning that takes place at the lower levels, with experience from primary level universalisation showing that a boost in access does not necessarily lead to learning.

#### IV. A phased approach to fee-free upper secondary education, first targeting girls and other marginalised youth, may be the most appropriate strategy to universalise access to education at this level.

- **A uniform strategy for implementing and financing fee-free upper secondary education is neither viable nor appropriate across all countries.** Upper secondary school financing options may vary depending upon the characteristics and context of the country.
- **Given that public sector expenditure is the key source of financing in education, financing strategies will have to mobilise and leverage domestic resources, as well as better harness and catalyse private sector sources.** The strategies examine mechanisms to mobilise the various categories of financing as described in the Revised Draft Outcome Document for the Third International Conference on Financing for Development, including domestic public resources, domestic and international private finance, and international public finance.
- **Countries may exhibit characteristics of multiple categories, and so financing options may be adapted with varying levels of targeting and fee-free prioritisation.** Additionally, the categories posed are dynamic, and many countries could shift between categories within the next 15 years. Financing strategies in any of these categories must also go hand-in-hand with reforms to increase the cost effectiveness of schools and reduce per pupil costs, particularly as costs are disproportionately high at the upper secondary level, compared to the lower levels.
- **A phased, incremental approach to fee-free upper secondary, coupled with measures to reduce or mitigate indirect or ancillary school-related costs, will likely be most appropriate.** Equity concerns could be mitigated by appropriate targeting, and a planned process would ensure that domestic financial resources are not unduly diverted from basic education. The timespan or scope of phasing may be determined by country context, priorities, and financial resources available.





# #1

## I. INTRODUCTION AND METHODOLOGY

The purpose of this technical paper is to investigate the broad ambition of the draft Sustainable Development Goals (SDGs) to provide free secondary education for all children by 2030. While the SDGs call for all children to complete primary and secondary education by 2030, the research presented specifically considers universal access to 12 years of fee-free education. With 58 million children still out of school at the primary level, the SDG ambition of completion of a full 12 year cycle of primary and secondary education for all children by 2030 may not be feasible.<sup>18</sup> Indeed, universal completion of upper secondary is not yet even fully seen in high income countries, with only 81% of youth between 20–24 years in 28 EU countries successfully completing upper secondary or tertiary education in 2013.<sup>19</sup> Projections based on existing data show that universal upper secondary education completion in low and middle income countries is unlikely to be achieved until after 2100.<sup>20</sup> The analysis thus identifies the approximate range of the global cost for achieving universal upper secondary school (USS) access and delves into lessons learned from country experiences in providing universal fee-free secondary education. The study explores financing mechanisms and tactics, and also investigates strategies to mitigate negative impacts of fee-free upper secondary education on equity and quality at the lower levels. Three countries are studied in depth, namely Kenya, Republic of Korea<sup>21</sup>, and Sri Lanka. Lastly, recommendations and options for achieving fee-free upper secondary education are proposed, with an assessment of different financing and institutional arrangement options.

The study utilises a combination of both primary and secondary research. A thorough literature review was conducted to better understand the key debates in this area. Recent analysis and financing estimates from the Education for All Global Monitoring Report (GMR) prepared in advance of the Third International Conference on Financing for Development (July 2015), the Oslo Summit on Education for Development (July 2015), and the adoption of the post-2015 development agenda (September 2015) were also studied. The countries selected for in-depth case studies were chosen for their ability to provide contrasting experiences and lessons on implementing fee-free universal secondary education. Key informant interviews were also conducted with 11 stakeholders, including former policymakers, senior level decision makers at organisations focused on education (specifically girls' education), and experts in education financing (Annex 7). In order to ensure consistency in the interviews, an interview protocol was developed to serve as a broad guide. The areas covered in the interviews included pre-requisites for fee-free secondary education, financing mechanisms for upper secondary education, and methods to mitigate unintended consequences around equity and quality.

18. UNESCO. UIS database. Accessed June 2015. <http://data.uis.unesco.org/>

19. Eurostat. *Upper secondary or tertiary educational attainment, age group 20–24 by sex*. Accessed June 2015. <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tps00186&plugin=1>

20. UNESCO. 2015c. *How long will it take to achieve universal primary and secondary education?* Education for All Global Monitoring Report. May 2015 <http://unesdoc.unesco.org/images/0023/002330/233028E.pdf>

21. The Republic of Korea is referred to thereafter as South Korea.

# #2

## 2. UNIVERSAL SECONDARY EDUCATION: THE CONTEXT

### INTRODUCTION

On the heels of considerable gains in universalising primary education, the international community is now shaping the set of globally shared education goals for the next 15 years, with considerable interest shown in expanding priority investments beyond primary education to other levels of the education system, including secondary education. Notably, Goal 4.1 proposed in the Zero Draft of the Outcome Document for the UN Summit to Adopt the Post-2015 Development Agenda incorporates secondary education, stating: “By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.” Secondary education provision is also implicitly linked to a number of other SDG goals,<sup>22</sup> making it a timely area of focus at the forefront of attention in the global education community.<sup>23</sup> The Incheon Declaration adopted at the 2015 World Education Forum also supports this message, calling for “the provision of 12 years of free, publicly funded, equitable quality primary and secondary education, of which at least nine years are compulsory.”<sup>24</sup> The inclusion of the term “free” is particularly significant, as it reaffirms a commitment to mitigating the financial burden on households and ensuring that the full cycle of education — including an additional one-year of pre-primary education — is available to all. This is in line with Article 13 of the UN International Covenant on Economic, Social and Cultural Rights (1966) which states, “Secondary education in its different forms, including technical and vocational secondary education, shall be made generally available and accessible to all by every appropriate means, and in particular by the progressive introduction of free education,” which also reaffirms the human rights obligation to fee-free provision of secondary education.<sup>25</sup>

“No country can develop if its citizens only attend primary school.”

EXPERT STAKEHOLDER

22. Specifically, goals 4.3, 4.4, 4.5, 4.b, 5, 8, 8.1, 8.2.

23. United Nations. 2 June 2015. *Zero Draft of the Outcome Document for the UN Summit to Adopt the Post-2015 Development Agenda*. <https://sustainabledevelopment.un.org/content/documents/7261Post-2015%20Summit%20-%202%20June%202015.pdf>

24. World Education Forum. 2015. *Incheon Declaration*. Education 2030: Towards inclusive and

equitable quality education and lifelong learning for all. <https://en.unesco.org/world-education-forum-2015/incheon-declaration>.

25. United Nations. *International Covenant on Economic, Social and Cultural Rights*. United Nations Human Rights. 1996–2015. Office of the High Commissioner for Human Rights.



The growing focus on universalising secondary education at both the upper and lower level has raised a number of questions related to its feasibility and financing. Central questions in this debate include the following:<sup>26</sup> Should secondary education be universal and fee-free education, as has been pursued at the basic levels of education? Given the wide spectrum of secondary education types, are governments able — and should they have the responsibility to — provide all types of secondary education? To what extent should private providers be leveraged for provision of secondary education? How should scarce resources be allocated between efforts to universalise secondary education versus efforts to universalise — and improve levels of learning in — primary education? Do additional resources to finance upper secondary education exist? All of these considerations are further discussed in Section IV and a range of external and public financing options for upper secondary education are explored further in Section V.

Given this increased focus, it may be instructive to revisit the benefits of quality secondary education and of adopting a perspective that considers post-primary schooling. Secondary education has been hailed as one of the highest-return investments a low income country can make and cited as a key factor in the growth of the fastest-growing economies of the past 25 years.<sup>27</sup> While primary schooling is essential to human development, studies show that the major benefits of education — including skill and character development, economic growth at the individual and country levels, poverty reduction, and political stability<sup>28</sup> — become visible only after a critical threshold at the secondary level is reached.<sup>29</sup> Thus, a holistic focus across the education hierarchy is essential to realising the full promises education holds for countries and individuals. These benefits are specifically a result of the prominent role secondary education plays in shaping adolescent values and judgment, equipping children with the ability to compete in an increasingly knowledge-based economy, while serving as the critical node between primary and tertiary.<sup>30</sup> To achieve these benefits at the country level, widespread and equitable access to both boys and girls is essential, as is ensuring high quality provision resulting in relevant learning outcomes.<sup>31</sup> Strategies to achieve these factors at the upper secondary level will be examined closely in this study.

26. These questions draw heavily upon interviews conducted with Key Informants (Annex 7).

27. Fredriksen, B., and Fossberg, C. 2014. *The Case for Investing in Secondary Education in Sub-Saharan Africa (SSA): Challenges and Opportunities*. International Review of Education, Vol 60, Issue 2. May 2014. pp. 235–259.

28. Drawn from Key Informants interviews (Annex 7) and Jacob, J.W., and S. Lehner. *EQUIP2 State-of-the-Art Knowledge in Education: Secondary Education*. 2011. <http://www.fhi360.org/sites/default/files/media/documents/EQUIP2%20SOAK%20-%20Secondary%20Education.pdf>

29. Fredriksen, B., and Fossberg, C. 2014.

30. Ibid.

31. Drawn from Key Informants interviews (Annex 7).

## THE SIZE AND SHAPE OF SECONDARY EDUCATION

Globally, the vast majority of children transition from primary to secondary general education, with a roughly even breakdown between boys (94%) and girls (95%). However, this global figure masks regional differences, with transition rates varying by income, geography, and gender. Progression to general secondary education in 2011 was 99% in high income countries compared to just 75% in low income ones, while the region with the lowest transition rate was Sub-Saharan Africa at 70%.<sup>32</sup>

Sub-Saharan Africa has the lowest gross enrollment ratio (GER) at just 41%, albeit a sharp improvement from 25% in 1999. Enrollment rates are higher at the lower secondary level (50%) than at the upper secondary level (32%), where the GER for girls is just 28%.

**SOURCE: UNESCO. 2015A.**

Worldwide, total enrollment in secondary school stands at 552 million in 2012, up from 435 million in 1999. Although the Gross Enrollment Ratio (GER) in secondary was 73% in 2012, an improvement from 59% in 1999, 63 million adolescents of lower secondary age were still out of school.<sup>33</sup> Differences in global GERs between lower and upper secondary is illustrative of the challenge in accessing upper secondary school, with a GER of 85% at the lower secondary level (split roughly equally between male and female) compared against 62% at the upper level. The net enrollment rate stood at 65% worldwide at the secondary level, and was at just 33% in Sub-Saharan Africa, indicating patterns of repetition and overage students.<sup>34</sup> However, as with the transition rate indicators, the global median masks regional and income differences between countries, as well as gender differences (Annex 1). Importantly, GER improvements also mask completion rates: the 2013/4 EFA GMR shows that while disadvantaged girls in low and lower middle income countries have increased their access to lower secondary school over the course of the first decade of the 21st century, completion has stagnated at under 20%.<sup>35</sup>

32. UNESCO. 2015a. *Education for All 2000–2015: Achievements and Challenges*. Education for All Global Monitoring Report. Paris: UNESCO. <http://unesdoc.unesco.org/images/0023/002322/232205e.pdf>

33. Ibid.

34. UNESCO. UIS database. Accessed June 2015.

35. UNESCO. 2014b. *Teaching and Learning — Achieving quality for all. 2013–2014*. EFA Global Monitoring Report. Paris: UNESCO. Paris: UNESCO. Figure 1.8.3, page 104.

## THE STRUCTURE OF SECONDARY EDUCATION

Nearly all countries distinguish between lower (junior) and upper (senior) levels of secondary education although the structure and years of secondary education vary. For example, in Sub-Saharan Africa, junior and senior secondary education ranges from 2 to 4 years at each level. Junior secondary is increasingly seen as the “second stage” of basic education, although this also varies by country: “[In some cases] it is provided in the same institutions and is often taught by the same teachers as primary education. In others, provision is clearly distinct from primary education, with pupils sharing the same schools with senior secondary students who attend specialised classes taught by teachers with higher qualifications.”<sup>36</sup> Increasingly, countries are going beyond universal primary education to designate lower secondary education as part of basic compulsory education.<sup>37</sup> This designation may lead to increased transition rates, particularly for girls and other marginalised youth. The vast majority of low and middle-income countries have not only incorporated free lower secondary education into their national systems (although households may still face related costs, as discussed later in this section), but have made it compulsory.<sup>38</sup> The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda called for every child to have access to lower secondary education, citing research that shows that merging primary and lower secondary education into a nine-year period will effectively instill the broad skills required by adolescents in the 21st century.<sup>39</sup> Meanwhile, the draft SDG goes further still, and calls for ensuring that all children complete free secondary education by 2030. Indeed, analysis by the World Policy Forum indicates that a number of countries have already started moving towards providing 12 years of fee-free education (see Annex 2).<sup>40</sup>

The structure of secondary education at the lower and upper levels accounts for their respective objectives and pathways. In many instances, these are often outdated modes of conceptualising education and are a relic of colonial patterns, and do not account for school-leavers entering the labor market at entry-level positions following the completion of lower and/or upper secondary education. Instead, students at upper secondary prepare “for further study in tertiary level institutions or for entering the labor market at mid-level positions.”<sup>41</sup> In many countries, upper secondary school further branches out into general (or academic) and technical paths. Worldwide, the enrollment in vocational programmes as a percentage of upper secondary education was roughly 23% in 2012, which ranges from 34% in upper middle income countries to 12% in low income countries and 11% in lower middle income countries, with East Asia having the highest share at 41%.<sup>42</sup>

Meanwhile, enrollment in Technical Vocational Education and Training (TVET) as a percentage of total secondary was roughly 10% in 2012, confirming that TVET is particularly prevalent at the upper level.<sup>43</sup>

Significant issues are seen in traditional TVET systems, including misalignment with employer needs, inflexibility and lack of opportunity to return to general secondary education or tertiary education, and a deep-rooted stigma sometimes associated with pursuing a vocational option.<sup>44</sup> Indeed, secondary technical schools are seen as “poor cousins” to the academic track.<sup>45</sup> TVET education is also significantly more expensive than the general academic option, and in Sub-Saharan Africa is about three times more expensive than basic secondary education.<sup>46</sup> In recent years, TVET has been gradually evolving towards “vocationalised education”, with an integrated model of general and vocational education to provide more relevant options to students.<sup>47</sup>

Lastly, open and distance learning models are an alternative method to expand secondary education’s reach, particularly to rural or marginalised populations. Distance learning programmes take advantage of radio and television modalities of learning, and are now also leveraging emerging mobile and internet technologies. For example, online platforms like Kuepa.com provide a digital alternative for completing secondary education,<sup>48</sup> Tutor.NG collates computer and mobile accessible content for both subject-related and vocational skills for secondary school students,<sup>49</sup> and a number of massive open online courses (MOOC) have also emerged. In Namibia, the use of interactive CD-ROMs to teach sciences at the 10th and 12th grade levels is being tested as a method of Internet-free distance teaching of more technical subjects; Ecuador and Kazakhstan have embarked on similar initiatives,<sup>50</sup> and a number of southern African countries are pooling resources in an open schools consortium to provide academic and vocational programmes through distance secondary schooling.<sup>51</sup> These methods usually have higher upfront costs, but have the added advantage of greater reach and enrollment, which could offset or even reduce per student costs, and the potential to enroll those that may be excluded by traditional brick-and-mortar schools. However, one expert stakeholder noted that while technology-enabled distance learning has the potential to reduce costs, a blended approach incorporating face-to-face support by teachers may be necessary to avoid high drop-out rates that are often associated with distance learning.

36. Verspoor, A.M. and SEIA team. 2008. *At the Crossroads: Choices for Secondary Education in Sub-Saharan Africa*. Africa Human Development Series. World Bank. [http://siteresources.worldbank.org/INTAFRREGTOPEDUCATION/Resources/444659-1210786813450/Secondary\\_Education\\_At\\_the\\_Crossroads.pdf](http://siteresources.worldbank.org/INTAFRREGTOPEDUCATION/Resources/444659-1210786813450/Secondary_Education_At_the_Crossroads.pdf)

37. UNICEF. November 2014. *UNICEF Data: Monitoring the Situation of Children and Women*. <http://data.unicef.org/education/secondary>

38. UNESCO. 2015a.

39. Fredriksen, B., and Fossberg, C. 2014.

40. World Policy Forum. 2015a. *Is completing secondary education tuition-free?* <http://worldpolicyforum.org/policies/is-completing-secondary-education-tuition-free>

41. Verspoor, A.M. and SEIA team. 2008.

42. UNESCO. UIS database. Accessed June 2015.

43. UNESCO. 2015a.

44. Essel, O.Q., Agyarkoh, E., et al. 2014. *TVET Stigmatization in Developing Countries: Reality or Fallacy?* European Journal of Training and Development Studies. Vol.1, No.1. September 2014. pp.27-

42. <http://www.eajournals.org/wp-content/uploads/Tvet-Stigmatization-in-Developing-Countries.pdf>

45. Verspoor, A.M. and SEIA team. 2008.

46. Filmer, D., Fox, L., et al. 2014. *Youth Employment in Sub-Saharan Africa*. Africa Development Forum. World Bank and Agence Française de Développement. <https://openknowledge.worldbank.org/bitstream/handle/10986/16608/9781464801075.pdf?sequence=1>

47. Joo, L. *TVET Issues and Debates*. World Bank Institute. <http://info.worldbank.org/etools/docs/library/243625/bTVET%20Issues%20and%20debates.pdf>

48. Kuepa. 2015. <http://www.kuepa.com/US>

49. Results for Development Institute. 2015a. *Center for Education Innovations: Tutor.ng*. Accessed June 2015. <http://www.educationinnovations.org/program/tutorng>

50. UNESCO. September 2010. *E-Learning: Promoting Distance Learning at the Secondary Level*. UNESCO Office in Windhoek. [http://portal.unesco.org/en/ev.phpURL\\_ID=28751&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/en/ev.phpURL_ID=28751&URL_DO=DO_TOPIC&URL_SECTION=201.html)

51. Farrell, G., and Isaacs, S. 2007. *Survey of ICT and Education in Africa*. ICT and Education Series. InfoDev. The World Bank and The International Bank for Reconstruction and Development. [https://www.infodev.org/infodev-files/resource/InfodevDocuments\\_353.pdf](https://www.infodev.org/infodev-files/resource/InfodevDocuments_353.pdf)



FINANCING TRENDS  
IN SECONDARY EDUCATION

Public sector financing, household spending, and external aid are the three conventional sources of education expenditure. Domestic public sector financing is the primary source, and the 2015 Incheon Declaration called for governments to spend at least 4–6% of their GDP on education, with at least 15–20% of government budgets dedicated to the sector.<sup>52, 53</sup> In fact, public spending on education varies widely by income level and region. Even as the general trend among countries has been to increase spending over the past decade (Figure 1), the portion of domestic budgets allocated to education has stagnated. Although individual countries have committed to spending roughly 20% of their budget on education, no region as a whole has reached this and the global average stands at 13.7%.

52. World Education Forum 2015. *Incheon Declaration*.  
53. References to national income refer specifically to Gross National Product (GNP), or the increasingly used Gross National Income (GNI), unless specifically referred to in sources as Gross Domestic Product (GDP). Both GNP and GNI take into account net income from abroad, whereas GDP only includes domestic output.

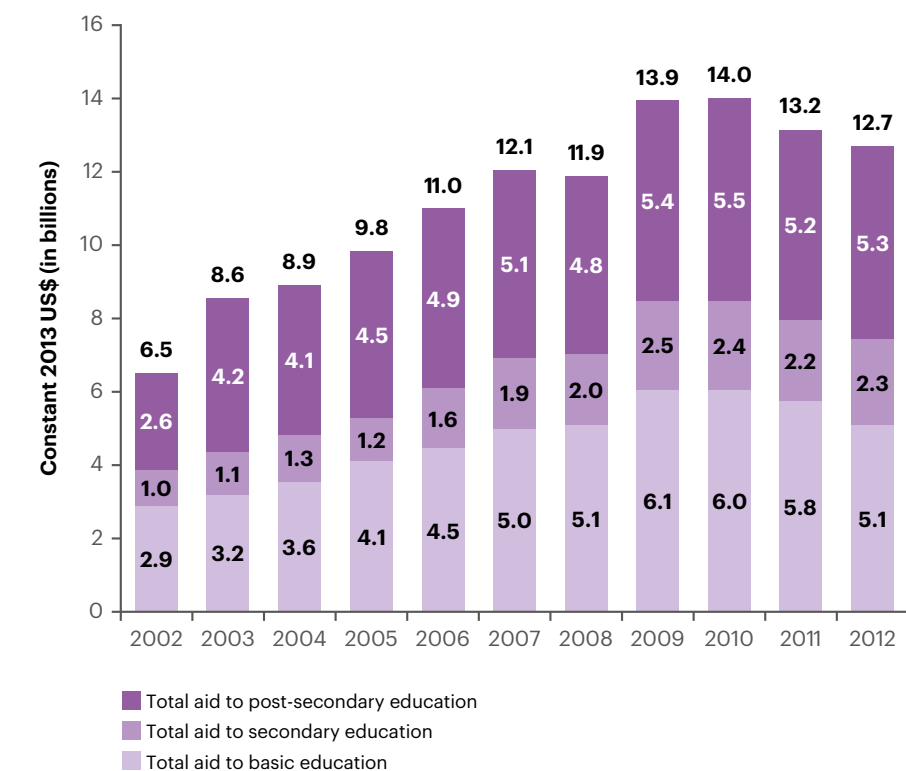
	Public Education Spending				
	% of GNP		% of government expenditure on education		Per capita primary education, PPP constant 2011, US\$
	1999	2012	1999	2012	2012
World	4.5	5.0	13.8	13.7	1,337
Low income	3.2	4.0	14.7	14.9	100
Lower middle income	4.4	4.9	15.0	15.6	467
Upper middle income	5.0	5.1	14.8	14.9	–
High income	4.9	5.4	12.4	12.3	6,805
Arab States	5.3	–	16.9	–	–
Central and Eastern Europe	4.4	4.9	12.7	11.7	4,478
Central Asia	4.0	3.4	–	13.0	–
East Asia and the Pacific	5.1	3.4	13.8	17.5	–
Latin America and the Caribbean	4.5	4.9	14.8	–	1,187
North America and Western Europe	5.2	6.0	12.3	12.5	7,943
South and West Asia	3.6	3.9	16.6	12.6	240
Sub-Saharan Africa	3.9	4.9	14.8	18.4	136

**Figure 1:** Public education spending  
**Source:** UNESCO, 2015a.  
**Note:** All regional values shown are medians. The median values of 1999 and 2012 are not comparable since they are not necessarily based on the same number of countries. Per pupil expenditure figures relating to domestic expenditure are expressed in purchasing power parity (PPP) prices in text unless otherwise stated.  
**Source:** Annex, Statistical Tables 9 (print) and 11 (GMR website); UIS database; GMR team calculations.

Globally, 33% of public expenditure on education is focused at the primary level, with 35% going toward the secondary level, although it is hard to distinguish between spending at the upper and lower levels of secondary education (2012 data). The level of public spending on secondary education varies from 28% in Sub-Saharan Africa to a high of 43% in South and West Asia (for regions where data is available).<sup>54</sup>

Meanwhile, household spending on education is significant: GMR analysis indicates that in a sample of 50 low, middle and high income countries, household spending was roughly 31% of the total education expenditure.<sup>55</sup> The burden tends to fall on poorer households more, which has the effect of furthering inequality.<sup>56</sup> In low and middle income countries, household contributions tend to be relatively low at the tertiary education level compared to the primary level, thus benefitting wealthier students who are more likely to advance to this stage. In contrast, in high income countries, the household contribution is relatively higher at the tertiary level than at the primary level, which leads to greater equity, particularly when coupled with subsidies for low income youth at the tertiary level.<sup>57</sup> Additionally, even where fee-free education policies are in place to reduce the monetary burden, households can face significant indirect costs such as school supplies and uniforms.<sup>58</sup>

Lastly, total aid to education has fallen by over US\$1.3 billion since 2010 (roughly 10%).<sup>59</sup> While existing data does not allow for disaggregating external financing trends by upper and lower secondary education, total aid to secondary education has remained relatively steady since 2010 (Figure 2).



**Figure 2:** Aid to education by level. Source: 2014d. Aid reductions threaten education goals. Education for All Global Monitoring Report. GMR Policy Paper 14. June 2014.  
**Source:** [http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/GMR/images/2014/transforms/UNESCO\\_PolicyPaper\\_13-EN\\_v5.pdf](http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/GMR/images/2014/transforms/UNESCO_PolicyPaper_13-EN_v5.pdf)

54. UNESCO. 2015a.

55. Ibid.

56. Kattan, R.B. 2006. *Implementation of Free Basic Education Policy*. Education Working Paper Series Number 7. December 2006. World Bank. [http://siteresources.worldbank.org/EDUCATION/Resources/EDWP\\_User\\_Fees.pdf](http://siteresources.worldbank.org/EDUCATION/Resources/EDWP_User_Fees.pdf)

57. Wils, A., and Bonnet, G. January 2015. *The Investment Case for Education and Equity*. UNICEF. [http://www.unicef.org/publications/files/Investment\\_Case\\_for\\_Education\\_and\\_Equity\\_FINAL.pdf](http://www.unicef.org/publications/files/Investment_Case_for_Education_and_Equity_FINAL.pdf)

58. Kattan, R. B., and Burnett, N. July 2004. *User Fees in Primary Education*. World Bank. [http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079993288/EFACase\\_userfees.pdf](http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079993288/EFACase_userfees.pdf)

59. UNESCO. 2015a.



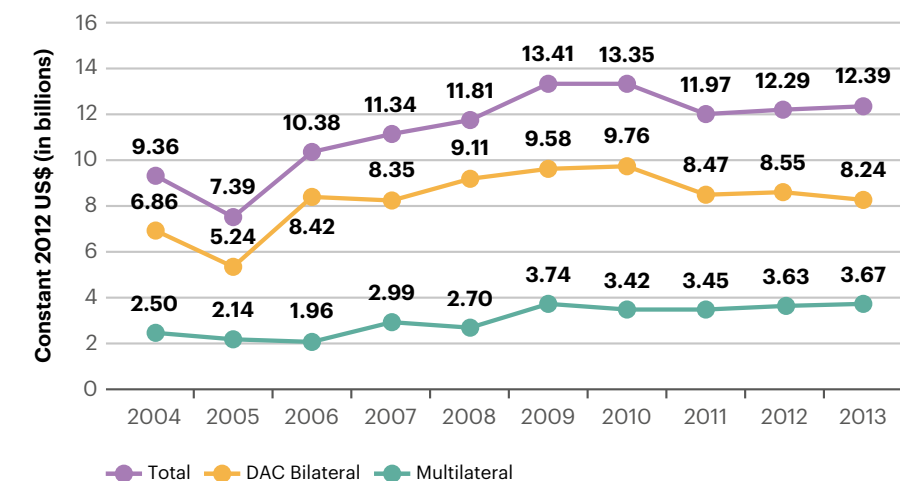
## EVOLVING EXTERNAL FINANCING STRATEGIES

Although aid comprises a small percentage of global education funding, the discussion on how to leverage the resources of the international community is an important one to catalyse results for upper secondary access. This section explores the largest bilateral and multilateral providers of aid, as well as evolving external financing strategies.

### Trends in bilateral financing

In 2013, DAC country bilateral contributions to ODA totaled US\$112.6 billion, of which US\$8.2 billion was allocated towards the education sector.<sup>60</sup> The countries with the highest contributions to total bilateral ODA, as well as the highest contributions to education ODA, were France, Germany, Japan, the United Kingdom, and the United States (a complete ranked list is in Annex 3).<sup>61</sup> In absolute numbers, these countries have consistently remained among the top international education aid donors. Figure 3 indicates bilateral aid to education from DAC countries peaked in 2010 at US\$9.8 billion, declining by over US\$1 billion in subsequent years.<sup>62</sup> This decrease is mainly attributable to major donors — including Australia, France, Japan, the Netherlands, Spain, and the United States — reducing their overall aid to education.<sup>63</sup>

The share of ODA contributed by DAC members towards education has also yielded a general downward trend since it peaked in 2009, with only 7.3% of bilateral ODA from DAC countries allocated to education in 2013 (Figure 4).<sup>64</sup> Worryingly, as of 2014, only five DAC countries had reached the UN target of increasing aid to 0.7% of GNI — namely, Sweden, Luxembourg, Norway, Denmark, and the United Kingdom — suggesting more international aid could be available for education as well as other sectors if DAC donors achieved the UN target.<sup>65</sup>



**Figure 3:** Aid to education (US\$ billions)  
**Source:** OECD-DAC. 2015.

Within this picture of decreasing overall education aid however, the share of DAC bilateral education aid allocated towards secondary education has been steadily increasing.<sup>66</sup> A few bilateral donors have notably turned their focus towards financing post-primary education. Austria, Belgium, Canada, Luxembourg, Switzerland, and the United Kingdom have prioritised aid to secondary education as a portion of their total education aid budget, ranging from 20–60%.<sup>67</sup>

60. OECD-DAC. 2015. International Development Statistics: Creditor Reporting System. Paris: Organisation for Economic Co-operation and Development. Accessed June 2015. <http://stats.oecd.org/Index.aspx?datasetcode=CRS1>.

61. Ibid.

62. Ibid.

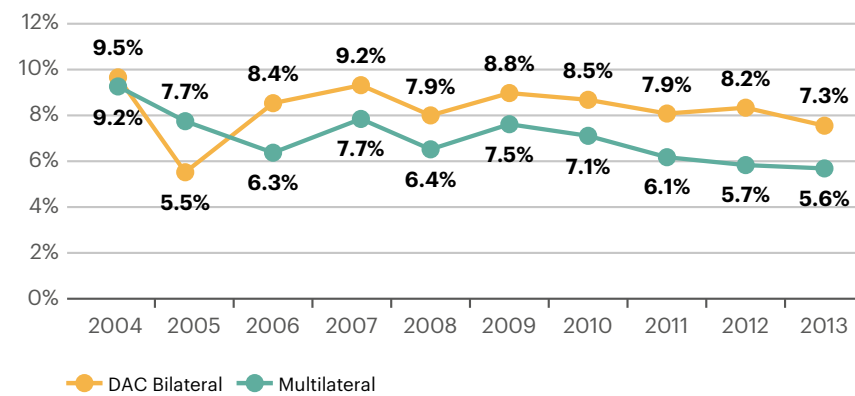
63. Ibid.

64. Ibid.

65. OECD. 2014b. ODA as a per cent of GNI (2014). Compare Your Country: Official Development Assistance 2014. Accessed June 2015. <http://www.compareyourcountry.org/oda?cr=oe&lg=en>

66. OECD-DAC. 2015.

67. Ibid.



**Figure 4:** Education ODA as a share of total ODA (%).  
**Source:** OECD-DAC. 2015.

In 2013, aid to post-secondary education comprised more than twice the amount of aid spent on secondary education;<sup>68</sup> according to the OECD, 18 out of 28 DAC donor countries spent more on post-secondary than secondary education.<sup>69</sup> In 2012, support to students from developing countries studying in donor countries comprised 72% of this post-secondary education aid.<sup>70</sup> Indeed, it could be argued that such spending of education ODA within donor country borders could be allocated from non-ODA sources. In some cases, post-secondary aid eclipses aid to primary education.<sup>71</sup> This overrepresentation of post-secondary funding in education aid budgets suggests space for reallocation of funding towards upper secondary and other sub-tertiary levels of education.

## Trends in multilateral financing

Multilaterals are increasingly playing more significant roles in aggregating aid for education. The most prominent partnership is the Global Partnership for Education (GPE). Since its founding, the GPE has secured US\$3.9 billion in funding for basic education from bilaterals, with the United Kingdom, the Netherlands, Australia, Spain, and Norway contributing the greatest share (Annex 3).<sup>72, 73</sup> The GPE has brought together a diverse set of government donors, CSOs, and in-country governments to address complex challenges in primary education. In developing countries receiving GPE support, 22.5 million more children have gained access to primary school, literacy rates have improved, and greater gender equity has been achieved.<sup>74</sup> Furthermore, developing country partners have also increased their spending on education as a share of GDP by 10% since joining GPE.<sup>75</sup> Notably, 40% of GPE's funds aid fragile and conflict-affected states.<sup>76</sup>

In 2013, other multilateral institutions<sup>77</sup> disbursed a total of US\$65.8 billion in ODA, but only US\$3.7 billion was spent on education (Figure 3).<sup>78</sup> Of this amount, US\$730 million was allocated directly to secondary education through the Asian Development Bank (ADB) Special Funds, Arab Bank for Economic Development in Africa (BADEA), EU Institutions, World Bank's International Development Association (IDA), International Fund for Agricultural Development (IFAD), Islamic Development Bank, United Nations Development Programme (UNDP), and United Nations Children's Fund (UNICEF).<sup>79</sup> Much like the trend in DAC countries, the share of education ODA from these multilaterals has seen a declining trend (Figure 4). Generally, multilaterals are shifting towards a holistic sector approach when it comes to education: the AfDB and ADB in particular are broadening their priorities to include investments in secondary education, technical and vocational education, and higher education in order to fill labor market gaps.<sup>80</sup> These two multilaterals, along with IDA and the EU Institutions, have contributed to the recent spike in upper secondary ODA as a portion of multilateral education ODA. It is worth noting that in some cases this shifting priority to post-primary aid has caused a simultaneous decline in support to basic education from multilaterals.<sup>81</sup> Overall, while multilateral support to education is diversifying across the sector, it remains, much like bilateral aid, largely fragmented.<sup>82</sup>

68. Ibid.

69. Ibid.

70. UNESCO. 2015a.

71. OECD-DAC. 2015.

72. As countries generally do not report contributions to GPE separate from bilateral aid numbers, annual GPE contributions are included in the bilateral numbers referenced above.

73. Global Partnership for Education. 2015a. *Global Partnership for Education – Status of Donor Contributions as of 30 April 2015*. <http://www.globalpartnership.org/content/gpe-donor-contributions>

74. Ibid.

75. Ibid.

76. Ibid.

77. These include all multilaterals reporting to the OECD-DAC Creditor Reporting System.

78. OECD-DAC. 2015.

79. Ibid.

80. Rose, P., Steer, L., et al. September 2013. *Financing for Global Education: Opportunities for Multilateral Action*. Center for Universal Education, the Brookings Institution <http://www.brookings.edu/-/media/Research/Files/Reports/2013/09/financing-global-education/Basic-Education-Financing-Final-webv2.pdf?la=en>

81. Ibid.

82. Ibid.



## Emerging approaches

Many in the international aid community have lauded the instrumental role GPE has played in coordinating donor efforts and expanding primary education access and equity. With the shifting focus beyond the primary level, there are now calls for the GPE's mandate to expand beyond primary education into lower and in some cases upper secondary levels.<sup>83</sup> Jeffrey Sachs has gone even further to call on GPE to expand into “a true Global Fund for Education” that would support every low income country with political will, a national plan, and dedicated domestic financing in achieving its education goals.<sup>84</sup>

Gordon Brown recently proposed a global emergency fund for education to better support countries in crisis and conflict, which would take GPE's commitment to fragile and conflict states further and move beyond primary.<sup>85</sup> Traditionally, countries in crisis and conflict tend to suffer on all dimensions of education and face different needs than their more stable counterparts. They also often require more creative and shorter-term solutions to their education challenges than do more stable countries building education systems intended to last for the longer term. While not limited to any level of education, the proposed fund would place particular emphasis on aiding children out of school for reasons related to natural disaster, disease, and conflict and would coordinate international donor efforts to build regularity in education funding and education access in these situations.<sup>86</sup>

Meanwhile, a greater emphasis is simultaneously being placed on increasing the effectiveness of spending through results-based financing initiatives. For example, Norad has created a US\$60 million fund, Results in Education for All Children (REACH), that will be implemented and monitored in partnership with the World Bank. REACH, in its pilot phase, disburses funds through results-based financing to ensure that aid dollars are achieving the impact intended.<sup>87</sup> Additionally, at the 2015 World Education Forum, the World Bank committed to doubling results-based financing for education to US\$5 billion over the next 5 years.<sup>88</sup>

Beyond government-provided aid, coordination of large-scale private sector support has also received greater recognition as a potential source of education financing in recent years. Both GPE and the proposed Global Fund for Education call on private corporations to join government efforts and contribute resources towards education.<sup>89,90</sup> Other private sector coordination efforts like the Global Business Coalition for Education have also been recognised for their potential to catalyse private sector resources for education.<sup>91</sup>

Lastly, there has been an increased focus on non-traditional innovative financing mechanisms, similar to techniques used in the health sector. These include public-private partnerships, diaspora bonds, and various forms of levies and taxes.<sup>92</sup> Although the health and education contexts are distinct, some mechanisms may have the potential to be adapted to play a significant role in mobilising additional resources. For example, it is estimated that an International Finance Facility for Education — similar to the International Finance Facility for Immunisation — has the potential to raise US\$3-4 billion a year.<sup>93</sup> Some of these mechanisms will be explored in more depth in Section V.

83. United Nations. May 2015.

84. Sachs, J.D. March 2015. *Financing Education for All*. Project Syndicate. <http://www.project-syndicate.org/commentary/financing-education-poor-children-by-jeffrey-d-sachs-2015-03>

85. The Office of Gordon and Sarah Brown. January 2015. *Gordon Brown Calls for Global Emergency Education Fund*. <http://gordonandsarahbrown.com/2015/01/gordon-brown-calls-global-emergency-education-fund>

86. Ibid.

87. World Bank. 2015c. *Results in Education for All Children (REACH)* Accessed June 2015. <http://www.worldbank.org/en/programs/reach>

88. World Bank. 2015e. *World Bank Group Doubles Results-Based Financing for Education to US\$5 Billion over Next 5 Years*. May 18, 2015. <http://www.worldbank.org/en/news/press-release/2015/05/18/world-bank-group-doubles-results-based-financing-for-education-to-us5-billion-over-next-5-years>

89. Global Partnership for Education. 2015b. Accessed June 2015. <http://www.globalpartnership.org/private-sector-and-foundations>

90. Sachs, J.D. March 2015.

91. Rose, P., Steer, L., et al. September 2013.

92. UNESCO. 2015a.

93. *Education for All: Facts and Figures*. 2011. From the Education for All Global Monitoring Report, “The hidden crisis: Armed conflict and education”, 2011. [http://www.un.org/en/ecosoc/julyhls/pdf11/education\\_for\\_all\\_facts\\_and\\_figures.pdf](http://www.un.org/en/ecosoc/julyhls/pdf11/education_for_all_facts_and_figures.pdf)

# #3

## 3. GLOBAL COST OF UPPER SECONDARY EDUCATION ACCESS

### INTRODUCTION

The expansion of upper secondary education will necessitate increased resources for education and shifts in expenditures, as well as careful consideration of the needs in other levels of education, and issues of equity. This section discusses those resource needs and the cost of universal fee-free upper secondary access. It is based on analysis provided by the GMR of a global costing model stretching from pre-primary to the upper secondary level.<sup>94</sup> The section also discusses alternative future scenarios to obtain a range of costs for upper secondary education.

In the 2000s, Lewin (2007) and Binder (2006) projected the costs of the expansion of secondary school. Both based their projections on similar models, the basic form of which is a product of unit costs and total students.<sup>95, 96</sup> For the unit costs, both authors relied on present unit costs by country as compiled by UIS and the World Bank, with assumptions on upper and lower bounds. For the pupil assumptions, the authors took the projected population of secondary/upper secondary school age and multiplied it by assumed gross enrollment ratios.

Using this approach both authors came to similar conclusions. Lewin calculated that for Sub-Saharan Africa, an upper secondary enrollment rate of 50% would cost 1.3–2.0% of GDP. A 100% enrollment would require double that investment. Binder, looking at secondary education overall, estimated that a gradual 15-year rise from present enrollment rates to 90% would cost 2.5–4.9% of GDP in low income countries.<sup>97</sup>

The GMR cost projections for upper secondary are also based on the product of unit costs and student numbers, but for unit costs it uses a dynamic model rooted in the notions of development and convergence.<sup>98</sup> Unit costs are a function of teacher salary, class size, material costs as a percent of recurrent costs, classroom investments, and other expenditures; salaries represent the lion's share of unit costs. The GMR model

94. UNESCO. 2015b. *Pricing the right to education: The cost of reaching new targets by 2030*. <http://en.unesco.org/gem-report/node/819#sthash.DgM6vCXd.dpuf>

95. Lewin, K. and Caillods, F. 2001. *Financing secondary education in developing countries: Strategies for sustainable growth*. International Institute for Educational Planning/UNESCO. <http://unesdoc.unesco.org/images/0012/001248/124844e.pdf>

96. Binder, M. 2006. *The Cost of Providing Universal Secondary Education in Developing Countries*. Achieving Universal Basic and Secondary Education: How Much Will It Cost?, pp. 35–65. Cambridge, MA: American Academy of Arts and Sciences. <https://www.amacad.org/publications/Glwwe.pdf>

97. Computed from table 9 in Binder (2006). For low income countries, the projected additional costs for a 15-year increase range from 7.0–20.3 billion US\$ (a), equal to 0.6–2.8 percent of GDP (p). The initial expenditure is 15.3 billion US\$ (i). The estimated percent of GDP needed (present+new costs) is equal to:  $p+i \cdot p/a$

98. Wils, A. 2015. *Reaching education targets in low and lower middle income countries*. Costs and finance gaps to 2030. Paper commissioned for the EFA Global Monitoring Report 2015, *Education for All 2000–2015: achievements and challenges*. <http://unesdoc.unesco.org/images/0023/002325/232560e.pdf>



builds on this observation, where two key factors govern projected class size and teacher salaries: namely, *convergence* causes countries to gradually move towards the average class size and teacher salaries for their income level; and *development*, measured as GDP per capita growth, shifts those convergence values. Moreover, instead of using instantaneous enrollment changes, the model projects pupil growth over time by grade, causing change to occur somewhat more gradually, and also allowing for the influence of population shifts. Repetition rates converge towards low values of 5% and all transition rates converge towards 100%. Crucially, these dynamics have important implications for future costs, because together, they make the enterprise of full primary and secondary education more affordable as countries develop.

## BASE SCENARIO: GMR MODEL

The GMR model presents a base scenario, in which the anticipated target of universal upper secondary by 2030 is met in all countries, regardless of income.<sup>99</sup> The basic assumptions for upper secondary are provided in Figure 5. Specifically, it is assumed that the system can fully accommodate all adolescents of upper secondary age by 2030, and that the target of full access is met simultaneously with universal completion.<sup>100</sup> The pupil teacher ratios, on average, are expected to rise, with the salary multiple expected to decline. These two trends are the result of the development and convergence dynamics discussed above — they are not explicit targets in themselves. Average pupil teacher ratios rise because the model adjusts very low pupil teacher ratios upwards towards average convergence levels when there is a finance gap; similarly, high salary levels are adjusted down towards average levels when there is a finance gap. If pupil teacher ratios rise and the salaries fall for upper secondary, this is an indication that — relative to the available finances and other education needs (as measured by the finance gap) — countries are providing smaller class sizes and higher salaries for upper secondary than they can afford. The model assumes a 25% share of non-salary recurrent costs, although it could be argued that 20% may be sufficient.

99. UNESCO. 2015b.

100. In order to attain full access, or 100% enrollment (plus a small margin for repetition), all grades of upper secondary must be fully accessed including the last one. We assume that all who reach the last grade of upper secondary also graduate or complete that level.

	Measurable targets	Initial value	Target value	Target year
Upper secondary access	Lower secondary completion rate and transition to upper secondary	-	100%	2030
	Upper secondary enrollment and completion rate	-	100%	2030+d <sup>3</sup>
	Percent private enrollment*	22%	10%	
Upper secondary quality	Pupil teacher ratio	23	27	
	Teacher salaries (as multiple of GDP per capita)	5.1	4.9	
	Share of non-salary recurrent costs		25%	
Equity	Markup of per student costs to attract marginalized children (living on <US\$2/day)		40%	

\*The percent private enrolment is used as a proxy for private household contributions to this level of education. Benchmark value is unweighted average by country.

**Figure 5:** Selected high-level assumptions for the base scenario for upper secondary education  
**Source:** UNESCO. 2015b.

The cost structure associated with TVET is not accounted for in the base model, although it is included in the alternative scenarios.

Importantly, it is assumed that the costs of enabling marginalised children to attend school are higher than for children who are not marginalised. Specifically, the base scenario assumes the margin is 40% higher, mostly due to additional demand side subsidies. The proportion of marginalised children who are in school and receiving such additional subsidies are projected to rise over time, as more adolescents are included in upper secondary access. At the same time, the overall proportion of marginalised children in the population is expected to fall as countries develop and GDP per capita increases. The net effect of these two dynamics determines how many marginalised adolescents are attending upper secondary and receiving the additional subsidies. In the base scenario, the proportion of marginalised adolescents in upper secondary rises from practically nil in the initial year to approximately 30% of all pupils by 2030.

With these assumptions, the number of upper secondary students rises from 105 million in 2012 to 266 million by 2030 (Figure 6, with the full table with results for preschool, primary, upper and lower secondary available in Annex 8). The increase would be particularly rapid in low income countries, from 18 million up to 82 million; and from 87 million to 184 million in lower middle income countries. This is a rapid rise in numbers, but it is not without historical precedent. Indeed, in the period 2000–2012, upper secondary enrollment expanded rapidly, by a factor of 4 in some countries (UIS data). For 50 of the 82 countries in the GMR model, the projected pupil increases fall well within this range of historical experience. In 14 low income, high population growth countries the projected upper secondary enrollment expansion is more than twice (8x) the historical range.

The unit costs, in contrast, are projected to *decline*, as the result of convergence (pushing countries with high expenditure down) and GDP per capita growth. This shift will also bring upper secondary costs closer to those for primary and lower secondary. In 2012, the average unit cost for an upper secondary student was US\$751 compared to US\$224 for primary and lower secondary. By 2030, the unit costs would be US\$675 and US\$448 respectively, a ratio that is much more in line with the relative spending seen in countries with higher incomes and higher secondary enrollment rates.

The total projected costs for upper secondary from 2015–30 are on average US\$97 billion, up from approximately US\$38 billion that was spent in 2012. The bulk of those costs are in lower middle income countries, namely because of a larger population, coupled with higher unit costs. Upper secondary costs in lower middle income countries are projected to be US\$83 billion; compared to US\$14 billion in low income countries. The relatively low costs in low income countries mask large projected budget shortfalls: it has been estimated that 42% of the cost in low income countries would need to be financed externally, compared to just 6% for lower middle income countries.<sup>101</sup> Hence, focusing external funding on low income countries would make a relatively larger difference, as compared to countries with higher incomes.

	All		Low income		Lower middle income	
	2012	2030	2012	2030	2012	2030
Number of upper secondary pupils (millions)	105	266	18	82	87	184
Per pupil expenditure, upper secondary (weighted average US\$ per year)	751	675	394	367	823	811
	2012	2015–2030 average	2012	2015–2030 average	2012	2015–2030 average
Total public costs average annual, bn US\$, upper secondary+	<b>38</b>	<b>97</b>	<b>3</b>	<b>14</b>	<b>35</b>	<b>83</b>
As above, as % of GDP*	0.71%	1.30%	0.57%	1.66%	0.80%	1.06%
Total public costs bn US\$, preschool, primary, upper and lower secondary levels together	149	340	14	50	134	289
As above, as % of GDP*	3.49%	5.23%	3.10%	6.56%	3.74%	4.31%

\*Total costs are not equal to the product of students and the weighted average expenditure per pupil because a) total public costs exclude private pupils and b) the total costs are computed by multiplying pupils and expenditure per pupil *by country* and summing.

\*Per country average, unweighted.

**Figure 6:** Selected results for upper secondary projections, GMR base scenario

**Source:** UNESCO. 2015b.

The costs for upper secondary from 2015–30 are projected to be 1.30% of total GDP in the 82 low and lower middle income countries included in GMR's projections — specifically 1.66% in low income countries and 1.06% in lower middle income countries. In order to evaluate the feasibility of such spending, it is important to see the entire cost chain, including all school levels from preschool through secondary, as well as significant quality and equity investments. Figure 6 reveals that in lower middle income countries, the total projected costs of preschool through secondary amount to 4.31% of GDP (Annex 8). Even with the addition of tertiary education, it is likely that education costs in lower middle income countries could stay within the 6% of GDP financial envelope proposed as an international benchmark for education spending. Importantly, these costs include implementing the assumed quality and equity improvements in all levels, so ensuring that all youth have access to a full cycle of quality education.

However, the same is not true for low income countries. There, the costs of preschool, primary and secondary together — that is, even without tertiary education — would require, on average 6.56% of GDP. In a few very low income countries, starting from very low levels, and with rapid population growth, the needs are much higher, up to 15–20% of GDP. The total annual financing gap is estimated to average US\$39 billion from 2015–2030; specifically US\$21 billion in low income countries and US\$18 billion in lower middle income countries. Clearly, low income countries will not be able to come close to high levels of universal fee-free upper secondary enrollment without outside support. It is possible though, that high levels of upper secondary enrollment could be achieved with a combination of fee-free provision for marginalised students and payment of tuition from more affluent families. This approach may also be the more equitable one, in particular during the transition phase to full upper secondary, when children from affluent families are likely to be over-represented at this education level. Such an option is explored further in Section V.

Lastly, in the base scenario, the total additional costs for subsidies and other measures for marginalised youth are 6% of the total upper secondary costs for all projected countries together. In lower middle income countries, these subsidies are only 3% of total upper secondary costs, but in low income countries, the subsidies amount to 10% on average, with numbers as high as 14–18% in a number of very poor countries. The inclusion of marginalised adolescents in upper secondary in low income countries will require a considerable commitment on the part of policymakers to free the funding required for this endeavor.

101. UNESCO. 2015b.



## ALTERNATIVE SCENARIOS

To provide a contrast to the base scenario and costs outlined above, the model has been extended to three alternative scenarios which allows for a manipulation of key assumptions to test how estimated costs may fluctuate. The three scenarios selected are:

- 1. Conservative access target, with 80% target for upper secondary enrollment.** This represents an alternative where upper secondary is still available for most adolescents, but allows for a slower expansion to all groups, or where a portion of adults will be able to find meaningful and gainful work without this level.
- 2. Shift in upper secondary structures towards technical and vocational education, with TVET reaching 30% of upper secondary enrollment.** This scenario allows technical and vocational education to expand to levels that are common in higher income countries. TVET comprises 28% of upper secondary enrollment in high income countries and 34% in upper middle income countries<sup>102</sup>, with costs approximately 1.5 times those of general upper secondary.<sup>103</sup> In contrast, in low and lower middle income countries, only 12% of upper secondary pupils are enrolled in TVET, and the costs, at least in Sub-Saharan Africa, are approximately 3 times those of upper secondary.<sup>104</sup> For the purposes of this scenario, we assume a gradual increase to 30% TVET, while the cost ratio of TVET to general secondary declines from 3 to 1.5.
- 3. Evolution to “small, smart families”, which assumes a faster transition to small families in high-fertility countries.** This scenario is one where the total fertility rates decline at rates observed during the 1970s and 1980s in Bangladesh, Sri Lanka and Tunisia, where family size changed from 5.5–7 children per woman to 2.0–2.4 in 25–30 year. This is a considerably faster change in family size than what is assumed in the base scenario. The scenario gets its name from the observation that smaller family size allows parents and the country to invest more in each child’s education.<sup>105</sup>

Although these options by no means exhaust the possibilities — for example, the GMR discusses pathways that focus more on financing and timing<sup>106</sup> — the three selected scenarios vary some of the most salient parameters. Figure 7 shows the costs of education in these of these scenarios, measured in percent of GDP over the period 2015–2030, with a comparison table presented in Annex 9. The differences between the scenarios become more pronounced over time, in particular for the small families scenario.

Over the entire projection period, 2015–2030, the differences between the four scenarios are moderate. In lower middle income countries, the projected percentage of GDP required for education through the secondary level ranges from 4.2–4.5%. In low income countries, the range is from 6.2% of GDP with the small families scenario to 6.9% in the TVET scenario.

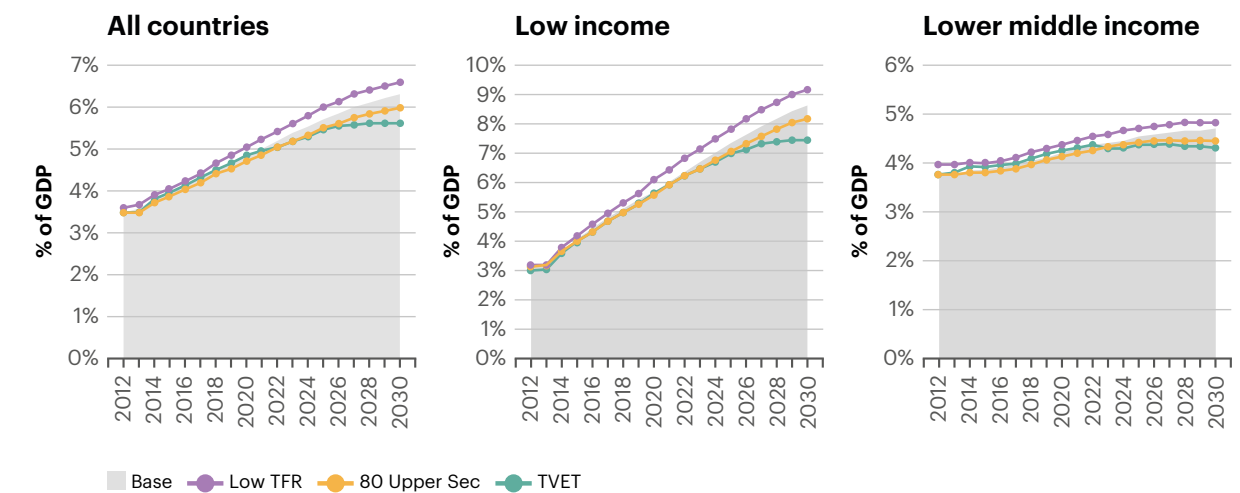


Figure 7: Results from modelling the three alternative scenarios

Even the 30% TVET enrollment scenario, which raises upper secondary costs by approximately 11% in both groups of countries, has a marginal 3% increase on total average costs. This means that attaining high levels of TVET should require only small overall budget shifts that can be incorporated in minor changes in class size and/or salaries or a slightly larger budget. If full upper secondary is affordable, then including TVET should also be affordable.

However, the question remains how to make upper secondary affordable, particularly in low income countries. In the base scenario, low income countries are projected to require 8.8% of GDP for education through the secondary level by 2030. This outcome means that financing upper secondary in low income countries will be extremely difficult. One alternative is to lower aspirations to 80% upper secondary access. In this case, by 2030, 8.2% of GDP will be required, which would represent real savings but would not substantially shift the financial picture.

102. UNESCO. UIS database. Accessed June 2015.

103. Lewin, K.M. 2008.

104. Filmer, D., Fox, L., et al. 2014.

105. Wils, A., and Bonnet, G. January 2015

106. Wils, A. 2015.

Another alternative would be if families were smaller in those countries with high fertility rates. Within the 15-year projection period, this scenario results in significantly diminished pupil numbers in preschool, primary, and lower secondary. As a result, the projected expenditure would be 7.5% of GDP. These savings (compared to the base scenario) are enough to cover 40% of the costs for upper secondary by 2030.<sup>107</sup> By far, this change has the greatest potential for making full upper secondary feasible for the next generation in low income countries.

The reason that smaller families have such an impact on such costs is because lower population growth slows the expansion of the school system, and as a result the high costs of building new schools and training new teachers are reduced. Another equally important reason is that the youth dependency burden is lowered — meaning that for every income-earning adult, there are fewer school-age children and adolescents. The lower dependency ratio has effects at the macro level — a smaller portion of GDP is needed for schooling. But the effects are equally profound at the family level — parents of small families can invest more in the education of each child, potentially the difference between providing them with upper secondary and needing to stop at primary or lower secondary school.

107. Total costs in 2030 in low income countries in the base scenario are US\$ 87 billion; compared to US\$76 billion in the small family — a difference of US\$11 billion. The total projected costs of upper secondary by 2030 are US\$28 billion.





# #4

## 4. LESSONS LEARNED FROM EXPERIENCES IN PROVIDING FEE-FREE UPPER SECONDARY EDUCATION

### EXPERIENCES IN UNIVERSALISING UPPER SECONDARY EDUCATION

Numerous country attempts to expand secondary education access hold lessons for others embarking down the path of expansion, particularly at the upper secondary level. Perhaps the most fundamental lessons are to be learned from the preconditions or the minimum foundation factors present in countries that have successfully expanded or universalised their education systems. Based on a study of country experiences, a broad literature review, and interviews with key informants, the following four points illustrate these “ideal conditions”; however, countries that display some but not all of these have still been shown to be able to expand their secondary education access.

First, political stability is perhaps the most paramount; political instability hinders a government’s ability to coordinate let alone expand public goods such as education, inflicting adverse effects on both quantity and quality expansion. OECD countries such as South Korea and East Asian countries such as Vietnam that have successfully expanded their secondary education systems have stable political systems. On the other hand, countries that are in the midst of civil war or political transition face significant challenges in channeling resources into and managing the expansion of primary schooling let alone secondary schooling.<sup>108,109</sup> Rwanda, at the time of internal genocide and civil violence, is an example of the effects of political instability on education:<sup>110</sup> its secondary gross enrollment ratio (GER2) in the 1990s was just 16%, decreasing further in the years following the conflict. Today, as the country has regained some semblance of stability, it has expanded its secondary GER access rate to double what it was in those days.<sup>111</sup> However, constraints are still present due to factors such as societal pressures, distant boarding or urban secondary schools that remain geographically or financially inaccessible to rural and low income youth, and relatively limited investment in secondary schooling compared to both other levels of education as well as the secondary level investments of its African counterparts.<sup>112</sup>

108. Drawn from Key Informants interviews (Annex 7).

109. 2014. *Country Data Reports. Worldwide Governance Indicators*. <http://info.worldbank.org/governance/wgi/index.aspx#countryReports>

110. World Bank. 2013b. *Rwanda Education Resilience Case Report*. Education Resilience Approaches (ERA). <https://openknowledge.worldbank.org/bitstream/handle/10986/17466/776820WPOCRORwanda0Box0342041B00PUBLIC0.pdf?sequence=1>

111. World Bank. 2015a. *World Development Indicators*. World Bank. Accessed June 2015. <http://data.worldbank.org/>

112. Verspoor, A.M. and SEIA team. 2008.

For the majority of years between 1983 and 2009, Sri Lanka's two major ethnic groups were at war with each other. Despite this, Sri Lanka's political commitment to education along with attention to boosting economic growth has enabled it to achieve a 99% GER at the secondary level.

**SOURCE: SRI LANKA: A CASE STUDY, ANNEX 6**

Second, countries that have achieved successful secondary expansion tend to have low or declining levels of population growth. Limited population growth, especially for ages associated with school attendance, not only makes planning of resources more predictable but also plays a key role in enabling access and achievement of learning outcomes. Countries recognised for achieving tremendous gains in secondary access such as South Korea, Vietnam, and Thailand have generally seen a declining trend in population growth over the last few decades while reforms were underway.<sup>113</sup> Today, these countries have low population growth rates of 0.4%, 1%, and 0.3% respectively and are renowned for retaining quality within their education systems.<sup>114</sup>

Third, sustainable financing of secondary education, and education more generally, is essential to avoid regression and to ensure that gains in expanding access are steadily built upon. While external financing via international donors can help fill the education financing gap in the short-term, over the long-term countries must be able to find the domestic resources to sustain a stable stream of funding for secondary education.<sup>115, 116</sup> Countries such as those in the East Asia Miracle have maintained strong and steady economic growth and have also been able to expand and maintain gains in access to secondary education.<sup>117</sup> Indeed, many such governments view investment in education as an engine for further growth. As an illustrative example, South Korea's strong economy, in turn, has fueled further demand for secondary and particularly upper secondary education, creating a cycle of support for education at this level.<sup>118</sup> South Africa embodies the possibilities of expanded secondary access in Africa, despite an entrenched history of discrimination. Its success has come in part due to its reliance on domestic resources to fund its education system. The government invests 6.2% of its GDP on education<sup>119</sup>, above the recommended 4–6%, and as a result boasts one of the highest secondary access rates in Africa.<sup>120</sup>

113. Ibid.  
114. World Bank. 2015a.  
115. Fredriksen, B., and Fossberg, C. 2014.  
116. Verspoor, A.M. and SEIA team. 2008.  
117. Ibid.  
118. World Bank. 2013a. *South Korea: Workforce Development*. SABER Multiyear Country Report. 2013. <https://openknowledge.worldbank.org/bitstream/handle/10986/16277/799240WP0SABER0Box0379795B00PUBLIC0.pdf?sequence=1>  
119. World Bank. 2015a.  
120. Verspoor, A.M. and SEIA team. 2008.

Fourth, high rates of access and learning at pre-secondary levels are an essential prerequisite before countries begin to concentrate on universalising secondary school access. As discussed later in this section, for children to avail the benefits of secondary education, they must have a solid foundation of literacy, numeracy, and other foundational skills developed in primary school.<sup>121, 122</sup> Understanding the importance of strong primary learning outcomes for success at later levels, the international community has focused its collective efforts for the past 15 years on expanding universal primary education. The same bottom-up learning progression is necessary for expansion from lower secondary to upper secondary, as skills attained at the lower level are built upon at the upper level.<sup>123</sup> Countries that have been successful in expanding primary access at universal or near-universal rates have adopted policies of universal primary education access, most often providing it fee-free. For instance, Sri Lanka, Bangladesh, and South Korea have fee-free primary education programmes in place<sup>124</sup> and have achieved gross enrollment ratios over 90% in primary schooling.<sup>125</sup> South Korea and Sri Lanka have since focused resources on successfully expanding universal access beyond primary schooling to the lower and the upper levels of secondary education.<sup>126</sup>

While these four conditions serve to facilitate an expansion of secondary education access, an absence of one or more of these conditions does not necessarily preclude a country from achieving universal upper secondary access. For example, Sri Lanka illustrates the great strides that can be made in upper secondary access despite a climate of political instability. A detailed case study on Sri Lanka and its path towards universalising upper secondary is available in Annex 6.

Meanwhile, Cuba is an example of a country that achieved near-universal access to upper secondary despite having limited financial resources. Its success comes mainly from radical re-planning of resources and an integrated work-and-education structure customised to its specific national context.<sup>127</sup>

As described in Section III, high population growth remains a significant challenge to expanding education access. Although resource rich and wealthier countries such as Saudi Arabia have achieved high levels of secondary access a decade earlier despite high population growth, these are rarities.<sup>128</sup> Even though some countries with a high population growth rate — such as Kenya, Tanzania, and Uganda — are embarking on universalisation, not many countries have sustained high population growth simultaneously with high levels of access at the upper secondary level, particularly those with limited financial resources.<sup>129</sup> It is in these countries, with high population growth and limited domestic resources to leverage, in which the international community could play the most significant role in boosting access.

121. Ibid.  
122. Drawn from Key Informant interviews (Annex 7).  
123. Ibid.  
124. World Policy Forum. 2015b. *Is Primary Education Tuition-Free and Compulsory?* <http://worldpolicyforum.org/policies/is-primary-education-tuition-free-and-compulsory>  
125. World Bank. 2015a.  
126. Drawn from South Korea and Sri Lanka case studies (Annex 5 and 6).  
127. Cheng, Y. and Manning, P. 2003. *Revolution in Education: China and Cuba in Global Context, 1957–76*. Journal of World History, Vol.14, No. 3, pp. 359–391. University of Hawai'i Press. <http://www.manning.pitt.edu/pdf/2003.RevolutionInEducation.pdf>  
128. World Bank. 2015a.  
129. Drawn from the Kenya case study (Annex 4).



For example, the multi-donor supported Secondary Education Development Program has provided significant assistance to reform Tanzania’s secondary education system along key areas such as curriculum reform, teacher training, financial and school management, and fee-reduction programmes in public secondary schools.<sup>130</sup> Strategies for boosting financial resources are discussed further in Section V.

## MITIGATING UNINTENDED CONSEQUENCES OF UNIVERSALISING UPPER SECONDARY EDUCATION

Even when the foundational factors described above are present, it is perhaps inevitable that any effort to universalise upper secondary education is associated with the risk of potential ramifications on the quality and equity dimensions of education. It is also important to closely examine the *structure* of upper secondary education being considered for fee-free universalisation, and whether the focus is on expanding the reach of general or technical education, or some combination of the two. The factors raised in the discussion that follows are applicable across both structures of upper secondary education; rapid universalisation without consideration to the quality and relevance of both streams can embed inequities.

Nearly all consulted stakeholders agreed that while implementing fee-free secondary education can boost enrollment rates for both boys and girls, there are at least four possible detrimental impacts associated with implementing fee-free upper secondary policies. The most commonly cited unintended consequences and mitigation measures are explored below.

1. **Fee-free provision of upper secondary education without adequate planning of physical infrastructure and stock of well-trained teachers can lead to overcrowded classrooms and a drop in the quality of education.** A shortage of teachers is one of the key constraints to learning, and those in the poorest areas tend to be most affected: recent data shows that 3.3 million additional primary school teachers are needed by 2030 to achieve universal primary enrollment, with an even higher 5.1 million additional teachers needed at the lower secondary level to achieve universal lower secondary enrollment by 2030.<sup>131</sup> Sub-Saharan Africa faces the greatest gap, and accounts for 63% of primary school teachers needed and 50% of the additional lower secondary school teachers needed. Worryingly, 29 countries will be unable to fill the gap to recruit the primary and lower secondary teachers needed by 2030, leading to severe implications for the quality of learning.<sup>132</sup> In addition, challenges are faced in adequately training existing teachers; the gap in well-trained teachers is particularly likely to be seen in disadvantaged areas, worsening equity concerns. To even achieve universal primary education, the requirements are drastic: a study in Sub-Saharan Africa shows that in 8 out of 14 countries, at least 5% of *all* upper secondary graduates in 2020 would need to enter the teaching profession — a very

high bar.<sup>133</sup> The situation is likely to be exacerbated for teacher supply at the upper secondary level, where more specialised training and subject-specific knowledge may be needed, with qualified candidates in demand in other sectors.<sup>134</sup>

“The politics around upper secondary education are more pronounced than any other part of the education system.”

### EXPERT STAKEHOLDER

The case of Uganda is illustrative of the risk of inadequate, trained teachers and other resources: following the country’s implementation of a fee-free universal secondary education scheme in 2007, enrollment at the secondary level rose from 547 million in 1999 to 1.4 billion in 2013, and transition rates from primary to secondary jumped from 44% in 2000 to more than 60% by 2010.<sup>135</sup> However, a loss in quality has been seen, with the number of O-level exam candidates achieving the minimum pass rates dropping to 80% in 2010 from 95% in 2006.<sup>136</sup>

Mitigating this risk requires careful planning by policymakers, sources for sustainable financing, and alignment at both the industry and household level on *why* fee-free secondary education is crucial and the pathways through which its benefits will be derived. In order to ensure an adequate stock of teachers at the secondary level, policymakers may need to be ready to implement flexible solutions, such as utilising primary teachers for lower secondary, recruiting existing upper secondary students to enter the teaching profession, and increasing the effectiveness of existing teachers.<sup>137</sup>

Importantly, government commitment and political will to expand access and quality is crucial. Post-revolution Cuba is perhaps one of the most emphatic examples of what can be accomplished if political will and careful planning are aligned. Cuba’s political leadership hoisted education as a crucial priority for the country’s development and, despite limited resources, immediately undertook drastic reforms of the education system. It moved quickly to channel all education resources to lay the basic foundations needed for higher study with a nationwide literacy campaign and establishment of robust teacher training programmes. Part-time adult education programmes were developed and secondary schools established in rural areas; these revolutionary schools closely linked work and study and required students to participate in both agricultural work in the countryside and secondary study. Given limited resources, the government carefully planned inputs, incorporated compulsory part-time work into the education structure to help fund it, and undertook a continuous effort to foster a shared understanding of the need for these reforms. This monumental undertaking drastically changed the demography of higher education, making it available to all,

130. Verspoor, A.M. and SEIA team. 2008.

131. UNESCO. 2014a. *Teaching and Learning — Achieving quality for all. 2013-2014*. EFA Global Monitoring Report. Paris: UNESCO. <http://unesdoc.unesco.org/images/0022/002256/225660e.pdf>

132. Ibid.

133. Ibid.

134. Moore, A. S., DeStefano, J. et al. *Working Paper: The Expansion of Secondary Education and the Need for Teachers: How big is the gap?*

135. UNESCO. UIS database. Accessed June 2015.

136. Kavuma, R.M. *Free Universal Secondary Education in Uganda has Yielded Mixed Results*. The Guardian. October 2011. <http://www.theguardian.com/global-development/poverty-matters/2011/oct/25/free-secondary-education-uganda-mixed-results>

137. Moore, A. S., DeStefano, J. et al. *Working Paper: The Expansion of Secondary Education and the Need for Teachers: How big is the gap?* 2008. USAID. Equip 2. <http://www.epdc.org/sites/default/files/documents/Expansion%20of%20Secondary%20Education%20and%20the%20Need%20for%20Teachers.pdf>

regardless of gender, location, income, or previous education. Despite mixed opinions about its approach and its underlying political agenda, today, Cuba has one of the most equitable education systems in the world and boasts an impressive GER2 of 99%.<sup>138</sup>

- 2. The quality of education and long-term value of upper secondary education is influenced by the relevance of the curricula.** Outdated curricula at the upper secondary level lead to youth not receiving the appropriate education needed to be healthy, productive citizens, resulting in a skills mismatch and high levels of youth unemployment. For example, one stakeholder raised concerns that the Sub-Saharan Africa education structure is extending its reach without consideration of the skillsets needed for today's labor market. Instead, the curricula in many parts of Sub-Saharan Africa are a "copy-paste" effort from the colonial systems of education, long after those countries have abandoned it themselves. Indeed, the relevance challenge was also witnessed in Uganda, with concerns that secondary education — albeit now accessible to all youth — is not delivering key transferable life skills which are particularly crucial for employment.<sup>139</sup>

**“With a poor quality of education [at an upper secondary level], it is not infeasible that it will lead to wars [instigated by] half-baked youth without jobs.”**

#### EXPERT STAKEHOLDER

In order to ensure relevance, the content of curricula must have strong links to the labor market, so that youth are equipped with the right skills for industry needs. Stronger ties may be needed between industry and educators, so that upper secondary education can appropriately support individual livelihoods and the broader growth of the nation. Through a series of reforms over the past 50 years, South Korea experience exemplifies how successfully tying labor market actors into the development and implementation of secondary education can result in high levels of relevance of upper secondary outcomes and boost economic progress. Policies such as mandating regular employer-funded skills training, establishing numerous new vocational high schools, incorporating feedback from industries into the national upper secondary curriculum design, and fostering close partnerships between employers, upper secondary institutions, and government have spurred South Korea's economic growth. These policies, and their resulting promises of employment or advancement to tertiary institutions, have also solidified a strong demand for upper secondary education amongst students and parents.<sup>140, 141</sup> As a result, over the past decade, South Korea has consistently churned out a GER2 of 96–98%.<sup>142</sup>

- 3. There is broad agreement that appropriate policies to promote equity are crucial in order to ensure all demographic groups have access to quality education.** Reducing monetary barriers through targeted demand side interventions to marginalised populations been shown to be successful in boosting enrollment at all levels. For example, Kenya launched Fee Free Secondary Education to reduce the financial burden of secondary education on children and their families. The scheme provisions Kenyan Shillings 10,265 (approximately US\$105) for each child annually to decrease the cost of attending secondary school, and has contributed to a 50% increase in secondary enrollment since its start in 2008.<sup>143</sup>

Given cultural norms that may pose a barrier to girls' education in many countries, there is a need to be particularly mindful of how to increase opportunities for girls to participate at the secondary level. It will be crucial to develop policies to allay safety concerns and target the specific needs of adolescent girls, and to ensure a supportive environment with adequate safety nets in place to foster learning. Community-based partnerships play a key role in supporting the inclusion of girls, particularly by increasing the involvement of parents, who may have been excluded from the education system themselves. Indeed, one expert consulted noted that although demand side interventions such as stipends and conditional cash transfers can play a role in increasing access to girls at the upper secondary level, such measures need to start at the lower level to tackle broader equity concerns. Indeed, further study may be needed to explore how best to mitigate drop-outs between primary and lower secondary education, and again between the lower and upper levels. Mexico, for instance, has expanded the use of conditional cash transfers from primary through upper secondary schools through its Oportunidades program. Preliminary results indicate that conditional cash transfers have even higher rates of impact at the upper levels of education for both genders, and have demonstrated increased primary to secondary transition rates, reduced dropout rates, and longer average years of schooling.<sup>144</sup> Meanwhile, Bangladesh's experience with girls' stipends at the upper secondary level is described further in Section V.

Equity concerns between rural and urban secondary schools, as well as private and public secondary schools also exist. An expert familiar with Bangladesh's experience with stipends at the secondary level noted that quality is often perceived to be higher in private urban schools, with rural schools often seen to have lower learning outcomes than those in the cities. This broad phenomena is also seen in Uganda, which faces the risk of a similar "two-tier" learning system of "under-performing, mostly rural universal secondary education schools and a minority in better, private schools."<sup>145</sup> These equity concerns can also extend to the general and vocational tracks, leading to entrenching a stratified, inflexible system at the upper secondary level.

In order to mitigate against these set of concerns, a consulted expert emphasised that broad systems reforms may be needed. For instance, South Korea eliminated entrance exams at the secondary level, replacing this by a lottery system based on where children reside. This has had an equity-promoting effect, virtually eliminating elite secondary schools.

138. Cheng, Y. and Manning, P. 2003.

139. Kavuma, R.M. October 2011.

140. Drawn from the South Korea case study (Annex 5)

141. World Bank. 2013a.

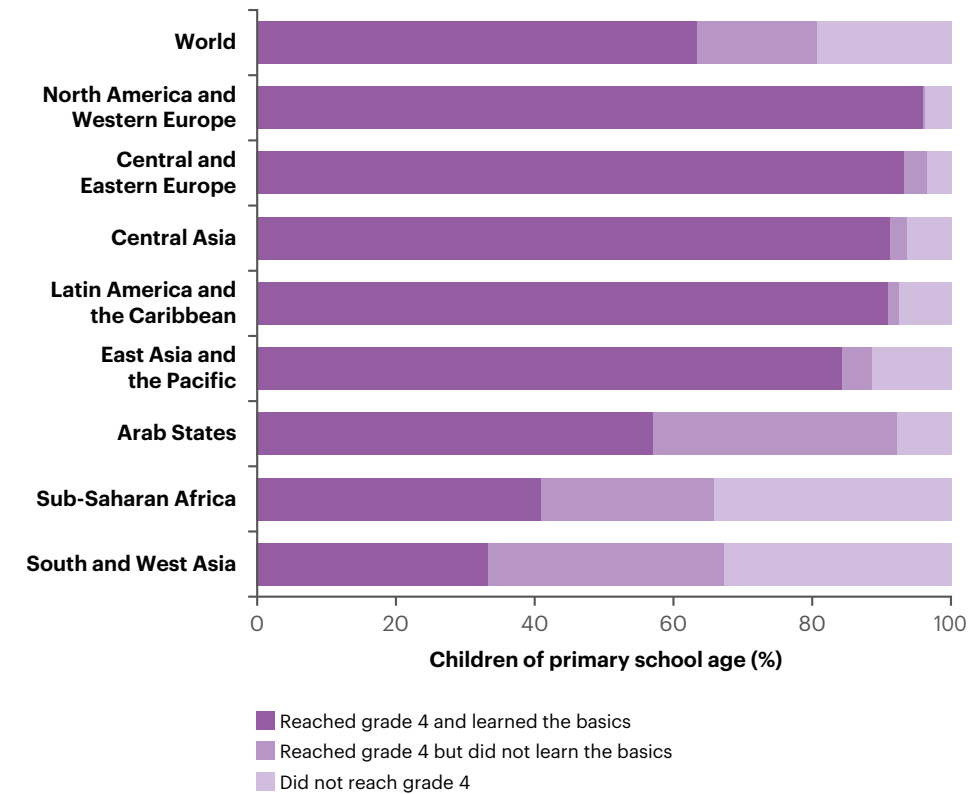
142. World Bank. 2015a.

143. Drawn from the Kenya case study (Annex 4).

144. World Bank. 2007. *Conditional Cash Transfers: The Next Generation — A Case Study of Mexico's Oportunidades Program*. Youth Development Notes, Vol.2, No. 4. World Bank. Children & Youth Unit, Human Development Network, <http://siteresources.worldbank.org/INTCY/Resources/395766-1186420121500/YDNVolII4CCT.pdf>

145. Kavuma, R.M. October 2011.





**Figure 8:** Learning outcomes by region  
**Source:** 2011. *The hidden crisis: Armed conflict and education*. Education for All Global Monitoring Report. Paris: UNESCO. <http://unesdoc.unesco.org/images/0019/001907/190743e.pdf>

**4. All stakeholders reiterated that learning achievements at the upper secondary level can only be as good as the quality of learning that takes place at the lower level.**

Experience from the universalisation of education at the primary level has shown that a boost in access does not necessarily lend itself to learning, with estimates showing that of the 650 million primary school age children, roughly 250 million children are not reaching the basic learning standard, even if they progress to Grade 4 (Figure 8).<sup>146</sup> Low repetition rates and high transition rates from the primary level have been seen in all systems with successful secondary level access and learning outcomes.<sup>147</sup> Given the dismal learning performance at the lower level, a shift to prioritising fee-free upper secondary education (which exhibits higher per pupil unit costs) could mean fewer financial resources to improve quality and access at the pre-primary, primary, and lower secondary levels. Such a shift would be regressive in nature, and could further exacerbate equity concerns.

Mitigating this concern will entail strategic country-specific decisions on how to allocate resources at the upper secondary level, and ensuring that the gains at the lower levels are not reversed. Any attempt towards fee-free universalisation of upper secondary education should thus ensure that resources are not taken away from marginalised youth, particularly poor rural girls that are still excluded from quality primary education.<sup>148</sup>

“I shudder at the thought that we are even supporting [universal] lower secondary education given these [poor learning] results at the basic level.”

EXPERT STAKEHOLDER

Importantly, given these factors and learning from the experience in the universalisation of education at the primary level, achieving universal fee-free upper secondary access may not be appropriate or feasible for all countries by 2030. Instead, specific options or incremental phase-in strategies for fee-free upper secondary education may be needed, depending on country context and current learning achievements. The following section presents options for raising additional financing for upper secondary education without impacting the achievements made at the lower levels.

146. UNESCO. 2014a.  
147. Glewwe, P., Zhao, M., and Binder, M. 2006. *Achieving Universal Basic and Secondary Education: How Much Will it Cost?* 2006. American Academy of Arts and Sciences. <https://www.amacad.org/publications/Glewwe.pdf>  
148. EFA Report. 27 May 2015. *12 years “free” or “publicly funded” education? A good outcome.* World Education Blog. <https://efareport.wordpress.com/2015/05/27/12-years-free-or-publicly-funded-education-a-good-outcome/>

# #5

## 5. RECOMMENDATIONS AND OPTIONS ON FINANCING FEE-FREE UPPER SECONDARY EDUCATION

The discussion thus far makes clear that a uniform strategy for implementing fee-free upper secondary education will not be viable or appropriate. Although countries are gradually moving towards incorporating lower secondary education as part of compulsory basic education, steep challenges related to learning outcomes and equity at the lower grades still persist in many developing countries, particularly in Sub-Saharan Africa.

“There [can be no] one size fits all approach. Fee-free upper secondary education is unlikely to be affordable or [feasible] across the board.”

### EXPERT STAKEHOLDER

With this in mind, upper secondary school policies and financing options may vary depending upon the characteristics and context of the country. Lewin highlights that national policy needs to prioritise investment based on national development strategies and the targets set for enrollment at different levels. He specifically states that “Most countries [in Sub-Saharan Africa] will not be able to afford substantially expanded secondary enrollment without increasing the total budget envelope available to the education sector, increasing the share of that expenditure allocated to the secondary-school subsector, and implementing cost-saving reforms that reduce costs per pupil.”<sup>149</sup> Examples of such cost-saving reforms include adjusting teacher workloads and teacher class ratios; adjusting teacher salaries (the main cost in day schools), reducing non-teaching costs; and adjusting the secondary structure and curriculum offerings.<sup>150</sup> All stakeholders consulted also emphasised the importance of ensuring the suitability of any proposed approach to the needs of the country, with broad agreement that there are likely a number of different categories of country ‘stages’ or characteristics.

As discussed in Section IV, these categories may differ by population growth rates, GDP growth, quality and access to primary education, and the political context. The Human Development Index (HDI) — which considers a variety of quality of life factors such as birthrates, GNI per capita, and income inequality in its country ratings — is also

149. Lewin, K.M. 2008. *Strategies for Sustainable Financing of Secondary Education in Sub-Saharan Africa*. Africa Human Development Series. World Bank. [http://siteresources.worldbank.org/INTAFRREGTOPSEIA/Resources/Study1\\_Financing.pdf](http://siteresources.worldbank.org/INTAFRREGTOPSEIA/Resources/Study1_Financing.pdf)

150. Ibid.



closely tied to the country categorisation.<sup>151</sup> For the purposes of this study and following from consultations with key experts, four broad categories of countries are identified (Figure 9). Indeed, these are broadly in line with Lewin’s categories of countries that are demarcated along enrollment rates and rate of progress towards target enrollment levels when considering sustainable financing strategies for education in Sub-Saharan Africa.

Considering low and lower middle income countries as defined by the World Bank, illustrative examples of countries that fall into each of the four categories are below:

- **Category 1:** Armenia, Guyana, Sri Lanka
- **Category 2:** Bolivia, Indonesia, Vietnam
- **Category 3:** Malawi, Mozambique, Tanzania
- **Category 4:** Central African Republic, Chad, South Sudan

Category	Population growth	GPD growth	Primary level quality and access	Lower secondary quality and access	Upper secondary quality and access	Political context
1	Low/declining	High	Widespread enrollment (NER ~100%) and high learning outcomes	Widespread enrollment (NER ~100%) and high learning outcomes	Widespread enrollment (NER ~95–100%)	Stable
2	Low/declining	High	Widespread enrollment (NER ~100%) and high learning outcomes	Widespread enrollment (NER ~95–100%) and high learning outcomes	Rapidly increasing access; growing emphasis on quality	Stable
3	Low/medium	Medium-High	Rapidly increasing NERs	Increasing focus on access and quality	Increasing focus on access and quality	Stable
4	High	Unstable	Low-medium levels	Low levels	Low levels	Unstable or fragile

Figure 9: Illustrative country categorizations

Category	Population growth GPD growth	
1	Domestic financing options	External financing options
2	<b>Countries in this category likely have a suitable foundation in place for testing and implementing successful fee-free upper secondary education measures. Many countries may have already embarked on fee-free policies at both the upper and/or lower secondary level.</b>	
	<ul style="list-style-type: none"><li>• Increase total public budget allocation to education, in addition to increasing the share of the education budget to upper secondary education.</li><li>• Leverage GDP growth to increase revenue mobilization through more effective and broader means of taxation.</li><li>• Generate increased revenue from natural resources to invest in education.</li></ul>	<ul style="list-style-type: none"><li>• Design diaspora bonds targeted towards education.</li></ul>
3	<b>In some countries, fee-free policies may already be in place for both upper and lower secondary education, as well as for primary education. However, many countries in this category may not necessarily have equitable levels of learning and access — let alone financing — required to effectively and equitably implement universal fee-free upper secondary education immediately.</b>	
	<ul style="list-style-type: none"><li>• Increase total public budget allocation to education, as well as leverage GDP growth to increase revenue mobilization through more effective and broader means of taxation.</li><li>• Institute mandatory corporate social responsibility schemes focused on mobilizing resources for education.</li><li>• Develop community-based partnerships and financing models.</li></ul>	<ul style="list-style-type: none"><li>• Design financing mechanisms such as debt buy-downs to leverage international finance pools.</li><li>• Create public-private partnerships, particularly geared towards vocational education. This could equally be considered as a domestic option.</li></ul>
4	<b>Given the weak state structure and poor education levels at lower levels, it may not be feasible or appropriate for all countries in this category to pursue fee-free education at the upper secondary level until 2025 or beyond.</b>	
	<ul style="list-style-type: none"><li>• The ability of governments to raise revenue may be limited in such contexts.</li></ul>	<ul style="list-style-type: none"><li>• Leverage support from the Global Partnership for Education.</li><li>• Increase humanitarian aid to education.</li></ul>

Figure 10: Summary of financing strategies

151. UNDP. Human Development Index. 2014. Accessed June 2015. <http://hdr.undp.org/en/content/human-development-index-hdi>

Each category presents distinct characteristics and options for financing strategies (Figure 10). It is important to note three key points:

1. Although the cost estimates for fee-free upper secondary school consider both general and TVET access scenarios (Section III), the discussion below is broader in nature though financing options that may be particularly well-suited for a specific stream are highlighted.
2. The categories are illustrative in nature: countries may exhibit characteristics of multiple categories, and so the options that follow may be adapted accordingly. While financing options have been linked to those categories where they may be most suited, these resource mobilisation options may be equally applicable across multiple categories — particularly Categories 2 and 3 — with varying levels of targeting and fee-free prioritisation.
3. The approach is dynamic, and countries have the ability to shift between categories within the next 15 years. Rapid improvements in access and learning outcomes at lower levels, coupled with increased resource mobilisation and political commitment towards secondary education can lead to a greater ability to effectively and equitably implement universal fee-free access at the upper secondary level. Indeed, Vietnam is one such example of a country that has made rapid strides in the past decade, and has now set its sights upon universal access to upper secondary school.

## DOMESTIC AND EXTERNAL FINANCING STRATEGIES

The strategies below examine mechanisms to mobilise the various categories of financing as described in the Revised Draft Outcome Document for the Third International Conference on Financing for Development, including domestic public resources, domestic and international private finance, and international public finance (collectively grouped for the purposes of the analysis as domestic and external financing). **Strategies to grow domestic resources are examined particularly closely, given that these offer the greatest potential to mobilise funds.**<sup>152</sup>

“In order to seriously address the financing gap, much of the impetus and resources will need to come from domestic sources.”

### EXPERT STAKEHOLDER

Although domestic financing remains the most significant source of finance in all developing countries, public international finance — specifically ODA — remains crucial in least developed countries.<sup>153</sup> The Revised Draft Outcome Document calls

for a renewed commitment to allocate 0.7% of GNI in ODA to developing countries, particularly targeting areas of greatest need, in order to increase overall aid pools.<sup>154</sup> Simultaneously, a commitment to education must be emphasised: the recent decreases in education aid as a percentage of overall ODA are a significant concern (Section II). Given the overrepresentation of aid to post-secondary in overall education ODA, donors may also consider reallocation within their education aid budgets, particularly shifting portions of post-secondary aid to upper secondary and lower levels of education. Channeling greater investment to the secondary level in particular will strengthen the link between primary and post-secondary, which currently receives the lowest portion of education funding. In turn, this would have a cyclical effect ensuring current and future investments to post-secondary are sustainable and equitable in nature, contributing to fostering employable talent. An increase of aid, combined with reallocation, could thus play a significant role in reducing inequity.

As described in Section II, improved coordination amongst bilaterals and multilaterals could play a key role in ensuring aid effectiveness at the upper secondary level and across subsectors. Greater coordination amongst global and regional multilaterals could leverage individual strengths, tap into regional insights, and so ensure an efficient use of limited resources. For instance, regional banks like ADB and AfDB have greater insight into regional labor markets and thus may be in a strong position to work with regional governments and private sector actors to coordinate aid to upper secondary levels.

Lastly, aid must be targeted more effectively to create the greatest long-term impact in countries seeking to expand their education systems. This could take two forms, specifically (i) leveraging aid to have a more catalytic impact, and (ii) designing new mechanisms to increase aid’s effectiveness. Recent studies have shown the dramatic impact aid can have in supporting domestic revenue generation, particularly important given that the bulk of financing for education in developing countries comes from domestic sources. Specifically, this may entail supporting countries in strengthening their tax base and collection capabilities: a GMR study showed that for every US\$1 spent to bolster the tax system, US\$350 in revenue was raised.<sup>155, 156</sup> Despite this immense potential to raise revenue for all sectors, including education, under 0.1% of aid currently supports strengthening tax systems.<sup>157</sup> Second, as noted in Section II, new forms of financing such as output-based aid initiatives adopted by REACH may be particularly suited to increase access for poor and marginalised youth at the upper secondary level, as was done in Vietnam’s Upper Secondary Education Enhancement Project, as well as to more generally improve the overall impact per dollar of aid spent. In order to achieve success, such initiatives must be carefully implemented with the appropriate, measurable performance indicators as well as consideration of the context and enabling environment.<sup>158</sup>

152. Rose, P., Steer, L., et al. September 2013.  
153. United Nations. 2014. *Report of the Intergovernmental Committee of Experts on Sustainable*

*Development Financing*. Final Draft. 8 August 2014. <https://sustainabledevelopment.un.org/content/documents/4588FINAL%20REPORT%20ICESDF.pdf>  
154. United Nations. May 2015.  
155. Archer, D. 2014. *The Sustainability of the Global Partnership for Education: The Role of Domestic Resource Mobilisation*. ActionAid. [http://www.actionaid.org/sites/files/actionaid/tax\\_and\\_gpe\\_article\\_-\\_david\\_archer\\_12.06.14.pdf](http://www.actionaid.org/sites/files/actionaid/tax_and_gpe_article_-_david_archer_12.06.14.pdf)  
156. UNESCO. 2014c. *Increasing tax revenues to bridge the education financing gap*. Education for All Global Monitoring Report. GMR Policy Paper 12. March 2014 <http://unesdoc.unesco.org/images/0022/002270/227092E.pdf>  
157. Ibid.  
158. Clist, P. and Dercon, S. 30 June 2014. *12 Principles for Payment By Results (PbR) In International Development*. Accessed June 2015: [http://r4d.dfid.gov.uk/pdf/outputs/Misc\\_Infocomm/clist-dercon-PbR.pdf](http://r4d.dfid.gov.uk/pdf/outputs/Misc_Infocomm/clist-dercon-PbR.pdf)



The financing options that are presented in more depth below were most frequently mentioned in recent literature or through consultations with experts. A variety of mechanisms to *mobilise* financing is explored, while Section VI that follows discusses in more depth how a phased, fee-free approach may be *implemented*.

## FINANCING STRATEGIES BY COUNTRY CATEGORY

### Category 1

Countries with these broad characteristics tend to be well-performing countries, falling near the top of the range for learning outcomes. Countries in this category include both high income countries (e.g. South Korea) as well as lower middle income countries (e.g. Sri Lanka). **Given the broad achievements of countries in this category, including at the upper secondary level, financing options are not presented.** However, an in-depth study of the experience of the South Korea is available in Annex 5, where the lessons and experience of the country's remarkable progression towards achieving near-universal upper secondary education is examined closely.

### Category 2

This broad category encompasses countries that exhibit high NERs and high quality of education at the primary and lower secondary levels, which are also making rapid progress in expanding reach and quality at the upper secondary level. Their strong GDP growth rates are accompanied by stable population growth and a supportive political context. Many countries in South East Asia fall within this category, as do countries in Latin America. **Countries in this category likely have a suitable foundation in place for piloting and implementing successful fee-free upper secondary education measures. Indeed, many countries may have already embarked on fee-free policies at both the upper and/or lower secondary level.** A selection of financing options and strategies that may be appropriate for countries exhibiting these characteristics are discussed below.

### Domestic financing options

- › Increase total public budget allocation to education, in addition to increasing the share of the education budget apportioned to upper secondary education. A commitment towards increasing the total budget allocation to education to 20% or more is crucial to increasing the total

amount of financial resources available for education.<sup>159</sup> Countries that exhibit characteristics of Category 2 may already spend close to 20% given their achievements in education or have the ability to do so. For instance, Vietnam and Malaysia — two countries that fall into this category — both spent 21% on education as a share of their total government expenditure.<sup>160</sup> This first step will boost the prioritisation of education and will increase the overall level of resources available to the sector.

Meanwhile, given the achievements in universal enrollment and learning outcomes in primary and lower secondary education, these national governments in particular should have increased fiscal space for prioritising upper secondary education.<sup>161</sup> Lewin calls for secondary education to receive at least 30% of total education spending,<sup>162</sup> with Category 2 countries likely needing to spend at least this share to implement fee-free education at the upper level. It may be feasible to extend fee-free education to all youth, but mechanisms should be particularly targeted to reduce access and learning challenges faced by disadvantaged and marginalised youth, including girls, ethnic minorities, and disabled children.

**Levies can also be used by the donor community to raise aid for education. For example, it has been estimated that a 0.5% levy on mobile phone transactions in Europe could raise \$894 million for education per year.**

**SOURCE: EDUCATION FOR ALL: FACTS AND FIGURES. 2011.**

Leverage GDP growth to increase revenue mobilisation through more effective and broader means of taxation. High levels of economic growth can be harnessed by increasing the share of GDP towards education. The Zero Draft Outcome Document for the Third International Conference on Financing for Development in Addis Ababa rightly called to commit countries with government revenue below 20% of GDP to increase tax revenue, broaden the tax base, and ensure a fair, effective tax system — although this specificity was omitted in the Revised Draft (May 2015). Financial resources can be further mobilised by increasing the efficiency and effectiveness of tax collection, as well as adopting levies to support education. Revenue generated from taxes remains inadequate in many low and lower middle income countries; it accounts for just 10–14% of GDP in low income countries, compared to tax to GDP ratios of 20–30% in high income countries.<sup>163</sup> Indeed, external technical expertise and aid may be needed to strengthen tax systems in developing countries, as discussed earlier.

159. UNESCO. 2015a.

160. Ibid.

161. Fredriksen, B., and Fossberg, C. 2014.

162. Lewin, K.M. 2008.

163. United Nations. 2014.

In order to boost revenue specifically for education, some countries such as South Korea also have an education tax. This is essentially a surcharge on national and local taxes, and has served to finance education initiatives.<sup>164</sup> Likewise, India adds a 2% addition on income tax liabilities for education, with an additional 1% added as a higher education cess or tax to finance secondary and higher education.

Annex 4 provides a deep dive into how Kenya effectively increased its public financing in education through effective tax collection mechanisms.

**In contrast to countries that struggle to generate revenue, tax revenue in Angola is 42% of GDP. However, only 9% of the budget is spent on education, severely constraining resources to the sector.**

**SOURCE: UNESCO. 2014C.**

Generate increased revenue from natural resources to invest in education. Effective revenue generation from natural resources can support government efforts to boost income, particularly in resource rich low and lower middle income countries. Indeed, GMR analysis found that 17 low and middle income countries could mobilise an additional US\$5 billion a year through their national resources, equivalent to two and a half times the funds they received in aid in 2010.<sup>165</sup> It is crucial to ensure that such deals are designed to not only favor multinational corporations, but that the revenue generated is channeled towards education. For example, it is estimated that US\$36million is lost each year in Ghana through deals that favor mining companies,<sup>166</sup> while the Democratic Republic of the Congo lost US\$1.36 billion in its deals with five mining companies over 2010–2012.<sup>167</sup>

It is important to note that in order to diversify risk, a broad tax base is optimal. Over-reliance on revenue generation from natural resources should be avoided, a tendency that has particularly been seen in Sub-Saharan Africa.<sup>168</sup>

## External financing options

- › Design diaspora bonds targeted towards education. Although this has been included under external financing, diaspora bonds could be issued in domestic currency to fund education, specifically even upper secondary education.<sup>169</sup> On average, diaspora savings in 2009 were 9% of regional GDP in 2009 in low income countries and 2.3% in middle income countries, and may have significant potential in countries with high migrant remittances. The Revised Draft Outcome Document for the Third International Conference on Financing for Development already highlights the crucial role of remittances, and the next step may be to leverage these inflows to galvanise education success. While diaspora bonds have been used widely in India and Israel, more work may be needed to adapt them to the education sector, and specifically to finance upper secondary education.<sup>170</sup>

**Tax revenue in Pakistan is just 10% of GDP, with education only receiving 10% of the government budget. If the government increased its tax revenue to 14% of GDP by 2015 and allocated one-fifth of this to education, it could raise sufficient funds to get all of Pakistan's children and adolescents into school.**

**SOURCE: UNESCO. 2014C.**

## Category 3

Countries in this category demonstrate low to medium rates of population growth, medium to high economic growth rates, and a stable political climate. In terms of educational attainment, primary level enrollment may be rapidly increasing, although the quality and levels of learning may be more ambiguous. Countries may also be increasingly focused on expanding enrollment at the lower secondary level, with some embarking on universalising both upper and lower secondary education. **In some countries, fee-free policies may already be in place for both upper and lower secondary education, as well as for primary education. However, many countries in this category may not necessarily have equitable levels of learning and access, let alone financing, required to effectively and equitably implement universal fee-free upper secondary education immediately.**

164. Asia Trade Hub. South Korea: Taxation. Accessed June 2015. <http://www.asiatraderhub.com/s.korea/tax1.asp>

165. Rose, P., Steer, L., et al. September 2013.

166. Global Campaign for Education. 2013. *A Taxing Business: Financing Education for All Through Domestic Resources*. [http://www.campaignforeducation.org/docs/reports/GCE\\_A%20TAXING%20BUSINESS.pdf](http://www.campaignforeducation.org/docs/reports/GCE_A%20TAXING%20BUSINESS.pdf)

167. UNESCO. 2014c.

168. Ibid.

169. Burnett, N., and Bermingham, D. 2010. *Innovative Financing for Education*. ESP Working Paper Series, No.5. Results for Development Institute and Open Society Institute Education Support Program. <http://www.resultsfordevelopment.org/sites/resultsfordevelopment.org/files/resources/Innovative%20Financing%20for%20Education%20-%20Burnett%20&%20Bermingham.pdf>

170. Ketkar, S., and Ratha, D. *Diaspora Bonds for Education*. <http://siteresources.worldbank.org/FINANCIALSECTOR/Resources/282044-1257537401267/DiasporaBondsEducation.pdf>



## Domestic financing options

- › Increase revenue mobilisation by leveraging GDP growth through more effective and broader taxation, as well as increase total public budget allocation to education. In a similar manner to Category 2, countries in this category must commit to both mobilising public resources and prioritising education. However, unlike Category 2, countries in this category may not necessarily be ready to prioritise fee-free universal upper secondary education over the lower level, although some (e.g. Uganda) may nonetheless seek to embark upon this path. Instead, a greater mobilisation of domestic resources should be used to finance improving the quality of learning acquired at the primary and lower secondary levels through, for instance, teacher training and ensuring the relevancy of curricula. Additionally, resources could feed into initiating or implementing fee-free policies targeting girls and marginalised youth as has been done in Bangladesh, where the government implemented stipend programmes at both the lower secondary and upper secondary levels to boost the female enrollment and quality of education. The stipends are specifically targeted at girls from poor or disadvantaged families, and have been credited with boosting girls' enrollment rates.<sup>171</sup>
- › Institute mandatory corporate social responsibility schemes focused on mobilising resources for education. A few countries — most recently India, in April 2015 — have implemented initiatives that require 1–2% of average net profits from major corporations to flow into CSR efforts, with education being a large priority. Although concerns have arisen about the implementation and impact of such schemes, such an initiative is estimated to generate up to US\$2 billion in additional revenues toward public services in India. Category 2 countries may want to implement such schemes specifically to channel additional funding to upper secondary education, as doing so will not reduce the financial resources still needed at the lower levels. Indeed, given the role upper secondary education plays in fostering an employable workforce, corporations may be amenable to such a mechanism. Develop community-based partnerships and financing models. Partnerships and links with the community have been shown to be crucial to not only mobilise finances where public resources are limited, but to also increase buy-in and ownership, and bolster the value of education. The effectiveness of community-based partnership can be seen in Zimbabwe in the 1980s, where community contributions and labor were harnessed to build secondary school infrastructure. Parents took charge of school management, while the government financed teaching costs and learning materials. This initiative to build schools in the community also decreased dependence on boarding schools and cost US\$50 annually per pupil, compared to annual costs of US\$250 per pupil at traditional boarding schools. Subsequently, communities also supported the establishment of upper secondary schools — an initiative that also would not have been possible with government financing alone.<sup>172</sup>

From a non-financial angle, community participation has been shown to mitigate some equity concerns, and support equitable transitions between primary to lower secondary, and lower to upper secondary.<sup>173</sup>

## External financing options

- › Utilise financing mechanisms such as debt buy-downs to leverage international finance pools. As noted in the Revised Draft Outcome Document for the Third International Conference on Financing for Development, blended finance that combines concessional and non-concessional lending may hold significant promise. Indeed, they may specifically benefit countries in Category 3, some of whom may still be low income nations unable or unwilling to borrow from financial agencies offering non-concessional funding. A loan buy-down mechanism may therefore allow a country to mobilise additional funds — highly conditioned on results — to deploy towards education, possibly towards fee-free upper secondary education targeted at specific demographics.<sup>174</sup>
- › Create public-private partnerships, particularly geared towards vocational education. Facilitating public-private partnerships and leveraging financial resources from private corporations — both domestic and international — are especially valuable for vocational education at the upper secondary level.<sup>175</sup> According to one expert stakeholder, there may be greater opportunity for funding from the private sector for levels of education, such as upper secondary and vocational training, that have direct links to the labor market. As Fredriksen notes: “Private companies may co-finance courses, and may be directly involved in training and management.”<sup>176</sup> Such a mechanism may permit fee-free access at the upper secondary level, and as importantly, ensure the relevancy of curricula to today's labor market. For example, South Korea has had success building strong linkages between TVET providers and employers. Employers are also mandated to provide regular training to employees or pay into a collective fund to finance further vocational training.<sup>177</sup>

## Category 4

Countries in this category are fragile and/or conflict-affected states, with low levels of primary school enrollment and learning. Political and institutional systems may be vulnerable to shock or may be non-existent. **Given the weak state structure and poor education outcomes at lower levels, it may not be feasible or appropriate for all countries in this category to pursue fee-free**

171. Raynor, J., and Wesson, K. 2006. *The Girls' Stipend Program in Bangladesh*. Journal of Education for International Development. <http://www.equip123.net/TEID/articles/3/Bangladesh.pdf>

172. Verspoor, A.M. and SEIA team. 2008.

173. Ibid.

174. Burnett, N. 2014. *Important or Just Trendy? The New World of Education Financing* (PowerPoint slides). Seminar I: Do We Need New Forms and Sources of Financing for Education. Hiroshima University.

175. Fredriksen, B., and Fossberg, C. 2014.

176. Ibid.

177. World Bank. 2013a.

**education at the upper secondary level until 2025 or beyond.** Because of low levels of learning and access at lower levels, many of these countries should focus their education resources at the basic education level to ensure a strong base for secondary education. Indeed, many countries in this category still rely heavily on external aid, in contrast with countries in the previous categories. By their very nature, domestic financing options may be unfeasible or unrealistic; data on domestic public spending for education in such contexts is incomplete and the ability of governments to raise revenue may be limited.<sup>178</sup> Given these factors, the discussion focuses solely on external financing options in which the international community would be heavily involved.

## External financing options

- › Leverage support from the Global Partnership for Education and other actors: The GPE, together with the Inter-Agency Standing Committee (IASC) and the Inter-Agency Network for Education in Emergencies (INEE) provides vital support to many countries in Category 4, as well as those in emergencies and protracted crises.<sup>179</sup> The IASC's Education Cluster coordinates responses at a country level — with funding disbursed directly by agencies — while the INEE serves as a knowledge sharing network.<sup>180</sup> Meanwhile, the GPE plays a key role in external financing for this category of countries, with more than 40% of GPE's disbursements directed to fragile and conflict-affected countries, with a particular focus to support the poorest children in attaining basic education.<sup>181</sup>

However, given the GPE's core commitment to basic education, an expansion of its scope or additional mechanisms to fund higher levels of education may be needed (Section II). The Revised Draft Outcome Document for the Third International Conference on Financing for Development specifically calls for the GPE to be scaled up to provide for secondary education, which may be especially crucial for vulnerable adolescent children in these countries once a strong enough base has been built at the primary level.

- › Increase humanitarian aid to education via dedicated fund: Unfortunately, humanitarian funding to education remains at very low levels: as of 2013, it stands at 2%, well below the 4% target called for by a number of key stakeholders in 2012.<sup>182</sup> In countries that have remained in civil conflict for decades, humanitarian aid is required for all levels of education, and yet a large financing gap continues to remain. The INEE recommends pooled funding in fragile states to increase coordination. To this end, there are three main types of pooled funding mechanisms for disbursing aid: the Central Emergency Response Fund (CERF), Common Humanitarian Funds (CHFs)

and the Emergency Response Funds (ERFs). However, the volume of funding channeled through the mechanisms has not changed since 2010 and was less than 12% in 2013.<sup>183, 184</sup>

With this in mind, Gordon Brown has championed a global emergency education fund, which will have the potential to focus specifically on children in humanitarian crises.<sup>185</sup> It has been suggested that this new mechanism be focused on three principles: (i) ensuring more and better funding, specifically funding that is additional, supports quality outcomes and is based on need, (ii) generating greater support, namely serving to strengthen the capacity of existing systems, and enhance monitoring and tracking efforts in emergency contexts, and (iii) fostering collaboration and commitment, particularly to create more alignment and increase synergies within the broader architecture of emergency funding to education.<sup>186</sup> A dedicated fund will allow for the prioritisation of education in emergency settings.

## ILLUSTRATIVE COSTS OF ACHIEVING UPPER SECONDARY EDUCATION BY COUNTRY CATEGORY

The base cost model presented in Section III can be expanded to consider the costs of achieving fee-free upper secondary education for each of the four country categories. For the purposes of the modelling exercise, the analysis considers the illustrative countries previously mentioned.

Figure 11 illustrates the upper secondary gross enrollment ratio in 2012 for the three illustrative countries in each of the categories. The distinction between the groups are clear when considering present access and distance to full upper secondary access. In Category 1 countries, the upper secondary GER is 80–90%; in Category 2 countries it is 60–72%; in Category 3, 17–23%; and in Category 4, 5–17%. Besides upper secondary enrollment ratios, the categories also differ with regards to population growth and income. Category 1 and 2 countries have a fertility rate of 2–3 children per woman and are middle income, while Category 3 and 4 countries have a fertility rate of 4–6 and are low income.

The second panel in Figure 11 shows the projected costs of achieving complete access to all levels of schooling from preschool through secondary by 2030 in these four category groups. The differences are clear: the same education achievements, namely universal access, place a much higher financial burden on Category 3 and 4 countries than in Category 1 countries. Why is this so? The answer is not only that Category 3 and 4 countries are poorer or less stable, but also that the proportion of children (and hence, pupils) in Category 3 and 4 countries is higher due to continued preferences for large families and unmet need for contraception in these countries.

178. Nicolai, S. 11 May 2015. *Draft: Education in emergencies and protracted crisis. Toward a strengthened response. Background paper for the Oslo Summit on Education Development.* [http://www.ineesite.org/uploads/files/resources/EiE\\_-\\_Toward\\_a\\_strengthened\\_response\\_\\_Oslo\\_Summit\\_paper\\_-\\_DRAFT\\_2015-05-11.pdf](http://www.ineesite.org/uploads/files/resources/EiE_-_Toward_a_strengthened_response__Oslo_Summit_paper_-_DRAFT_2015-05-11.pdf)

179. Ibid.

180. Ibid.

181. UNESCO. 2015a.

182. Ibid.

183. Ibid.

184. Nicolai, S. 11 May 2015.

185. The Office of Gordon and Sarah Brown. January 2015.

186. Save the Children. 2015b. *More and Better: Global action to improve funding, support and collaboration for education in emergencies.* [http://www.savethechildren.org.uk/sites/default/files/images/More\\_and\\_Better.pdf](http://www.savethechildren.org.uk/sites/default/files/images/More_and_Better.pdf)

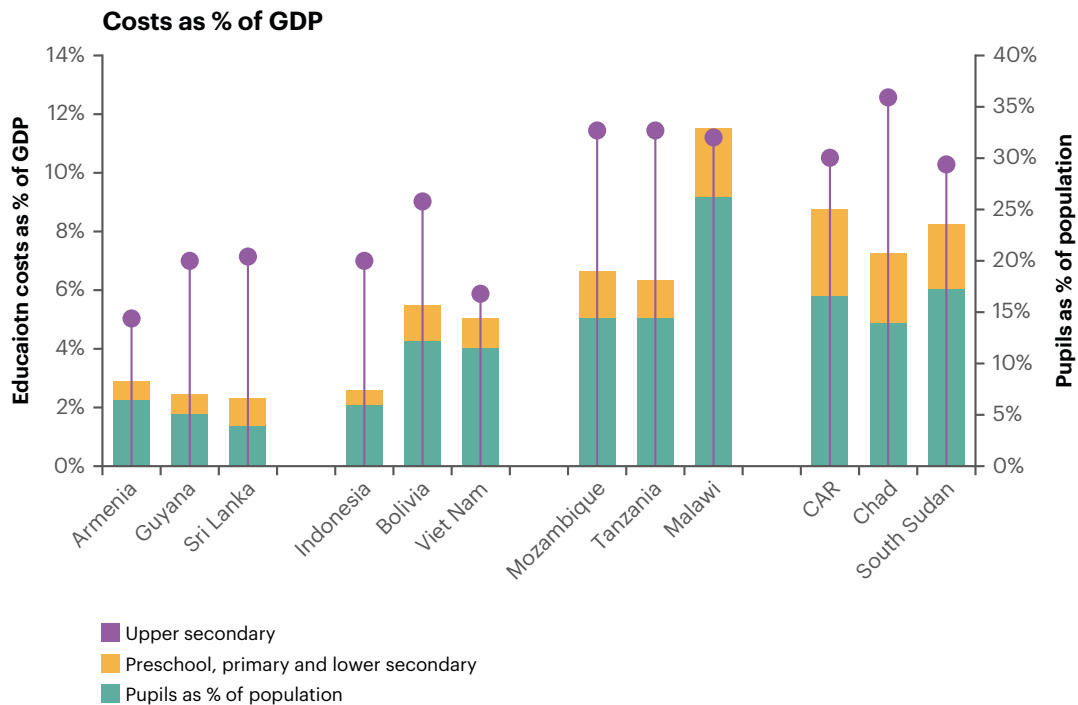
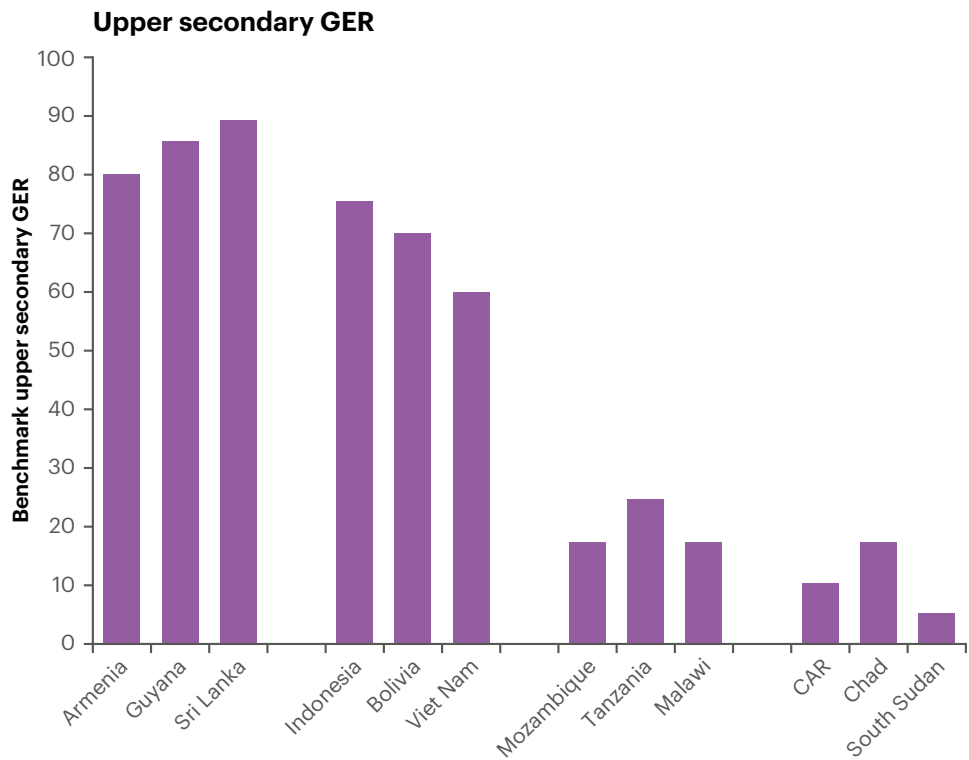


Figure 11: Upper secondary costs in each of the four categories

The purple dots in the second panel show all students preschool-upper secondary as a proportion of the population in each country. The figure shows that a higher proportion of school-age youth generally translates to higher costs (as % of GDP). Within margins, individual countries can mediate that relationship by increasing class sizes and/or lowering teacher salaries. For example, Vietnam and Bolivia both start out with much higher teacher salaries than Indonesia in 2012, and are projected to maintain those. They can do this because they have the fiscal space to do so: these countries translate their relatively low demographic burden into higher education quality. In contrast, Tanzania and Mozambique are projected to spend somewhat similar portions of GDP as Vietnam and Bolivia despite having more school-aged youth, but they do so by having substantially larger class sizes — approximately 40 pupils per class compared to 20–25 in Bolivia and Vietnam.

In sum, it is clear that universal fee-free access across all levels of education place a significant burden on Category 3 and 4 countries, reiterating that many countries in these two categories may not have the financing required to effectively and equitably implement universal access immediately.



# #6

## 6. DISCUSSION AND CONCLUSION

Numerous country experiences have shown that monetary factors are a barrier to demand, and that abolishing fees, whether at the primary or secondary level, can significantly boost enrollment.<sup>187</sup> As mentioned in Section II, recent research has revealed the large extent to which households face a significant monetary burden and opportunity cost when pursuing secondary education, particularly at the upper level. For example, a 2012 UNESCO study of 15 countries in Sub-Saharan Africa found that household expenditure at the upper secondary level is the equivalent of 85% of public education expenditure, highlighting the enormous strain faced at this level.<sup>188</sup> Worryingly, household contribution at the higher education level is far lower at just roughly 20% of public expenditure, emphasising the regressive nature of public funding efforts.

As discussed in Section III, achieving fee-free access at all levels of education in low and lower middle income countries will result in education requiring between 4.20% – 6.91% of GDP over 2015–2030, with universal access placing a particularly high financial burden on countries in Category 3 and 4 (Section V). Importantly however, experience from both the primary and secondary experience shows that fee abolishment may alone not be sufficient to boost access, particularly for girls and other disadvantaged populations. As discussed in Section II, household out-of-pocket expenses on education remain significant, even where fee-free policies at the secondary level may exist. For example, although abolishing secondary school fees reduced household costs by 58% for day schools and 31% for boarding schools in Kenya, indirect costs are still 12–20 times the monthly income of families in rural areas of the country.<sup>189</sup> The opportunity costs are high and the perceived immediate economic benefit of secondary education may be limited, particularly for low income households.<sup>190</sup> Secondary education is therefore still not accessible to those in the lowest quintiles, leading to grave equity concerns. Indeed, it has been suggested that the increased public investment in secondary education may be more equitable if it is specifically targeted towards the most marginalised communities.<sup>191</sup>

187. Kattan, R.B. 2006.

188. Foko, B., Tiya, B. K., and Gusson, G. March 2012. *Household Education Spending*. An Analytical and Comparative Perspective for 15 African Countries. Dakar: UNESCO. <http://www.uis.unesco.org/Library/Documents/household-education-spending-analytical-comparative-perspective-15-african-countries-2012-en.pdf>

189. UNESCO. 2012b. *Youth and skills: putting education to work*. Education for All Global Monitoring Report. Paris: UNESCO. <http://unesdoc.unesco.org/images/0021/002180/218003e.pdf>

190. Ohba, A. 2011. *The Abolition of Secondary School Fees in Kenya: Responses by the Poor*. International Journal for Educational Development, Vol. 31, No. 4, pp.402–408. Elsevier Ltd.

191. UNESCO. 2012b.

# A PHASED APPROACH TO FEE-FREE UPPER SECONDARY EDUCATION

Given these considerations, a phased approach to fee-free universalisation of upper secondary education may be most appropriate.<sup>192</sup> The timespan or scope of phasing may be determined by country context, priorities, and financial resources available; some countries may choose not to undertake universal fee abolishment until access and learning quality at lower levels have been met. Indeed, such fee-free phasing is aligned with the International Covenant on Economic, Social and Cultural Rights, which calls for the *progressive introduction* of free education at the secondary level.<sup>193</sup>

2015 — 2020	Phase 1: Fee-free access extended to certain marginalized demographics, including girls and those in the lowest quintile.
2020 — 2025	Phase 2: Fee-free access extended to a broader demographic, including those in rural areas and those in informal urban settlements.
2025 — 2030	Phase 3: Fee-free access extended to all citizens.

Figure 12: Illustrative phased approach to fee-free universalization by 2030

Using the country categorisation described in Section V, it is clear that Category 1 countries may be most suited to embark on universalising fee-free upper secondary education, if such a scheme is not already in place. Meanwhile, Category 2 and 3 countries may adopt a more incremental approach. Some Category 2 countries may be able to achieve universal fee-free upper secondary by 2030 in an incremental, planned manner (Figure 12 provides an illustrative example). Such a phased approach to fee-free upper secondary education could mitigate equity concerns through first targeting girls and other marginalised youth. Additionally, fee-free access itself may be gradually implemented over the five-year period to ensure that lessons are absorbed for future phases; for example, fee-reduction policies may start with mitigating ancillary costs or first targeting girls in certain districts. A planned process would thus ensure that domestic financial resources are not unduly diverted from basic education. Meanwhile, Category 3 countries may choose to prioritise expanding access and improving learning outcomes at the lower secondary and primary levels before initiating any fee-free measures at the upper secondary level, with Phase 1 possibly pushed back to 2020–2025. Lastly, as already noted, it may not be feasible or appropriate for Category 4 countries to pursue fee-free education at the upper secondary level and so any sort of fee-free phasing may not be initiated until 2025 or beyond.

192. A similar phased-in mechanism to abolish fees at the lower level was also suggested by Kattan, R.B. (2006).  
193. United Nations. *International Covenant on Economic, Social and Cultural Rights*.

An incremental approach such as this is in line with the interim ‘stepping stone targets’ advocated by Save the Children to target the most disadvantaged children and ensure equitable outcomes for the SDGs.<sup>194</sup> Indeed, selection for fee-free targeting in Phase 1 and 2 should be done in an “open, inclusive and participatory [process]”, taking into account context and reasons for exclusion.<sup>195</sup> It is crucial to reiterate that there remain distinct differences in country characteristics within each category, and so each country will adopt its own path towards fee-free universalisation. Indeed, some countries may ultimately decide that fee-free upper secondary education for all youth may not be the most feasible or appropriate path. In such cases, the phased approach may be terminated after Phase 2. Meanwhile, countries with large out-of-school populations in Category 2 or 3 may instead prioritise fee-free access for all youth at the primary and lower secondary level, and may not embark on Phase 1 until 2025 or beyond. Regardless of the timespan, it will be crucial to ensure that indirect or ancillary school-related costs to households are also concurrently reduced or mitigated, and a phased, targeted approach may permit the resources for this.

Finally, in many countries — and particularly in low and lower middle income countries — financing strategies in any of these categories must go hand-in-hand with reforms to increase the cost effectiveness of schools, particularly given our focus on the upper secondary level. For example, in Sub-Saharan Africa, per pupil costs at the upper secondary level are six times that of primary (and even higher for vocational courses), while at the lower secondary level, they are three times more expensive. In comparison, per pupil costs at the secondary level are usually twice primary costs in high-enrollment countries.<sup>196</sup> As discussed in Section II, emerging technological innovations in content delivery may be a mechanism to lower unit costs; additionally, distance learning could be more widely adopted for teacher training to improve quality delivery of more complex secondary school subjects.<sup>197</sup> Programmes like EDUCATODOS in Honduras — providing alternative distance learning secondary education through a combination of radio technology, non-traditional centers in churches and work places, and non-formally certified teachers — may also hold lessons for reducing costs of upper secondary delivery. In particular, hiring local teachers with non-formal qualifications, investing in technological services to support them, and leveraging community resources could further create cost-efficiencies at the secondary level. While a full discussion of the input costs of upper secondary school and the assumptions in the cost model for the provision of free universal upper secondary school is present in Section III, it is worth reemphasising that financing strategies alone without reforms — particularly in Category 3 countries — may not be efficient or effective.

194. Save the Children. 2015a. *Fulfilling the Promise. Ensuring the post-2015 education agenda delivers on equity and learning*. [http://www.savethechildren.org.uk/sites/default/files/docs/Fulfilling\\_the\\_Promise.pdf](http://www.savethechildren.org.uk/sites/default/files/docs/Fulfilling_the_Promise.pdf)  
195. Ibid.  
196. Lewin, K.M. 2008.  
197. World Bank. 2015b. *ICTs in Education: Costs*. infoDev. <http://www.infodiv.org/articles/icts-education-costs>

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ANNEX 1:  
SECONDARY EDUCATION  
GROSS ENROLLMENT RATIO

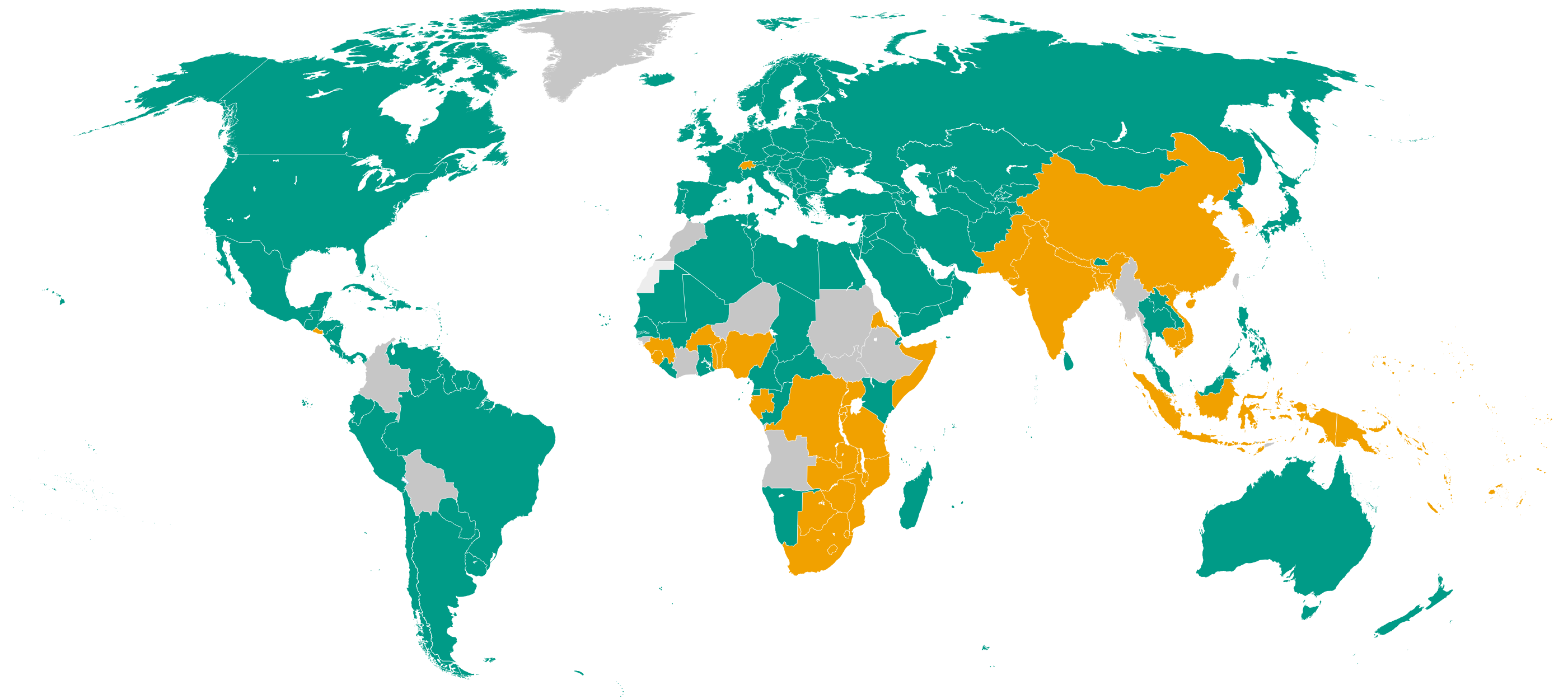
	Lower secondary				Upper secondary				Total secondary							
	School year ending in 2012				School year ending in 2012				School year ending in 1999				School year ending in 2012			
	Total	Male	Female	GPI (F/M)	Total	Male	Female	GPI (F/M)	Total	Male	Female	GPI (F/M)	Total	Male	Female	GPI (F/M)
	Weighted average				Weighted average				Weighted average				Weighted average			
World	85	85	84	0.98	62	63	60	0.96	59	61**	56**	0.91**	73	74	72	0.97
Countries in transition	95	95	95	1.00	98	101	96	0.95	90	90**	91**	1.01**	96	97	95	0.98
Developed countries	103	103	102	0.99	100	100	100	0.99	99	99	100	1.02	101	102	101	0.99
Developing countries	82	83	81	0.97	56**	58**	55**	0.95**	51	55**	48**	0.88**	69**	70**	67**	0.96**
Arab States	89	93	85	0.92	58	58	58	1.00	61	65	56	0.87	74	76	72	0.95
Central and Eastern Europe	97	97	96	0.99	89	91	86	0.95	88	90**	86**	0.96**	93	94	92	0.97
Central Asia	96**	97**	95**	0.98**	104**	106**	102**	0.96**	85	85	85	1.00	99**	100**	97**	0.98**
East Asia and the Pacific	97	96	97	1.02	73	72	73	1.01	61	62**	59**	0.94**	84	84	85	1.01
East Asia	97	96	97	1.02	72	72	73	1.01	60	62**	58**	0.94**	84	84	85	1.01
Pacific	102	104	99	0.95	102	105	99	0.95	109	109	109	0.99	102	104	99	0.95
Latin America and the Caribbean	98	97	100	1.03	76	71	81	1.14	80**	78**	83**	1.07**	88	85	91	1.07
Caribbean	73**	72**	75**	1.05**	47**	45**	49**	1.09**	50**	50**	50**	0.99**	60**	58**	62**	1.06**
Latin America	99	98	101	1.03	77	72	82	1.14	81**	78**	84**	1.07**	89	86	92	1.07
North America and Western Europe	103	104	103	0.99	98	98	98	1.00	99	98	100	1.02	101	101	100	0.99
South and West Asia	81**	81**	80**	0.98**	51**	54**	48**	0.88**	44	50	38	0.75	64**	66**	62**	0.93**
Sub-Saharan Africa	50**	53**	46**	0.86**	32**	35**	28**	0.80**	25	28	23	0.82	41**	45**	38**	0.84**
Countries with low income	55	57	53	0.93	32	35	29	0.82	29	32	27	0.82	44	47	42	0.89
Countries with middle income	88**	89**	88**	0.99**	61**	62**	60**	0.97**	56	59**	53**	0.89**	74**	75**	73**	0.98**
Lower middle	79**	80**	78**	0.97**	52**	54**	49**	0.90**	46	51	41	0.80	65**	67**	63**	0.94**
Upper middle	101	101	101	1.00	76	74	78	1.05	67	68**	66**	0.97**	88	87	89	1.02
Countries with high income	102	102	102	0.99	99	99	98	0.99	98	97**	98**	1.01**	100	101	100	0.99

Annex 1: Secondary education Gross Enrollment Ratio  
Source: UNESCO. 2015a.

\*\*  
For country level data: UIS partial estimate; for regional and other country-grouping weighted averages: partial imputation due to incomplete country coverage (between 33% and 60% of population for the region or other country grouping).



## ANNEX 2: GLOBAL PREVALENCE OF FEE-FREE SECONDARY EDUCATION



**Annex 2:** Global prevalence of fee-free secondary education  
**Source:** World Policy Forum. 2015a.

■ Tuition reported ■ Tuition-free

ANNEX 3:  
DAC BILATERAL AID TABLES

Bilateral	Total ODA in 2013 (US\$ millions)	ODA as a % of GNI
United States	27,565.69	0.18
Japan	21,694.22	0.23
Germany	14,084.20	0.38
France	8,995.02	0.41
United Kingdom	6,291.55	0.71
Norway	4,615.10	1.08
Australia	4,165.36	0.33
Sweden	3,917.70	1.01
Switzerland	3,744.38	0.45
Netherlands	3,318.15	0.67
Canada	3,278.29	0.28
Korea	2,238.20	0.13
Denmark	2,038.85	0.85
Belgium	1,410.50	0.45
Spain	948.41	0.18
Italy	921.47	0.17
Finland	865.93	0.54
Austria	665.46	0.27
Ireland	543.31	0.46
New Zealand	367.51	0.26
Portugal	318.09	0.23
Luxembourg	302.06	1.00
Poland	141.25	0.10
Czech Republic	57.30	0.11
Greece	43.61	0.10
Iceland	29.41	0.25
Slovenia	20.41	0.13
Slovak Republic	14.16	0.09

Annex 3: DAC bilateral aid tables  
Sources: OECD-DAC. 2015.  
OECD. 2014b.

ANNEX 4:  
KENYA: A CASE STUDY

Country context

Kenya’s economy is the largest and one of the most important in East Africa (40% of the region’s GDP) — one that is integrated within the region but in possession of a global reach. Its upward trajectory has been bolstered by a new constitution (2010) that has put into place a new, more devolved governance structure.<sup>198</sup>

Kenya is a lower middle income economy; its estimated growth of 1 million persons per year is anticipated to strain the education system’s ability to provide quality education now and in the future.<sup>199</sup>

Education landscape

Kenya follows an 8–4–4 system of education, with 8 years at primary school, 4 years secondary and 4 years tertiary.<sup>200</sup> Both primary and secondary education are intended to be free, with primary education compulsory. While access to education has gradually improved over the past ten years, learning levels remain quite low. According to a 2011 Uwezo study, less than half of students in grade 4 pass both English and numeracy tests at the standard 2 level<sup>201</sup> and Kenya’s reading proficiency has dropped from second to fifth among the 15 African countries in the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ).<sup>202</sup> More encouragingly, Kenya has achieved near gender parity at the secondary level.<sup>203</sup>

198. Kimenyi, M., and Kibe, J. Jan 6, 2014. *Africa's Powerhouse*. The Brookings Institution. <http://www.brookings.edu/research/opinions/2013/12/30-kenya-economy-kimenyi>

199. World Bank. 2015a.

200. Results for Development Institute. 2015b. *Center for Education Innovations: Kenya*. Accessed June 2015. <http://www.educationinnovations.org/country/kenya>

201. Uwezo. 2011. *Are Our Children Learning?* Uwezo Kenya. [http://www.uwezo.net/wp-content/uploads/2012/08/KE\\_2011\\_AnnualAssessmentReport.pdf](http://www.uwezo.net/wp-content/uploads/2012/08/KE_2011_AnnualAssessmentReport.pdf)

202. USAID. *Kenya: Education*. <http://www.usaid.gov/kenya/education>

203. UNESCO. 2012a. *Global partnership for Girls' and Women's Education — One Year on*. May 2011–May 2012. UNESCO. [http://www.unesco.org/eri/cp/factsheets\\_ed/KE\\_EDFactSheet.pdf](http://www.unesco.org/eri/cp/factsheets_ed/KE_EDFactSheet.pdf)

Net enrollment rate, secondary
56%
Gross enrollment ratio, secondary
67%
Progression to secondary school, female
–
Progression to secondary school, male
–

**Annex 4:** Kenya: a case study  
**Source:** World Bank. 2015a.

Secondary schools are either day schools, boarding schools or some combination of both, with approximately 2/3 falling under the day category.

While the private sector is a large player at the pre-primary and primary levels, this is not the case for secondary education, with only 12% of students enrolled in non-vocational private schools.<sup>204</sup> Furthermore, TVET is not prevalent in Kenya, as less than 1% of all students are enrolled in secondary TVET schools.<sup>205</sup>

The Global Competitiveness Index (GCI) 2013-2014 ranks Kenya 44th in quality of education out of 148 countries.<sup>206</sup>

The Constituency Development Fund (CDF) developed in 2003, is intended to support constituency-level, grassroots development projects. Three-quarters of the amount is divided equitably between Kenya’s 210 constituencies while the remaining one-fourth is divided based on a poverty index to cater for poorer constituencies. Nearly half of CDFs resources have been allocated to the education sector, aiding infrastructure development.

**SOURCE: ROMERO, R.G. 2009. *DECENTRALIZATION, ACCOUNTABILITY AND THE MPS ELECTIONS: THE CASE OF THE CONSTITUENCY DEVELOPMENT FUND IN KENYA*. IIG BRIEFING PAPER 2. IMPROVING INSTITUTIONS FOR PRO-POOR GROWTH (IIG).**

204. The Economist. Feb 22, 2014. *Education in Kenya: Classroom divisions*. <http://www.economist.com/news/middle-east-and-africa/21596981-paid-private-schools-are-better-value-money-free-sort-classroom>

205. Nicolai, S., Prizzon, A., and Hine, S. July 2014. *Beyond Basic: The growth of post-primary education in Kenya*. ODI. <http://www.developmentprogress.org/file/1953/download?token=HxC8goBZ>

206. Kimenyi, M., and Kibe, J. Jan 6, 2014.

Education spending and financing

The priority placed on education is manifest in its domestic outlays. Education traditionally received the highest portion of public resources, generally above 20%, and education spending increased by 31% in real terms between 2003 and 2009. Tellingly, primary and secondary education budgets were ring-fenced after the 2008–2009 global economic crisis.<sup>207</sup>

This political commitment to education was also evident in the important 2003 Free Primary Education (FPE) program, which aimed and succeeded in improving declining primary school re-enrollment numbers. This program abolished all levies and fees in primary schools, and thus served as an equity-increasing measure. It served as a catalyst for increasing the gross enrollment ratio to over 100% and had the effect of stimulating public demand for secondary education.<sup>208</sup>

Moreover, as noted by Ayako (2014), increased public financing was bolstered by higher fiscal revenues, derived through not only the expansions of the tax base, but more efficient tax collection.<sup>209</sup>

Institutional arrangements to promote secondary education

In 2008, the government launched Free Day Secondary Education (FDSE). FDSE was very much an outgrowth of Vision 2030, a blueprint for establishing Kenya as an industrialised middle income country by 2030. Under this act, the Ministry of Education was tasked with increasing literacy rates and increasing the transition rate from primary to secondary. Through the FDSE, 10,265 Kenyan Shillings (approximately US\$105) were provided per student per school each year to cover tuition fees and other expenses, drastically lowering the burden placed on students and families.<sup>210</sup>

In practice, however the grant did not fully abolish school fees. Such grants cover direct costs associated with school attendance but not boarding costs. Households are also expected to provide non-discretionary items such as school uniforms and books, and despite price increases, capitation amounts have not risen since they were rolled out in 2008. Moreover, delays in disbursement have been prevalent and the formula does not take into account high-need populations. Nevertheless, the fee reduction program, paired with allocations from the CDF have contributed to boosting transition rates from primary to secondary education, as Kenya has seen a 50% increase in secondary enrollment over the past decade.<sup>211</sup>

207. Ayako, A. B. 2015. *Financing Post-Primary Education in Kenya: A Review of Structure, Trends and Challenges*. International Journal of Education and Research, Vol. 3, No. 4. <http://www.ijern.com/journal/2015/April-2015/29.pdf>

208. Ibid.

209. Ibid.

210. Ibid.

211. Ibid.



In light of the increasing demand for secondary education, the Kenyan government is considering methods to increase the efficiency and financial sustainability of secondary provision. Proposals being considered include establishing a minimum pupil size (likely 150) for each school, along with minimum class sizes.<sup>212</sup>

The private sector is also perceived as having played a role in supporting secondary education. This has taken the form of scholarships, (e.g. the Wings to Fly program by the Equity Group Foundation, which is targeting 10,000 scholarships at the secondary level) and through the development of a scholarship forum that coordinates initiatives among six large funders.<sup>213</sup> Moreover, access to secondary education also profits from modest levels of ODA, namely from the African Development Bank and JICA, although this support focuses largely on improving quality rather than access.<sup>214</sup>

Lastly, although private schools only house a modest percentage of secondary school students, it is notable that many previous private schools, as well as those that fall under the self-help Harambee category of schools, were responsible for initial expansion of secondary education. Many of the once-private schools have since been absorbed by the government.<sup>215</sup>

Key learnings

The Kenya case study illustrates the impact that combining a reduction of demand-side barriers (through the FPE and FDSE programmes) with expansion of domestic resources can have on promoting access to secondary education.

At the same time, it also underscores the need to take into account the hidden costs of attending school — as well as the needs of vulnerable populations — when crafting policies to increase access to secondary education.

212. Nicolai, S., Prizzon, A., and Hine, S. July 2014.  
213. Ibid.  
214. Ayako, A. B. 2015.  
215. Nicolai, S., Prizzon, A., and Hine, S. July 2014.

ANNEX 5:  
SOUTH KOREA: A CASE STUDY

Country context

Economic growth in South Korea over the past fifty years has been impressive, with average annual growth of 7%. A member of OECD, it possesses a per capita income of nearly US\$23,000, with tremendous technological advancement, a track record of innovation, and a stable democracy. While the product of many factors, its growth was initially marked by political authoritarianism and deep state involvement in the economy. Gradually politics liberalised, with Koreans having freely elected a president for the first time since 1987.<sup>216</sup>

Notably, South Korea has experienced a steady decline in population growth, with a total fertility rate of 1.2% in 2013, below the replacement rate and inciting questions about future growth prospects.<sup>217</sup>

Education landscape

The economic growth noted above has been partly fueled by a rapid expansion of the education sector. While only the first nine years of schooling, which are free, are compulsory for children (six years in primary school and three years in middle school), school attendance is nearly universal all the way through to the upper secondary level.<sup>218</sup>

Net enrollment rate, secondary
96%
Gross enrollment ratio, secondary
97%
Progression to secondary school, female
100%
Progression to secondary school, male
100%

Annex 5: South Korea: a case study  
Source: World Bank. 2015a.

216. N Noland, M. 2014. *Six Markets to Watch: South Korea — The Backwater That Boomed*. Foreign Affairs. January/February 2014. Council on Foreign Relations.  
217. World Bank. 2015a.  
218. Jones, R.S. June 2013. *Education Reform in Korea*. OECD Economics Department Working Papers. OECD iLibrary. [http://www.oecd-ilibrary.org/economics/education-reform-in-korea\\_5k43nxs1t9vh-en;jsessionid=151blqdt360sl.x-oecd-live-03](http://www.oecd-ilibrary.org/economics/education-reform-in-korea_5k43nxs1t9vh-en;jsessionid=151blqdt360sl.x-oecd-live-03)

South Korea has two types of high schools: general, which endeavor to prepare children for tertiary education, and vocational schools. Steadily, the relative share of the population that attend vocational schools has declined, from 36% of all upper secondary students in 2000 to 19% in 2012. <sup>219</sup>

Goals and contents of education are determined at the national level, while school curriculum is organised and implemented at the individual school level, within the framework provided by the central government. <sup>220</sup>

In addition to achieving universal access, South Korean ranks near the top of international learning assessments, including Programme for International Student Assessment (PISA) survey results in reading, mathematics, and science. It has done so while establishing near gender parity in upper secondary completion rates. <sup>221</sup>

Despite impressive statistics, the Korean education system is not without issues. As noted by Jones (2013), challenges include stress for children, who face long days and stiff competition; high financial burdens on families (a high percentage of whom pay for *hagwons*, or private, after-school classes in order to boost chances of attending a top university); and an increasing mismatch between the needs of the job market and the skills acquired in vocational high schools, which partly explains the decline in attendance in such schools. <sup>222</sup>

Education spending and financing

The South Korean government has, for the past fifty years, understood education to be an engine for economic growth. Total spending on education as a share of GDP in Korea is the third highest in the OECD at 8%. <sup>223</sup> Public expenditure on education as a percentage of total public expenditure fares slightly worse, ranking 5th among OECD countries, which reveals the very high share of private expenditure on educational institutions. <sup>224</sup> While Korea increased its share of public expenditure on primary and lower secondary by 78% between 2000 and 2009, private funding jumped by 134% over this period. <sup>225</sup>

Annual expenditure on secondary education per student is somewhat modest relative to other OECD countries at US\$8,199. <sup>226</sup> However, there have been considerable increases in secondary school salaries over the past decade, with the ratio of upper secondary school teacher salaries to those of full-time, adult workers with a tertiary education ranking first among OECD countries at 1.36. <sup>227</sup>

219. Ibid.  
220. Ibid.  
221. Ibid.  
222. Ibid.  
223. OECD. 2014a. *Country Note: Korea*. Education at a Glance: OECD Indicators. <http://www.oecd.org/edu/Korea-EAG2014-Country-Note.pdf>  
224. Ibid.  
225. Ibid.  
226. Ibid.  
227. Ibid.

School funding is highly centralised, with local school systems deriving 80% of their revenue from the central Ministry of Education, Science and Technology (MEST) budget. <sup>228</sup> Local systems are also funded on a small scale through revenue transferred from local governing bodies, school admission fees and tuition, and locally issued bodies. Provincial Offices of Education then have discretionary spending power for these funds.

Private schools receive a small portion of government funding and subsidies, though their chief sources of financing are tuition and private support. The size of their subsidies is determined by the difference between the school's budget and a standard budget for a public school of the same enrollment size.

Institutional arrangements to promote secondary education

Expansion of secondary education began in earnest in the late 1960s, as the need for skilled workers increased, resultant from rapid economic growth. In light of increased demand, the government bolstered capacity through public financing and demand-side measures. <sup>229</sup>

Notably, secondary education exams were abolished in 1968, replaced by a lottery system based on where children reside. This has had an equity-promoting effect, virtually eliminating elite secondary schools. <sup>230</sup>

Internal tax revenue is allocated to secondary institutions based on a formula that includes enrollments, school location, local government allocation for education, and school entrance and tuition fees. Across secondary education, government expenditure per student for secondary education is 23%.

SOURCE: KIM, GJ. *EDUCATION POLICIES AND REFORM IN SOUTH KOREA. SECONDARY EDUCATION IN AFRICA: STRATEGIES FOR RENEWAL. THE WORLD BANK.*

228. Center on International Education Benchmarking. 2015. *South Korea: System and School Organisation*. NCEE. <http://www.ncee.org/programs-affiliates/center-on-international-education-benchmarking/top-performing-countries/south-korea-overview/south-korea-system-and-school-organisation/>  
229. Kim, GJ. *Education Policies and Reform in South Korea*. Secondary Education in Africa: Strategies for Renewal. The World Bank. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.196.5601&rep=rep1&type=pdf>  
230. Ibid.

In 1974, a governmental policy named the High School Equalisation Policy (HSEPD), which sought to equalise school inputs including operational expenses, coupled with the a new student admission policy, which employed locally standardised achievement tests, increased secondary enrollment considerably. In addition, a 1981 special education tax was used to finance the improvement of the physical conditions of primary and secondary schools. Although private sources of funding for education are quite high in Korea, the share of private sources is much smaller in secondary education, constituting only one-fourth of the total secondary financing.<sup>231, 232</sup>

There are clear channels of funding for secondary education, with infrastructure provided by the central government and textbooks provided by local government.<sup>233</sup>

Tuition fees for upper secondary education exist. Of considerable concern is private tutoring in Korea, which more than half the students in upper secondary education utilise.<sup>234</sup>

# Key learnings

Above all, the Korean government recognised the inherent link between economic development and educational improvement. This translated to increased commitment of domestic resources. Such investments, coupled with policy measures such as the abolishment of secondary exams in lieu of a lottery system, had the effect of promoting access and equity nationwide.

While the achievement of universal access has not been without challenges (e.g. there is a need to ensure that Korean vocational schools provide skills that are relevant to the current economy and that an equity gap does not emerge as wealthier families pay for extensive private, after-school classes), the Korea case is, in many ways, an exemplar.

231. Ibid.  
232. UNESCO. 2013. *Financing of Secondary Education in the Asia-Pacific Region*. Education Policy Research Series Discussion Document No. 4. 2013. Education Policy and Reform Unit, UNESCO Bangkok. <http://unesdoc.unesco.org/images/0022/002255/225507e.pdf>  
233. Kim, GJ.  
234. Ibid.

# ANNEX 6: SRI LANKA: A CASE STUDY

## Country context

Sri Lanka gained its independence from Britain in 1948 and recently suffered from over two decades of civil war with its two main populations at odds — the Sinhalese majority and Tamil separatists. Civil war was present in Sri Lanka between the years of 1983 and 2009, with a brief cease-fire between the years of 2002 and 2006.

Now finally at peace, the Sri Lankan government has been proactive in building its economy through a distinct national development policy framework, called the Mahinda Chintana.<sup>235, 236</sup> As a result, economic growth has been high compared to Sri Lanka’s South Asian neighbors. It is estimated that GDP will have increased by 7.8% in 2014 from US\$67.18 billion in 2013. Notably, much of this economic growth has been extremely beneficial for Sri Lanka’s poorer populations, with consumption per capita growing 3.3% a year for the bottom 40% of the population, 0.5% higher than the per capita growth of the total population.<sup>237</sup>

## Education landscape

Schooling is compulsory for students between the ages of 5 and 14 (primary and lower secondary).<sup>238</sup> Sri Lanka’s Ministry of Education also conducts internal and external evaluations of schools annually to ensure quality.<sup>239</sup> One measure undertaken to ensure high quality is the introduction of school-based management systems in 2012, which now affects 55% of all students under the age of 18. Additionally, school-based teacher development programmes were implemented in 2012, affecting 63% of all teachers.<sup>240</sup>

235. International Labour Organisation. 2010. *National Development Policy Framework Vision, Mahinda Chintana 2011–2016*. [http://www.ilo.org/dyn/natlex/natlex4.detail?p\\_lang=en&p\\_isn=94373&p\\_country=LKA&p\\_count=271](http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=94373&p_country=LKA&p_count=271)  
236. Central Intelligence Agency. 2015. The World Factbook. *Sri Lanka*. Accessed April 2015. <https://www.cia.gov/library/publications/the-world-factbook/geos/ce.html>  
237. World Bank. 2015d. *Sri Lanka Overview*. Accessed April 2015. <http://www.worldbank.org/en/country/srilanka/overview>  
238. Fulbright. 2012. *The Educational System of Sri Lanka*. United States-Sri Lanka Fulbright Commission. [http://www.fulbrightsrilanka.com/?page\\_id=609](http://www.fulbrightsrilanka.com/?page_id=609)  
239. Ministry of Education — Sri Lanka. Accessed May 2015. <http://www.moe.gov.lk/english/>  
240. World Bank. 2015d.



Net enrollment rate, secondary
85%
Gross enrollment ratio, secondary
99%
Progression to secondary school, female
100%
Progression to secondary school, male
97%

**Annex 6:** Sri Lanka: a case study  
**Source:** World Bank. 2015a.

Broadly speaking, there are four different types of schools in the country — national, provincial, private, and religious schools. The 9,000 provincial schools in Sri Lanka serve the majority of the student-aged population and are tuition-free.<sup>241</sup> Primary school has a high completion rate of 98%, with 96% of students then moving on to pursue secondary education. Secondary education is broken into two portions — junior secondary and senior secondary. Junior secondary focuses on students aged 10 to 14 and senior secondary focuses on students aged 14 to 18. Approximately 84% of students — 87% of girls and 81% of boys — complete junior secondary school.<sup>242</sup> The passing of advanced level examinations are required for students wishing to pursue further education, which is roughly one-third of students who complete their General Certificate of Education Ordinary Level (GCE O Level) examinations. However, despite high enrollment rates at the secondary level, Sri Lanka has a high unemployment rate among educated youth (at 5.5% for men and 11.7% for women in 2013).<sup>243</sup>

Education spending and financing

As of 2012, government spending on education was 1.7% of GDP.<sup>244</sup> More specifically, government expenditure per student at the secondary level as a share of GDP per capita was 6.9% in 2012.<sup>245</sup> Sri Lanka utilises a “Programme Budgeting System,” where budgets are broken down by each ministry and department and also by recurrent and capital expenditures. Recurrent expenditures include operational costs while capital expenditures include developmental costs.<sup>246</sup> Specifically for primary and secondary funding, 20%

241. Clark, N. 2011. *Education in Sri Lanka*. World Education News & Reviews. World Education Services. <http://wenr.wes.org/2011/05/wenr-may-2011-feature/>

242. World Bank. 2015d.

243. ILO. 2013. *Global Employment Trends for Youth 2013*. Geneva: International Labor Organisation. [http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms\\_212423.pdf](http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_212423.pdf)

244. Central Intelligence Agency. 2015.

245. World Bank. 2015a.

246. Oulai, D., da Costa, I., et al. 2009. *Education Budgeting in Bangladesh, Nepal and Sri Lanka: Resource Management for Prioritisation and Control*. UNESCO and International Institute for Education Planning. <http://unesdoc.unesco.org/images/0018/001871/187180E.pdf>

of the allocated budget is meant to go to capital expenditures.<sup>247</sup> Sri Lanka also initiated the “Programme of School Improvement” in 2006, which encourages local communities to raise funds as a mechanism to supplement government funding.<sup>248</sup>

Guidelines for costs associated with teachers and infrastructure are followed by various divisions of government. For instance, both the central and provincial governments are responsible for recruiting, employing, and paying salaries to teachers. These salaries range from US\$3,501 starting off to US\$7,215 at the top of the pay scale.<sup>249</sup> Provincial and state governments both are responsible for the funding costs associated with new construction, while textbook purchasing is the responsibility of the central government alone.<sup>250</sup>

Sustained economic growth is a fundamental issue at the heart of the Mahinda Chintana and having a valuable workforce is crucial to its plan. To counteract high youth unemployment, which is leading to skills shortages and under-productive industries, the Sri Lankan government has established the Tertiary and Vocational Education Commission and has encouraged the implementation of a variety of other policies. This Commission has developed the National Vocational Qualification Framework and additional professional education programmes are now being developed and rolled out.<sup>251</sup>

Institutional arrangements to promote secondary education

The Sri Lankan Constitution of 1978 mandated the right to free education and compulsory schooling between the ages of 5 and 14. Also required are various levels of teacher training. Primary and secondary teachers are required to train for three years, and senior secondary teachers mandated to have a Bachelor of Education or any Bachelor degree with a postgraduate Diploma of Education.<sup>252</sup>

Prior to 2003, private schools were prohibited from being established, which in part accounts for their current limited presence in Sri Lanka. However, legislation has been passed to allow private schools to be established, mostly in the form of international schools. Private schools are now recognised as providing an equivalent level of quality education to public schools.<sup>253</sup>

247. UNESCO. 2013.

248. Ibid.

249. Ibid.

250. Ibid.

251. Dandar, H., Millot, B., et al. 2014. *Building the Skills and Economic Growth and Competitiveness in Sri Lanka*. World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/18409/882690PUB0978100Box385205B00PUBLIC0.pdf?sequence=1>

252. Clark, N. 2011.

253. UNESCO. 2013.

Key learnings

Sri Lanka has a highly successful, affordable, and accessible education system, despite being a war-torn nation for decades. With low dropout rates at the lower secondary level, most students are well equipped to attend technical and vocational schools. Distinctively, female students have higher levels of completion rates at the upper secondary level. Overall now, the key challenge is one of quality, and ensuring that students have the right and relevant skillset to enter the labor market.

ANNEX 7:  
LIST OF KEY INFORMANTS  
INTERVIEWED

Key Informant	Affiliated Organization	Position
Aaron Benavot	UNESCO	Director, Education for All Global Monitoring Report
Barbara Chilangwa	Government of Zambia	Ambassador of Zambia in Angola
Chandrika Bahadur	Sustainable Development Solutions Network	Director, Education Initiatives
David Archer	ActionAid	Head of Programme Development
Dzingai Mutumbuka	UNESCO, International Institute for Education Planning	Governing Board Member
Harry Patrinos	World Bank	Practice Manager, Education
Karen Mundy	Global Partnership for Education	Chief Technical Officer
Keith Lewin	University of Sussex, Consortium for Research on Educational Access, Transitions and Equity	Director & Professor
Liesbet Steer	Brookings Institute, Center for Universal Education	Fellow
Nora Fyles	United Nations Girls' Education Initiative	Head of Secretariat
Safiqul Islam	BRAC Education Programme	Director

Annex 7: List of key informants interviewed

## ANNEX 8: MODEL WITH COST RESULTS FOR PRESCHOOL, PRIMARY, LOWER SECONDARY, AND UPPER SECONDARY

	All		Low income		Lower middle income	
Number of pupils (public and private), in millions						
	2012	2030	2012	2030	2012	2030
Preschool	31	85	5	28	26	57
Primary	418	476	127	163	290	313
Lower secondary	155	242	29	70	125	172
Upper secondary	105	266	18	82	87	184
Public expenditure per pupil, weighted average, US\$ per year						
	2012	2030	2012	2030	2012	2030
Preschool	258	854	117	421	286	1069
Primary	195	403	70	197	250	510
Lower secondary	301	536	144	284	339	639
Upper secondary	751	675	394	367	823	811
Total public costs, US\$ billions						
	2012	2015–2030 average	2012	2015–2030 average	2012	2015–2030 average
Preschool	4.8	31.2	0.4	4.4	4.4	26.8
Primary	68.1	129.4	7.3	19.9	60.8	109.5
Lower secondary	38.0	81.8	3.6	11.6	34.5	70.2
Upper secondary	37.7	97.1	3.1	14.5	34.5	82.7
Second chance youth literacy programmes	0.0	0.3	0.0	0.1	0.0	0.2
ALL levels through secondary	149	340	14	50	134	289
Total public costs, as % of GDP (average, by country)						
	2012	2015–2030 average	2012	2015–2030 average	2012	2015–2030 average
Preschool	0.11%	0.44%	0.06%	0.54%	0.14%	0.38%
Primary	1.73%	2.13%	1.70%	2.72%	1.75%	1.72%
Lower secondary	0.94%	1.35%	0.77%	1.63%	0.95%	1.16%
Upper secondary	0.71%	1.30%	0.57%	1.66%	0.80%	1.06%
Second chance youth literacy programmes	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ALL levels through secondary	3.49%	5.23%	3.10%	6.56%	3.74%	4.31%
External finance needs (finance gap), US\$ billions						
Preschool, primary, lower secondary + literacy	6	24	1	13	4	10
Upper secondary	3	16	1	8	3	8
ALL levels through secondary	9	39	2	21	7	18

**Annex 8:** Model with cost results for preschool, primary, lower secondary, and upper secondary  
**Source:** Wils, A. 2015.

## ANNEX 9: ALTERNATIVE SCENARIOS PROJECTED IN THE ANALYSIS

	All		Low income		Lower middle income	
Alternative scenarios projected in the analysis: Total public costs for all levels through secondary, as % of GDP (average, by country)						
	2012	2015–2030 average	2012	2015–2030 average	2012	2015–2030 average
<b>GMR base scenario</b>	<b>3.49%</b>	<b>5.23%</b>	<b>3.10%</b>	<b>6.56%</b>	<b>3.74%</b>	<b>4.31%</b>
Scenario 1: Conservative access target	3.49%	5.06%	3.10%	6.29%	3.74%	4.21%
Scenario 2: TVET reaching 30% of upper secondary enrollment	3.49%	5.47%	3.10%	6.91%	3.74%	4.48%
Scenario 3: Evolution to “small, smart families”	3.49%	5.00%	3.10%	6.17%	3.74%	4.20%

**Annex 9:** Alternative scenarios projected in the analysis  
**Source:** Wils, A. 2015.





Photo 1: Joshua Roberts/Malala Fund  
Photo 2: Center for Girls' Education Nigeria  
Photo 5: Room to Read  
Photos 3,4,6,7,8,9: Tanya Malott/ Malala Fund

Design by: <http://du.st>

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“

Leaders of the 21st century must deliver on their promises to invest in the future and start investing in books, education and hope, rather than in weapons, war and conflicts. ”

— Malala Yousafzai