## ActionAid research on tax and education Methodological note

ActionAid's research on tax and education uses publicly available data from trusted, reputable and relevant sources. Here is a list of the main sources and an explanation of the methodologies we used in our calculations:

- Information regarding a country's total GDP and GDP per capita is taken from the IMF's World Outlook database and uses US dollars in current prices. Where possible, 2017 figures have been used. Where this has not been possible, the most recent available numbers have been used. For more details, see:https://www.imf.org/external/pubs/ft/weo/2017/01/weodata/index.aspx
- For information regarding how much a country spends on the education of each pupil, the UNESCO UIS database has been the primary source of information. In some cases, other UNESCO or government data has been used. All costs are in US dollars at current prices. For more information about the UNESCO UIS database, see: <a href="http://data.uis.unesco.org">http://data.uis.unesco.org</a>
- ActionAid's data on how much a country spends on education as a
  percentage of their GDP and of their overall budgets is taken primarily from
  UNESCO's UIS database see: <a href="http://data.uis.unesco.org">http://data.uis.unesco.org</a> and in some cases
  from the World Bank's database on education statistics see:
  <a href="http://datatopics.worldbank.org/education/">http://datatopics.worldbank.org/education/</a>
- Information regarding the financial pledges made to the Global Partnership
  for Education (GPE) have all been taken from the pledges made to the GPE by
  countries themselves and can be found here:
  <a href="https://www.globalpartnership.org/funding/replenishment/pledges">https://www.globalpartnership.org/funding/replenishment/pledges</a> Note that all
  conversions from various national currencies into US dollars have been made
  using March and April 2018 exchange rates using <a href="https://www.xe.com">https://www.xe.com</a> and are
  therefore approximate.
- Calculations regarding the growth dividend of educating the girls currently not in education has assumed that all of those girls would finish their primary education, and that their increased productivity would be in line with the averages calculated using best practice methodologies as presented in a World Bank study on the issue (see 'Measuring the Economic Gain of Investing in Girls: The Girl Effect Dividend' by Jad Chaaban Wendy Cunningham, 2011. Policy Research Working Paper 5753'). The calculation assumes that all the girls will enter the workforce and that they will work for 45 years. The calculation for how much additional GDP their work will contribute with over 45 years assume a compound effect of their additions to GDP, i.e. the growth in one year builds on the growth from the previous year.
- The methodology for calculating tax incentives losses varies slightly from country to country. In some cases, authoritative existing estimates have been used, either by government sources or by international organisations. In other

cases, ActionAid has made its own calculations based on data from reputable and reliable sources. For example, the World Bank estimates that Ghana loses 5% of its GDP to tax incentives each year. Meanwhile, the IMF puts Ghana's GDP in 2017 at US\$42.75bn, meaning their estimated annual loss from tax incentives is US\$2.14bn.

- Information regarding the number of out-of-school girls of primary school age is taken primarily from the **UNESCO** UIS database (http://data.uis.unesco.org) and the World Bank's education statistics (http://datatopics.worldbank.org/education/). In the case of Malawi and Nepal, the World Bank figures were very out of date, so ActionAid has made its own calculations. UNESCO figures from 2014 state that 10% of girls of primary school age in Malawi are not in education. UNESCO figures also tell us that the total number of children actually in primary education is 3.08 million.<sup>2</sup> Assuming half of those are girls, 1.54 million girls are of primary school age, meaning that if 10% are not actually in education, then that leaves 154,000 girls not in primary school. In the case of Nepal, UNICEF data has been used. According to UNICEF, an estimated 577,000 children of primary school age in Nepal are not in education in 2016. Assuming half of these are girls, we can estimate that approximately 283,500 girls of primary school age are not in education.<sup>3</sup>
- The estimate that 97% of the funding required to achieve SDG 4 must come from domestic budgets comes from the 2016 Education Commission report The Learning Generation: Investing in education for a changing world, p. 22. http://report.educationcommission.org/.

<sup>&</sup>lt;sup>1</sup> See Education Policy and Data Centre country profile

https://www.epdc.org/sites/default/files/documents/EPDC%20NEP Malawi.pdf

<sup>&</sup>lt;sup>2</sup> See UNESCO Institute for Statistics http://uis.unesco.org/country/MW

<sup>&</sup>lt;sup>3</sup> See UNICEF's 'All Children in School – Nepal Case Study' (2016) phttp://unicef.org.np/uploads/files/927615134285223000-all-children-in-school-report-2016.pdf