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For all Global Out-of-School Children Initiative resources and tools please visit: allinschool.org
Acknowledgements

The updated Global Out-of-School Children Initiative Operational Manual builds on the previous versions produced by UNICEF, UIS and ILO in 2015 and 2011. These OOSCI manuals contributed greatly to improving the availability and quality of data on exclusion from education, as well as awareness of the issue. The current update was undertaken in line with the recommendations of evaluation of the initiative by UNICEF in 2018.¹

The update has drawn on a broad review of out-of-school children studies from countries and regions since 2012, as well as on consultations with key stakeholders and founding partners, focusing on their experiences using the manual to conduct studies or particular approaches adopted to translate evidence into action to reduce exclusion. As such, the update has benefitted from the lessons learned by countries from every region.

Warm thanks are due to all those who have offered their time and experience to enrich and inform this process, including: ministry of education directors, policy executives, programme coordinators, curriculum designers, health and protection officers, M&E specialists, data managers, statistical officers; founding partner experts (UIS, ILO); key international stakeholders (GPE, World Bank); regional and country OOSCI focal points; UNICEF country and regional education advisors and specialists; and consultants tasked with drafting out-of-school children studies.

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### Acronyms and abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>7DE</td>
<td>Seven dimensions of exclusion</td>
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<tr>
<td>ANE</td>
<td>National evaluation agenda</td>
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<tr>
<td>CBE</td>
<td>Complementary basic education</td>
</tr>
<tr>
<td>CECC</td>
<td>Educational and Cultural Coordination in Central America</td>
</tr>
<tr>
<td>CRA</td>
<td>Cumulative risk analysis</td>
</tr>
<tr>
<td>CSF</td>
<td>Community Systems Foundation</td>
</tr>
<tr>
<td>CSO</td>
<td>Civil society organization</td>
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<tr>
<td>DFID / FCDO</td>
<td>Department for International Development / Foreign, Commonwealth and Development Office</td>
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<tr>
<td>DHS</td>
<td>Demographic and health survey</td>
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<tr>
<td>ECW</td>
<td>Education Cannot Wait</td>
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<tr>
<td>EGMA</td>
<td>Early grade math assessment</td>
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<tr>
<td>EGRA</td>
<td>Early grade reading assessment</td>
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<tr>
<td>EMIS</td>
<td>Education management information systems</td>
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<tr>
<td>EQRDA</td>
<td>Education quality reforms in Afghanistan</td>
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<tr>
<td>ESA</td>
<td>Education sector analysis</td>
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<td>ESP</td>
<td>Education sector plan</td>
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<tr>
<td>EWS</td>
<td>Early warning systems</td>
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<tr>
<td>FCDO</td>
<td>Foreign, Commonwealth and Development Office</td>
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<tr>
<td>FGDA</td>
<td>Focus group discussions</td>
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<tr>
<td>GATE</td>
<td>Girls’ Access to Teacher Education</td>
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<td>GEMR</td>
<td>Global education monitoring report</td>
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<td>GPE</td>
<td>Global Partnership for Education</td>
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<tr>
<td>IHSN</td>
<td>International household survey network</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<tr>
<td>ISCED</td>
<td>International standard classification of education</td>
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<tr>
<td>LEG</td>
<td>Local education group</td>
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<tr>
<td>LSMS</td>
<td>Living standards measurement surveys</td>
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<tr>
<td>MEMIS</td>
<td>Maldives education management information system</td>
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<td>MICS</td>
<td>Multiple Indicator Cluster Survey</td>
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<tr>
<td>MICS-EAGLE</td>
<td>Multiple Indicator Cluster Survey-Education Analysis for Global Learning and Equity</td>
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<tr>
<td>MIDEPLAN</td>
<td>Ministry for National Planning and Economic Policy</td>
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<tr>
<td>MoE</td>
<td>Ministry of Education</td>
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<tr>
<td>MoRES</td>
<td>Monitoring of results for equity systems</td>
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<tr>
<td>MPLs</td>
<td>Minimum proficiency levels</td>
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<tr>
<td>NEET</td>
<td>Youth not in education, employment or training</td>
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<tr>
<td>NESP</td>
<td>National education strategic plan</td>
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<tr>
<td>NFE</td>
<td>Non-formal education</td>
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<tr>
<td>NGO</td>
<td>Non-government organization</td>
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<tr>
<td>NSSO</td>
<td>National Sample Survey Organization</td>
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<tr>
<td>OOSCI</td>
<td>Out-of-School Children Initiative</td>
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<tr>
<td>PASEC</td>
<td>The Programme for the Analysis of Education Systems</td>
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<td>PEER</td>
<td>Profiles enhancing education reviews</td>
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<tr>
<td>PISA</td>
<td>Programme for International Student Assessment</td>
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<tr>
<td>RSE</td>
<td>Relative standard error</td>
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<tr>
<td>RBM</td>
<td>Results-based management</td>
</tr>
<tr>
<td>RODO</td>
<td>Risk of dropout</td>
</tr>
<tr>
<td>SEACMEQ</td>
<td>The Southern and Eastern Africa Consortium for Monitoring Educational Quality</td>
</tr>
<tr>
<td>SAS</td>
<td>Statistical Analysis System</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable development goal</td>
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<tr>
<td>SDG4</td>
<td>Sustainable Development Goal 4</td>
</tr>
<tr>
<td>SIMPOC</td>
<td>Statistical Information and Monitoring Programme on Child Labour</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
</tr>
<tr>
<td>SRI-IRM</td>
<td>Social and Rural Research Institute – India Market Research Bureau</td>
</tr>
<tr>
<td>TVET</td>
<td>Technical and vocational education and training</td>
</tr>
<tr>
<td>U-DISE</td>
<td>Unified district information system for education</td>
</tr>
<tr>
<td>UCW</td>
<td>Understanding Children’s Work</td>
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<tr>
<td>UNPD</td>
<td>United Nations Population Division</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<tr>
<td>UNGEI</td>
<td>United Nations Girls’ Education Initiative</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<tr>
<td>UPRE</td>
<td>Unit for Educational Retention, Re-entry and Success</td>
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<tr>
<td>UIS</td>
<td>UNESCO Institute for Statistics</td>
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<tr>
<td>WASH</td>
<td>Water, Sanitation and Hygiene</td>
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<tr>
<td>WB</td>
<td>World Bank</td>
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<tr>
<td>WIDE</td>
<td>World Inequality Database on Education</td>
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Introduction
This section presents the background and purpose of the Global Out-of-School Children Initiative (OOSCI). It describes the Initiative’s revised theory of change and the function of the out-of-school children study and analysis. It concludes by describing the purpose of the Manual, which is to guide out-of-school children studies and inform broader advocacy, analysis and engagement with out-of-school (OOS) children and children at risk of dropping out.

The Out-of-School Children Initiative

In the decade that followed the adoption of Education for All at the World Education Forum in Dakar in 2000, primary enrolment rates improved considerably around the world. This was due, in part, to the massive influx of children into school which followed the implementation of free and compulsory primary education in many countries. However, progress began to show signs of stagnation, and the international community gradually recalibrated its focus, from the broad systemic measures capable of boosting attendance for all, to the finer and more contextualized barriers that in practice continued to impede attendance for many.

Children who do not attend school are among the most vulnerable and hard to reach in the world. They may come from the poorest households, have to work to help support their families and live in remote areas with poor access to government services. They may face discrimination as ethnic minorities or live with disabilities, and may often be girls but also boys in other contexts. They may live in displaced communities, in contexts plagued by conflict and war, or come from depressed peri-urban areas in high income countries.2 Some are so vulnerable that they fail to appear in any national databases, making them even harder to identify and protect.

In response to this paradigm shift, the Global Out-of-School Children Initiative was launched in 2010 to make a significant, sustainable reduction in the number of out-of-school children.3 It aimed to do this by harnessing diverse data sets including education data, health data, regional surveys and population surveys, primarily to: (i) quantify the number of children who are not in school (out-of-school children) or are at risk of dropping out; (ii) identify their individual, household and community characteristics to determine prevalent profiles of exclusion (or risk of exclusion); and (iii) establish the barriers that drive or keep them out-of-school; and (iv) suggest policies to overcome these.

Initially a partnership between UNICEF and the UNESCO Institute for Statistics (UIS), the initiative now is led by UNICEF in partnership with ILO and UNESCO.

The initiative provided the pathway for high level advocacy with governments around the issue. In the years that followed, over 30 country studies were conducted, using a variety of innovative statistical methods to develop evidence-based policy recommendations. The 2015 OOSCI Operational Manual was drafted to draw the lessons from this collective experience, offer clarity of the complex modelling approaches, and offer a standardized and consistent approach to analysis, based on best practice.

Since 2015, indicator calculation methods have evolved as part of the SDG4 monitoring framework, including for pre-primary age and upper secondary children. UIS analysis shows there has been little progress in reducing the global number of out-of-school children, adolescents and youth. In 2020, 259.5 million children, adolescents and youth were out of school, a figure that has increased since 2019, due in

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3 For further background information, see the OOSCI’s webpage: [www.allinschool.org](http://www.allinschool.org)
part to the COVID-19 pandemic. This represents one-sixth of the global population of this age group. Almost three-quarters of these children are in Southern Asia and Sub-Saharan Africa. The root causes of exclusion pre-date the pandemic, but it did make the issue of out-of-school children a prominent concern across the globe, with school closures of unprecedented scale and duration.

An external evaluation of the OOSCI was commissioned in 2018 by UNICEF. It aimed to test the validity of the OOSCI theory of change and its assumptions, to provide a formative assessment of progress towards achieving the overall goal of substantial and sustainable reduction of out-of-school children, and to strengthen the programme logic.

The findings of the evaluation have been integrated into this revised Operational Manual, including key recommendations to: update the theory of change; tap into relevant OOSCI partners’ technical expertise to strengthen links between data and strategic policies and implementation responses, monitoring of policies, and resource mobilization; re-orient the methodology to cover the entire basic education cycle, including upper secondary; target key vulnerable groups that cut across all profiles of out-of-school children; generate explicit strategies that address learning needs; and strengthen programmatic elements to achieve a sustainable and substantial reduction in the number of out-of-school children.

This 2023 Operational Manual aims to embody these changes, circumstances and recommendations, providing up-to-date indicator definitions and computing methods; enhancing government leadership of studies; supporting countries in their expanded study and analysis of OOS and risk of dropout (ROD) children, adolescents and youth; strengthening the identification, promotion and implementation of sound education and multi-sectoral policies.

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that address exclusion; offering approaches and advice to link Out-of-school studies to the learning crisis; and outlining guidance for the consideration of COVID-19 related issues. A more comprehensive overview of the key changes to the first edition of the manual can be found in Annex A.

The goal of the initiative remains fundamentally unchanged. OOSCI aims to significantly and sustainably reduce the number of children, adolescents and youth who are out of school or at risk of dropping out in the future.

Theory of Change of the OOSCI

RATIONALE

With the adoption of SDG4 and the commitment to increasing pre-primary education participation, and primary and secondary education for all children, adolescents and youth, the OOSCI aims to implement strategies and policies that substantially and sustainably reduce exclusion in education. National, regional and global out-of-school children studies provide the evidence basis for policy recommendations, documenting the profiles of out-of-school children and children at risk of dropping out, and identifying factors of participation and drivers of exclusion, including for the most marginalized and vulnerable groups.

Achieving results for out-of-school children will depend on several inputs, including advocacy for inclusive education, government buy-in and leadership, country-level ownership, CSO/community engagement and expanded partnerships. It will also hinge on the engagement and discourse of political and government leaders in decision-making processes around equitable financing of education.

Figure 0.1 visualizes the revised theory of change for OOSCI. The arrows illustrate how the components of OOSCI and the study will lead to a sustainable reduction in the number of out-of-school children, in particular the most marginalized and vulnerable. Thick arrows show how various inputs link to outputs, and to intermediate outcomes. For example, the various inputs – government leadership, EMIS and household survey data, technical assistance from partners – contribute to OOSCI study as an output. The out-of-school children study is expected to lead to a series of intermediate outcomes, such as an improvement in knowledge and evidence on school exclusion and policy recommendations, and outcomes, such as targeted programmes to the most excluded groups. Thin arrows represent how various activities lead to others. For instance, it shows the relationship between the profiles, barriers and policy chapters of the OOSCI study.
FIGURE 0.1
Out-of-School Children Initiative Theory of Change

ACRONYMS

<table>
<thead>
<tr>
<th>CSO</th>
<th>Civil society organization</th>
<th>EWS</th>
<th>Early warning systems</th>
<th>PEER</th>
<th>Profiles enhancing education reviews</th>
<th>WIDE</th>
<th>World Inequality Database on Education</th>
</tr>
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<tbody>
<tr>
<td>ESA</td>
<td>Education sector analysis</td>
<td>GEMR</td>
<td>Global education monitoring report</td>
<td>RBM</td>
<td>Results-based management</td>
<td>7DE</td>
<td>Seven dimensions of exclusion</td>
</tr>
<tr>
<td>ESP</td>
<td>Education sector plan</td>
<td>MoRES</td>
<td>Monitoring of results for equity systems</td>
<td>RODO</td>
<td>(Children at) risk of dropout</td>
<td>See all Acronyms and Abbreviations</td>
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</tbody>
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INPUTS

- Country-level buy-in and ownership
- Advocacy for inclusive education, from primary to upper secondary, and equitable responses to learning and non-educational needs of OOSC and those at risk of dropout
- Government leadership, capacity-building & empowerment
- Data: EMIS, HH surveys, UIS, GEMR, WIDE, PEER, ESAs, qualitative, policy and social and behaviour change research
- Technical assistance from UNICEF and UNESCO
- CSO and community mobilization, including sensitization/awareness, tracking and monitoring of OOSC
- OOSCI partners’ expertise, resources and tools

OUTCOMES

- OOSC country, regional, global studies
- Policy, financing and strategy recommendations
- Analysis of existing policy effectiveness & gaps
- Identification of barriers and bottlenecks (MoRES)
- Definition of profiles (statistical analysis by 7DE)

RESULTS

- Enhanced alignment of international education donors, partners and stakeholders with the OOSC initiative
- Contribution to the achievement of SDG4

IMPACT

Substantial and sustainable reduction in the number of children, adolescents and youth that are out of school, in particular the most marginalized and vulnerable
NOTES

1. **INCLUSIVE POLICIES.** For education to be fully inclusive it will entail a mix of policies: those of a system-wide nature that favour universal enrolment, and explicit strategies that target the differentiated needs of key excluded groups or address specific cross-cutting characteristics of out-of-school children and children at risk of dropping out.

2. **PROACTIVE RESULTS-BASED MANAGEMENT.** For lasting change to be achieved at scale, it will entail not only the elaboration of appropriate and relevant policies, but mechanisms to ensure their effective implementation, and actively monitor the situation of out-of-school children, as well as those at risk of dropout, through early warning systems.

3. **REMOTE LEARNING DURING SCHOOL CLOSURES.** School closures – due to COVID-19, emergencies and natural disasters, for example – exacerbate the problem of out-of-school children if timely mitigation measures are not taken. Remote learning during COVID-19 has highlighted the importance of multiple and flexible pathways to learning and provided an opportunity to rethink how education can be delivered and extended to all out-of-school children.

4. **PARTNERSHIPS.** Beyond its founding and supporting partners, the OOSCI aims to harness the technical expertise and new ideas of national, regional and international education stakeholders, identify common areas of work around out-of-school children monitoring and data, address barriers to education participation, develop policies and implementation responses, mobilize resources, and foment sustainability.

5. **LINK TO LEARNING.** The scale of the global learning crisis has directly impacted out-of-school children by contributing to the risk of dropout or non-transition to the next level of education, either as the result of poor perceptions of the value of education, or due to sub-optimal schooling pathways and repetition, leading to over-age attendance.

6. **PRO-POOR FINANCING.** The pathway to results is based on the notion of progressive universalism, in recognition of the belief that a disproportionate number of resources will have to flow towards the poorest and most marginalized people to achieve a meaningful reduction in the number of out-of-school children.

KEY RISKS AND ASSUMPTIONS

R1. The political sensitivity of out-of-school children and dropout (and/or identification of vulnerable children, such as those in disadvantaged ethnic groups) may hinder acceptance of the data/evidence in some contexts, resulting in inaction.

A1. Sufficient financial resources are made available for policy implementation.

A2. Governments will take leadership to generate evidence on out-of-school children and show political will to respond to the outcomes, findings and adhere to the recommendations.

A3. Out-of-school children studies/evidence translate into recommendations that are politically, technically, and financially feasible.

Remote learning during COVID-19 has highlighted the importance of multiple and flexible pathways to learning and provided an opportunity to rethink how education can be delivered and extended to all out-of-school children.
Role of the Out-of-school Children Study

At the global level, the international community has adopted ambitious Sustainable Development Goal (SDG) targets that include ensuring that all girls and boys have access to quality early childhood development, care and pre-primary education (SDG 4.2), and that all girls and boys complete free, equitable and quality primary and secondary education, by 2030 (SDG 4.1). Education is seen to play a fundamental role in reducing poverty and facilitating sustainable development.

As countries progress towards these goals, they become more difficult to attain. This is because of the increasing marginal cost of reaching and providing an education to harder to reach groups of children, adolescents and youth.

As illustrated in the theory of change above, out-of-school children studies play a pivotal role in helping countries close the remaining enrolment gap. Studies harness multiple inputs, such as national political engagement and expertise, data, technical assistance, advocacy and partner support, to bring about changes and improvements in knowledge and understanding of the issues, political and decision-maker attitudes towards them, and education sector practices. Through all of the above, the main goal of an out-of-school children study is to contribute to substantial and sustainable reductions in the number of out-of-school children, adolescents and youth, by promoting the effective implementation and monitoring of more inclusive education policies.

Studies achieve this in several ways:

1. An OOSCI study, when carefully conducted according to this guidance, will not only quantify the scale of the problem, but identify the characteristics of who it impacts, understand the barriers that they face and, above all, recommend cost-effective policy responses to lift those barriers. As such, it is a valuable evidence resource.

2. The process through which a study is conducted aims to create awareness of underserved minority groups, build the capacities of national education stakeholders, generate consensus around the realities, issues and needs of children, adolescents and youth who are out-of-school and at risk of dropping out, and constitute an extensive review of data sources and data and evidence gaps.

3. The study should be the opportunity to determine concrete action plans to reduce exclusion in education. This includes advocacy, pro-poor financing, alignment with and incorporation in sector planning documents such as ESPs, as well as by determining responsibilities and accountability for the implementation of strategic policy recommendations.
4. An OOSCI study may provide a unique and welcome opportunity to listen to the voices of children, adolescents and youth on their feelings towards school and education, their expectations and aspirations, or the reasons for their absence. Engaging them in problem and solution identification has been shown to have a positive influence on school rules, policies and procedures.5

While the quality and statistical rigor of an OOSCI study is important, so is the engagement of national leadership in its preparation and the inclusive process followed to conduct it. When the OOSCI study process and responsibilities are agreed with the broader education community, the findings are more likely to be implemented.

Although out-of-school indicators have been included in the SDG4 monitoring framework, the primary role of an OOSCI study is not to monitor progress towards the attainment of SDG4 targets. Rather, OOSCI studies aim to inform action by national governments and their partners to help achieve SDG4 targets. For SDG4 monitoring, the UNESCO Institute for Statistics works with national governments to collect and then calculate out-of-school indicators based on a standard, cross-nationally comparable methodology. While OOSCI studies draw on the global methodology described in this manual, their purpose is to inform national out-of-school children policy rather than to generate cross-nationally comparable figures. Therefore, the studies may use national sources of data (such as national population estimates and national definitions of their education system) among other adaptations.

While indicator definitions and calculation methods are the same, the estimates reached by an out-of-school children study may differ from UIS published data for a number of reasons. An out-of-school children study may:

- Use national definitions of the education system (e.g. an eight-year basic education cycle), while the UIS will use the cross-nationally comparable definitions of the country’s education systems in its ISCED mapping (e.g. primary education for six years and lower secondary for two years).

- Use a different approach to the processing of population data or use different sources, based on a detailed and context-sensitive review of their reliability.

- Include and consider a greater range of sources – such as national survey programmes, bespoke research or non-official sources – to better identify ‘invisible’ or ‘semi-invisible’ groups.

- Involve data triangulation from several sources in the case of out-of-school children in emergencies (OOSCiE) to provide best possible estimates of a difficult to measure population (See Annex C).

- Harness alternative data sources that offer greater insight into profiles of children out of school and at risk of dropout, through in-depth disaggregation.

It is therefore possible that UIS SDG4 monitoring and out-of-school children studies may reach somewhat different estimates of the number and rates of out-of-school children. While UIS aims to produce data that is comparable across countries and regions, the prime concern for the profiles chapter of an out-of-school children study is to produce the most detailed data on profiles of children in the 7DE as possible for a given country at a specific point in time to inform national policy development.

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Purpose of the Manual

The Global Out-of-School Children Initiative Operational Manual is both a how-to guide for individuals and teams conducting an OOSCI study, and a resource guide for the broader education community concerned with equity and inclusion.

For individuals and teams, it presents a clear and consistent approach to determining the best strategies to reduce exclusion in education, based on an understanding the profiles of children, adolescents and youth out of school and at risk of dropping out (the who are where), and the supply, demand, quality and governance barriers they face in accessing education.

For the education community, the manual constitutes a gateway to a compendium of valuable resources and practical tools, relating to data, exclusion profiles, barriers to education, policy frameworks and exclusion monitoring and early warning systems. These resources, referenced throughout, can easily be accessed through the thematic folders on the OOSCI website: www.allinschool.org.

The manual not only provides guidance for national studies, but can be used to:

- Foster stronger national capacities in the collection and management of education statistics, policy analysis, and strategy development;
- Develop cross-sectoral and multi-stakeholder partnerships with NGOs and international organizations in favour of reducing exclusion; and
- Promote the engagement of children, youth and adolescents in a dialogue on how best to remove barriers to their education.

- Enhance the understanding of and unpack social and behavioural drivers behind why children are out of school.

The audience for this manual includes:

- Government officials who want a better understanding of out-of-school children in their countries, whether or not they are partners in the initiative;
- Statisticians, Education Management Information System (EMIS) managers, and policy advisers in ministries of education;
- Members of teams preparing national or regional reports for the Out-of-School Children Initiative, including dedicated consultants;
- Staff members and experts in UN agencies engaged in education programmes with a particular focus on access, participation and attendance; and
- Academics, researchers and education professionals with an interest in improving the inclusion and equity of education systems.
KEY RESOURCES

RESOURCES:
- Annex A Key changes to the Updated Version of the Operational Manual
- UNESCO/IIEP. Planipolis: https://planipolis.iiep.unesco.org/
- UN Global Initiative on Decent Jobs for Youth: https://www.decentjobsforyouth.org/guiding-principles#scope

LINKS:
- UNESCO UIS. Profiles Enhancing Education Reviews (PEER): https://education-profiles.org/
- GEM online sub-reports offering comprehensive information on national education legislation, policies and programmes on issues central to achieving SDG 4. Themes covered: inclusion and financing for equity. Themes to come: non-state actors in education, climate change education and gender equality.

ADDITIONAL RESOURCES:
- UNESCO 2021, Inclusive early childhood care and education. From commitment to action: https://unesdoc.unesco.org/ark:/48223/pf0000378076
- UNESCO 2021, Inclusive early childhood care and education. From commitment to action: https://unesdoc.unesco.org/ark:/48223/pf0000378076

REFERENCE GUIDELINES:
- Vol. 3 Methodological Guidelines https://unesdoc.unesco.org/ark:/48223/pf0000377738
- Outlines GenU’s strategy to “meet the urgent need for expanded education, training and employment opportunities for young people, aged 10-24.” Several strategic priorities are well aligned with the OOSCI, directly (access) or indirectly (removing barriers to access). Web-page also offers strategic analysis, overview of evidence, theory of change, operating model, and results framework.
- This formative evaluation of the OOSCI initiative provides recommendations which form the basis for the revision of the Operational Manual (this document) and the OOSCI methodology and approach.
1 OOSCI Conceptual Framework

TOPICS COVERED
Key elements of the OOSCI conceptual framework:

+ Categories of out-of-school children, in terms of their exposure to education;
+ Levels of dropout risk;
+ The Seven Dimensions of Exclusion model for generating profiles of out-of-school children and children at risk of dropping out;
+ The main types of non-formal education and which ones the OOSCI considers as being ‘in school’; and
+ The visibility model for highlighting data gaps and ways to resolve them.
Section 1 outlines the main concepts and models used by the Out-of-School Children Initiative in its approach to conducting national and regional OOSCI studies. It introduces categories of out-of-school children in terms of their exposure to education, and categories of children at risk of drop-out in terms of the risk level they face. The Section outlines the Seven Dimensions of Exclusion, the overarching model that informs OOSCI’s work to bring all children into school and support them through upper secondary, and explains how different types of non-formal education should be considered from an ‘in’ or ‘out of school’ perspective. Finally, it introduces the Out-of-school Children Visibility Model, a complementary approach to help identify certain categories of children who have never entered school.

It is important to note that the OOSCI focuses primarily on exclusion from school or education: either children who are out of school currently or are at risk of dropping out. This latter group (at risk) is intended to capture those in school who are silently excluded, and exhibit risk factors that may lead to drop out or non-transition. Children who are in school but are not learning are not the primary focus of out-of-school children studies. However, low learning achievement, repetition and school failure are factors that can be used to identify children, youth and adolescents who are at risk of dropping out, the barriers they face, and the policies that can mitigate these factors.

First, for children and adolescents having entered school or any equivalent learning setting, they may have dropped out before or after completion of primary and lower secondary (basic education). Though both are considered ‘out of school’ according to the OOSCI (in line with SDG4), the consequences of dropping out will vary according to the timing and extent of their exposure to education. Adolescents and youth who have completed basic education will, in principle, have some foundational skills and knowledge enabling them to participate actively in society and the workplace. These are children and adolescents who have completed basic education, including primary and lower secondary, and who have either not continued to upper secondary, or dropped out before completing the upper secondary cycle.

On the other hand, children who drop out in earlier grades – during primary, or fail to enrol in lower secondary, or drop out of lower secondary before completing it – are unlikely to have acquired even the most basic mastery of reading and writing, numeracy and other skills.

All school leavers can, in theory, return to school in the future, but in practice those that do are a minority. For youth having entered school but dropped out, the consequences will further depend on whether and how they are involved in work or training or unpaid care. See Annex C for guidance on child labour and decent work, and Section 4.1.3 on the issue of youth not in education, employment or training (NEET)s.

Second, those who have not entered school may do so in the future, or not at all. Children who never enter school will, by definition, have no exposure to foundational learning at all – and will bear the attendant lifelong consequences. Children who enter school late will have greater exposure, although this may be limited, as average enrolment is usually related to a higher probability of academic failure, repetition and ultimately dropout.

6 In line with the UIS definition and according to the ISCED standard, basic education comprises primary education (first stage of basic education) and lower secondary education (second stage). See the glossary.

1.1 Educational Profiles of Out-of-school Children

As shown in Figure 1, below, out-of-school children can be divided into two groups based on their exposure to education: those who entered school in the past and dropped out, and those who have not entered school. Each of these categories can in turn be split into two mutually exclusive groups.
The relative sizes of these four groups will vary from country to country. The level of exposure of out-of-school children who entered school at some point will have different implications depending on when they dropped out. Country contexts and available data may inform a different cut-off point, such as one based on the completion of compulsory education where it is different from lower secondary. Careful consideration should be given to the present status of children impacted by school closures, due to natural disasters, emergencies, crises, or pandemics, such as COVID-19. Whether such children should be classified as in or out of school will depend on several factors, including their enrolment at the beginning of the school year, the existence and effectiveness of remote learning strategies, children’s access to and engagement with these, or the period of time during which they have not been learning remotely. Indeed, such children may technically be out of school, but still be learning. Here again, it would be helpful for policy makers if we differentiate between two distinct categories: those who are expected to resume school after re-opening, and those who are expected to drop out permanently.

### 1.2 Risk of exclusion faced by children, adolescents and youth in school

As countries progress towards universal education, the focus of education policies to reduce exclusion will increasingly need to shift towards the retention in school of those children who are enrolled, until they successfully complete the basic education and upper secondary levels. This calls for a clearer conceptualization of the status of children at risk of dropout.

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For out-of-school children, this could be achieved by differentiating between levels of school exposure, including those that will not in fact drop out (for whom the risk, while present, does not materialize), and those who will. For the latter, the further differentiation between those who will drop out in the course of their current level, and those who will not transition to the following level, may offer a prospective view of future out-of-school children rates at each level, as well as provide some initial policy pointers. By differentiating risk levels and detailed profiles of children at risk of dropping out, the identification of the barriers and ultimately policy responses can be more tailored to each group.

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7 These are important considerations for the measurement of out-of-school children, which have not yet met with a firm institutional position, due in part to the difficulty of obtaining data on the duration, frequency and content of remote learning that individuals gain access to. The manual later offers guidance as to how to proceed in this temporary void.
Figure 1.2 constitutes a proposed classification of dropout risk by level based on a combination of the extent of the delays in schooling pathways compared to official age for grade, and the attainment of the minimum proficiency levels (MPLs) corresponding to the cycle or grade. Both of these metrics are considered to be among the best proxy indicators for dropout prediction, considering data that is usually available.

Drawing on the risk factors and guidance in Section 3.2.2, country studies may determine different criteria for levels of dropout risk, the indicators associated with each, and ultimately the relevant profiles of children at risk of dropping out.

1.3 Seven Dimensions of Exclusion

The Out-of-School Children Initiative focuses on children out of school and those at risk of dropping out, over a wide age range. To help distinguish distinct groups of children for analysis and policy support, it uses a *dimensions of exclusion* framework, where each group of children is represented by a particular dimension. In line with the SDG 4 commitment to achieve universal primary and secondary education, the OOSCI dimensions of exclusion model has been expanded. It is now called the Seven Dimensions of Exclusion (7DE) and includes two dimensions relating to youth of upper secondary age. This model presents the key groups of children, adolescents and youth for OOSCI analysis and interventions:

**DE1** Children aged one year younger than official primary school entrance age who are not enrolled in early childhood education (including pre-primary) or primary school.

**DE2** Primary school aged children who are not enrolled in school, regardless of the level.

**DE3** Lower secondary aged adolescents who are not enrolled in school, regardless of the level.

**DE4** Primary school students who are at risk of dropping out before completing the level or of not continuing to lower secondary.

**DE5** Low secondary students who are at risk of dropping out before completing the level or of not continuing to upper secondary.

**DE6** Upper secondary aged youth who are not enrolled in school, regardless of the level.

**DE7** Upper secondary students who are at risk of dropping out before completing the level.

These dimensions represent the intersection of two different population groups (children who are out of school, and those who...
are in school but at risk of dropping out) with four levels of education (pre-primary, primary, lower secondary and upper secondary). The term ‘exclusion’ has a slightly different meaning depending on the population concerned: children who are out of school are excluded from education, while children who are at risk of dropping out may be excluded within education because they are not attaining expected learning outcomes and minimum proficiency levels, or they may face discriminatory practices or attitudes within the school (push factors). Of course, children at risk of dropout may also face external pressures to leave school early (pull factors).

Each dimension of exclusion represents a distinct group of children that can be quantified (See Section 3) and analysed using statistical methods to identify the particular characteristics (or profiles) of the children most likely to be excluded (See Section 4).

The 7DE model is illustrated in Figure 1.3. It uses the terminology for levels of education as defined according to the International Standard Classification of Education (ISCED). ISCED was designed by UNESCO to facilitate comparisons of education statistics and indicators across countries based on uniform and internationally agreed definitions. National definitions of education system levels, the respective age ranges and durations, can differ from ISCED. For country OOSCI studies, the 7DE can be adapted to national definitions.

Understanding more about the at-risk groups is key to preventing them from becoming out-of-school children. It is important to emphasize that Dimensions 1, 2, 3 and 6 relate to specific age groups, whereas Dimensions 4, 5 and 7 relate to levels of education. Other noteworthy aspects follow.

**Dimension 1** represents children who are not in early childhood education (ISCED 0) or primary education (ISCED 1). Although pre-primary education programmes may be longer than one year, the 7DE model proposes a standard approach for all countries by focusing on the enrolment status of children aged one year below the official school entrance age into primary school. This is in line with SDG indicator 4.2.2. As an example, if the official primary entrance age in a country is 6 years, Dimension 1 includes children aged 5 years who are not in early childhood or primary education.

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This dimension is important to measure and study, even when pre-primary education is not compulsory. Quality pre-primary education is known to be a key factor of school readiness, contributing to primary enrolment and ultimately retention throughout secondary education, as well as learning achievement. Children who attend non-recognized education or care programmes should be identified as a distinct group of out-of-school children within DE1, if the data are available.

Note: In practice, very few youth of upper secondary age who have never been to school actually do enter later, due to lacking the foundational knowledge and skills required, and the relative scarcity of second chance education programmes that target this age group. However, it could be possible through the provision of targeted support to particularly vulnerable youth.

Dimensions 2, 3 and 6 respectively represent children, adolescents and youth of primary, lower secondary and upper secondary age, who are not enrolled in pre-primary, primary, secondary or higher levels of education. As described in Section 1.1, these dimensions are each divided into three categories, based on previous or future school exposure: children who attended in the past and dropped out, children who will enter school late (after the country’s official primary entrance age), and children who may never enter.9

As underlined by Figure 1.1, for those children who attended school but dropped out, the point at which they dropped out merits further exploration. Understanding at what point(s) children are likely to drop out is necessary to formulate effective policy and educational responses. On the one hand, because completion of the full education level is usually accepted as necessary to ensure the sustainability of the skills and knowledge acquired. These skills are important to become active citizens and secure decent work. The point of exclusion will impact both individual prospects and the nature of potential further educational needs to be fulfilled by governments. On the other hand, understanding the point at which education pathways end is key to defining prevention strategies. These will vary substantially according to when the typical dropout point occurs. For example, the implications are very different if it is the third year of primary school after two repeated years, the transition to lower secondary school due to lack of secondary school supply, or in the last year of lower secondary because students fail their qualifying examinations.

For Dimension 6, relating to youth of upper secondary age who are out of school, it will be important in most contexts to provide some further nuance that reflects the gravity of their situation. This can be achieved by firstly differentiating between those who are still of compulsory school attendance age and those who are not. Secondly, it is valuable to determine those who are not in education, employment or training (NEET), an internationally recognized and standard indicator for this age group (SDG Indicator 8.6.1; also see Section 4.1.3). Under SDG 4.1, all children are expected to complete primary, lower and upper secondary by 2030. However, out of school youth may be in non-formal vocational training (which may not be considered as equivalent to formal education) or employment. This is preferable to no activity at all, as this implies that they are exposed to at least some extent to continued learning and skills development. Care is needed, as some types of vocational training and employment for upper secondary age youth are still considered child labour (see Annex D).

Dimensions 4, 5 and 7 respectively represent students who are in primary, lower secondary and upper secondary school, but are at risk of dropping out, regardless of their age.10

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9 It cannot be known with certainty which out-of-school children will or will not enter school in the future. For operational purposes, the second and third group are therefore analyzed with reference to the probability of future school attendance (‘likely to enter school late’ and ‘unlikely to ever enter school’).

10 As per footnote 2, it cannot be known with certainty which in-school children will or will not drop out in the future. Children at risk of dropping out are therefore analyzed on the basis of probability. Not all children at risk will drop out; just as some students who may not be identified as being at risk will drop out.
Finally, it should be noted that the out-of-school children and dropout dimensions cover different populations and age ranges, so the number of children in each dimension cannot be added together to represent the total population that is excluded or at risk of exclusion from a given cycle (DE2 and DE4 for primary; DE3 and DE5 for lower secondary; DE6 and DE7 for upper secondary).

In addition, the 7DE model described provides a snapshot of current and prospective exclusion at a particular point in time, but there is, of course, movement between the dimensions as children enter or leave education, as they transfer from one cycle to another, or simply as they become older. Looking at how children interact with the school system over time adds a dynamic perspective to the development of profiles of children excluded from education (See Section 4.2).

1.3.1 CONSIDERING NON-FORMAL AND ALTERNATIVE EDUCATION PATHWAYS IN THE 7DE

While some out-of-school children do not participate in any educational programming at all, others may take part in a range of learning opportunities. For purposes of accurate statistics and relevant policy responses, it is therefore important for the OOSCI to be clear about what types of educational programmes are considered to be ‘in school’ and which are not. As stated above, children, adolescents and youth enrolled in formal education programmes are considered ‘in school’. As defined in ISCED 2011, formal education programmes are “institutionalized, intentional and planned through public organizations and recognised private bodies, and […] are thus recognised as such by the relevant national education or equivalent authorities.”

Enrolment in non-formal education (NFE) programmes may or may not be considered ‘in school’ depending on whether they are recognized by national authorities as equivalent to programmes in the formal system. Non-formal education is defined as “institutionalized, intentional and planned by an education provider. […] Non-formal education mostly leads to qualifications that are not recognised as equivalent to formal qualifications by the relevant national or sub-national education authorities or to no qualifications at all.”

However, non-formal education can, in specific cases, be recognized as an equivalent qualification to one awarded in the formal system to facilitate graduate’s entrance into further levels of education or the labour market.

In the context of COVID-19 school closures and other issues such as displacement and migration, global actors are increasingly recognizing the need for multiple and flexible pathways to learning, including through non-formal education. This is particularly true for youth of upper secondary age, who typically have a wider range of education and training needs and programmes. To make such pathways possible, national qualification frameworks must be developed and expanded, and data on NFE learners should be included in national EMIS systems. Table 1.1 lists key types of non-formal or alternative education activities and programmes, and provides guidance whether children, adolescents and youth attending each should be considered in or out of school for the purpose of OOSCI studies. In addition, the UIS produces country-specific mappings of national education programmes to ISCED levels and orientations (general or vocational), which can be further consulted.

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12 Ibid., p. 81.
### TABLE 1.1
Key types of early childhood, non-formal or alternative education activities and programmes, and their relationship to out-of-school children in the 7DE

<table>
<thead>
<tr>
<th>TYPE OF EDUCATION OR TRAINING PROGRAMME</th>
<th>CONSIDERATIONS FOR OUT-OF-SCHOOL CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>EARLY CHILDHOOD EDUCATION — care and education services for young children from birth to the age of entry into primary education, as defined by the country.</td>
<td><strong>IN SCHOOL</strong> for children aged one year below the official primary school entrance age only</td>
</tr>
<tr>
<td>LITERACY PROGRAMMES — organized primarily to impart the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts.</td>
<td><strong>NOT IN SCHOOL</strong> include in Dimension 1, 2, 3 or 6 depending on age of students</td>
</tr>
<tr>
<td>EQUIVALENCY SCHOOLING — short-term or transitional programmes, including of an accelerated nature, organized primarily for children and youth who did not have access to or dropped out of formal education, supporting their re-entry to the formal system; also known as bridging, re-integration, second chance, or catch-up programmes.</td>
<td><strong>IN SCHOOL</strong></td>
</tr>
<tr>
<td>RELIGIOUS EDUCATION — organized learning about religion held in churches, mosques, temples, synagogues and other places of worship.</td>
<td><strong>NOT IN SCHOOL</strong> unless the curriculum is similar to other schools in the national education system and officially recognized.</td>
</tr>
<tr>
<td>COMPLEMENTARY OR FURTHER EDUCATION — programmes in courses or subjects such as peace education, life skills, income generation, rural development or human rights, that are not examined or part of a recognized programme of study leading to a qualification.</td>
<td><strong>NOT IN SCHOOL</strong> include in Dimension 1, 2, 3 or 6 depending on age of students</td>
</tr>
<tr>
<td>COMMUNITY-BASED EDUCATION — methods and programmes usually developed in dialogue with communities and participants, with a focus on context-sensitive social development, including cultural or traditional/indigenous activities.</td>
<td><strong>NOT IN SCHOOL</strong> unless the curriculum is similar to the national education system and officially recognized</td>
</tr>
<tr>
<td>TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING — training and skills development directly relating to an occupational, production, service or livelihood field.</td>
<td><strong>IN SCHOOL</strong> for secondary aged youth and above, unless exclusively work-based in nature (training).</td>
</tr>
<tr>
<td>WORK-BASED LEARNING — a sub-set of TVET, including apprenticeships, renewed apprenticeships, internships, dual/alternance learning, and continuous professional development.</td>
<td><strong>NOT IN SCHOOL</strong> include in Dimension 2, 3 or 6 depending on age of learners. Can be included in the calculation of NEETs (in training).</td>
</tr>
</tbody>
</table>

The following principles should always prevail in determining the school status of children enrolled in such programmes or activities:

- Children, adolescents and youth who only participate in informal, incidental or random learning, or non-formal activities leading to qualifications which are not recognized by the relevant national authorities, should always be considered to be out of school.

- Children, adolescents and youth participating in non-formal education should be considered to be in school where the qualifications or certificates earned are recognized as equivalent to formal qualifications by the relevant national authorities, however they are obtained.
However, participation in non-formal or alternative education that is recognized by the authorities, but not considered equivalent to the formal system, is different from no exposure to school at all. As such, it should ideally be reported separately when analysing out-of-school children data, particularly for youth of upper secondary age.

Education may also be offered using alternative modalities of delivery, such as remote learning through online, television or other media (such as take-home work). Such modalities are used to support hard-to-reach rural communities with no access to nearby schools, students affected by closures of school premises due to COVID-19, or adolescents with caregiving or work responsibilities that are incompatible with mainstream schooling (UNICEF 2020). In these cases, the formal curriculum is adapted to flexible timeframes and uses adapted pedagogical methods and materials as well as ICT-supported learning. These modalities are usually part of the formal education system and lead to certification, meaning that enrolment is considered to be in school.

1.3.2 BENEFITS OF APPLYING THE 7DE MODEL

By applying the 7DE model, an OOSCI study identifies seven quantifiable groups of children who are excluded from education or at risk of exclusion. In addition, the OOSCI methodology is used to develop detailed profiles of these children by disaggregating statistics according to characteristics that include age, sex, area of residence (urban/rural), location, household wealth, ethnic, linguistic or religious group, disability, participation in child labour, and orphanhood (see Section 4 and annexes for specific profiles of children).

The model also enables links to be made between the profiles of out-of-school children and the barriers to education that lead to exclusion. Results of the analysis provide insight into the interaction between different barriers faced by children and their households as they create mutually reinforcing patterns of disadvantage (See Section 5). The identification of these barriers is a crucial step towards developing recommendations for policies and strategies that will contribute to reducing exclusion in education, the primary goal of out-of-school children country studies (See Section 6).

The Seven Dimensions of Exclusion therefore represent an equity-focused approach to the generation of a sound evidence base, with key policy implications, for the following reasons:

- By generating data on out-of-school children from pre-primary to upper secondary school age, the model underlines the importance of the life-cycle approach, while offering the scope for differentiated analysis according to the varied needs and realities of children, adolescents and youth.
- It draws attention to the patterns, forms of exposure and disruptions to schooling, including early school leavers, children who will enter late and children who are unlikely to ever enrol, as well as exposure to non-formal and alternative education.
- The disaggregated analysis within the 7DE is key for a better understanding of the multiple, overlapping and cumulative forms of exclusion and barriers to inclusion. As such, it underlines that exclusion is a gradual, multi-layered process, rather than a single event.
- The 7DE framework covers children who are currently in school but at risk of leaving before completion, identifying at-risk groups who may become the out-of-school children of tomorrow.
- While focusing on issues of access, retention and completion, it also opens channels for a more sophisticated analysis of learning, which...
can be used to highlight the importance of education quality as a factor related to school participation, including parents’ decisions about sending children to school, or ultimately, for them to drop out.

### 1.4 Out-of-school Children Visibility Model

The out-of-school children visibility model was created to highlight gaps in data on out-of-school children and children at risk of dropping out and provides a framework to improve data coverage and quality. Some vulnerable groups of children who are likely to be out of school are often not covered by household survey and administrative data – most often homeless, institutionalized, and nomadic children and children affected by conflict or with disabilities.

The visibility model is complementary to the 7DE model. It provides methods for collecting and analysing information on children, adolescents and youth who are invisible in data. It allows researchers to estimate the number of out-of-school children and uses multiple data sources on children, in addition to household surveys and administrative records, to determine which children are out of school and, when possible, why.
As presented in Figure 1.4, there are three levels of visibility:

1. **VISIBLE OUT-OF-SCHOOL CHILDREN**: out-of-school children who can be identified using the Ministry of Education database (EMIS) or other government education databases, or where EMIS do not have unique records of students, in school records. Visible out-of-school children are typically those who have dropped out because children who have never enrolled in school are often not recorded in education databases.

2. **SEMI-INVISIBLE OUT-OF-SCHOOL CHILDREN**: Invisible out-of-school children who could be made visible by cross-referencing government databases and/or school records. They consist of the following two groups:
   - **UNRECORDED DROPOUTS**: Children who dropped out but were never recorded as such and who could be identified by using improved vertical flows of information from the school level to the national level, using pupil or student absenteeism records.
   - **OUT-OF-SCHOOL CHILDREN WHO NEVER ENROLLED**: Children who never enrolled but for whom information can be obtained from horizontal, cross-sector information flows (information sharing). Records on children can be linked through a unique ID, such as a birth certificate number, to identify those who are not recorded in the Ministry of Education database, but are recorded in other databases such as civil or local registries, whether electronic or paper-based.

3. **INVISIBLE OUT-OF-SCHOOL CHILDREN**: Children who are not recorded in any government, administrative or school records and who are thus completely invisible to analysts, unless specific and targeted research is undertaken.

Invisible out-of-school children, adolescents and youth may include immigrants, refugees, internally displaced persons, nomadic or other children on the move; homeless or street children; children affected by conflict; ethnic, religious or linguistic minorities; and children with disabilities, among others. These groups are often particularly vulnerable, exposed to stigma and discrimination.

However, several approaches or strategies can be employed to estimate the size and composition of the group, and then gather data on their characteristics, outlined in Section 3.1.
The OOSCI study and any lessons learned in the process should be used as an opportunity to advocate for the creation of systems – or the linkage of existing systems and databases – that will make the identification of semi-invisible and invisible out-of-school children easier in the future.

1.4.1 VISIBILITY AND THE 7DE

In the 7DE model, each dimension can be associated with expected levels of visibility according to the classification described above. This is shown in Table 1.2. Visible out-of-school children will generally be those in Dimensions 2, 3 and 6 who have dropped out. Unidentified dropouts are semi-invisible out-of-school children (who may be erroneously included in Dimensions 4, 5 or 7). Those who have never entered school, whether in Dimension 1, 2, 3 or 6, could be either semi-invisible out-of-school children if they exist in administrative or school records, or invisible out-of-school children if they are not recorded in any government records at all.

For more information on the visibility model as well as early warning systems, see Section 3, Section 4.5 (Case study of Maldives), and Annex B.

**TABLE 1.2**

Visibility Model and the 7DE

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>GROUPS OF OUT-OF-SCHOOL CHILDREN BY EXPOSURE TO EDUCATION</th>
<th>VISIBILITY GROUP THESE CHILDREN MAY BELONG TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMENSION 1: Children aged one year below the official primary school entrance age</td>
<td>Have not entered school</td>
<td>Semi-invisible or Invisible</td>
</tr>
<tr>
<td>DIMENSION 2: Primary school aged out-of-school children</td>
<td>Dropped out</td>
<td>Visible</td>
</tr>
<tr>
<td>DIMENSION 3: Lower secondary aged out-of-school adolescents</td>
<td>Unregistered dropouts</td>
<td>Semi-invisible</td>
</tr>
<tr>
<td>DIMENSION 6: Upper secondary aged out-of-school youth</td>
<td>Have not entered school</td>
<td>Semi-invisible or Invisible</td>
</tr>
<tr>
<td>DIMENSIONS 4, 5 AND 7: Pupils/students at risk of dropout</td>
<td>N/A: in school</td>
<td>Visible or semi-invisible</td>
</tr>
</tbody>
</table>

Children, adolescents and youth in Dimensions 4, 5 and 7, who are at risk of dropping out, will most likely be visible in education administrative data at the school level, because they are enrolled. If they are enrolled in other educational institutions not included in the education ministry data, they may be semi-invisible. However, this does not mean that they have been identified as being at risk of dropping out. This will depend on whether schools monitor and provide support to children in difficult circumstances or who display characteristics associated with dropout risk, such as frequent absence, or if a national or school dropout early warning system (EWS) has been set up. These children, although always visible at the school level, may nevertheless be invisible at the regional and national levels, depending on the nature of national reporting and EMIS procedures.
2 Preparing and Planning an Out-of-school Children Study

TOPICS COVERED
Fundamental steps for carrying out an OOSCI study, including:
+ The importance of government leadership
+ Forming the steering committee
+ Forming the technical team
+ Setting the work plan and timeline
+ Sample contents of an OOSCI study
+ Advance preparation for impact and follow-up
Section 2 covers key considerations to prepare and develop a high quality out-of-school children study; one that is developed through an inclusive and timely process and is ultimately effective in bringing about the changes necessary to reduce exclusion from and within education. These guidelines are based on an assessment of previous OOSCI experience. The section first focuses on the central role of national government leadership, followed by a discussion of stakeholder engagement through appropriate composition of the study steering committee and the technical team, as well as advice on the inclusion of children, adolescents and youth. It also provides the outline of a typical national OOSCI study, as well as the work plan, timeline, and structure. Finally, it offers guidance on other post-study considerations that will improve the study’s intended impact.

2.1 Government Leadership

OOSCI studies are fuelled by the commitment and leadership of national governments, especially education ministries. The engagement of high-level government officials and key decision makers is important to ensure both that the study is relevant and high quality, and that its findings will be considered in further policy-making processes. In principle, studies should be designed, guided and conducted by national authorities with support from development partners.

The benefits of strong national leadership of an out-of-school children study include:

- Greater significance and scale of change and sustainability.
- Enhanced long-term national capacities for more effective out-of-school children monitoring and evaluation methods.
- Further opportunities for ownership and leadership by the government in the implementation of the findings and recommendations of the studies.

For an OOSCI study to have the fully ownership of the government and the most impact on policies, it is critically important that the study is in full alignment with the government’s policy and planning cycle and its priorities. An OOSCI study could take place, for instance, in coordination with a medium-term review of the education sector plan and/or with an education sector analysis exercise, so that the findings of the study will effectively inform the next planning cycle.

Once government leadership has expressed an interest in conducting an OOSCI study, United Nations agencies, including UNICEF and other OOSCI partners, and non-governmental agencies can help to facilitate the process, depending on the needs, resources available and capacity gaps identified. OOSCI consultations usually begin by communicating the value of new and more in-depth knowledge on out-of-school children, adolescents and youth. Advocacy tools and summary data on the situation (with highlighting of data gaps) can be useful in dialogue with stakeholders, including national government counterparts. If the government and ministry of education are interested in a smaller-scale effort, rather than the full OOSCI study as described in this manual, the various data, barrier and profile approaches in this manual can be used selectively as a first step to generate awareness of the issues.

The next step is to share an overview of the study and analysis, based on this Operational Manual. Other relevant documents might include...
previous national or regional studies and global reports (see allinschool.org). The next stages of discussion will explore why it is important to conduct the study, and how the results of the study can be used in the policy planning cycle and addressed in education sector budgets.

A process of engagement is recommended, that may include:

- Informal discussions, to clarify the terms of reference for carrying out, disseminating and utilizing the study. In some cases, OOSCI partners may wish to send a letter to national government representatives to formally introduce the initiative. A template provided for this purpose is in Annex J.

- Formal declaration of interest that outlines the specific commitments of all stakeholders, possibly as a memorandum of understanding.

### 2.2 Stakeholder Engagement

Broad and inclusive stakeholder engagement with an out-of-school children study is equally important to ensure its relevance and ultimate impact. It is recommended that both a steering committee and a technical working group be formed, with roles that are outlined and discussed below. The composition of these groups will benefit from careful thought, for which a partner mapping exercise may prove useful. Finally, engaging with children, adolescents and youth is a process that requires prior planning, to ensure that it is results-oriented, productive and respects ethical and safeguarding considerations.

#### 2.2.1 PARTNER MAPPING

Partner or stakeholder mapping can be a valuable exercise to conduct for the out-of-school children study, for several reasons: to determine membership of the study steering committee and/or participation in the technical team; to identify OOSCI finding analysis workshop invitees and potential data owners/providers; and to determine which stakeholders may be critical to the successful implementation of recommendations, or would benefit from receiving information about the study findings, in which case it may occur in the later stages of study elaboration.

14 Key roles and qualifications are set out in sample Terms of Reference (ToRs) for the Technical Team, Steering Committee and consultants, which can be found in Annex K.
The mapping involves drawing up a list of partners and stakeholders, noting: important organizations; name and contact details of main focal person; type of organization; location (global, regional, national, sub-national); and nature of their interest in or relationship to the OOSCI, which we will come back to.

It will be important to ensure that all partners and stakeholders are considered. This includes government departments (Education and, if applicable, related ministries covering TVET or nonformal education, Statistics, and other government departments that work with vulnerable children); UN, bilateral and donor agencies; international and national NGOs; universities and research institutes; other technical partners; community-based organizations; representatives of children, adolescents and youth; representatives of school leaders or teachers, or school-based organizations such as parent-teacher associations or management committees; civil society organizations; representatives of other sectors involved in removing barriers to education, such as nutrition, health, WASH, protection, gender and social protection; private sector players; and committees tasked with monitoring the implementation of children’s rights.

A common approach to ensuring that all relevant stakeholders have been covered is called ‘snowballing’. It involves contacting those identified in the first instance and sharing the list for them to name any that may be missing, then repeating the process with any further additions. Online research, consulting the local education group (LEG), and attending strategic webinars or meetings are also helpful.

However, partner mapping can produce results far more valuable than just a comprehensive list of organizations and contacts, in which case a more analytical dimension with different visualizations can be developed (See Figure 2.1). Having clear goals will be instrumental to determine how to conduct the exercise.

As recommended by the formative evaluation of the OOSCI, you may consider using the mapping exercise to: assign roles and responsibilities according to interests or capacities; strengthen cross-sectoral coordination; broaden national buy-in with non-traditional partners; harness expertise of technical partners to develop effective solutions to exclusion; validate emerging findings during the OOSCI study process; attract sustainable resources for implementation; source new ideas; identify entry points for programming for out-of-school children; seek highly contextualized approaches to local issues; prioritize advocacy messages by target group; develop a stakeholder engagement plan; ensure comprehensiveness and complementarity of partner inputs; or encourage private sector engagement.

Depending on these goals, further information fields may be added to the list or database to provide more information on the nature of the interest in, or relationship of, each stakeholder to the OOSCI. A common approach is to categorize each stakeholder’s level of interest and capacity to influence (low, medium, high). These fields could include: the stakeholder’s main view of a key issue; their strategic objective; their historic level of engagement; their expected input (programme design, technical assistance, programme management, M&E, funding); the dimension of exclusion, education level or age group they focus on; or further typology, such as duty-bearers, service providers, rights-holders, and beneficiaries.

Which data is collected, by whom, at what stage in the OOSCI study process and how, will vary depending on the country context and the purpose of the stakeholder mapping agreed between the government and the other OOSCI partners. The government lead may include a UNICEF expert and Local Education Group representative in a collaborative and dedicated working session early in the process. Alternatively, the responsibility could be trusted to the consultant team working on the study, on the basis of their exchanges with stakeholders during interviews and group discussions. The mapping could be validated by the steering committee and technical team.
2.2.2 THE STEERING COMMITTEE

OOSCI studies call for a steering committee of high-level participants appointed by the Minister of Education. This is one of the fundamental pillars of effective government leadership as outlined above, to strengthen national ownership and build a results-based (i.e., exclusion policy implementation) approach to the studies. It is recommended that the steering committee be chaired by the Permanent Secretary of the Ministry of Education or another government representative of a similar level.

The steering committee should: finalize the terms of reference for the study, determining its purpose, nature, scope and structure, as well as the workplan and timeline; select and/or hire the technical team that will conduct the study, including any consultants, and determine respective roles and responsibilities; ensure adequate financing for the study and associated research; and provide specific input to brainstorming policy recommendations.

In addition, the steering committee members are responsible for raising the profile of the OOSCI study within their respective...
organizations and in other committees and working groups relevant to out-of-school children in which they participate, such as a Local Education Group.

Finally, the steering committee will be the main body responsible for quality assurance of the study, holding the technical team accountable. It can achieve this by clearly setting minimum standards for study process deliverables, providing oversight of the technical team’s work; helping to mitigate risks and obstacles encountered during the study period and process; and ultimately, approving the final report and contributing to a national action plan. Potential political sensitivities and their effect on whether the findings will be accepted should be considered, as they could influence the direction and outcomes of the study.

The steering committee is fundamentally a partnership framework amongst relevant members who actively collaborate to move the OOSCI study forward. Building on the stakeholder mapping described above, key members of the steering committee are:

- **Ministry of Education**: Seek the involvement of a wide range of MoE stakeholders to ensure that buy-in is not concentrated in the hands of a few individuals who may change position before studies are completed. This should include: (i) the planning and statistical/EMIS departments from the outset, a fundamental – although not always sufficient – condition for the acceptance of out-of-school children figures; (ii) individuals from different departments, including teacher training and management, early childhood, special education, curriculum development, budgeting, school improvement, and gender (as appropriate).

- **Other government ministries**: Considering the multidimensional nature of out of school determinants, policy recommendations will almost certainly require inter-ministerial coordination and social protection policies. Therefore, it is important to ensure that relevant stakeholders are members of the steering committee from the outset. It may be appropriate to include the ministry for TVET or non-formal education (if not within mandate of the Ministry of Education), Ministry of Health for issues related to children with disabilities, the Ministry of Labour for issues related to child labour, the Ministry of Social Protection for issues related to welfare and poverty, the ministry responsible for ethnic minority issues, the Ministry of Finance and Planning and the National Statistical Office.

- **Children, adolescents and youth**: Youth representatives should be involved to ensure that their perspectives and concerns are adequately addressed in strategies that are relevant and appropriate. See further considerations in the dedicated section below.

- **Other key partners**: These may include representatives of OOSCI partners, bilateral and multilateral agencies, other relevant development agencies or NGOs with high interest in out-of-school children.

### 2.2.3 THE TECHNICAL TEAM

Responsibilities of an out-of-school children study will largely be determined by the national context. National and/or international consultants are often recruited to work on studies, organize workshops, collaborate on the analysis, write the report, or provide guidance, support and feedback during the process. Ideally, they will perform these tasks under the oversight of a steering committee, and with the expert technical input of key partners, that may be organized into a technical team.

The role of the technical team is to: provide further technical assistance, support and guidance to complement to these guidelines;
contribute to building national capacities in terms of out-of-school children data collection, analysis and monitoring; gather relevant data and research to inform the out-of-school children study; assist the key penholders in conducting quantitative and qualitative analysis on the profiles of out-of-school children, adolescents and youth, as well as on the barriers to education they face, or specific issues and dimensions requiring expert knowledge; and work with the steering committee on the strategic vision and policy recommendations.

Because the capacity of technical teams is a major determinant of the quality of the study, each team should bring together a broad range of expertise that covers education statistics, in-depth understanding of the barriers to education relevant to the national context, and national education policies. It is also crucial that members of the team have the time and flexibility to complete the study even when there are unforeseen delays.

Typically, the technical team will include the following members and partners:

- **MINISTRY OF EDUCATION**: At a minimum, the team should include the MoE EMIS officer and a national education policy expert focusing on equity and inclusion. Involving other MoE officers in qualitative research is an excellent way of improving national ownership. This can be achieved by: (i) offering national and regional officers and directors the opportunity to share their views as key informants for barriers and policy analysis; (ii) requesting the input of district education officers for the selection of targets for KII and FGDs, or to identify representative schools; (iii) collaborating with ministry experts for the design of survey tools and instruments; and (iv) inviting them to participate in or witness interviews or focus group discussions, with students, parents, teachers and headmasters, particularly in schools where children face particular barriers or intersectional barriers.

- **OOSCI PARTNERS**: UNICEF staff in country and regional offices often act as a methodological resource during OOSCI study development, as including on the 7DE, the identification of barriers, the design and costing of policy proposals, issues related to children with disabilities, youth engagement and qualitative analysis. Methodological decisions regarding SDG 4.1.4 on out-of-school children rates and other thematic SDG 4 indicators are taken by the Technical Cooperation Group on SDG 4 indicators (TCG), the intergovernmental body mandated to adopt methodological decisions on SDG 4. The UIS, as the custodian agency of the SDG 4 thematic framework, is responsible for maintaining SDG4 metadata and provide the clarifications for the implementation of the TCG decisions (See resource folder on allinschool.org). ILO offers guidance on the analysis of children’s work (See Annex D).

- **STATISTICIANS, QUALITATIVE RESEARCHERS, AND ANALYSTS**: Generating and analysing out-of-school children data requires familiarity with both administrative and household survey data and qualitative data. Statistical data competencies will include experience with statistical software (Stata or SPSS) in order to use the statistical code provided, and with Excel in order to use the 7DE workbook. Qualitative data competencies will include key informant interviews and focus group discussions. Experience from past OOSCI studies has shown that the time and expertise required to generate and analyse statistical tables and graphs and qualitative data is often underestimated, and that the convincing narrative from the profiles analysis is best developed by dedicated writers.

- **AUTHOR OR PENHOLDER**: The author(s) of the OOSCI study will need to have a broad range of expertise, including fluency in the national language or languages, a solid understanding of education statistics, knowledge of the national education system, a strong background in education policy, knowledge of and sensitivity to social and cultural dimensions of education exclusion, experience
working with vulnerable groups, and excellent writing skills. It is essential to ensure that the report authors engage in dialogue with the statisticians and policy analysis to understand the challenges and gaps encountered, as well as to ensure the interpretation of indicators is correct. When there are multiple authors, an editor or primary author will need to finalize the report, to ensure the structure and findings across sections are consistent.

- **MULTI-SECTORAL EXPERTISE:** Since the problems faced by out-of-school children extend beyond education, expertise in other fields such as poverty, social protection, disability, and child labour may be necessary. This may involve representatives from different ministries or cross-sectoral experts from OOSCI partner organizations, hiring additional consultants, or engaging an institute that offers a broad range of expertise.

- **CHILDREN, ADOLESCENTS AND YOUTH:** Youth representatives should be involved, particularly in the identification and understanding of barriers to education faced by their peers. See further considerations in the dedicated section below.

- **FOCAL PERSON, COORDINATOR OR SECRETARY:** Finally, the technical team should designate someone with a broad range of expertise and excellent communication skills to coordinate the study, monitor effective progress, liaise between consultants and experts, identify capacity gaps or problems with the report, mobilize additional support as required, share updates with the steering committee, convene meetings, and ease transitions when new consultants or staff members join the team. Typically, this is a UNICEF staff member.

Outlining the expected contributions and timeline for each member of the technical team will help ensure a shared understanding of the OOSCI study process.

### 2.2.4 ENGAGING WITH CHILDREN, ADOLESCENTS AND YOUTH

Although engaging children and adolescents requires an investment in time, expertise and resources, the benefits to the study’s relevance, quality and legitimacy are significant. Children and adolescents provide uniquely relevant perspectives. Out-of-school youth can themselves help identify groups of ‘invisible’ out-of-school children. Their views lead to better understanding of barriers to education and more relevant policy recommendations.

OOSCI studies should therefore aim to involve youth representatives in each of the key phases of elaboration, including: (i) preparation, including formation of a steering committee; (ii) data collection and analysis; (iii) barrier analysis, and harnessing further qualitative data,
including FGDs with children, adolescents, youth and their parents; (iv) formulation of policy recommendations to address the barriers and reduce exclusion; and (v) launch and dissemination, including planning next steps to implement recommendations and advocacy. Social and behaviour change approaches can provide a useful point of departure for operationalising these principles.\(^{15}\)

Youth representatives should be carefully selected according to two key criteria: they have lived experience of barriers to access education so they can represent the most vulnerable categories of children; and be in communication with their cohort so that they can speak on their behalf. As expertise is needed to work with young people, the technical team may work through a youth organization, NGO or consultant with demonstrated capacity to facilitate a participatory research. It is also important to be mindful of the ethics involved when working with children and youth.\(^{16}\)

Their engagement can vary between being consulted through FGDs or being provided with the resources to conduct research among their peers themselves. Availability of resources, research needs, and context will determine the most appropriate solution. These are further discussed in Section 5.2.1. It is important to highlight to the steering committee the time and resources needed to facilitate the youth consultations and FGDs.

As the process of consultations brings together children and adults to discuss potentially sensitive issues, research ethics principles and child safeguarding should be given careful consideration (see Section 5.2.1). Consent forms are mandatory when consulting minors.\(^ {17}\) When obtained, input from children, adolescents and youth should be taken into consideration, and when this is not possible, they should receive an explanation. The cycle of engaging youth is completed by reporting on the results, however, once collaboration has been built, it is ideal to continue with a long-term partnership on the implementation of policies.

### 2.3 The Study Structure

Table 2.1 lists the proposed content for a national study. This structure is intended as guidance and is designed to support an effective presentation of the study findings and recommendations. While the basic structure facilitates harmonization across studies, the content of each study should be responsive to the country context and the key messages the report aims to communicate.

Note that the introductory description of the national education system should contain information on the age ranges of the different levels and cycles, from pre-primary to upper secondary, relating each to the ISCED classification.

Across all studies, it is strongly recommended that the general methodology and indicators align as closely as possible to those specified in this manual. This ensures some degree of consistency in studies, which one of the key strengths of OOSCI. However, the revised OOSCI methodology described in this manual includes many innovative approaches developed in past national and regional OOSCI studies, which could be used as adaptations. Study teams may consider adopting these approaches where they better suit the national or regional contexts, or meet specific study goals.

Specific guidance on drafting each of the four core OOSCI study chapters is provided in the sections that follow.

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15 See [https://www.unicef.org/social-and-behaviour-change](https://www.unicef.org/social-and-behaviour-change)
16 See [https://www.unicef-irc.org/research/ethical-research-for-children/](https://www.unicef-irc.org/research/ethical-research-for-children/)
17 Examples can be found on Adolescent Participation in Monitoring and Evaluation Guidance, Tool D ‘Consent and Adolescent Assent Form Template’.
## TABLE 2.1
Typical OOSCI national study structure, sample content and number of pages

<table>
<thead>
<tr>
<th>CONTENT</th>
<th># OF PAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOREWORD</strong> (signed by a government official and a UNICEF representative)</td>
<td>1</td>
</tr>
<tr>
<td><strong>ABBREVIATIONS AND ACRONYMS</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>EXECUTIVE SUMMARY</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>INTRODUCTION</strong></td>
<td>10</td>
</tr>
<tr>
<td>- Overview of the Global Initiative on Out-of-school Children</td>
<td></td>
</tr>
<tr>
<td>- The national education system, ISCED classification and country context</td>
<td></td>
</tr>
<tr>
<td>- Methodology, conceptual framework</td>
<td></td>
</tr>
<tr>
<td>- Study goal and contextualized Theory of Change</td>
<td></td>
</tr>
<tr>
<td><strong>CHAPTER 1. Quantitative overview of the 7DE</strong></td>
<td>10</td>
</tr>
<tr>
<td>- Introduction</td>
<td></td>
</tr>
<tr>
<td>- Data sources, gaps quality and limitations</td>
<td></td>
</tr>
<tr>
<td>- Key education access and participation indicators</td>
<td></td>
</tr>
<tr>
<td><strong>Seven Dimensions of Exclusion (numbers, rates)</strong></td>
<td></td>
</tr>
<tr>
<td>- 7DE status bar chart</td>
<td></td>
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<tr>
<td>- Review of historical trends</td>
<td></td>
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<tr>
<td>- Analytical summary</td>
<td></td>
</tr>
<tr>
<td><strong>CHAPTER 2. Profiles of excluded children</strong></td>
<td>20</td>
</tr>
<tr>
<td>- Introduction</td>
<td></td>
</tr>
<tr>
<td>- Classification of out-of-school children in DEs 1236 by school exposure and characteristics</td>
<td></td>
</tr>
<tr>
<td>- Disaggregated analysis of children at risk of dropout in DEs 457</td>
<td></td>
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<tr>
<td>- Current trend analysis</td>
<td></td>
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<tr>
<td>- Pathway analysis, retrospective cohort analysis</td>
<td></td>
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<tr>
<td>- Cumulated Risk Analysis</td>
<td></td>
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<tr>
<td><strong>Key profiles of excluded children</strong></td>
<td></td>
</tr>
<tr>
<td>- Analytical summary</td>
<td></td>
</tr>
<tr>
<td><strong>CHAPTER 3. Barriers to education</strong></td>
<td>20</td>
</tr>
<tr>
<td>- Introduction</td>
<td></td>
</tr>
<tr>
<td>- Barriers identified, categorized using MoRES framework</td>
<td></td>
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<tr>
<td>- Table linking key profiles to barriers</td>
<td></td>
</tr>
<tr>
<td><strong>Critical barriers</strong></td>
<td></td>
</tr>
<tr>
<td>- Analytical summary</td>
<td></td>
</tr>
<tr>
<td><strong>CHAPTER 4. Policy and strategy recommendations</strong></td>
<td>20</td>
</tr>
<tr>
<td>- Introduction</td>
<td></td>
</tr>
<tr>
<td>- Assessment of existing policy effectiveness and gaps</td>
<td></td>
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<tr>
<td>- Policy and strategy options</td>
<td></td>
</tr>
<tr>
<td>- Cost-effectiveness analysis</td>
<td></td>
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<tr>
<td><strong>Prioritized policy and strategy recommendations</strong></td>
<td></td>
</tr>
<tr>
<td>- Implementation, monitoring and evaluation vision</td>
<td></td>
</tr>
<tr>
<td>- Analytical summary</td>
<td></td>
</tr>
<tr>
<td><strong>CONCLUSION</strong></td>
<td>5</td>
</tr>
<tr>
<td>Key profiles, critical barriers and priority policy proposals</td>
<td></td>
</tr>
<tr>
<td>Agreed next steps and way forward</td>
<td></td>
</tr>
<tr>
<td><strong>REFERENCES</strong></td>
<td></td>
</tr>
<tr>
<td><strong>ANNEXES</strong></td>
<td></td>
</tr>
</tbody>
</table>

Total suggested number of pages for the main report: 100
2.4 Work Plan, National Workshops and Timeline

While the OOSCI Operational Manual presents the ideal structure and content of a study, it also recognizes the diversity of resources available in each country. The study’s scope can be adapted, for example, by omitting non-core components (such as particular statistical analyses) or not collecting any primary data, or to focus on particular areas of the country (the 2016 Ukraine study examined government-controlled areas only), dimensions of exclusion (the 2014 Romania study analysed the situation of youth out of school and at risk of dropping out of upper secondary age), or particularly vulnerable target groups (such as children with disabilities, internally displaced persons, or an ethnic minority).

Once the purpose and scope of the study are decided, the steering committee should agree on a broad outline of a work plan, to be fleshed out by the technical team. Such a work plan should distinguish between the activities, agreements and outputs (deliverables) to be completed at each of the stages. A sample timeline is presented in Table 2.2.

As part of the workplan, it is recommended that several process workshops be held during study development:

1. **A CAPACITY-BUILDING LAUNCH WORKSHOP**, focusing on OOSCI concepts, sharing the purpose and intent of the study, discussing the methodology for indicator computation and profile elaboration, reviewing existing data, and developing a research plan to fill gaps. This would be the opportunity for the steering committee to form the technical team, as well as to adapt the OOSCI theory of change to the local context, to underline how it is expected the study will contribute to a significant and sustainable reduction in out-of-school children.

2. **A BARRIER IDENTIFICATION WORKSHOP**, led by the technical team, and involving other education stakeholders (as identified in the stakeholder mapping), to discuss the barriers to education for the key profiles of children in the 7DE. This workshop would draw on advanced drafts of Chapters 1 (on out-of-school children numbers and data) and 2 (on key profiles of out-of-school children and children at risk of dropping out). This workshop should be participatory and can involve methods such as a problem-tree approach. The role of stakeholder engagement in the barriers analysis is described in Section 5.2.1.

3. **A POLICY AND STRATEGY WORKSHOP**, led by the steering committee and involving the technical team and other education stakeholders (per the mapping), combining both technical and policy participants. This takes place once the barriers chapter has been finalized and the groundwork for the policies chapter is well advanced, including the analytical review of existing policy and gaps, and once international best practice for the country’s critical barriers has been identified. A preliminary national action plan roadmap could be developed to discuss the next steps after the study’s publication. More details are discussed in Sections 2.5 and 6.1.

Optional data workshop: The study team may wish to convene a steering committee and technical team meeting between workshops 1 and 2 to discuss the findings of the data and profiles analysis if they are anticipated to be sensitive. For example, the quantitative analysis may produce higher numbers of out-of-school children than published previously (due to new methodology or using different data sources) or highlight particular profiles of children in the 7DE. This timely engagement may reduce issues later in the OOSCI study finalization and launch.

The third process workshop ensures that policies are best suited and prioritized for impact, as well as to discuss arrangements for
their financing, incorporation into national and sector planning processes, implementation, monitoring and evaluation. It will further offer the opportunity to agree on suitable arrangements for the launch event and dissemination of the study and its findings. These considerations are discussed in further detail below.

TABLE 2.2
Sample timeline for the OOSCI study

<table>
<thead>
<tr>
<th>Phase 1: Planning and preparation</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage with the MoE</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 ...</td>
</tr>
<tr>
<td>Partner mapping</td>
<td></td>
</tr>
<tr>
<td>Nomination of the steering committee</td>
<td></td>
</tr>
<tr>
<td>Determination of quality assurance mechanism</td>
<td></td>
</tr>
<tr>
<td>Workshop 1: Launch and capacity-building</td>
<td></td>
</tr>
<tr>
<td>Nomination of the technical team</td>
<td></td>
</tr>
<tr>
<td>Plan phases 2, 3, 4</td>
<td></td>
</tr>
<tr>
<td>Recruitment of consultants</td>
<td></td>
</tr>
<tr>
<td>Study inception phase and report</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2: Data collection and research</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data inventory and quality assessment</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 ...</td>
</tr>
<tr>
<td>Research and data collection plan</td>
<td></td>
</tr>
<tr>
<td>Desk review of existing sources</td>
<td></td>
</tr>
<tr>
<td>Obtain data clearance as required</td>
<td></td>
</tr>
<tr>
<td>Draft Chapter 1: 7DE numbers and indicators</td>
<td></td>
</tr>
<tr>
<td>Qualitative research, KII, FGDs</td>
<td></td>
</tr>
<tr>
<td>Engage with children, adolescents and youth</td>
<td></td>
</tr>
<tr>
<td>Technical assistance from OOSCI partners</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 3: Analysis and report writing</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disaggregated data analysis</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 ...</td>
</tr>
<tr>
<td>Draft Chapter 2: Profiles of excluded children</td>
<td></td>
</tr>
<tr>
<td>Link key profiles to barriers</td>
<td></td>
</tr>
<tr>
<td>Workshop 2: Critical barrier identification</td>
<td></td>
</tr>
<tr>
<td>Draft Chapter 3: Document critical barriers</td>
<td></td>
</tr>
<tr>
<td>Link critical barriers to existing policy</td>
<td></td>
</tr>
<tr>
<td>Draft Chapter 4: Policy/strategy proposals</td>
<td></td>
</tr>
<tr>
<td>Workshop 3: Policy prioritization and planning</td>
<td></td>
</tr>
<tr>
<td>Develop a national OOSC action plan</td>
<td></td>
</tr>
<tr>
<td>Consolidate full draft report</td>
<td></td>
</tr>
<tr>
<td>Review by UNICEF and OOSCI partners</td>
<td></td>
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<tr>
<td>Review by steering committee</td>
<td></td>
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<tr>
<td>Finalization</td>
<td></td>
</tr>
<tr>
<td>Technical assistance from UNICEF</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 4: Dissemination and follow-up</th>
<th>Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validation of the study findings and recommendations</td>
<td>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 ...</td>
</tr>
<tr>
<td>Publication of the report</td>
<td></td>
</tr>
<tr>
<td>Communication strategy</td>
<td></td>
</tr>
<tr>
<td>Presentation and dissemination of results</td>
<td></td>
</tr>
</tbody>
</table>
Table 2.2 offers a tentative timeline for a typical national study, over 18 months. While the phases listed can be adjusted slightly, they should usually be carried out in sequence. The data tables need to be generated and analysed, and the gaps and limitations in the data documented in Chapter 1, before Chapter 2 on the profiles of excluded children can be written. Likewise, Chapter 3 on the identification of barriers must relate these to the key profiles identified in Chapter 2, and the policy analysis in Chapter 4 must relate to the critical barriers determined in Chapter 3. This is fundamental for a concrete narrative to emerge, creating a logical flow between the chapters – and ensures that the study concludes with evidence-based policy recommendations.

As with any study, it is important to set a timeline that is realistic, considering the work to be completed and study components to be delivered. If, due to time or resource constraints, it is necessary to compress the timeline, for instance to ensure that the study findings can feed into the next ESP planning process, the scope of the study will need to be adapted accordingly. It is not advisable to forego consultative processes with stakeholders that will be key to ensuring the study is not only of good quality but can achieve its intended impact. In addition, plans for qualitative research should keep in mind that sufficient time and resources will be needed to ensure a high-quality process and product.

For a well-prepared and conducted OOSCI study, the review process will be ongoing, conducted in stages (numbers, then, profiles, then barriers, then policies), with the input of different stakeholders as appropriate for each, and feedback to the steering committee each step of the way. The workshops described above can serve as key review milestones.

Before the study is published, it must be reviewed and approved by all key partners, including the government, children, adolescents and youth, OOSCI partners (as appropriate) and the UNICEF regional office. A well-coordinated review process is important to prevent mistakes, avoid unnecessary work and waiting periods, and meet the timeline for completing the studies. When the study is initiated, the review process needs to be agreed upon and clarified with all members of the team, including consultants and experts who have agreed to review the studies.
2.5 Planning for Impact

It is very important to outline the study’s goals, before beginning the study. The overarching goal of an OOSCI study is to provide the evidence base for recommending and stimulating policy changes that bring more children into school and support them to succeed and complete pre-primary, primary and secondary education. However, how, when and with whom the OOSCI study can lead to these changes in the national context needs to be considered in advance.

Planning for impact and follow-up gives direction to the study itself. As the research, writing and review are carried out, it is useful to know how the study will be used once it has been completed and what outcomes it will contribute to.

In addition to producing the report, the study process may be the opportunity to:

- Raise awareness of out-of-school children as an important cross-sectoral issue;
- Conduct advocacy;
- Build bridges to sector-wide planning and review mechanisms;
- Coordinate policies and decision-making on out-of-school children between ministries;
- Cost and budget for activities and programmes to reduce exclusion;
- Raise awareness of other data sources and projects on out-of-school children; and
- Support capacity development of ministries and partners such as non-governmental organizations and United Nations agencies.

Before the team begins developing the study, it is recommended that the team discuss the OOSCI theory of change with stakeholders and make adaptations to the goals and the national context (for example, in workshop 1). This is an opportunity to clarify how the study will contribute to reducing education exclusion, as well as generate awareness and consensus among key stakeholders of the additional activities needed to ensure the goals of the study are met.

Most countries underline the importance of having a communication strategy to launch and disseminate the study findings, as a key step to maximize the study’s impact. This should identify objectives, target audiences and stakeholders, along with key messages and media for specific audiences. Possible activities include:
A high-profile launch event with senior government officials and other stakeholders;

- Engaging with and contributing to national and international media;
- Involving local celebrities in discussion of findings with the public;
- Presentation of the findings at national and international conferences;
- Publication of an advocacy brochure;
- Publishing the report on the OOSCI website [http://www.allinschool.org](http://www.allinschool.org);
- A website or blog to disseminate the findings; and
- A specific event for children, adolescents and youth who participated in the study

After the key findings of the report have been validated and agreement reached among stakeholders on what policies and strategies best respond to the needs and barriers identified – but possibly before publication of the study itself – the steering committee members should plan to develop a national out-of-school children action plan. This plan is not a standalone policy but a working document that outlines how the study’s findings will contribute to existing national policy and development processes, to translate the evidence into action. Such a plan could consider the following:

- Regular update (or further research) of the analysis of barriers, to remain responsive to the needs of different groups;
- Actions required for out-of-school children study findings to be reflected in the Education Sector Plan and other education sector strategies, which may include a costing plan for implementation;

Section 6.4 outlines further considerations for planning the next steps after the policy analysis is complete. For examples of how OOSCI studies and analysis were conceptualized, developed and used for policy change, see the case studies of the Maldives, Costa Rica and Afghanistan in Sections 4.5, 5.5 and 6.5 (respectively).
SECTION CONTENTS

Step 1: Review Data Sources, Quality, Gaps and Limitations ...... 46
Step 2: Calculate the 7DE Indicators ...... 55
Section 3 Key resources ...... 63

TOPICS COVERED
+ Considerations for appraising and processing data
+ Approaches to the quality control of data and identification of gaps and limitations
+ How to compute the indicators for the 7DE
+ Introduces two OOSCI tools for this purpose:
  Data Inventory and Quality Assessment
  7DE Calculation Worksheet
+ Visualizing the 7DE and considerations for trend and comparative analysis

3

OOSCI STUDY CHAPTER:
Data Sources and Out-of-school Children and Risk of Dropout Indicators
Section 3 describes the process of drafting the data sources and indicators chapter of the study. This includes the steps required to source, appraise, and prepare the data needed to conduct an OOSCI study, identify gaps and limitations, and produce the basic quantitative profile of out-of-school children and RODO in the country, including the calculation of numbers and rates for each dimension of exclusion.

The steps are:

1. Review data sources to create an inventory of available quantitative data, assess dataset quality, and highlight any gaps, errors, discrepancies and/or limitations.

2. Calculate the 7DE indicators using standard indicator methodology and tools, to complete the data tables.

3.1 Step 1: Review Data Sources, Quality, Gaps and Limitations

Every OOSCI study should contain a brief section that outlines the quantitative and qualitative data sources examined, the rationale for using those retained and a discussion of the data limitations and advice on the interpretation of indicators. Step 1 focuses on quantitative data.

Out-of-school children study teams are encouraged to access, download and use the Data Inventory and Quality Assessment Worksheet provided on allinschool.org. This tool is designed to produce a comprehensive overview of data sources available in the context of an out-of-school children study, assess the reliability of each, and identify important differences between them that may lead to different estimates of the number of out-of-school children and RODO.

Include as many columns as required to cover all sources of population data, enrolment and attendance data, and other data on out-of-school children and RODO, collected during the last five years (or more, if a comparison of trends over time is desired). Examples for household survey data and administrative data are included in the Data Inventory tool.

Include information on data collection systems and sources that are both national in coverage, or sub-national but provide information on out-of-school children for a specific geographic region of the country (for example, a province or state) or for a specific population group or minority.

While this step is the first in the process of developing an out-of-school children study, the tools it covers may be of use beyond this chapter and should be revisited as appropriate at later stages. For instance, once the initial quantitative data analysis covered in this chapter is complete, the findings may highlight the need to consider further data sources, or point to further research, for instance to develop profiles (Section 4) or identify barriers (Section 5). If so, new sources discovered, or surveys carried out can be added and reviewed at later stages.

In performing the exercise, reference may be made to metadata, questionnaires, codebooks and existing analytical reports, to gain a better understanding of the data. All such reference material should be retained and listed.

3.1.1 OVERVIEW OF COMMON DATA SOURCES, ISSUES AND GUIDANCE

Researchers of an OOSCI national study must consider multiple complementary data sources, because the limitations inherent in each imply that no single source will be sufficient to provide a complete profile of out-of-school children and RODO. There are two main sources of quantitative data on children:
Administrative data – refers to data on student enrolment collected by schools through a school census, that is usually annual and feeds into national EMIS systems. Some EMIS systems have unique student identifiers which can be used to provide powerful insights in the development of profiles of children in the 7DE. Other ministries also collect relevant administrative data on children.

Household survey and census data – refer to data on the school attendance of children collected by interviewers with a household survey or census questionnaire.

**ADMINISTRATIVE DATA SOURCES: ADVANTAGES AND LIMITATIONS**

Administrative data are routine data collected by government institutions such as the Ministry of Education. Education administrative data, typically in the EMIS, primarily provide information on school enrolment, including repetition, dropout and completion.18 Because administrative data focus on students, they are especially useful for providing a picture of children, adolescents and youth in school but at risk of dropping out (DEs 4, 5 and 7). EMIS databases may be based on a census (headcount) and provide aggregate figures on enrolment, repetition and dropout. In some countries, EMIS databases are based on unique student identifiers, which allow for greater level of disaggregation of student, teacher and school characteristics. This source has several advantages. It is collected every year, allowing for measurement of trends and (when complete) can cover the enrolment of the entire country without concern for sampling error. Data on enrolment can be linked to school, teacher and some student characteristics (age, sex and geographic location) as EMIS also includes administrative data collected on school inputs, teachers, staff and schools.19

Administrative data have limitations. Because enrolment records only cover children that are in school, administrative data provide no direct information on out-of-school children, except for students registered as having dropped out. Data collection by Ministries of Education may not cover all schools, such as private schools and non-formal programmes managed by other ministries. Administrative data also generally lack detailed information on students’ individual or household characteristics. There may also be concerns about the accuracy of data reported by schools, related to per capita funding arrangements that encourage over-reporting of enrolment or under-reporting of dropout, or related to misunderstanding of what specific individual circumstances should lead them to be considered as having left school.

**HOUSEHOLD SURVEY DATA: ADVANTAGES AND LIMITATIONS**

One common source of data for out-of-school children statistics is from sample-based household surveys such as the Multiple Indicator Cluster Survey (MICS) and the Demographic and Health Survey (DHS) or, less commonly, population censuses. Because surveys collect information from a representative sample of all households– these data are particularly useful for analysing out-of-school children (DEs 1, 2, 3 and 6). Household surveys tend to collect data on school attendance, that is, by asking the respondent whether school age children attended school ‘at any time’ in the reference school year. Household surveys collect information on individual and family characteristics including sex, location, household wealth, ethnicity, child labour status, and parental education, which makes them useful.

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18 Most education data in the UIS Data Centre at [http://data.uis.unesco.org](http://data.uis.unesco.org), including data on enrolment, teachers and finance, are provided by national authorities to the UIS in response to an annual education survey. The data are collected and processed in a manner consistent with international standards, such as the International Standard Classification of Education (ISCED), and they are therefore internationally comparable.

for the disaggregated data analysis required to develop the in-depth profiles of children in each dimension of exclusion.

Household survey data have different limitations. It is usually difficult to link children to the school they attend. Large household surveys may not be conducted annually, but typically every four to five years. Household surveys are sample based and often do not include ‘invisible’ children who do not live in traditional households. These include children who are homeless or living on the street, nomadic populations, or children in institutions such as hospitals, orphanages or juvenile detention centres.

Sample size and survey design are important considerations for the assessment of a dataset’s suitability and quality. The level of disaggregation possible in a household survey is determined by the levels for which the sample was designed to be representative: typically for the national level, the regional level and for rural and urban areas. When reporting indicator values for small sub-groups of the population, only publish estimates based on at least 25 unweighted observations. This threshold is applied in reports by two large international survey programmes, the Demographic and Health Survey (DHS) and the Multiple Index Clustering Survey (MICS).

Another frequently used measure of the quality and precision of an estimate is the relative standard error (RSE).

Additional concerns about data may arise when the dataset is opened and the calculation of indicators is started. Many errors may exist in the data, but discrepancies in age data merit special attention below.

DISCREPANCIES BETWEEN DIFFERENT DATA SOURCES

Estimates of the rate and number of out-of-school children calculated from different data sources can vary. As discussed in the East Asia and the Pacific regional OOSCI report, data from administrative and/or household survey sources may be missing, old or inconsistent. In

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21 In DHS and MICS reports, estimates based on 25 to 49 unweighted cases are published with a note on the small sample size; in summary tables these estimates are placed in parentheses. Indicator estimates for smaller groups are not published.

22 The relative standard error (RSE) is calculated as the standard error divided by the mean of an estimate, expressed as a percentage. Estimates with an RSE above 30% are commonly considered unreliable.

India for instance, the Out-of-school rate for children of primary age was found to be nearly 20 per cent based on the 2011 Census survey data, between 8 and 10 per cent based on National Sample Survey Organization (NSSO) and Unified District Information System for Education (U-DISE) 2014 data, yet barely 3 per cent based on Social and Rural Research InstitutIndia Market Research Bureau (SRI-IMRB) 2014 survey data. The UIS provides further examples and explanation of the reasons for discrepancies in out-of-school children rates across administrative and household survey sources.

Such discrepancies are an unavoidable reality, and the reasons must be identified and explained in the data limitations section of the quantitative analysis. Several approaches are feasible to deal with the discrepancies in out-of-school numbers and rates resulting from different data sources. In some cases, the differences can be minimized by using standard indicator methodology and definitions. An alternative approach to this comparative analysis is data triangulation. This approach was adopted in the 2018 Afghanistan and Cameroon out-of-school children studies.

Where no single dataset is deemed to be clearly more reliable and triangulation of different sources faces technical issues, it is advised to compute the key 7DE indicators based on each dataset and provide the range of estimates, clearly labelling the source of each.

In cases where it is not possible to follow the statistical methodology precisely, it is recommended that the study team seeks expert guidance from UNICEF and other OOSCI partners.

ISSUES WITH POPULATION DATA AND GUIDANCE

Descriptive population statistics may indicate age heaping – an unusually high share of ages ending in 0 and 5. Such patterns can be caused by uncertainty of survey respondents about their own age or the exact age of other household members, leading to approximations. Methods to reduce age heaping in survey data typically do not yield data that are significantly more reliable and such methods are therefore not further discussed. However, the presence of age heaping is an indicator of poor data quality and can have a significant impact on indicator estimates for the school-aged population.

The available sources of population data, including UNPD, national census results and projections, should be critically and comparatively appraised, to identify and use the most accurate and credible data available.

ACCUACY OF SINGLE AGE DATA AND GUIDANCE

Accurate age data are essential for indicators such as the out-of-school rate. Administrative and household survey data are both susceptible to problems with the reliability of age information. This is often particularly stark in contexts where birth certificates are not common.

Administrative data and household surveys measure education participation in different ways. Education systems generally define the official ages for a level of education based on the age at the beginning of the academic year. For example, children may be

26 UN-DESA’s Committee for the coordination of statistical activities (ICCSA) is preparing recommendations on the source of population data to use for the calculation of SDG indicators. In addition, the UNPD has modified its methodology for single year of age population estimates in 2022.
required to enter Grade 1 of primary education if they are 6 years old by 1 February. Furthermore, administrative sources usually focus on reporting of enrolment at the time of the school census collection.

By contrast, household surveys may collect data on educational status and age many months after the start of the school year. Survey data collection is typically not coordinated with the school year. In addition, one respondent typically provides age information for all household members, which can be inaccurate. When this happens, children in school may be wrongly considered over-age even if their age was appropriate for their grade at the start of the school year. This distinction is important when considering overage attendance as a proxy for dropout risk.

Given these limitations, it is recommended that age data be adjusted to the approximate age at the start of the school year. If the birth date of school-aged children is available, ages should be adjusted to the age of the child at the start of the school year, as is increasingly common practice in MICS and national surveys. If the birth date is not available, and the gap between the start of the school year and the date of the survey data collection is more than six months, UIS practice is that all ages in the dataset be subtracted by one year (age – 1). Although this second option does not eliminate all associated errors, it reduces the error caused by the gap in data collection.

### 3.1.2 CREATE A DATA INVENTORY

A proposed outline for the data inventory is provided on the second sheet of the Data Inventory tool workbook. The inventory should identify and document all recent sources of administrative and household survey data on enrolment and attendance in the country. It can reveal gaps in knowledge about issues, regions or subgroups of the population that may be avenues for future research.
The inventory should cover primary data sources on children in and out of school from the last five years. Older data can be included if no data collection took place during the last five years, or if the analysis aims to produce historical trends. Available data sources may include:

- Administrative data, from EMIS or other surveys conducted by the Ministry of Education;
- National household surveys or population censuses;
- Demographic and Health Surveys (DHS) or Multiple Indicator Cluster Surveys (MICS);
- Living Standards Measurement Studies (LSMS);
- International Household Survey Network (IHSN);
- Data provided by line ministries involved in areas that are relevant to child wellbeing, such as the ministries of social affairs, family development, or health;
- Thematic or specific studies or surveys conducted by the national statistical office;
- Statistical Information and Monitoring Programme on Child Labour (SIMPOC) and the ILOSTAT website;
- Data on refugees from UNHCR, on internally displaced people from IOM (See Annex C);
- Data on minority or ‘invisible’ groups collected by NGOs;
- National or international learning assessments (EGRA/EGMA, PISA, SACMEQ, PASEC);
- Data from key private or non-formal education providers, including of early childhood, TVET and equivalency schooling programmes; and
- Data from real-time out-of-school children /RODO monitoring and early warning systems.

The inventory will consolidate information about the data producer and owner, the collection date, the frequency of collection, the definitions given to key terms, sample size and design, population and geographic coverage, and possible levels of disaggregation, among others. This information can usually be found in the background documentation for each data source. It may however be necessary to contact the agency or focal person for more detailed or missing information.

The data inventory can be used in several ways. First and foremost, it provides the foundation to conduct the data quality assessment described just below. The findings will be necessary to determine if and what adjustments are necessary for any later analysis, as well as to inform the interpretation of the results. The inventory may also be used to proffer recommendations to improve future data collection instruments or develop new ones.

### 3.1.3 ASSESS DATA QUALITY

A suggested framework to appraise the quality and reliability of each data source is provided on the third sheet of the Data Inventory and Quality Assessment tool. The assessment includes a series

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of questions to be answered that rely on experts’ observations. The answer to each question, selected from a drop-down list, will be automatically attributed a score. The closer the total score for each source is to the maximum number of points (45), the more reliable the data.

The data assessment should draw on the judgment and expertise of the specialists in the country’s education sector who form the technical team and steering committee. Much of the information required to populate the spreadsheet will have been gathered to populate the Data Inventory sheets of the tool. However, out-of-school children study teams are encouraged to interview the agency responsible for the data source to ensure the coverage of data sources is adequately documented.

Aspects covered include the data’s age, accessibility, accuracy, coverage, disaggregation levels, utility for purpose, and the consistency of definitions used, among others. Particular attention is drawn to the review of definitions, that may be the reason for different indicator values of out-of-school children. Discrepancies can occur when there is no explicit definition of out-of-school children and dropout at the national level, or more than one definition is used across different sources. The data quality assessment should primarily be used to identify and understand major differences between data sources that may cause discrepancies between the estimates. It is key to ensure the correct interpretation of the data. However, where several different sources of data for any given input variable are available, the tool will also enable the determination of which are the most representative, recent and of the highest quality, to be used in the analysis.

Combined, the results of the Data Inventory and Quality Assessment worksheets will provide the basis to document data gaps and limitations, as outlined in the next section. The tools are intended to support the development of the data and profiles chapters but are not intended for full publication in an OOSCI study. The findings can be summarized at the outset of the data chapter, providing readers with a rationale as to why certain datasets were chosen.

### 3.1.4 DOCUMENT DATA GAPS AND LIMITATIONS

The review of each data source and its quality outlined above will highlight certain source-specific limitations. Once the exercise has been completed for all sources, a broad overview of them together will enable the identification of any significant gaps.

Analysts should therefore keep in mind both: (i) the possibility of fragmented information systems when assessing the number of in-school children, to ascertain whether administrative or household survey data have any gaps in education coverage; and (ii) the possibility that certain categories of children are not captured in population data, due to their ‘invisible’ or ‘semi-invisible’ status (see Box 3.1).

Some gaps and limitations can be identified during the initial review of sources at the time of the study launch. Others will become apparent as the key chapters are drafted in turn, and should then feed-back to this section of the report. The process will therefore be ongoing throughout the course of the study elaboration process.

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31 A national definition of out-of-school begins by defining the population who should be in school, based on official attendance ages. It should also determine which types of educational programmes qualify children, adolescents and youth as being ‘in school’ (See Table 1). For those having attended school, the definition must further specify the point at which and reasons for which a pupil or student is considered to have dropped out. This in turn implies clear guidelines on how absenteeism is interpreted, based on its duration and causes. Where absenteeism is not accurately taken into account, national dropout figures will be underestimated, as will the number and rates of out-of-school children. For more information see UNICEF and UIS. 2016. Monitoring Education Participation.
The following questions can be considered when evaluating data gaps:

- Which data sources were investigated for use in the OOSCI study?
- What criteria were used to assess the quality and suitability?
- For what reasons did the team choose the specific administrative and household survey data sources?
- If there are differences between indicator estimates from different sources, were methods used to minimize these differences, and which?
- What accounts for the different indicator estimates?
- Are there any important gaps or cautions for interpretation of any indicators in the analysis that follows?
- Are there any important gaps in the data on out-of-school children and children at risk of dropping out for certain regions or subgroups of the population?
- Is there a way to acquire data on these groups from small-scale or qualitative studies to complement the main analysis?

Building on the last question, the out-of-school children study team may consider developing a research plan to fill the gaps in understanding the profiles of out-of-school children or RODO, particularly focusing on invisible children. This may include a combination of quantitative and qualitative methods. This plan may include:

- Collection of missing data on in-school children;
- Collection of data on specific ‘semi-invisible’ or ‘invisible’ groups of out-of-school children;

‘Invisible’ out-of-school children will not be covered by any administrative or household survey dataset and will need additional research.

- Primary research to better understand the profiles of children, adolescents and youth in each of the 7DE.

Additional research options on the barriers faced by various profiles of children out of school and at risk of dropping out are described in Section 5.

INVISIBLE, SEMI-INVISIBLE AND VISIBLE OUT-OF-SCHOOL CHILDREN

By examining multiple data sources, the data inventory can be used to evaluate whether additional sources provide information on the ‘semi-invisible’ out-of-school children in the Seven Dimensions of Exclusion (see Section 2). These are out-of-school children who are not recorded in Ministry of Education data or another government database. For example, children who have never enrolled are typically not identifiable in EMIS data. By definition, ‘invisible’ out-of-school children will not be covered by any administrative or household survey dataset and will need additional research.

Box 3.1 describes how to fill the data gap on semi-invisible and invisible out-of-school children.
Identifying children who are out of school is often an exercise in improving data quality. Careful analysis can reveal gaps in a country’s data on out-of-school children, which may be resolved by improving records, linking multiple databases and using innovative approaches to identify children completely absent from government records.

Semi-invisible out-of-school children can be identified in countries with relatively robust government data collection systems and by cross-checking the Ministry of Education database with other government databases. For example, by comparing child-level records in the Education Management Information System (EMIS) with the civil registry, it is possible to identify children recorded in one database but not in the other. If a particular school-age child is not registered in the EMIS but is registered in the civil registry database, the child is either out of school, or the civil registry may be inaccurate. Alternatively, the civil registry may identify children in schools which are not included in the EMIS. Lastly, a further challenge is to adequately track the movement of students. For example, existing policies may encourage the re-entry of students who have previously dropped out of school, however, these students may not be adequately tracked by existing information systems. This can lead to inaccurate records of school attendance.

Potential data issues encountered in finding semi-invisible out-of-school children include:

- Children migrated abroad but are still recorded in the civil registry as living in the country.
- Enrolment in certain types of schools or institutions may not be recorded by the Ministry of Education, such as schools or institutions not under its jurisdiction.
- Errors in the unique identification code for children can lead to mismatch when comparing records across databases.
- Incorrect recording of children’s birth dates can skew data on whether the child is of compulsory school age.
- Long-term truants are identified as such in records at the school level but are still counted as enrolled in national data. The period of non-valid absenteeism that is indicative of having dropped out – or no longer being enrolled in school – is a matter to be defined in legislation.

Invisible out-of-school children are, by definition, children who are not registered in any government or school database. Obtaining data on invisible out-of-school children is therefore particularly difficult. They can include children with disabilities (see Annex L), homeless children and those living on the street, internally displaced children, refugee children, immigrants, children in nomadic communities, and even marginalized ethnic minorities, among others. These groups are often particularly vulnerable, exposed to stigma and discrimination and hard-to-reach.

It is recommended that the team engage the OOSCI steering committee, particularly those stakeholders who work with such children, to identify invisible out-of-school children. Several approaches or strategies may, however, enable to estimate the size and composition of these groups, and then gather data on their characteristics:

- Triangulating data from multiple different sources, including the most recent national census, EMIS, the ministry responsible for implementing the Convention on the Rights of the Child, social support services, ministries of health, or local government, to highlight inconsistencies that could help to better target specific research efforts to identify invisible out-of-school children.
- Data may be available through non-governmental sources (humanitarian agencies, NGOs, or human rights organisations).
- Develop partnerships to directly obtain data on specific groups or conduct qualitative research through non-governmental bodies, such as a national university or research institute, national or international NGOs, or through youth representatives.
- Use the out-of-school children study and any lessons learned in the process as an opportunity to advocate for the creation of systems, or linkage of existing systems and databases, that will make the identification of invisible out-of-school children easier in the future.
DEVELOPING RECOMMENDATIONS BASED ON IDENTIFIED DATA GAPS AND DISCREPANCIES

Data gaps and major discrepancies identified in Step 1 should be documented, and a summary overview provided in Chapter 1 of the study. In addition, Chapter 4 should present specific recommendations on improving the availability and quality of data on out-of-school children and children at risk of dropping out to improve future analysis, or that constraints to obtaining them be lifted. Particular attention should be paid to improving data at different levels of decision-making including national, province, district and school. Annex B outlines the UNICEF and UIS’s Eight Step Monitoring Framework for out-of-school children and children at risk of dropping out, which can be used to identify pertinent recommendations for filling gaps on semi-invisible and invisible children and improve data quality and timeliness. In addition, country examples of policies and strategies to improve data collection and reporting on out-of-school children and RODO are highlighted in Section 6.

3.2 Step 2: Calculate the 7DE Indicators

After determining which data sources to use for analysis, indicators can be calculated, and the relevant data tables can be generated. This section aims to provide greater clarity in terms of indicator definitions for the 7DE, which adopts a revised methodology for out-of-school children indicators (DE 1, 2, 3, and 6) in the context of the SDG4.
Study teams are encouraged to use the **7DE calculation tool**, a bilingual (English-French) Excel-based tool available on [allinschool.org](http://allinschool.org), that has been specifically developed for this purpose. This section explains the underlying approach.

The section on 7DE in Chapter 1 of the OOSCI study should present the key indicators for the rate and number of children in each of the dimensions. Teams are encouraged to select the tables according to the most relevant data in their context, and determine which tables belong in the main text and annexes. The section can be relatively short, providing a brief overview of the latest 7DE values (see summary Table 3.1 and Table 3.3), with a brief analysis of national or regional trends.

### 3.2.1 OUT-OF-SCHOOL CHILDREN INDICATORS FOR DIMENSIONS 1, 2, 3 AND 6

To calculate the out-of-school children indicators for dimensions 1, 2, 3 and 6, the following data are required, for the most recent year all data sets are available:

- Population data by single age. This is the number of children, adolescents and youth, for each year of age, from one year below the official age of entry into primary, to the official age of upper secondary completion.

- Formal education enrolment data by single age, level, grade and gender. This is the number of children, adolescents and youth, for each year of age considered above, that attend each level: last year of pre-primary, primary, lower secondary, upper secondary and higher education. It is important to include public, private and other providers.

- Non-formal education enrolment data by single age, for those activities and programmes considered equivalent to being ‘in school’, for each year of age considered above (See Table 3.1).

For DE1, pre-primary age refers to the age one year below the official age of entry into primary education. For primary (DE2), lower secondary (DE3) and upper secondary education (DE6), the official age groups for the respective level of education are used in the indicator calculation.

According to new UIS methodology, to estimate the number of out-of-school children in each of the dimensions 1, 2, 3 and 6, the following approach should be used:

*The number of students of the official age for the given level of education enrolled in early childhood education, primary, secondary or higher levels of education is subtracted from the total population of the same age.*

This approach differs from those used in previous OOSCI guidance. Now, for each dimension, all students of official age for that level, regardless of the level in which they are enrolled, are considered to be ‘in school’.

School data are often split between public, private and other providers, such as community-based education. In the **7DE calculation tool**, users are therefore invited to enter enrolment data by age, grade and gender in three separate worksheets. These data are consolidated in the Total worksheet, as shown in the figure below. The official age range for each level of education are automatically highlighted in yellow, based on the data users provide on the structure of the education system in the country.

---

### FIGURE 3.1
Consolidated enrolment data, by age, grade and gender in the 7DE calculation tool

#### 7DE Calculation Model for calculating the Dimensions of school evasion

Basic data on the distribution of pupils by age, cycle and grade: Grand total

<table>
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<th>Year</th>
<th>Phase</th>
<th>Grade</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
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<td>31,210</td>
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</tr>
</tbody>
</table>
The corresponding out-of-school rate for dimensions 1, 2, 3 and 6, are calculated by dividing the number of out-of-school children by the population of official age for the respective level of education. As an example, for Dimension 2, the equation is:

\[
\text{Rate of OOSC of primary age (DE2)} = \frac{\text{Number of OOSC of primary age (DE2)}}{\text{Total population of official age for primary enrollment}}
\]

The 7DE calculation tool produces a summary table of the out-of-school children dimensions by number and rate, disaggregated by sex. Presentation of these indicators is integral to Chapter 1 of an OOSCI study.

### Compulsory Education

In almost every country now, primary education is compulsory. However, where pre-primary, lower secondary or upper secondary are not compulsory cycles, children, adolescents and youth in DE1, DE3 and DE6 may not be categorised as ‘Out-of-school’ from a national regulatory standpoint. It is still important to calculate the respective indicators for all these dimensions, not least in alignment with SDG4, on the understanding that all countries are committed to the progressive realization of children’s right to 12 years of education.

In addition, the out-of-school children dimensions offer valuable proxy measures for other policy priorities. For example, DE1 relates to lack of school readiness (and is SDG indicator 4.2.2), and DE3 and DE6 can be a proxy for children who have missed out on the preparation to be active citizens and productive workers. Studies should nevertheless clearly indicate which grades and levels are not compulsory, as this will have different policy implications.

#### Table 3.1

Summary of out-of-school children numbers and rates, by DE and sex for Morocco 2018, in the 7DE calculation tool

<table>
<thead>
<tr>
<th></th>
<th>GIRLS - FILLES</th>
<th></th>
<th>BOYS - GARÇONS</th>
<th></th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NUMBER</td>
<td>RATE</td>
<td>NUMBER</td>
<td>RATE</td>
<td>NUMBER</td>
</tr>
<tr>
<td>D1: Children aged 5 years old</td>
<td>170,914</td>
<td>52.0%</td>
<td>152,717</td>
<td>44.1%</td>
<td>323,631</td>
</tr>
<tr>
<td>D2: Children 6 to 11 years old (Primary)</td>
<td>128,253</td>
<td>6.6%</td>
<td>81,465</td>
<td>4.0%</td>
<td>209,718</td>
</tr>
<tr>
<td>D3: Children between 12 and 14 years old (Lower Secondary)</td>
<td>91,625</td>
<td>10.4%</td>
<td>42,580</td>
<td>4.5%</td>
<td>134,205</td>
</tr>
<tr>
<td>D6: Children between 15 and 17 years old (Upper Secondary)</td>
<td>308,239</td>
<td>34.5%</td>
<td>328,858</td>
<td>34.8%</td>
<td>637,097</td>
</tr>
<tr>
<td>Total Out-of-school Children (5 to 17 years old)</td>
<td>699,031</td>
<td>17.2%</td>
<td>605,620</td>
<td>14.2%</td>
<td>1,304,651</td>
</tr>
</tbody>
</table>

#### Disaggregating Out-of-School Children

7DE Values by Single Year of Age

It is recommended that the numbers and rates explained in this section be computed for children, adolescents and youth of every single age, and by sex, from the outset. The approach is the same, requires no further data than that already described above, and the results will form the basis for further disaggregation and profiling (See Section 5).

#### 3.2.2 Risk of Dropout Indicators

For Dimensions 4, 5 and 7

Estimating the number of children in school who are at risk of dropping out is less straightforward than counting children who are out of school because all children in school face some risk of dropping out. Three options are available for the statistical analysis:

---

33 For instance, in a country where the official age for primary enrolment is 6, the number of out-of-school girls aged 9 will be computed as the total female population of the official age for Grade 4, minus the number of 9 year-old female students enrolled in any grade or cycle.
**METHOD 1:** Estimate the number of children in school who are likely to drop out in the future, based on historical survival trends drawn from administrative data.

**METHOD 2:** Estimate the number of children at risk of dropout based on several indicators that are known associated risk factors, such as the absence of pre-primary attendance, being overage, high absenteeism, or poor learning achievement.

**METHOD 3:** Determine the characteristics of the children, adolescents and youth that have dropped out in the past based on household survey data, and consider which children currently enrolled in school share those characteristics.

This section presents Method 1, which is included in the 7DE calculation tool. The others are dealt with in Section 4, as they use data on profiles of children at risk of dropout to determine the number and rate of DE 4, 5, and 7.

**ROD ESTIMATION METHOD 1: HISTORICAL SURVIVAL TRENDS**

To calculate the dropout risk indicators for dimensions 4, 5 and 7, the following data are required:

- **Education enrolment data by level, grade and sex.** It is important to include public, private and other providers. Unlike the calculation of the out-of-school children indicators above, it is not necessary to provide this data by single age. However, it will be necessary to provide historical data, for at least two successive school years.

- **Non-formal education attendance data by grade and sex,** for those activities and programmes considered equivalent to being ‘in school’.

- **The number of repeaters,** by cycle, grade and sex, including for different providers and non-formal education streams where available. As for enrolment data, historical data will be required spanning back the same number of years.

This method is based on the calculation of grade-specific survival rates. It makes the assumption that recent education sector performance in terms of internal efficiency (repetition, dropout and promotion) will remain fairly constant into the immediate future. This method is a convenient statistical approach, as figures based on direct reporting of dropout by schools are often unreliable. This may be related to unclear definitions, or policies which may discourage reporting of dropout, such as per capita grant funding.

The 7DE calculation tool makes the calculation of the historical survival trends straightforward. The tool includes several adaptations to the basic method outlined, that include a capping factor and use of mean historical values.34

This approach can distinguish between those pupils at risk of dropping out before completing the education level in which they are enrolled, and those at risk of not transitioning to the next. This is particularly helpful to decision-makers, as strategies to address the barriers faced at these different stages can be better designed to reduce each. This is discussed in more detail in Section 4.2.

To obtain the share of currently enrolled pupils in a cycle that are expected to drop out before the end of the cycle, the steps of the approach are:

---

34 The capping factor adjusts for situations where the sum of the promotion and repetition rates are greater than one. Teams will determine if it is appropriate to use this based on context; it could flag inconsistencies with a particular data subset, or reflect a mid-cycle influx of pupils, such as new refugee arrivals or returnees. The mean historical values allow to reduce the error margin related to data deemed to be unreliable in a given year. Both of these options are explained in detail in the note accompanying the use of the tool.
A. Compute the promotion rates by grade, equivalent to the number of new entrants (total enrolment – repeaters) in a given grade in year y+1, divided by the total enrolment in the previous grade in year y.

B. Compute the share of repeaters by grade for year y, equivalent to the number of repeaters in a given grade that year, divided by the total enrolment in that grade for the same year.

C. Compute the year-on-year survival rate by grade, for all but the last grade of the cycle. This is equivalent to the promotion rate for a given grade in year y (a), divided by 1 minus the share of repeaters for the same grade and year (b).

D. Compute the survival rate until the last grade by grade, equivalent to the product of the year-on-year survival rates by grade (c), of the grade in question until the penultimate grade of the cycle.

E. Compute the number of expected dropouts before the last grade by grade, as the product of the total enrolment in year y for that grade and 1 minus the survival rate until the last grade for that same grade (d).

F. Compute the total number of expected dropouts before the last grade for the entire cycle, as the sum of the expected dropouts before the last grade for all but the last grade of the cycle (e).

G. Compute the share of enrolled pupils expected to drop out during the cycle35 as the total number of expected dropouts before the last grade (f) divided by the total enrolment for the cycle (the sum of total enrolment in each grade in year y).

To obtain the share of currently enrolled pupils in a cycle that are expected to complete the cycle but not pursue their education to the following cycle:

A. Compute the transition rate from one cycle to the next. This is the same as the promotion rate (a), but from the last grade of cycle c to the first grade of cycle c+1. It is the number of new entrants (total enrolment – repeaters) in grade 1 of cycle c+1 in year y+1, divided by the total enrolment in the last grade of cycle c in year y.

35 Note that with the administrative data used for these calculations, it is not possible to distinguish between those students who dropped out during the last grade of the cycle, and those who dropped out after completion of the last grade, but did not transition to the next cycle. Therefore, both groups are included in the calculation of the share of enrolled pupils not expected to continue to the next cycle.
B. Compute the share of repeaters in the last grade of cycle \( c \) for year \( y \), which as above, is equivalent to the number of repeaters in that grade that year, divided by the total enrolment in that grade the same year.

C. Compute the number of students in the last grade not expected to continue to the next cycle, which is the product of total enrolment in the last grade of cycle \( c \) in year \( y \), and 1 minus the transition rate from one cycle to the next (\( h \)), minus the share of repeaters in the last grade of cycle \( c \) (\( i \)).

D. Compute the share of enrolled pupils not expected to continue to the next cycle, as the number of students in the last grade not expected to continue to the next cycle (\( j \)) divided by the total enrolment for the cycle (the sum of total enrolment in each grade in year \( y \)).

Finally, the consolidated share of children at risk of dropout is the sum of the share of enrolled pupils expected to drop out during the cycle (\( g \)) and the share of enrolled pupils not expected to continue to the next cycle (\( k \)). The 7DE calculation tool produces a summary table of the dropout risk dimensions by number and rate, disaggregated by sex (See Table 3.2). Presentation of these indicators are integral to Chapter 1 of an OOSCI study.

### 3.2.3 VISUALIZING THE 7DE

Data visualization can be extremely helpful to both gain analytical insight, as well as illustrating findings in an impactful way for readers and decision makers. This section briefly reviews the visualizations prepared by the 7DE Calculation tool. Additional examples of data visualization resources and examples are presented in Section 4 (Profiles).

#### TABLE 3.2

Summary of school dropout risk indicators, by DE and sex, Morocco 2018, in the 7DE calculation tool

<table>
<thead>
<tr>
<th></th>
<th>GIRLS - FILLES</th>
<th>BOYS - GARÇONS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NUMBER</td>
<td>RATE</td>
<td>NUMBER</td>
</tr>
<tr>
<td>D4: Children in Primary</td>
<td>116,227</td>
<td>6.8%</td>
<td>123,477</td>
</tr>
<tr>
<td>D41-Risk of dropping-out during the cycle</td>
<td>83,642</td>
<td>5.2%</td>
<td>102,086</td>
</tr>
<tr>
<td>D42-Risk of dropping-out during the transition to the next cycle</td>
<td>32,585</td>
<td>10.7%</td>
<td>21,391</td>
</tr>
<tr>
<td>D5: Children in Lower Secondary</td>
<td>85,695</td>
<td>12.4%</td>
<td>158,500</td>
</tr>
<tr>
<td>D51-Risk of dropping-out during the cycle</td>
<td>46,683</td>
<td>10.4%</td>
<td>102,697</td>
</tr>
<tr>
<td>D52-Risk of dropping-out during the transition to the next cycle</td>
<td>39,012</td>
<td>14.6%</td>
<td>55,803</td>
</tr>
<tr>
<td>D7: Children in Upper Secondary</td>
<td>23,853</td>
<td>7.7%</td>
<td>40,995</td>
</tr>
<tr>
<td>Total children at risk of dropping out</td>
<td>225,775</td>
<td>6.7%</td>
<td>322,972</td>
</tr>
</tbody>
</table>

### 7DE STATUS BAR CHART

The seven dimensions of exclusion, as they have been computed above, can be combined and displayed in a bar chart. This visualization can be extracted from the 7DE calculation tool. It is particularly helpful, at this early stage of the analysis, to gain insight into the comparative scale of each of the dimensions of exclusion. The chart displays, for each single age, the cumulative shares of children, adolescents and youth that are in school, at risk of dropping out of their current level, or out of school.

For those that are in school, the differentiation between which level they are currently attending also offers insight into the scale of overage attendance. For instance, in the case of Morocco in Figure

---

36 Note that this indicator is only computed for dimensions 4 and 5, as the prime concern of the Out-of-School Children Initiative is that children, adolescents and youth complete a full cycle of basic and upper secondary education. It is therefore of limited interest to determine the share of students enrolled in upper secondary that will not pursue their education beyond that stage.
3.2, about one-third of 13 year-olds still attending primary, two years after the official age of completion of the level (age 11).

Depending on how the picture the data paints and the points that teams wish to underline in their narrative, the tool also generates charts for the out-of-school children dimensions only, as well as for each gender separately. Including the latter for both girls and boys may highlight the scale of disparities in the exclusion each face.

### 3.2.4 ADDITIONAL CONSIDERATIONS FOR 7DE CALCULATION

#### CALCULATING TREND DATA FOR THE 7DE

The methodology and 7DE calculation tool presented so far focus on 7DE calculations for the most recent year available. Countries will naturally be interested in monitoring their progress in addressing exclusion in education over time, to recognize the efforts and effectiveness of policies implemented. Though it may seem convenient to compare 7DE values with previous OOSCI studies, this is not recommended for two reasons. First, the methodology described here differs from previous phases of OOSCI. Second, out-of-school children indicators draw on population data, for which the entire time series are revised every few years based on updated information from census. Rather, it is suggested to re-calculate 7DE values for the time series so that it reflects the new methodology and most accurate population data.

#### INTERNATIONAL COMPARISONS

While the primary purpose of the OOSCI study is for national policymaking, it may be useful to situate the country’s 7DE status in the context of the region or countries at a similar stage of development. For this, internationally comparable indicators produced by UIS and UNICEF can be very helpful. Out-of-school children indicators (DE 1, 2, 3 and 6) as well as some proxy indicators for dropout risk (such as overage attendance) from administrative or household survey sources can be extracted from the UIS Data Centre and at the UNICEF data portal.
SECTION 3
KEY RESOURCES

RESOURCES:

- OOSCI resources and tools: allinschool.org
- Data Inventory and Quality Assessment Tool
- 7DE Calculation Tool

LINKS:

- UIS Data Centre – education data by country and region: http://data.uis.unesco.org
- Demographic and Health Surveys (DHS): https://dhsprogram.com/
- Multiple Indicator Cluster Surveys (MICS): https://mics.unicef.org/

ADDITIONAL RESOURCES:


Several elements of interest when preparing an out-of-school children study: tool to determine a country’s gaps in monitoring out-of-school children that could help understand how good and comprehensive the data is, and an annex on data quality management and cleaning. Note that out-of-school children rate definitions are now out of date. Note: Brief version also available.


Includes tables for principles of research quality, evaluating the overall strength of a body of evidence, and notes on combining qualitative and quantitative sources.
TOPICS COVERED
+ Data disaggregation by individual, household and educational characteristics to develop profiles of children in the 7DE.
+ Further methods of estimating dropout risk.
+ Classification of out-of-school children by school exposure.
+ Pathway analysis, cumulative risk analysis and multivariate regressions.
+ Prioritizing profiles for the OOSCI study.
+ OOSCI case study: the Maldives experience

OOSCI STUDY CHAPTER:
Profiles of Out-of-school Children and Children at Risk of Dropping Out
Section 4 describes the process of drafting Chapter 2 of the study. This includes the steps required to produce the main profiles of out-of-school children and children at risk of dropping out of school.

Continuing from Section 3, the steps are:

1. Conduct disaggregated data analysis to determine which individual and household characteristics of children are associated with the highest OOS/ROD rates for each of the 7DE, and which characteristics are most common across them.

2. Analyse the flow of children in and out of the education system and identify where the system loses students by analysing indicators of entry and exit.

3. Conduct cumulative risk analysis or multivariate regressions to highlight the most significant determinants of OOS/ROD.

4. Identify key profiles that highlight the most important individual and household characteristics of children in each of the 7DE and prioritize them.

Chapter 2, the key profiles chapter, represents most of the analysis described in this section. A ‘profile’ is a group of children in one or more of the 7DE with certain shared characteristics. Profiles presented in the OOSCI study should be created for relatively large groups of out-of-school children (scale of exclusion) or for groups in which the out-of-school rate is relatively high (severity of exclusion). The profiles chapter should highlight results from relevant indicators, disaggregated analyses and qualitative data. Identifying the profiles of children, adolescents and youth most likely to be out of school, or at risk of dropping out can involve determining:

- If specific groups face higher OOS/ROD rates, such as children with disabilities, a given ethnic minority or internally displaced children;
- The most common characteristics of out-of-school children and children at risk of dropping out, such as household wealth, work status or area of residence;
- The educational experiences of out-of-school children, whether certain groups are more likely to have dropped out (and at what age and grade), enter in the future, or unlikely to enter at all; or
- If specific locations, such as regions or districts, OOS/ROD rates that are considerably higher than the national average.

Figure 4.1 above displays the most common characteristics of out-of-school children and students risk of dropout in 20 out-of-school children studies.
studies. This is provided for reference, as not all these characteristics may be relevant to every national study. The prevalence of these characteristics in the profiles of children in the 7DE across studies also reflect the availability of data. Qualitative data may also be explored to complement disaggregated analysis, in particular where quantitative data are lacking in coverage or detail. Where necessary, this should feed into the research plan detailed in Section 3.1.4.

4.1 Step 3: Conduct Disaggregated Data Analysis

At its most basic level, disaggregated analysis is the comparison of indicator values for different characteristics or groups, to determine for whom and where the numbers or rates are the highest. Disaggregated data analysis is crucial to determine the key profiles of children, adolescents and youth out of school and at risk of dropping out. This is the analysis of population subgroups, which is important for understanding the individual, household, school, or community characteristics of children in the 7DE. The purpose of disaggregated analysis is to identify groups of children that experience higher rates of school exclusion and risk of exclusion, to later identify the specific barriers they face and develop solutions to reach them.

Household survey data, dedicated surveys and administrative data can all be used in disaggregated analysis to develop key profiles of out-of-school children and children at risk of dropping out. However, because household surveys collect data on children in and out of school, with a range of individual and household characteristics, it is particularly valuable for the profiles analysis described here.

Tailoring the disaggregation of data to the most critical and relevant issues for national policies will help the relevance of findings for policy recommendations. For example, if the education system is decentralized and decision-making occurs at the province or district level, it is important to try to provide robust estimates at the sub-national level.

The sample code provided in Annex G can be used to conduct disaggregated data analysis of household surveys using Stata software. It uses the Sierra Leone MICS 2017 survey as an example but also includes details on adapting the code to analyse DHS data. The code can be adapted for other statistical software such as SPSS or SAS. Additional SPSS code for calculating education indicators can be found on the MICS website (See key resources).

CONSIDERATIONS FOR USING SAMPLE SURVEYS FOR DISAGGREGATED ANALYSIS

Sample surveys are designed to be representative to a particular level of disaggregation. For example, if data are only accurate down to the province level, further disaggregation to district level is not advised. With sample survey data, pay attention to standard errors and do not draw firm conclusions based on small sample sizes. As a rule of thumb, only data from groups with at least 25 unweighted observations can be considered sufficiently reliable.

The concerns above pertain to sample surveys. Census and administrative data usually aim to cover an entire population and as such can be useful for disaggregation by subgroup or area.

4.1.1 DISAGGREGATION OF OUT-OF-SCHOOL AND RISK OF DROPOUT RATES BY SEX AND OTHER CHARACTERISTICS

Depending on both country relevance and data availability, disaggregated data analysis can examine the numbers and rates of children in the 7DE according to the following characteristics:

- Individual: age; sex; disability status; school exposure and educational attainment of children who dropped out (see Section 4.1.2); academic performance; or child labour or employment status.
Household: Educational attainment of parents or household head; language, religion or ethnicity of parents or household head; household wealth quintile; household location (urban/rural); region, state or district of household; number of siblings; orphanhood status.

School: Distance to school; pupil-teacher ratio; and percentage of qualified teachers (for children who dropped out or are at risk of dropping out).

As noted in Section 3, all indicators produced by the 7DE calculation tool present estimates for girls and boys separately. To support data analysis of other important sub-groups of children, the Operational Manual includes specific guidance related to children in emergencies (Annex C), child labour (Annex D), children with disabilities (Annex E), and children from ethnic or linguistic minorities (Annex F). An example disaggregated analysis used to develop an important profile of out-of-school children in DE3 is presented in Box 4.1.

### PARITY INDICES

A common approach to measuring the relative disadvantage one group faces compared to the other is the parity index. It is the ratio of the value of the indicator for the disadvantaged group (e.g., girls) and the value of the same indicator for the other (e.g., boys). Where ratios exceed 1, the UIS recommends adjusting them by inverting the ratio and subtracting them from 2. This adjusted parity index ensures the indicator is symmetrical around 1. The further from 1 the adjusted parity index lies, the greater the disparity between the two groups of interest. A value of less than 1 indicates disparity in favour of the advantaged group, and a value of greater than 1 indicates a disparity in favour of the disadvantaged.

Parity indices can be calculated for many disadvantaged groups, such as disability status, indigenous peoples and conflict-affected children (SDG 4.5). Annex E discusses the calculation of disability parity indices in more detail.

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**Box 4.1**

Profile of 14-15-year-old boys, State of Palestine out-of-school children study, 2018

Given its scale and severity, the notably high dropout rates among 14-15-year-old boys places it at the heart of the problem of exclusion from education in State of Palestine. According to estimates using MICS 2014 data, 14 and 15-year-old out-of-school boys represent more than half of all 6-15-year-old children who are currently out of school. Eleven per cent of 14-year-old boys and 22 per cent of all Palestinian 15-year-old boys are out of school.

Among adolescent out-of-school boys, many are working in an economic activity despite being under 15, the minimum age of legal employment in Palestine. An estimated 32.3 per cent of 14-year-old boys who are out of school are working, yet the relationship between work and exclusion from education is not necessarily causal. In fact, 86.3 per cent of 14-year-old working boys are still attending school. However, boys who are working and attending school work fewer hours (8.8 hours per week on average) than boys who are working and are out of school (20.2 hours per week on average), suggesting possible differences in the types and intensity of work these two groups of boys are engaged in.

**4.1.2 CLASSIFICATION OF OUT-OF-SCHOOL CHILDREN BY SCHOOL EXPOSURE**

In addition to disaggregating data on out-of-school children by individual and household characteristics, profiles can also be developed for their past and expected school exposure. That is, children, adolescents and youth in dimensions 2, 3 and 6, may have dropped out, may enter later, and may never enter school at all. This analysis is important as it gives insight what kind of barriers children face to enter and stay in school. There are different policy implications for a country where most out-of-school children have dropped out (retention) compared to one where most out-of-school children have never entered at all (access). The classification will also shift for different age groups (DE2, 3 and 6), likely with a higher share...
of dropped out and a lower share of enter late for older ages. By applying this analysis to different population sub-groups, the analysis can point to which groups of children are more likely to have dropped out (such as adolescent boys), enter late, or never enter at all (such as children with disabilities).

**PRODUCE THE CLASSIFICATION OF OUT-OF-SCHOOL CHILDREN BY SCHOOL EXPOSURE**

This analysis uses household survey data. Children who have dropped out of school can be directly identified in the dataset, while out-of-school children who will enter school in the future, or may never enter, cannot. It is only possible to assess the probability of future attendance based on available data on school entry at each age.

Annex G tool provides sample code to produce the data needed to apply the classification of out-of-school children by school exposure, using a MICS household survey. The first step is to produce the shares of out-of-school children who have dropped out and never been to school at each age, and then calculate the age-specific entry rates.

The indicators produced by Annex H can then be input into 7DE calculation tool. The tool uses probability analysis to calculate the rate and number of children who are likely to enter school in the future and children who are likely to never enter school. The same spreadsheet can be copied and used to measure the distribution of children in the three groups by different characteristics, for example location or household wealth. Population estimates in the 7DE calculation tool Table 2 must also be updated to reflect the population of each subgroup that has been analysed. The output is illustrated in Table 4.1.

### TABLE 4.1

<table>
<thead>
<tr>
<th></th>
<th>GIRLS - FILLES</th>
<th>BOYS - GARÇONS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NUMBER</td>
<td>RATE</td>
<td>NUMBER</td>
</tr>
<tr>
<td>D1: Children aged 5 years old</td>
<td>170,914</td>
<td>52.0%</td>
<td>152,717</td>
</tr>
<tr>
<td>D2: Children 6 to 11 years old (Primary)</td>
<td>128,253</td>
<td>6.6%</td>
<td>81,465</td>
</tr>
<tr>
<td>D21: Children who have dropped out</td>
<td>61,722</td>
<td>48.1%</td>
<td>39,191</td>
</tr>
<tr>
<td>D22: Children who should enter later</td>
<td>26,824</td>
<td>20.9%</td>
<td>17,049</td>
</tr>
<tr>
<td>D23: Children who will never enter</td>
<td>39,707</td>
<td>31.0%</td>
<td>25,225</td>
</tr>
<tr>
<td>D3: Children between 12 and 14 years old (Lower Secondary)</td>
<td>91,625</td>
<td>10.4%</td>
<td>42,580</td>
</tr>
<tr>
<td>D31: Children who have dropped out</td>
<td>82,042</td>
<td>89.5%</td>
<td>38,140</td>
</tr>
<tr>
<td>D32: Children who should enter later</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>D33: Children who will never enter</td>
<td>9,583</td>
<td>10.5%</td>
<td>4,440</td>
</tr>
<tr>
<td>D6: Children between 15 and 17 years old (Upper Secondary)</td>
<td>308,239</td>
<td>34.5%</td>
<td>328,858</td>
</tr>
<tr>
<td>D61: Children who have dropped out</td>
<td>291,692</td>
<td>94.6%</td>
<td>311,172</td>
</tr>
<tr>
<td>D62: Children who should enter later</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>D63: Children who will never enter</td>
<td>16,547</td>
<td>5.4%</td>
<td>17,686</td>
</tr>
<tr>
<td>Total Out-of-school Children (5 to 17 years old)</td>
<td>699,031</td>
<td>17.2%</td>
<td>605,620</td>
</tr>
</tbody>
</table>

### 4.1.3 CONSIDERATION OF DIFFERENT TYPES OF SCHOOLING: REMOTE LEARNING AND PATHWAYS FOR UPPER SECONDARY AGE YOUTH

**REMOTE LEARNING**

Remote learning has been part of the educational offering in many countries for decades as an alternative modality to educate hard-to-reach students. However, it moved to the forefront of education
delivery with global school closures due to the COVID-19 pandemic, during which ministries of education provided education using print, radio, TV and/or online modalities.

Some considerations are needed for data on remote learning enrolment. In line with Table 1.1, students enrolled in remote learning, which is recognized as equivalent by the Ministry of Education, are considered in school. When the switch to remote learning happens during the school year, children, adolescents and youth who were enrolled at the beginning of a school year and had not dropped out before school closures can be considered in school. If data later becomes available on dropout during the school closure, these estimates can be revised.

For out-of-school children, it is a fact that many have no access to suitable remote learning during school closures. Monitoring the effective coverage of remote learning through mechanisms such as ‘reachability mapping’ could provide the basis to determine if pupils should be considered in or out of school. Monitoring coverage and access to remote learning will also help to appraise the risk of dropping out. Examples of data analysis approaches for remote learning are described in Annex C.

It is widely recognized that there is a heightened risk of dropout during and after a period of school closure. This is particularly the case for COVID-19, where for example, the livelihoods of the most vulnerable families have been undermined. Prevalence of early marriage of young girls and child labour of boys has increased. School closures and remote learning can exacerbate, or introduce new, barriers to education (See Section 5). Self-assessment surveys can be very helpful to understand the future prospects and intentions of pupils impacted by school closures, to both quantify dropout risk, and understand the barriers families face in sending their children back to school when classes resume.

Where it is available, enrolment and participation data on remote learning can be disaggregated by modality (print, radio, TV and online), and also by the other individual and household characteristics to see which students are more likely to be enrolled in and participating in different types of remote learning options.

Finally, it is important to consider that remote learning, where it has been established and is effective, may provide an opportunity to reach children, adolescents and youth that are out of school (regardless of school closures). This will be further developed in the policies Section 6.
NON-FORMAL OR ALTERNATIVE EDUCATION

As discussed in Section 1, the OOSCI conceptual framework takes an expanded notion of the types of educational programmes considered ‘in school’, compared to the types that are considered for SDG4 monitoring purposes. While it is important to acknowledge that enrolment in these programmes as categorically different than not being exposed to any education at all, students enrolled in non-formal or alternative education activities considered as being ‘in school’ may not be experiencing the same type or quality of education as those in the formal system. These different school or learning experiences may be relevant for policy analysis.

In the calculation of the out-of-school children indicators, the study team may consider disaggregating the ‘in school’ population by educational programmes where relevant for policy and programming. For example, children aged one year before primary entrance age who are attending early childhood care centres, as opposed to formal pre-primary school may be identified separately in the analysis. Similarly, the analysis may differentiate between primary age children in school, who attend formal, mainstream education and equivalency programmes. Adolescents and youth attending technical or vocational education may be another area of interest for decision-makers.

EDUCATIONAL AND LABOUR MARKET PATHWAYS FOR OUT-OF-SCHOOL YOUTH (DE6)

Upper secondary education (ISCED 3) comprises a wider range of programmes than lower levels of education, especially with regard to TVET. These programmes have a diversity of providers, which may include different government ministries and the private sector. This diversity of programme types and of providers poses challenges for data collection and accurate indicator estimates. Therefore, it is important to ensure that the data sources used for generating upper secondary enrolment and attendance indicators comprise the fullest range of upper secondary programmes that are considered equivalent to ISCED 3 by the Ministry of Education (see Table 1.1).

While a disaggregated analysis of out-of-school youth in DE6 can be conducted as for DE2 and DE3, in many contexts it will be appropriate to consider both enrolment in education and training, and participation in the labour market. This is particularly important where upper secondary education is not compulsory, or the official attendance ages overlap with the nationally accepted minimum legal age for work.

Therefore, it is important to report separately the number and share of upper secondary age youth who are not in education, employment or training (NEET), as well as for population subgroups. The reduction of the NEET rate – the share of young people (aged 15-24) who are NEET – is the SDG indicator 8.6.1 used to measure progress in the promotion of decent work for young people. Although arguably not as deleterious to young people’s well-being as hazardous forms of work, the reduction of the number and share of 15-17 year olds who are not in employment, education or training is a desirable policy goal. Young people aged 15-17 may therefore be one of four situations, two of which are positive – in some form of education or training on the one hand or in non-hazardous forms of employment – and two ‘undesirable’ – that is in child labour or NEET. As described in Annex D, although they meet the legal age for work, 15-17 year old youth who are employed in hazardous work are defined by the ILO as being in child labour41. Information on the NEET rate amongst 15-17 year olds is therefore an important complementary indicator and should be identified separately from those who are in (acceptable) employment, child labour, or education and training.
4.1.4 DISAGGREGATED ANALYSIS OF CHILDREN AT RISK OF DROPOUT IN DES 457

This section describes two methods for estimating the number and share of children at risk of dropping out by looking at their individual, educational and household characteristics.

ROD ESTIMATION METHOD 1: ANALYSIS OF KNOWN RISK FACTORS

Disaggregated analysis can be used to identify profiles of students who are more likely to drop out (DE 4, 5 and 7). While dropout and survival rates as described in Method 1 (Section 3) can offer macro estimates of the scale of the risk, they calculate dropout as a residual. That is, children who do not progress to the next grade, or repeat, are considered to have dropped out. On the other hand, students exhibiting known dropout risk factors can be identified directly in data which allows for disaggregated analysis and the development of profiles. These risk factors include overage enrolment, as well as lack of pre-primary experience, low learning achievement and chronic absenteeism. While not all children who share these characteristics will drop out, they may face common barriers that make them at higher risk than others.

Estimating dropout risk through identifying student risk factors has several advantages. First, it is based on data of children currently in school, rather than a projection of a historical trend. Second, the education system can have greater impact upon factors such as overage enrolment and low learning achievement, than underlying personal or family characteristics. Third, data on these factors are widely available, and allow for computations at every level of the education system, down to the school level (if using administrative data), enabling more targeted policy responses.
OVERAGE ENROLMENT: Being overage for grade can signal several underlying dropout risk factors, such as late entry to school, school failure or repetition. In OOSCI analyses in Latin America, it is believed to reflect learning issues, thus bringing in the quality dimension of education.

Using overage enrolment data as an estimate of dropout risk will only be as accurate as the underlying age data (see Section 3.1.1). In cases where age data is not considered highly accurate, calculating overage as the percentage of children who are at least two years older than the theoretical age for grade can reduce errors and avoid overestimating the share of children at risk of drop out.

Typically, studies used the measure of two or more years overage for grade. This is also the threshold used for SDG indicator 4.1.5. However, several countries have defined two or more sub-categories. In Panama, one year overage is considered low risk, and two or more years overage is high risk. In Madagascar, the number of children who are two years overage was so great that the study differentiated between 3 years (low risk), 4 years (medium risk) and 5 or more years overage (high risk).

The Stata code in Annex H can be used to calculate the share of children of primary age who are two or more years overage for grade from MICS datasets. It provides disaggregation of the share of overage primary students by sex, geographic region, urban or rural location, mothers’ highest level of education and household wealth index. See Table 4.2. The code can also be adapted for other overage thresholds. The UNICEF MICS webpage also provides SPSS code which can be used to calculate overage indicators.38

Similar to the approach for overage as a proxy for dropout risk, lack of pre-primary education attendance could be used as a proxy for dropout risk. Pre-primary is broadly recognized in education research to contribute to later retention by preparing children for the learning

BOX 4.2
ABCs of school dropout

Three risk factors (academic achievement below standard, behaviour problems, and chronic absenteeism) have been called the ‘ABCs’ of disengagement from school. These indicators are useful because they capture observable behaviours that are strongly related to school dropout. In addition, data on these indicators is typically already collected by schools for every student, they are actionable (interventions can cause a change in the indicator) and enable frequent and consistent measurement on a particular student.39

It is possible to calculate the share of students at risk of dropping out in DE 4, 5 and 7 using these risk factors in countries where EMIS databases use unique student identifiers and collect this data. In other countries, EMIS databases do not have this data at the national level, meaning calculation of these indicators may only be possible at a smaller scale, by using student-level data from school records (such as for a school-based early warning system for dropout). Monitoring Education Participation provides further guidance on how to define, measure and calculate dropout risk from these factors.

ACADEMIC ACHIEVEMENT BELOW STANDARD: Children who fail to learn can be exposed to personal frustration or a loss of confidence in the quality of teaching, both of which can be factors of dropout, in addition to contributing to becoming overage through repetition. Sources of data on learning achievements may include national and international learning assessments, studies of minimum proficiency levels, and exit examinations.

BEHAVIOUR PROBLEMS: Students who exhibit either very disruptive behaviour (bullying, violence, substance abuse) or are highly disengaged from school (socially isolated, not completing school requirements) can highlight higher risk for dropout.

CHRONIC ABSENTEEISM: High levels of absenteeism are the best predictor of dropout at the individual level. Many countries are developing real-time monitoring tools to track daily attendance and prevent dropout (See Section 4.5 and Annex B). However, in other EMIS databases, student-level absenteeism data may not be available. This data is typically available at the school level; however, it is not always digitized.


they will be exposed to in primary. This is particularly relevant for DE4. The indicator is the share of new pupils in primary Grade 1 that did not attend pre-primary education the previous year.
RECOMMENDATIONS FOR ANALYSING THE LINK BETWEEN THE LEARNING CRISIS AND OUT-OF-SCHOOL CHILDREN

The link between learning and dropout should systematically be established, because low learning achievement is a risk factor of early school leaving. Where data allows, data on pupils’ learning outcomes should be presented and analysed, ideally differentiating between the profiles determined for each DE. This should ideally be based on minimum proficiency levels (MPLs). Where data are available, for example, from a national learning examination or assessment, it may be possible to generate profiles of students who perform poorly. In some countries, international assessment data (e.g. PISA, SAQMEC, PASEC) can be disaggregated to add learning achievement analysis to profiles of children in DE 2, 3 and 6. For examples of OOSCI studies that have included learning outcomes into profiles analysis, see Romania 2012, Turkey 2012, and Jordan 2014 and 2020. Learning assessments in household surveys (such as the MICS foundational learning skills module for children aged 7-14 years) measure the learning achievement of children in and out of school, allowing for learning outcomes data to be integrated into profiles of children out of school in dimensions 2 and 3.

Deeper analysis may reveal low learning achievement to be related to sub-optimal education pathways and policies (repetition and high stakes exams). This can be explored by looking at data on repetition and patterns of dropout against points in the education system with high stakes examinations (see next section). On the other hand, low learning achievement may reflect other issues on the supply, demand and quality side which impact learning achievement. The reasons for low learning achievement can be further explored in the barriers analysis described in Section 5.

ROD ESTIMATION METHOD 2: CALCULATION OF DROPOUT RISK USING TWO YEARS OF SCHOOL ATTENDANCE DATA

The second method to generate estimates of the risk of dropout uses school attendance data over two school years (a reconstructed cohort method). Sample Stata code is provided in Annex H for use with household surveys. It produces an overall estimate of the share of primary students at risk of dropping out (DE 4), based on school attendance and dropout trends. It also differentiates between two types of dropouts, and the share of primary students who may: 1) drop out before primary completion; or 2) not transition to lower secondary after primary completion. This distinction can shed further light on the flow of children in and out of the system (See Step 4, Section 4.2). The code calculates these three indicators (total dropout risk, risk of dropout before primary completion, and risk of dropout at primary completion (non-transition to lower secondary)) and disaggregated values by sex, geographic region, urban or rural location, mothers’ highest level of education and household wealth index. The code will produce a result similar to that shown in Table 4.2, and can be extended to lower and upper secondary dropout risk (DE 5 and DE 7) as well.
4.2 Step 4: Analyse the flow of children in and out of the education system

Analysts are also advised to present complete profiles of children who left school early by identifying at what level and grade they left school. Step 4 enhances the findings in Steps 2, 3 and 4 by considering interaction with the education system over time to understand school exclusion. This step looks at the constriction in flows of children through the education system and identifies points in time, or critical milestones, where children are ‘lost’ from the education system. It builds on the analysis of out-of-school children by school exposure described earlier.

Here are some common points in time – points of constriction – that may create or worsen educational exclusion:

- (Non-) or late entry into school;
- Repetition, which may be more common in Grade 1 or in grades coinciding with national examinations;
- Promotion between grades; and
- Transition between levels of education, particularly from basic to upper secondary, which often faces greater supply constraints and has higher expectations of learning.

There are two primary methods to identify exclusion points: current trend analysis and retrospective or pathway analysis. Disaggregated analysis of the results of either approach listed above may show that different groups of children face different exclusion points. For example, children whose mother tongue is not the language of instruction may face much higher repetition rates in Grade 1, or rural children may have lower transition rates to upper secondary education than urban children, due to lack of nearby schools. Such dynamic analysis provides insights into the particular moments in the schooling system that merit further analysis and attention.

### TABLE 4.2

Share of primary students who are overage, and/or at risk of drop out during or at the end of primary education, by individual and household characteristics, Sierra Leone, 2017

<table>
<thead>
<tr>
<th>SHARE OF PRIMARY STUDENTS WHO ARE:</th>
<th>AT LEAST 2 YEARS OVERAGE FOR THEIR GRADE</th>
<th>AT RISK OF DROPOUT (TOTAL)</th>
<th>AT RISK OF DROPOUT BEFORE PRIMARY COMPLETION</th>
<th>AT RISK OF DROPPING OUT AT PRIMARY COMPLETION (NON-TRANSITION)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>29.2</td>
<td>8.8</td>
<td>7.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Female</td>
<td>29.0</td>
<td>14.9</td>
<td>12.5</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>Region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East</td>
<td>30.1</td>
<td>13.5</td>
<td>11.8</td>
<td>1.7</td>
</tr>
<tr>
<td>North</td>
<td>29.7</td>
<td>11.8</td>
<td>10.5</td>
<td>1.4</td>
</tr>
<tr>
<td>South</td>
<td>33.6</td>
<td>10.8</td>
<td>6.0</td>
<td>4.8</td>
</tr>
<tr>
<td>West</td>
<td>21.9</td>
<td>12.6</td>
<td>12.2</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Area</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>23.3</td>
<td>8.6</td>
<td>7.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Rural</td>
<td>33.4</td>
<td>17.2</td>
<td>13.8</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Mother’s education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None/Pre-primary</td>
<td>23.3</td>
<td>8.6</td>
<td>7.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Primary</td>
<td>33.4</td>
<td>17.2</td>
<td>13.8</td>
<td>3.3</td>
</tr>
<tr>
<td>Lower secondary</td>
<td>23.3</td>
<td>8.6</td>
<td>7.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Upper secondary+</td>
<td>33.4</td>
<td>17.2</td>
<td>13.8</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Wealth index quintile</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poorest</td>
<td>35.1</td>
<td>25.9</td>
<td>22.3</td>
<td>3.6</td>
</tr>
<tr>
<td>Second</td>
<td>33.7</td>
<td>15.2</td>
<td>10.8</td>
<td>4.4</td>
</tr>
<tr>
<td>Middle</td>
<td>31.8</td>
<td>13.2</td>
<td>10.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Fourth</td>
<td>24.0</td>
<td>10.4</td>
<td>9.4</td>
<td>1.1</td>
</tr>
<tr>
<td>Richest</td>
<td>19.5</td>
<td>6.2</td>
<td>6.2</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29.1</strong></td>
<td><strong>11.9</strong></td>
<td><strong>10.1</strong></td>
<td><strong>1.8</strong></td>
</tr>
</tbody>
</table>
4.2.1 CURRENT TREND ANALYSIS

Current trend analysis consists of examining indicators that can be used to identify exclusion points in the education system. The 7DE calculation tool calculates key indicators for this analysis: such as the dropout rate by grade, the repetition rate, and the transition rates from primary to lower secondary, and from lower secondary to upper secondary education. This also includes age by grade analysis which can examine school enrolment to identify ages or grades when students commonly leave school or repeat. From this analysis it may be possible to identify patterns of overage enrolment and how it compounds over time. Such an approach is beneficial because it reflects current patterns and is timelier.

The comprehensive overview of these education flow indicators is usually presented in a cross section schooling profile (Figure 4.2), progression rates (Figure 4.3) or education pyramid (Figure 4.4), that each highlight particular points of constriction in the education system. For example, Figure 4.4 depicts how the gross enrolment ratio decreases through the education trajectory. The base of the pyramid (primary entrance age) shows higher access rates, which narrow as students move through the education system. The figure reflects points of constriction both within and between levels of education (the effective transition rate) toward the GER at upper secondary completion age. These will need to be generated for different groups or individual characteristics for profiling purposes. Detailed instructions on how to generate these are included in the ESA methodological guidelines, Vol 1 (See Key Resources).

FIGURE 4.2
Schooling profile: share of children who access each grade, Mali, 2004/05 and 2007/8

Source: ESA methodological guidelines, Vol 1 (See Key Resources).

FIGURE 4.3
Progression rates by grade, from primary to upper secondary education

4.2.2 PATHWAY ANALYSIS

UNICEF has developed a helpful analysis and visualization that provides insight into the educational exposure of upper secondary age youth: the Education Pathway Analysis. It captures a range of different educational status (dropout, on time and overage attendance, completion, non-transition) into one graph. Pathway analysis is a type of retrospective cohort analysis, based on the most recent household survey data (available for over 100 countries). It illustrates the historical progression of these youth of upper secondary age at the time of the most recent survey through the education system through an online dashboard. The visuals provide useful figures and disaggregated analysis on a variety of key indicators, including:

- Those youth who never enrolled in primary;
- Those who dropped out of a cycle;
- Those who remain in a cycle below that corresponding to their age; and
- Those who completed the cycle but failed to pursue their education to the next cycle.

The pathway analysis shows the percentage of youth who enter school, transit from one stage to another (from primary to upper secondary), or leave school during critical access and transition points. The analysis also provides important insights into their education attainment based on their specific characteristics (sex, wealth quintile, and place of residence). It is recommended that the pathway analysis is systematically included in all profiling chapters. A standard pathway analysis includes the pathway for all children and the pathway disaggregated by sex, place of residence (rural vs. urban), and wealth quintiles. Pathways disaggregated by other characteristics (e.g., mother’s education) can be produced upon data availability. Box 4.2 describes an example pathway analysis for Jordan.

Source: ESA methodological guidelines, Vol1 (See Key Resources)

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\(^{40}\) [https://data.unicef.org/resources/how-are-children-progressing-through-school/]
Pathway Analysis for Jordan, by wealth quintile

In Jordan, children enter primary school at age 6, lower secondary at age 12, and upper secondary at age 16. There are 6 grades in primary school, 4 grades in lower secondary school, and 2 grades in upper secondary school.

The bar graph below compares the education pathways for the upper secondary school-age children by different levels of education, between those from the richest 20 per cent of families and those from the poorest 20 per cent of families. The bar graph allows for a more straightforward comparison between youth with different characteristics. The pie chart on the right shows the decomposition of their educational progress for those from the poorest 20 per cent of families. For every 100 upper secondary children in the poorest quintile of upper secondary school age in Jordan, four never entered primary, six attended primary but dropped out, one is still in primary education, six completed primary but did not transit to lower secondary, 15 attended lower secondary but dropped out, 11 are still in lower secondary, five completed lower secondary but did not transit to upper secondary, and 52 are attending upper secondary on time. This on-time upper secondary attendance rate is much lower than for their richest peers (91 per cent).

From the pathway analysis, three main bottlenecks can be identified for the poorest quintile:

- **DROPOUT BEFORE ENTERING LOWER SECONDARY:** 16 per cent of the upper secondary age youth from the bottom wealth quintile had their highest educational attainment at the primary level. They either failed to transition to lower secondary after completing primary (6 per cent) or they dropped out before completing primary (6 per cent). A smaller fraction never entered formal education at all (4 per cent).

- **OVERAGE ENROLMENT** (education system efficiency): More than 10 per cent of upper secondary age youth from the poorest households attend lower levels of education as overage students: 11 per cent still attend lower secondary education and 1 per cent are still in primary.

- **DROPOUT IN LOWER SECONDARY:** Another 20 per cent of upper secondary age youth did not make it to upper secondary: most dropped out of lower secondary before completion (15 per cent), and a few completed lower secondary without transitioning to upper secondary (5 per cent).
HOW TO CALCULATE THE PATHWAY ANALYSIS

While the online tool includes over 100 countries, the OOSCI study team may wish to calculate the pathway analysis themselves using an additional household survey or a different age range. The code to calculate the pathway analysis has been developed for use by teams (in Stata and SPSS format). Data sources for this analysis include Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS), and other nationally representative household surveys. The sample for the analysis is the youth of upper secondary school age in each country: the UNICEF tool uses the age range based on ISCED 2011, but country teams may wish to use a different age range if national definitions are different. This number is used as a denominator throughout the analysis. The highest level of education attended, along with the current level of education attending, are used to pinpoint the education trajectory for both in-school and out-of-school children. Statistical analysis is conducted to identify the percentages of upper secondary school-age children in each of the eight indicators, which add up to 100 per cent:

1. % transited to upper secondary
2. % did not transit to upper secondary
3. % still attending lower secondary
4. % dropped out of lower secondary
5. % did not transit to lower secondary
6. % still attending primary
7. % dropped out of primary
8. % never entered primary

The pathway analysis is a retrospective analysis of the flow of children in and out of the education system from primary entrance to upper secondary education. The analysis is done on children of upper secondary school age, so it is about what has already happened, such as “X% entered primary”. Because the analysis is retrospective, it is not recommended to extend it to early childhood education, or to conduct pathway analysis on youth of tertiary education age. This is because looking back at educational trends of more than a decade may not provide much valuable information for the current policy and educational context.

4.3 Step 5: Cumulative Risk Analysis and other multivariate analyses

The calculation methods to develop the profiles of children in the 7DE described so far have relied mostly descriptive statistics. However, the data to develop profiles of children in the 7DE can also be analysed using multivariate regression models. Such models are used to identify the strongest determinants of being out of school or dropping out, among the range of individual, household, community and school characteristics. OOSCI studies such as the regional report for West and Central Africa (2014), used regression models to determine the strongest determinants (characteristics) of children at different points in the education trajectory identified as important in the analysis: entering school (compared to never entering), and transitioning to lower secondary or (compared to dropping out before). The example of Haiti in Annex C also describes the use of a regression to identify the significant predictors of school enrolment.

CUMULATIVE RISK ANALYSIS

Cumulative Risk Analysis (CRA) refers to the usage of simple line graph to show how the probability of being out of school changes as risk factors (such as disadvantaged background characteristics) cumulate.
cumulate. It looks at the ‘added’ impact of disadvantaged background characteristics. Based on data availability, a standardized CRA considers four risk factors of being a girl, living in rural area, coming from poorer family, and having a less educated mother. CRA can be conducted for Dimensions 2, 3 and 6. The Stata code to calculate CRA can be found in Annex I.

The graph below gives an example of a standardized CRA in Sierra Leone for primary, lower secondary and upper secondary education, using data from the Multiple Indicator Cluster Survey (MICS) 2017. For example, it shows that for upper secondary education, an urban boy coming from a family with an educated mother, and who does not belong to the poorest wealth quintile (left-hand side of the graph), the likelihood of being out of school at upper secondary school age is around 11 per cent. For a girl of the same background (urban, non-poorest, mother educated), the possibility increases to around 13 per cent. The out-of-school rate nearly triples when we consider a rural girl who still comes from non-poorest family with an educated mother, to 33 per cent. If the same girl comes from a family in the poorest quintile, the rate goes up to 51 per cent and, if, in addition to coming from a poorer family their mother did not attend primary school, the rate reaches 60 per cent. More characteristics can be added if the data allows.

The added value of cumulative risk analysis is to shift the focus from the correlation between being out of school and various risk factors and background characteristics (as done in profiles analyses described earlier) to the causal inference between these characteristics and being out of school by decomposing the joint influence of various risk factors.

Correlation does not equal causality. CRA analysis moves beyond a simple tabulation of out-of-school rates and individual background characteristics. For example, rural children may be more likely to be out of school, but we cannot conclude that living in rural areas leads to being out of school. Rural areas may have more poor households (larger economic constraint) and lower levels of adult literacy (lower capacity to supervise children’s learning). These factors are all common drivers of being out of school. Due to the correlation between location, household wealth and adult literacy, a simple rural/urban tabulation might hide the fact that a rich rural child with educated parents could have the same possibility of being out of school as his urban peer. In contrast, a CRA decomposes the various influences to tell a more accurate story about how much the rural status affects school attendance, disregarding wealth and parental education. As such, the CRA analysis helps analysts identify more detailed profiles of children who face the highest risks of being out of school.
CALCULATING THE CRA FOR PROFILES ANALYSIS

CRA uses multivariable logit regression and reports the coefficients, which can be presented as the increase in percentage points for being out of school when compared to the baseline. Children without a disadvantaged background are set as baseline (left-hand side of the CRA graph), and the cumulative increase in the risk of being out of school is presented by a line.

The marginal change associated to each additional characteristic can be observed in the increase in the odds from left to right in the CRA graph.

CRA analysis uses household survey data, such as census or MICS. Annex I includes statistical syntax is provided in Stata format to calculate the CRA, using example data from Sierra Leone. As mentioned earlier, different risk factors might affect the probability of exclusion differently in different countries, thus certain customization might be needed to better display the cumulative nature of the CRA. For example, for some countries, being a boy or being an urban child can be a disadvantage, thus the sequence of risk factors should be adjusted in the visualization so that the most advantaged group is presented on the lefthand side. Where data is available, factors such as disability and ethnolinguistic minority status can be added to the CRA.

4.4 **Step 6: Identify key profiles of out-of-school children and children at risk of dropping out**

While the profiles analysis methods described above will render a large amount of information to construct the profiles, the OOSCI profiles chapter should present a synthesis of the most important characteristics and information about the children in the 7DE. This will form the basis for the barriers analysis and the focus for policies and strategies. For each dimension of exclusion, the chapter should clearly explain: who is most likely to be out of school or at risk of dropping out, where they live and what kind of school exposure they have. It should also note major data gaps or highlight where there may be ‘invisible’ out-of-school children that the barriers analysis should also consider.
In addition, the profiles chapter should include a summary table of the main characteristics or risk factors that cut across the dimensions of exclusion. Table 4.3 presents a number of factors for evaluating the importance of each profile that analysts can use based on their findings:

- Column 1 specifies the profile, for example, children with disabilities, or girls living in rural areas.
- Column 2 specifies the dimensions of exclusion most relevant for each profile, among the seven.
- Column 3 captures the scale of exclusion for each group, by indicating the number of children in each group, and the share of total OOS/ROD they represent.
- Column 4 captures the severity of exclusion for each group, by indicating the share of children in each group that are OOS/ROD.
- Column 5 presents the results from Step 5 on the flow of children, adolescents and youth in and out of the education system.
- Column 6 ranks profiles in order of importance, based on a subjective evaluation of key data and background knowledge concerning each of the profiles. Once the other columns have been completed, it is useful to rank the profiles from most important to least important.

The table is intended to encourage reflection and discussion on the importance of the profiles. The ranking should be validated with experts to ensure that no group is missed. It is crucial to consider profiles of children for which reliable data are not available, but which, based on Tother evidence, may represent a large or highly excluded group, such as refugees, children with disabilities or ethnolinguistic minorities (See Annexes C, E and F for more information on addressing data gaps). For profiles on these groups, NGO reports or qualitative studies may be required. The final decision of which profiles to focus on in the OOSCI report should be based on discussion and consensus among the OOSCI team members, during the optional data workshop or in the barriers workshop (see Section 2.4).

### Table 4.3
Identifying key profiles of out-of-school children or children at risk of dropping out

<table>
<thead>
<tr>
<th>1. PROFILE</th>
<th>2. DIMENSIONS OF EXCLUSION</th>
<th>3. SCALE OF EXCLUSION</th>
<th>4. SEVERITY OF EXCLUSION</th>
<th>5. CRITICAL SCHOOLING PATHWAY POINTS</th>
<th>6. RANK OF IMPORTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children with disabilities</td>
<td>DE1/236</td>
<td>Estimated to be very high (unknown)</td>
<td>Very high</td>
<td>Most never enter school, 40% primary dropout rate</td>
<td>1</td>
</tr>
<tr>
<td>Rural adolescent girls</td>
<td>DE6</td>
<td>5,133 to 7,887 (10 - 15%)</td>
<td>12% in D6</td>
<td>50% transition rate from lower to upper secondary</td>
<td>2</td>
</tr>
<tr>
<td>Children in region x</td>
<td>DE36</td>
<td>3,141 in D1 (3%) 1,500 in D2 (4%)</td>
<td>30% in D3 20% in D6</td>
<td>Little pre-primary education, 60% of primary pupils enter late</td>
<td>3</td>
</tr>
</tbody>
</table>

Etc.

Notes: (1) Estimated based on x, y and z, although no (reliable) data are available at the time of publication. (2) Lower estimate based on administrative data, upper estimate based on MICS household survey data.
OOSCI case study of the Maldives: tracking out-of-school children and children at risk of dropout through dedicated EMIS modules, to identify those not attending and monitor individual dropout risk in real time, triggering responses tailored to children's individual circumstances.

Prior to the development of a national EMIS system, the MoE (Ministry of Education) relied on education indicators produced by UIS for monitoring purposes. Although no out-of-school children study was ever conducted in the Maldives, the MoE did have ongoing and long-standing discussions with UNICEF regarding the need for education monitoring linked to EFA. This was also linked to the recognition that marginalized groups, including children with disabilities, internal migrants to the capital Malé and other islands and children in conflict with the law, are at high risk of not attending school.

A national EMIS system was needed to provide the Ministry with regular and reliable data, not least on the extent of access to and participation in school. Although gross and net enrolment rates appeared to be generally good in the Maldives, the need to closely monitor absenteeism, and to better understand the nature, scope and causes of long absenteeism were strongly felt, highlighting the need to track children’s schooling status at the individual level. Finally, there was a need for a dropout early warning system and individual case management system, to both reduce the risk of children leaving education, and to reintegrate those that had already left.

In the context of the regional drive to implement the Out-of-School Children Initiative, UNESCO and UNICEF ROSA conducted an inception visit to the Maldives in 2015. The OpenEMIS system was presented to the MoE, and the organizations conducted a summary analytical review of the Maldives’ context and readiness to implement an out-of-school children monitoring system, based on the eight dimensions of Monitoring Education Participation (UNICEF and UIS, 2016).

The MOE requested support to implement the OpenEMIS platform, later renamed to MEMIS (Maldives EMIS). To this end, UNESCO funded a three-year contract with its developers, Community Systems Foundation (CSF), signed in December 2015, and UNICEF ROSA provided funds to the UNICEF Maldives country office to support implementation and develop the out-of-school children and EWS components. A dedicated team was formed, led by the head of planning and Minister of State for Education, to coordinate technical matters between MoE, UNICEF and CSF. Addressing out-of-school children was prioritized at the highest level of government, and a special unit was formed in the MoE to determine interventions for at-risk students in school.

Prior to the deployment of MEMIS, Google Sheets was used to closely monitor student attendance. A template was shared with all schools to record student absence on a day-to-day basis. The data was centrally collected, consolidated and analysed, at the school, grade and student levels. With this tool, schools could select any student and generate a summary report of the number of days of absence and the reasons. Centrally, the MoE would call and support any schools where serious truancy issues were flagged.

This initial approach highlighted the need for a system-wide attendance policy, to ensure data was regularly collected. The policy was drafted, piloted and rolled out to 213 schools in May 2016. It not only made the recording of attendance compulsory for schools, but also defined the roles and responsibilities of school staff in responding to situations of unjustified absence. The policy required school principals and teachers to perform home visits once the set thresholds of truancy had been reached, for students to clarify their reasons for not attending, encourage them to return to school, or request the intervention of other social departments to overcome any obstacles to them doing so.

The system-wide attendance policy not only made the recording of attendance compulsory for schools, but also defined the roles and responsibilities of school staff in responding to situations of unjustified absence.
Due to the additional workload this represented at the school level, there was some resistance to its full and effective implementation. The MoE therefore undertook a number of actions to improve its effectiveness, including: i) closely monitoring the implementation of the policy and making direct contact with those schools not complying; ii) conducting regular orientation and communication activities with key stakeholders, including those agencies involved in responding to individual cases of prolonged truancy, such as the Maldives police service and National Drug Agency; iii) providing schools with training on the policy and its implementation on an ongoing basis, not least because of the high turnover of school headmasters; iv) participating in the training provided by other key stakeholders to their officers, such as the National Drug Agency.

MEMIS was officially launched later in 2017, after a year and a half of MoE efforts to configure the system and train school staff to its use, supported by UNICEF ROSA, CSF and UNICEF Maldives. It was created as a flexible system with optional modules to extend its functionality, including a new attendance monitoring tool and dropout risk early warning system (EWS). A key step was to incorporate an automated alert system for different thresholds of absenteeism and truancy, linking it to the reason for absence and enabling appropriate follow-up. The EWS considers other factors in addition to absenteeism, such as learning outcomes, overage attendance and repetition, to create a risk index. In addition, merging and cross-checking of EMIS data with Department of National Registry data was also carried out to identify OOSC.

MEMIS is now the foundation of a multifaceted out-of-school monitoring and response system, that:

1. Identifies out-of-school children by comparing DNR (Department of National Registry) and EMIS child-level data based on national ID numbers, to generate a list of students who are not assigned to any school. This list then requires further cross-checking and cleaning, to remove those children who are in fact abroad, have left school for work, or have completed Grade 10. The purpose is to enable schools and the MoE to identify out-of-school children and take action.

2. Monitors the daily attendance of all pupils, with protocols configured to reflect the Student Attendance Policy to avoid the accrual of long absences. The system automatically creates cases based on set criteria. For example, when a student accumulates three days of unexcused absence, the system creates a case to be attended by the leading teacher, who must make contact with the parents to understand and resolve the situation.

<table>
<thead>
<tr>
<th>CASE TYPE</th>
<th>SCENARIO</th>
<th>CASE ASSIGNED TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case type 1</td>
<td>1 Unexcused absence</td>
<td>Class teacher</td>
</tr>
<tr>
<td>Case type 2</td>
<td>3 Excused absence</td>
<td>Class teacher</td>
</tr>
<tr>
<td>Case type 3</td>
<td>3 Unexcused absence</td>
<td>Leading Teacher</td>
</tr>
<tr>
<td>Case type 4</td>
<td>5 Excused absence</td>
<td>Leading Teacher</td>
</tr>
<tr>
<td>Case type 5</td>
<td>5 Unexcused absence</td>
<td>Principal/Deputy</td>
</tr>
<tr>
<td>Case type 6</td>
<td>7 Excused absence</td>
<td>Principal/Deputy</td>
</tr>
<tr>
<td>Case type 7</td>
<td>10 Unexcused absence</td>
<td>Case triggers to MOE</td>
</tr>
<tr>
<td>Case type 8</td>
<td>10 Excused absence</td>
<td>Case triggers to MOE</td>
</tr>
</tbody>
</table>

3. Automatically generates alerts to school principals and MOE officials regarding individual students, based on the level of estimated dropout risk (the risk index value). In principle, these alerts also entail case management, triggering set responses by the education sector, which should elevate cases to other departments, where necessary. For instance, social workers should be involved if it is found that economic hardship is the main cause for high risk of dropout. However, this system has not yet been widely used.
At the system level, MEMIS has many sophisticated features, has contributed to the timeliness and quality of data, and has particularly helped MOE to address the issue of out-of-school children. Furthermore, the MOE has gained recognition as the go-to agency on the status of individual children, including their school attendance record and personal and social circumstances.

At the same time, the use of MEMIS to proactively track out-of-school children is still low and the EWS is not yet fully operational. Several areas require improvement to make more effective, independent and sustainable use of the system, as follows.

1. A number of technical challenges, related to system updates and report generation among others, have led to dependence on external support by CSF, which has impacted the sense of national data ownership and accountability, as well as generating high recurring costs for maintenance and improvements.

2. The system currently requires a time-consuming amount of manual data cleaning and filtering, calling for greater automation in cross-checking different databases, data cleaning and reporting processes.

3. Further capacity building is required at the central level to compensate for staff departures, increase the functional use of MEMIS by all MOE departments and better support school-level efforts, for greater policy compliance and implementation. This will ultimately ensure that more out-of-school children, or RODO, are identified and their cases addressed according to statutes.

4. The risk index’s components, criteria and threshold levels require fine-tuning, to include a student learning dimension, and effectively differentiate between children facing a real risk of dropout and those whose absence from school is explained by temporary circumstances.

5. Coordination for multi-sectoral responses to individual cases needs strengthening, particularly where substance abuse or criminal behaviour are concerned.

The COVID-19 pandemic has created a further set of implementation challenges. It is difficult to monitor attendance in the context of selective school closures, reduced class sizes, and arrangements that entail pupils dividing their learning time between school and home. Moreover, the pandemic has introduced the need for better and more systematic monitoring of distance learning reach and effectiveness, which has thus far been done by the MoE through surveys independently from MEMIS, with support from UNICEF Maldives and ROSA. In future, it would be good for such monitoring to be more systematically conducted through MEMIS itself, along with associated reporting and dashboards to improve the effectiveness and reach of distance learning.
SECTION 4  
KEY RESOURCES

RESOURCES:
- OOSCI resources and tools: allinschool.org.
- For the Out-of-school Children Monitoring Framework, see Annex B.
- For Children in Emergencies, see Annex C.
- For Children in Child Labour, see Annex D.
- For Children with Disabilities, see Annex E.
- For Children from Ethnolinguistic groups, see Annex F.
- For Example Stata code to generate data for classification of out-of-school children, see Annex G.
- For Example Stata code to estimate risk of dropout, see Annex H.
- For Example Stata code for cumulative risk analysis, see Annex I.

ADDITIONAL RESOURCES:

    Country factsheets include out-of-school children profiling, disaggregation and headcounts. Further information on repetition, dropout, child labor, early learning, socioeconomic characteristics, disability.


    A GEM Report tool to visualize access, completion and learning indicators by country, and according to wealth, sex, ethnicity and location (compounding all factors to highlight the range of disparities).

    Understanding Children’s Work: http://www.ucw-project.org/

    UNICEF Pathway Analysis Dashboard and Brief: https://data.unicef.org/resources/how-are-children-progressing-through-school/


    MICS-EAGLE (Multiple Indicator Cluster Survey-Education Analysis for Global Learning and Equity) surveys respond to the need for a methodology that includes a meta-analysis of why children are out of school, helping to link data/barriers/policy. They promote a mixture of standardized templates and country-specific analysis following stakeholder consultations, for disaggregating data from MICS household surveys. The initiative includes equity analysis of foundational learning using data on learning outcomes (GPE – Leaving no one behind). Specific complementary guidance for the analysis of MICS data.

LINK TO LEARNING:


    Provides a methodological approach to estimate risk of dropping out based on learning achievement data.
OOSCI STUDY CHAPTER:
Barriers to Education
Section 5 describes a systematic approach for using the profiles of out-of-school children and children at risk of dropping out to pinpoint the factors that exclude them from education and make recommendations to eliminate or reduce these barriers. It begins with an introduction to the analysis framework and the method for linking profiles to the most critical barriers. Then it provides guidance on structuring the barriers chapter of the OOSCI study.

5.1 Overview of common barriers to education

The statistical analysis at the beginning of an OOSCI study develops the profiles of children who are out of school or at risk of exclusion, and identifies the moments in the schooling pathway where exclusion develops and worsens. The next step in the study is to establish the factors that are keeping children out of school or placing them at risk of dropping out. In the OOSCI framework, barriers are understood as the factors that contribute to school exclusion. These may be push factors, which are exclusionary factors that originate within the schooling system itself (e.g., expulsion, irrelevant curriculum). Pull factors comprise those influences outside school that lead to drop out (e.g., labour, family responsibilities). Barriers are factors that can be changed and are distinct from profiles. A child with a physical disability may be out of school due to many different possible barriers. For example, social norms against inclusive education, lack of accessible school infrastructure, high cost of school transportation, and/or lack of trained teachers. Typically, children in the 7DE face a number of overlapping barriers, which need to be identified and analysed individually as well as collectively. The identification of key barriers to education is a necessary step to later assess policies and strategies that will reduce the barriers children (and their families) face in the completion of pre-primary, primary and secondary education.

Table 5.1 presents the most common barriers of exclusion identified in a review of 19 country and regional OOSCI studies. By far, the most common barrier relates to schooling costs and financing, which echoes the finding that children from poor households are the most common profile of children in the 7DE. Sometimes barriers impact multiple categories. For example, an absence of tailored or adapted services can a barrier on the demand side in some countries (lack of appropriate services makes education less appealing to children and their families) or on the supply side in other countries (lack of appropriate services is a problem of inadequate education offered by governments). The reasons why each factor is a barrier to education, and how it manifests in the lived experience of children in the 7DE, will depend on the country context. This table presents relevant barriers for the OOSCI report team to consider as they undertake the analysis.
Further discussion of many of these barriers can be found in the annexes for out-of-school children in emergencies (Annex C), Children in child labour (Annex D), children with disabilities (Annex E), children from ethnolinguistic minority groups (Annex F).
5.2 Identify Key Barriers to Education

5.2.1 DATA SOURCES AND DATA GAPS ON BARRIERS TO EDUCATION

The identification and analysis of barriers starts with a desk review of evidence of the factors that deter children from going to, and staying in, school. Much of this evidence will be familiar to the study team. However, the review should aim to explore a range of sources including: previous OOSCI reports; academic studies; findings from field research and pilot schemes; government policy papers and regulations; donor reports; NGO reports. A list of possible data sources for barriers analysis are presented in Table 5.2.

The desk review should draw from the findings of the profiles analysis. In other words, the barriers analysis should seek to understand the barriers faced by the key profiles/groups of children in the 7DE identified in the previous analysis (e.g., adolescent boys from poor households in urban areas). In addition, building on the analysis of flows of children in and out of the education system, and the identification of constriction points, the desk review can explore the reasons why most drop out occurs at certain grades or transition points. The profiles analysis may reveal certain school characteristics linked to high dropout risk – such as location, class size, repetition rate, and share of qualified teachers – which can guide the barriers analysis. Lastly, these secondary sources can also be used to gather existing data on ‘invisible’ out of school children that has already been identified in the data inventory and quality assessment in step 1.

Existing recent studies that have relied on primary research will be a valuable source of complementary data, in the interest of both expediency and cost-efficiency. As above, a rigorous appraisal of the quality of the study will be required before using it to draw any conclusions. Analysts may wish to refer to the BE2 paper on assessing the strength of evidence (DeJaeghere et. al, 2020) that explains each of the features required of high quality studies, including conceptual framing, openness and transparency, robustness of methodology, cultural appropriateness/ sensitivity, validity, reliability and cogency (see additional resources).

The discussion of barriers with various partners identified in the stakeholder mapping (see Section 2.2.1) can also take place in the context of process workshop 2 (see Section 2.4).

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**TABLE 5.2**

**Possible sources of data for barriers and policy analysis**

**REVIEW OF THE LITERATURE**
- Systematic reviews, global and regional studies, literature reviews
- Academic research
- Previous OOSCI reports
- Policy documentation from Ministry of Education
- Policy documentation from other ministries which affect education
- Donor reports
- Curriculum review e.g. relevance of curriculum

**ANALYSIS OF EXISTING DATA**
- Household survey e.g. perceptions of value of education, educational expenditure
- School surveys, e.g. measuring infrastructure and teacher absenteeism
- Classroom observations e.g. teaching practices
- School mapping exercise at community level
- Community level survey e.g. with religious heads, political leaders
- Student performance on national and international standardised tests
- EMIS data on teacher allocation, resource provision, student-teacher ratios
- Government budget review, comparing spending to international benchmarks
- Public expenditure tracking

**PRIMARY DATA COLLECTION**
- Qualitative research with key stakeholders including: key experts, government officials, policy makers as well as students, teachers, parents.
- Small-scale quantitative study focusing on key profiles of out-of-school children or key barriers

Source: Cameron et. al 2017.
CONDUCTING DATA COLLECTION ON BARRIERS

In order to identify and understand barriers faced by children identified as most likely to be out of school or at risk of dropping out. Where feasible, teams could conduct some primary data collection to better understand the barriers faced by children identified as most likely to be out of school or at risk of dropping out. Data on barriers gathered through the desk review can be either quantitative (such as those collected by surveys) or qualitative. Qualitative data collection includes interviews with experts, community members, and teachers, as well as focus group discussions with students, and children, adolescents and youth who are out-of-school.

Interviews and focus group discussions can have multiple benefits. First, they can provide critical understanding on the social and Behavioural barriers to education, and help to refine or validate other evidence and data, including quantitative data. Second, they can be valuable in illuminating the situation of hard to reach children in the 7DE who may not be well documented in either quantitative methods or reports (that is, invisible out-of-school children). Third, they can be an opportunity to start building relationships for continued engagement in future steps (e.g., development of report, advocacy, and programming). For example, the Kyrgyzstan OOSCI study features excerpts from interviews and focus group discussions with government officials, education professionals, parents and children (such as those in child labour), which powerfully illustrate the barriers faced by children and families (UNICEF Kyrgyzstan 2012). Furthermore, the Mexico OOSCI study included focus group discussions with over 200 adolescents from several regions across the country, including a focus on indigenous adolescent consultation (UNICEF Mexico, 2016).

Qualitative and survey research, especially consultations with vulnerable communities, and/or children and adolescents, should be ethically rigorous. It is important to clarify the purpose of the interview or focus group discussion, how participants will be selected, how the data collection, analysis and dissemination will meet ethical and privacy requirements, and ultimately, how the results of FGD will be taken into consideration in the report and policy recommendations (see UNICEF, 2021). It is important to respect good ethical research standards, including: safeguarding considerations; consent forms; respecting the preferred channels of communication, debate and feedback; and offering feedback and explanations where their views, once provided, are and are not reflected.
Table 5.3 provides some key considerations to choose the most common forms of data collection, particularly when involving children and/or adolescents. The study team can also consider further approaches, including life histories, visual, play, arts and computer-based approaches (UNICEF Innocenti, 2009).

When determining the best approach to adopt based on the qualitative data that is sought, the BE2 paper on qualitative research provides further practical insight into these techniques (DeJaeghere, et al., 2020). It outlines the different interview approaches, based on their degree of formality (informal to formal interviews), detail of information sought (structured, semi-structured, unstructured interviews), target participants (individual or group interviews, or focus group discussions), and need for follow-up or not (single or multiple interviews). The choice should carefully reflect awareness of the role of the interviewer, and power relations between the interviewer and the participants and between participants. Youth representatives may be interviewed as an alternative to wider consultation. In this case, care should be taken to ensure that they are both representative of vulnerable groups, and in close contact with their peers. They can be valuable collaborators, for example, by conducting FGDs themselves. Insights from social and behavioural science may provide a useful conceptual frameworks and guidance for how to identify and understand barriers and drivers that keep children out of school. Through social and behaviour change strategies the identified drivers can be targeted and a measurement.

### TABLE 5.3

<table>
<thead>
<tr>
<th>Key Considerations Relevant to the Choice of Methods of Additional Data Collection for the Barriers Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SURVEYS (CLOSE-ENDED)</strong></td>
</tr>
<tr>
<td>Research Setting</td>
</tr>
<tr>
<td>Recruitment/Sampling</td>
</tr>
<tr>
<td>Child-Friendliness/Participation</td>
</tr>
<tr>
<td>Age-specificity</td>
</tr>
<tr>
<td>Ethics</td>
</tr>
<tr>
<td>Potential Biases</td>
</tr>
<tr>
<td>Reciprocity/Reflexivity</td>
</tr>
<tr>
<td>Interpretation</td>
</tr>
<tr>
<td>Generalizability</td>
</tr>
<tr>
<td>Links to Theory</td>
</tr>
</tbody>
</table>
framework for the effectiveness of interventions can be developed, which in turn enables a feedback loop for monitoring, programme adjustment, and potential scale up.

Lastly, the study team may consider whether the primary data collection should be conducted during the study, or as a follow up to the report. This is discussed in more detail in Cameron et. al 2017. Where possible, conducting primary data collection on barriers as part of the OOSCI study is encouraged, as it would be a valuable input into developing relevant policy recommendations and the follow up studies on policy on impact.

### 5.2.2 THE MORES AND OTHER CONCEPTUAL FRAMEWORKS

To ensure that all relevant barriers have been identified, the results of the desk review should be mapped against a conceptual framework for equity and inclusion, such as the Monitoring Results for Equity System (MoRES). 42 Developed by UNICEF, MoRES is “a conceptual framework for effective planning, programming, implementation, monitoring and managing for results to achieve desired outcomes for the most disadvantaged children” (UNICEF, 2014, pg 5). The MoRES Framework is structured around four major domains, each with sub-categories. They are **enabling environment** (social norms, policy/legal framework, budget/expenditure, and institutional management/coordination); **supply** (availability of essential inputs, and adequately staffed services, facilities and information); **demand** (financial access, social and cultural practices and beliefs, continuity of use); and **quality** of services and goods.

While MoRES is a convenient and comprehensive framework, the OOSCI study team may also consider comparable alternatives. These include:

- **SABER EQUITY AND INCLUSION (E&I)**: This framework aims to help governments assess the strength and performance of their education system with a specific focus on equity and inclusion of vulnerable children. Equity and Inclusion is one of several domains of the SABER framework, which aims to provide diagnostic tools to assess education policies. More information can be found in Key Resources.

- **FRAMEWORK FOR DISABILITY-INCLUSIVE EDUCATION**: This framework is a tool to provide an overview of the entire education system using a disability-inclusive lens, to highlight aspects of the system that must be addressed to improve inclusion of children with disabilities.

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disabilities. The framework has broad applicability, as improvements made toward inclusive education benefit the access and learning of all children. The framework is explained in detail in the ESA Methodological Guidelines, Volume 3 (See Key Resources).

**BEHAVIOURAL DRIVERS MODEL:** The Behavioural Drivers Model offers a conceptual framework for mapping social and behavioural drivers, including social and gender norms, for a given practice or behaviour (such as school enrolment or dropout). It can be used as a basis to conduct participatory situational assessments, to design and operationalize strategies and programmes, monitor the extent to which interventions are being implemented, and evaluate effectiveness and changes in behavioral and social outcomes. As such, it can be used to analyse barriers that must be addressed in order to improve inclusive education and access to school for all children as important elements in reducing the number of out-of-school children. See [Section 5 Key Resources](#) for more information.

An example for a matrix for mapping barriers using the MoRES framework is shown in Table 5.4. The actual barriers will be identified according to the country context. Further research may be necessary if this mapping reveals gaps in identifying the barriers. The matrix is a tool that is not included in the final study. However, the Honduras OOSCI study provides an excellent example of how the MoRES framework can be used to discuss the different barriers that exist, and track actions taken to reduce them (See Table 6 in UNICEF Honduras, 2014).

Further examples of applying the MoRES framework to the particular barriers faced by particular profiles of children can be found in [Annex E](#) (Children with disabilities) and [Annex F](#) (Ethnolinguistic groups).
### TABLE 5.4
A MoRES matrix for mapping the barriers to education

<table>
<thead>
<tr>
<th>DOMAIN</th>
<th>CATEGORY</th>
<th>EXAMPLES OF POTENTIAL BARRIERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social and gender norms</td>
<td></td>
<td>▪ Social rules and pressures that marginalize certain groups.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Discrimination against vulnerable groups (e.g., children with disabilities, children from migrant backgrounds).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Existence of norms discouraging girls’ or boys’ attendance at school (pregnancy, criminal gangs). Norms expecting adolescent boy and girls to leave school and support family.</td>
</tr>
<tr>
<td>Enabling environment (Governance)</td>
<td>Legislation/policy</td>
<td>▪ Lack of political commitment to inclusion.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Laws and policies that discriminate against minorities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Restrictive administrative regulations, such as requiring a birth certificate to enrol in school.</td>
</tr>
<tr>
<td></td>
<td>Budget/expenditure</td>
<td>▪ Inequitable allocation of resources.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Lack of costed strategies to reach the poor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Wastage of resources.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Funding gaps.</td>
</tr>
<tr>
<td></td>
<td>Management/coordination</td>
<td>▪ Lack of effective delegation and devolution.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Lack of transparency and accountability mechanisms.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Weak monitoring mechanisms.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Lack of technical capacity.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Lack of mechanisms for inter-sectoral coordination.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Lack of effective participatory mechanisms at local levels.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Education system collapse during emergencies.</td>
</tr>
<tr>
<td>Supply</td>
<td>Availability of essential inputs</td>
<td>▪ Inadequate number of teachers per class.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Lack of female teachers, lack of teachers proficient in mother tongue of learners.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Lack of schools or learning spaces during emergencies.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Inadequate provision of textbooks and learning materials in a language understood by learners.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ No textbooks in mother tongue of children.</td>
</tr>
<tr>
<td></td>
<td>Access to adequate staffed services, facilities and information</td>
<td>▪ Lack of water and sanitation in schools.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Long distance to schools.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Lack of transport.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Inaccessible environment and lack of support services for children with disabilities.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Unsafe schools.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Opportunity costs and support for household subsistence.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Economic repercussions of emergencies.</td>
</tr>
<tr>
<td></td>
<td>Social and cultural practices and beliefs</td>
<td>▪ Negative individual emotional experiences of children with schooling and within the home or community.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Low perception from the part of families about the benefits of education due to low rate of labour market return.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Pregnancy and marriage reduce girls’ participation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Orphans/fostered children may be disadvantaged.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Household choices for sending children to school, with different preferences for boys and girls.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Bullying or corporal punishment against certain categories of children which may discourage them from attending school.</td>
</tr>
<tr>
<td></td>
<td>Timing and continuity of use</td>
<td>▪ Poor attendance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Overage.</td>
</tr>
<tr>
<td></td>
<td>Quality</td>
<td>▪ Lack of relevance of curricula, with weak links to livelihoods and jobs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Violence in schools, including bullying, beating, psychological stress, corporal punishment, sexual harassment.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Poor quality teacher training.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Lack of qualified teachers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Teacher absenteeism, loss of time on task.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Inadequate pedagogy.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Teaching in non-mother tongue.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Lack of integration of local values/cultures.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Ineffective evaluation approaches.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Poor monitoring of attendance and learning progress.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Inadequate assistance to children with special needs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Low achievers pushed out or fall out.</td>
</tr>
</tbody>
</table>

[^3]: Financial access is defined as “Ability to afford the direct and indirect costs of using services and adopting practices” in United Nations Children’s Fund, Pursuing Equity in Practice: A compendium of country case studies on the Monitoring Results for Equity (MoRES) System, UNICEF, New York, 2015 p. 8.
5.3 Prioritize barriers and link them to profiles of children in the 7DE

Once the desk review and additional primary research have been completed, and barriers categorized against the MoRES framework (or alternative conceptual frameworks, in Section 5.2.2), the study team can begin to systematically link these barriers to the profiles of children in the 7DE.

The profiles and barriers matrix in Table 5.5 is used to link the key profiles of out-of-school children and children at risk of exclusion with the corresponding barriers to education. It is recommended that profiles are listed in order of importance, by the number of children in each group as determined in Chapter 4, Step 6. Additional columns or detail could be added to present data from the profiles analysis. This could include the number or rates in the 7DE, school exposure profile, or the point(s) in the schooling trajectory where they face most exclusion. Two example profiles illustrate how the table should be completed. Some barriers will appear more than once because they affect more than one profile. The third column of this table could also be completed using an alternative conceptual framework, based on the decision of the study team.

The next step is identifying the most critical barriers – those with the greatest impact on children in the 7DE. The study team can consider which barriers affect the largest number of children, the widest range of profiles, or have the most severe impact on the children affected. The identification of the most critical barriers should therefore be based on the numbers of children in the key profiles developed in Chapter 4 or, if these are not known, of the best estimates available.

While there will be many complex reasons for school exclusion, in countries with large out of school populations, the most important barriers may be quite evident. Such barriers should be a priority for policy. These include supply-related barriers, such as a lack of classrooms and schools within a reasonable distance to home, and exclusionary policies that push students who do not do well at the primary leaving exam out of the educational system.

<table>
<thead>
<tr>
<th>PROFILE</th>
<th>BARRIER</th>
<th>MORES DOMAIN AND CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural adolescent girls who do not transition from lower to upper secondary education DE 5 and 6</td>
<td>Schools in rural areas are poorly resourced</td>
<td>Enabling environment (Budget/Expenditure)</td>
</tr>
<tr>
<td></td>
<td>Lack of female teachers</td>
<td>Supply (Availability of staff; essential inputs)</td>
</tr>
<tr>
<td></td>
<td>Lack of water and sanitation in schools</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cultural bias against educating adolescent girls</td>
<td>Demand (Social and gender norms; financial access)</td>
</tr>
<tr>
<td></td>
<td>Girls are excluded from school because of marriage or pregnancy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cost of education</td>
<td></td>
</tr>
<tr>
<td>Children with disabilities All 7 DE</td>
<td>Regulations prevent children with disabilities from attending general schools</td>
<td>Enabling environment (Legislation/policy)</td>
</tr>
<tr>
<td></td>
<td>Inaccessible school buildings and services (e.g., toilets) and inaccessible virtual learning</td>
<td>Supply (Availability of essential inputs)</td>
</tr>
<tr>
<td></td>
<td>Social pressure against children with learning difficulties in classes with other children</td>
<td>Demand (Social and cultural beliefs; financial access)</td>
</tr>
<tr>
<td></td>
<td>Violence (bullying) against learners with disabilities at school from classmates, teachers, within the family</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cost of education and adapted devices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teachers not trained in inclusive education approaches and pedagogy</td>
<td>Quality</td>
</tr>
<tr>
<td>Additional profiles</td>
<td>Barrier 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Barrier 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Barrier 3, etc.</td>
<td></td>
</tr>
</tbody>
</table>
Once critical barriers are identified, they should be grouped by MoRES (or another framework) category (e.g., supply, demand) and arranged in order of priority. These barriers are then entered into the matrix shown in Table 5.6. The specific barriers faced by each profile, as well as a rating (with justification) on the severity and magnitude of exclusion (as developed in the profiles chapter). For example, the Palestine out-of-school children study grouped the most critical barriers which affect the key profiles of out-of-school children into four areas: school and quality of education; well-being of the child and family; cost of education; and exclusionary administrative policies and practices.

As described in Section 2.4, a process workshop can be held at this time to discuss and validate the emerging findings of the barriers analysis, linked to the key profiles identified in the previous Section. An example workshop agenda can be found in Annex L.

### TABLE 5.6
**A matrix for determining critical barriers**

<table>
<thead>
<tr>
<th>CRITICAL BARRIER</th>
<th>SPECIFIC BARRIER</th>
<th>PROFILES AFFECTED</th>
<th>SEVERITY OF EXCLUSION</th>
<th>MAGNITUDE OF EXCLUSION</th>
<th>JUSTIFICATION*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of education</td>
<td>Pre-primary school fees</td>
<td>Pre-primary age (age 5)</td>
<td>High</td>
<td>Medium</td>
<td>65% of children in poorest households in DE1, representing 250,000 children.</td>
</tr>
<tr>
<td></td>
<td>Indirect and direct costs of upper secondary</td>
<td>Adolescent girls</td>
<td>Medium</td>
<td>High</td>
<td>30% of rural girls of upper secondary age in DE6. 1 million girls of upper secondary school age in rural areas out of school.</td>
</tr>
<tr>
<td></td>
<td>school (uniforms, fees, opportunity cost)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Costs of school transportation</td>
<td>Children with disabilities</td>
<td>High</td>
<td>Medium</td>
<td>40% of primary-age children with disabilities are in DE2, of which 50% have never been to school. There are an estimated 500,000 children with disabilities from ages 5-17.</td>
</tr>
<tr>
<td>Additional barriers to be determined</td>
<td>Profile 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Profile 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Profile 3, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Data presented here are for illustrative purposes. The evidence here should be drawn from the profiles analysis of the OOSCI study.

### 5.4 Develop the Barriers Chapter Structure and Narrative

The chapter that results from the methods outlined in this section should tell a cohesive story about why the children in the 7DE are out of school or at risk of dropping out. There are two goals of this analysis. First, the analysis will likely identify a wide range of barriers. The guidance in this section provides a framework to categorize barriers (MoRES) and analytical tables to prioritize them. This prioritization helps identify the most important barriers to target in the policies and strategies chapter – where reducing that barrier can have enrolment boosting impacts across different profiles of children. However, the narrative should distinguish which are the most relevant to each of the different profiles of children in the 7DE (and why). For example, Table 5.6 below shows that the cost of education is an important barrier to three profiles of out-of-school children, but it manifests in different ways (specific barrier).
Second, as the most vulnerable face multiple, compounding barriers to education, the reasons for being out of school are often complex. This means that the narrative must capture the complex reality of barriers faced by particular profiles. For example, cost of education may be a major barrier to education for children of pre-primary age, but how this interacts with other barriers, such as (for example) lack of pre-primary facilities in rural areas, low quality of services, and social norms around early childhood education all need to be captured in the analysis. A balance must be sought between identifying the most critical barriers across the profiles identified and describing how the barriers faced by each profile interact and lead to school exclusion.

Published OOSCI studies provide useful examples of how to write up the barriers analysis. See: Costa Rica 2016, Honduras 2016, Kyrgyzstan 2012, Palestine 2018 and West and Central Africa Region 2021. For example, the Honduras and West and Central Africa reports present barriers analysis organized by domains (e.g., demand), categories (e.g., poverty and economic difficulties due to the cost of education) and then highlights specific barriers (e.g., high direct costs of education). In addition, the Palestine and Kyrgyzstan studies combine analysis of barriers with excerpts from interviews with children, families, and education stakeholders.

A suggested outline of the barriers chapter is listed in Table 2.2.

5.5 OOSCI case study Costa Rica: Harnessing the out-of-school children study to develop a comprehensive inter-sectoral strategy to address the differentiated needs of children of secondary school age, for a staged rollout to priority schools and districts

Costa Rica launched the PROEDUCA programme in 2011, with EU financing. The main aims of the programme were to ‘contribute to social cohesion in Costa Rica by supporting education sector efforts to reduce secondary level dropout,’ strengthening the participatory and context-sensitive management of education, improving students’ interest in their learning and relationships with their schools, and improving the equity and conditions of learning through infrastructure, equipment and use of information technology. Although the dropout rate was reduced from a high of 14.5 per cent in 2011, in 2013 it was estimated that 12.4 per cent of children of secondary school age were still out of school (MEP Statistical Analysis Department, 2017). Almost all out-of-school children of secondary age had been enrolled at some point, so the focus was naturally on dropout. However, according to institutional mandates in the education sector, dropout was a concern for all actors, but the responsibility of none in particular. This effectively contributed to stagnation in reducing exclusion.

The country needed more than just a programme to improve participation; it needed a national strategy to achieve a significant and sustainable change in exclusion from school, particularly for the third cycle of basic education (equivalent to upper secondary). This implied a change of mentality and approach in the education system, from central administrations down to school leadership.

In 2014, the vice-minister for institutional planning and regional coordination requested that a project be launched to reduce academic failure and dropout. A working group was formed under the leadership of the office of the Minister, with the participation of the Office for...
Institutional Planning and Regional Coordination, the Directorate for Student Wellbeing and the Directorate for Curriculum Development. The result was a proposal to reform institutional management, building on and systemizing the efforts undertaken by the ministries’ different directorates at the central and regional levels, as well as schools. The Ministry also changed conceptual focus, highlighting educational exclusion, rather than dropout. To respond to the need to create a team to implement the proposal, the Ministry of Education created Yo me Apunto (‘I’m in’) in 2015, a sector-wide institutional strategy to improve educational retention, reincorporation of dropouts and academic success.

An out-of-school children study was launched in 2016, primarily to constitute a baseline study for the Yo me Apunto strategy. It was published in 2017. The study was complemented by extensive qualitative research, through a survey administered to schools and field visits by Yo me Apunto advisors, to better understand the factors behind academic failure and dropout. The data collected was then cross-referenced against household survey findings, including those relating to household educational practices (Clima educativo del hogar) and poverty (Círculo de pobreza), to determine priority intervention areas requiring tailored solutions. These were found to be mainly border and coastal areas.

The strategy was presented to UNICEF’s LACRO regional office in Panama, enlisted the organization’s support and technical assistance. It was then disseminated nationally, to the population and education stakeholders alike, in a broad communication campaign supported by the press unit, through TV, radio and advertising placed on buses, in bus stops and at other strategic locations. This campaign was highly effective, reaching hearts and minds, and contributed substantially to achieving the involvement and commitment of all.

An early process evaluation of the Yo me Apunto institutional strategy was conducted with the support of CECC/SICA (Educational and Cultural Coordination in Central America), to identify areas for improvement with a view to scaling up the strategy and action plan nationally. The evaluation highlighted that early warning strategies had a direct impact on reducing exclusion, the technical support provided to regional directorates strengthened capacities to respond to individual cases of exclusion, and that focusing on areas and schools with the greatest levels of exclusion enabled the optimal use of resources and achievement of results, impacting national rates of exclusion. Areas requiring improvement were also noted: it was necessary to institutionalize the work methodology by creating a dedicated unit in the Ministry’s organizational structure; given that exclusion is fuelled by multiple causes and factors, regional directorates needed to form teams to support implementation; and further process automation would contribute to workload efficiency and data management. Follow-up included a systemization process supported by UNICEF, to harness the experiences and perceptions of several education stakeholders.

Building on these findings, in 2018 the Ministry of Planning was approached to provide the strategy with dedicated institutional anchorage, leading to the creation of the Unit for Educational
Retention, Re-entry and Success (UPRE Unidad para la Permanencia, Reincorporación y Exito Escolar). A budget proposal was approved by the national assembly, because costs were limited to the six staff members of the unit.

The UPRE immediately set to task, first planning the support to be provided by central ministry departments and regional education directorates to priority schools, based on the areas previously determined to represent the highest risk of exclusion. For this, teams devoted to school retention were formed in each regional directorate. An early warning strategy for education exclusion was created, and 120 secondary schools selected to participate in its pilot phase through a student leadership project. Teachers and headmasters received training in the identification of students at greatest risk.

Effectively responding to that risk involved setting up intersectoral coordination mechanisms to remove barriers to ongoing education, in particular involving the Ministry of Health, social security services (IMAS – Instituto mixto de ayuda social and CCSS Caja Costarricense de Seguro Social), child protection services (PANI Patronato Nacional de la Infancia), addiction services (IAFA Instituto sobre Alcoholismo y Farmacodependencia), community peace centres, the private sector, and the Directorate of Migration and Foreigners.

In 2019, UPRE undertook to submit a new design evaluation proposal, focusing on the operational approach to reducing exclusion, to the Ministry for National Planning and Economic Policy’s (MIDEPLAN) evaluation unit. This was accepted, included in the National Evaluation Agenda (ANE) for 2019-22, and conducted – and lead to recommendations for an improved operational and strategic model.

Finally, in 2020 the SABER (Sistema de Administración Básica de la Educación y sus Recursos) platform was launched with further support from the EU PROEDUCA programme, enabling the individual monitoring of students through a digital student register based on national identity cards, with intersectoral and interinstitutional networks, that further incorporates the early warning module and response protocols.

Early results suggest that the Yo me Apunto strategy and UPRE unit have achieved a true change of mentality in a short time, successfully refocussing on exclusion rather than dropout, and considering exclusion as a process, rather than an event. This change of focus has provided a favourable context to provide multifaceted solutions to multifaceted problems, as exclusion may be the consequence of a number of administrative, pedagogical, psychosocial and other issues. Regional governments each have a roundtable that enables collaborative responses to the needs of each individual risk case. The Ministry of International Cooperation is supporting the UPRE’s operational needs, with the signature of a cooperation framework and support to the development of strategic alliances to strengthen UPRE’s work. Ultimately, the rate of exclusion in secondary education had dropped by 7 percentage points by 2017, to reach 7.2 per cent.

To move forward, plans are in place for: an impact evaluation; a study and improvement plan of the process of production and delivery of goods and services to priority schools; and the adaptation of the UPRE’s programmatic strategy to the COVID-19 context.

Some of the lessons learned from the Costa Rica experience are that it is not always necessary to create new institutions, or to increase budgets or staff. Improving and building the capacities of existing resources was sufficient. However, a huge amount of work was involved to effectively impact the planning and activities of each of the ministry’s units and departments to achieve significant change. The out-of-school children study was clearly instrumental in Costa Rica’s journey to more inclusive education, providing the Government and stakeholders not only with a situational analysis necessary to properly target action, but a real vision for the future.
SECTION 5
KEY RESOURCES

RESOURCES:

- OOSCI resources and tools: allinschool.org
- For Children in Emergencies, see Annex C
- For Children in Child Labour, see Annex D
- For Children with Disabilities, see Annex E
- For Children from Ethnolinguistic groups, see Annex F
- For published OOSCI Studies, see allinschool.org

ADDITIONAL RESOURCES:

- UNICEF. 2019. ‘Behaviour Drivers Model.’ New York: UNICEF.

RESEARCH METHODS AND ISSUES


Different processes for designing qualitative research, methods, considerations for analysis of results, implementation and ethics. Appendix 1 is a checklist to assess quality in qualitative research.


4 takeaway messages from the 12th colloquium of the Campbell Collaboration held in Copenhagen, to (i) produce relevant and timely research, (ii) know the rules of the political game, (iii) translate and institutionalize knowledge, and (iv) engage with a broader range of evidence.


Important considerations for conducting qualitative analysis, KII, FGDs, surveys, etc., particularly where children are involved.

ADDITIONAL RESOURCES FOR SPECIFIC GROUPS:

- (See Annexes)

SECONDARY-AGED ADOLESCENTS AND YOUTH


OOSCI STUDY CHAPTER:

Policy and Strategy Recommendations

TOPICS COVERED

Vital guidance for policy and strategy analysis, including:

- Linking existing policies to the most pressing barriers to education
- Developing and prioritizing policy recommendations
- Structure and content of the OOSCI study chapter on policies and strategies
- OOSCI study case studies on how the process can lead to policy impact

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- Identify and Assess Existing Relevant Policies .............. 102
- Develop the Policy Recommendations .................... 105
- Link the findings of the study together: profiles, barriers and policy recommendations .......... 109
- Plan the next steps: implementation of recommendations ........ 110
- OOSCI case study of Afghanistan ......................... 111
- Section 6
- Key resources ............................................. 114
This section includes guidance for choosing the policies and associated recommendations to support children, adolescents and youth in the 7DE. It provides suggestions for writing and structuring the policies chapter of an OOSCI study.

The purpose of the policies chapter is to help translate the findings of the previous analysis into effective action: identifying relevant policy options and strategies which can reduce or eliminate the barriers to education faced by the key groups of out-of-school children and children at risk of dropping out. Three country studies are presented at the end of this section. These cases describe the overall process of developing the study or applying the OOSCI methodology and its main findings, and how the recommendations informed policy. They provide examples of effective approaches to link profiles, barriers and policies and to ensure that the study is used to affect policy change to support out-of-school children.

6.1 Identify and Assess Existing Relevant Policies

The OOSCI study moves on to explore options for changes in government policy that could eliminate or significantly diminish the critical barriers. The OOSCI formative review and the meta-analysis highlighted that the analysis of existing policy has been a weak spot in some out-of-school children studies. While most studies reviewed existing policies according to the identified barriers, the review was mostly descriptive and failed to analyse gaps and limitations, beneficiaries (reach), and impact. Therefore, a first step to the formulation of policy recommendations should be an analytical policy analysis. This review of existing policy should critically examine the relevance, efficiency and effectiveness of adopted measures, beneficiary focus, implementation capacity at the central, sub-national and school levels, and impact of the existing policies, to provide a clear evidence-basis for prioritized policy recommendations. The review should also recognize the efforts made by the country and identify the key policies and programmes that can be the entry points. Guidance tools to undertake the policy analysis can be found in the key resources section. For example, see the checklist in UNICEF’s Improving Education Participation 2017.

The analytical policy analysis can be conducted through a desk review of existing policy and programme reports and evaluations. Joint Education Sector Reviews, Education Sector Plan Mid-term Evaluation Reports as well as Education Sector Analysis reports, if available, can be a good starting point. Possible data sources, and considerations for assessing the quality of evidence, are similar to those for the barriers analysis, and are listed in Section 5.2 and Table 5.2.

Inspiration can also be taken from existing OOSCI studies, such as the Costa Rica 2016 study, which presents a synthesis of existing studies and policy recommendations in its Annex.

Drawing on the priority barriers to education, many of the most relevant policy options may be within the education sector. Key education policies to review include those within current education strategic plans (ESPs), and/or those relating to compulsory education, ‘free’ education, school access, promotion and repetition, inclusive education, remedial and out-of-school support and national examinations.

However, the desk review should not limit itself to education policies only. As the reasons for being out of school are multi-dimensional, the policies which influence school enrolment cut across sectors. Other possible policy areas with impacts on education access and retention are:

- Social protection (See Box 6.1)
- Labour or economic policy (See Annex D)
- Statistical and civil registry policy (See Annex B)
- Child protection policy
- Health policy (see Annex E)
- Anti-discrimination policy (see Annex F and Annex E)
Gender equality/empowerment of women

The key questions to analyse each of the policies may include:

- Who are the main intended beneficiaries of the policy?
- What kind of barriers have been identified and addressed in the policy?
- Does the policy include efforts to address social and behavioural barriers to enable inclusive education?
- What are the achievements of the policy? Was there any unintended effect of the policy?
- How was the progress monitored?
- Were the interventions relevant to address the barriers?
- To what extent the representatives of the targeted beneficiaries were involved in the design, monitoring, and implementation of the policy?
- What was the cost associated with the policy implementation? Was the policy adequately funded?
- Was there enough capacity for the policy implementation?
- To what extent was a shared understanding of the policy developed by designers and by those education actors at the sub-national level who are tasked to implement it?

How these policies interact with other national policies, such as the country’s decentralization framework (governing who is responsible for what, and with what resources) should be considered. For example, there may be a national policy of fee-free basic education, but school management committees may have authority to charge levies, which perpetuates a financial barrier to education. Considering how these policies affect the key profiles of children in the 7DE is important, the assessment should be gender and disability-sensitive. In relation to COVID-19, the desk review will identify a wide range of strategies to maintain learning continuity despite school closures. These new strategies may be a source of inspiration for reaching out-of-school children outside of a traditional daytime classroom setting.

As part of the desk review, it can also be instructive to identify promising practices from other countries that reduced education exclusion for similar barriers and profiles of children in the 7DE.

Several global reports summarize the available research on effective education programmes for improving access (See Snilstveit et al 2015). It is important to note that such policies from abroad should be adapted to the national context, notably through discussion with national experts and piloting in country.

The desk review can be complemented and/or triangulated with additional qualitative information. The information may be collected through interviews with national policy experts, OOSCI partners and/or focus group discussions with school heads, teachers, families and adolescents who can provide critical perspectives on their experiences with the policy and the most relevant ways to address barriers. Depending on context and methodology of the overall process, focus group discussions can be done together with the discussion on barriers or after, so that participants can respond to the broader set of barriers identified by the analysis and availability and effectiveness of the existing policies addressing these barriers.

As with the assessment of data for profiles and barriers to education, the policy review should identify data and evidence gaps that limit the study team’s understanding of existing policy reach and effectiveness, and ultimately, evidence-based policy making. The policy and strategy discussion can also take place in the process workshop 3, discussed in Section 2.4.

Policies can be categorized according to the MoRES framework. This enables the policies to be linked to the critical barriers identified in Table 5.6. Examples of possible policy recommendations for each of the MoRES domains are presented in the following section.
BOX 6.1
Social protection policy can reduce barriers to education across the life cycle

WHAT IS SOCIAL PROTECTION? Social protection encompasses a broad range of policies and programmes, including parental leave and unemployment insurance, as well as pro-poor programmes, such as cash and asset transfers, public works programmes, and social health insurance. Cash and asset transfer programmes are the most common form of pro-poor social protection in developing countries. They include cash and assets, such as food, uniforms or bikes, provided to households or schools to improve access to education. These programmes have diverse aims, targeting (broad or narrow to specific groups), programme participants, benefits, conditions (such as school attendance) and implementers.

WHAT ARE THE BENEFITS? Evidence in low and middle-income countries suggests that cash and asset transfer programmes benefit children’s education and development across the life cycle. Drawing on global evidence, some researchers have rated conditional and unconditional cash transfers as some of the most effective ways to improve access to education. The evidence shows that most social protection programmes impact both girls’ and boys’ schooling trajectories in the same ways, except for in emergencies, where they may have a stronger influence on educational outcomes of girls.

These potential benefits make social protection programmes an important area of policy to review and consider when developing the policy recommendations for an OOSCI study. However, the effectiveness and cost-effectiveness will depend on the particular programme and country context.


GUIDANCE FOR SPECIFIC GROUPS AND BARRIERS THEY FACE (SEE KEY RESOURCES FOR MORE DETAILS):


BOYS: UNESCO. 2022. ‘Leave no child behind: Boys’ disengagement from education.’ This report presents an extensive analysis of factors leading to boys’ disengagement from education and drop-out and provides concrete policy recommendations on how to address this, including social protection.

OUT-OF-SCHOOL CHILDREN IN EMERGENCIES:

- UNICEF. 2020. ‘Response Analysis Tool: Effective Decision Making on the Use of CVA for Education Outcomes in Emergencies.’ A tool to undertake effective response analysis in emergencies, contributing to the design and implementation of quality, effective and consistent cash and voucher assistance (CVA) for education outcomes.

- UNICEF. 2020. ‘Cash and Voucher Assistance Targeting for Education Outcomes: How to Select Beneficiaries to Advance Equity and Maximize Results.’ Guidance on effective targeting of cash and voucher assistance programmes and policies in emergency settings to improve education outcomes and ensure equity.

CHILDREN WITH DISABILITIES:

6.2 Develop the Policy Recommendations

Once the existing policy analysis – identifying promising practices and challenges – is complete, the study team can develop policy recommendations. These are typically written up as high level recommendations and are prioritized by explaining how these changes may reduce or eliminate barriers to education for the key profiles of children in the 7DE. Ideally, policy recommendations should be systemic, so that they can target multiple barriers or profiles of children in the 7DE at the same time. For example, inclusive education training for teachers can both help retention of children with disabilities, and for other marginalized children, such as those from ethnolinguistic minorities. Improving data on out-of-school children may be another example as it will enhance the government’s capacity to make evidence-based decisions addressing multiple barriers.

The policy review should have identified the areas for policy improvement. Depending on the scale of exclusion and the effectiveness of the existing policies, the recommended intervention may vary. Figure 6.1 depicts a useful framework for OOSCI study teams to consider when determining policy recommendations.

Policy recommendations may also indicate the level of urgency (immediate, medium or long-term), cost implications (no, low, high) and responsibility lines for each of the proposed strategies and actions.

Policy and strategy recommendations can target barriers in the enabling environment, demand, supply and/or quality. An analysis of 19 OOSCI studies found the ten most common areas for policy recommendations spanned all four MoRES domains. Recommendations focussed on funding, alternative learning pathways, early childhood education, governance equity, monitoring and evaluation, teachers, learning, awareness campaigns, education policy and inclusive education. The section below provides examples of areas for policy proposals according to the MoRES Framework. The key resources listed at the end of this section can be used to develop more specific policy recommendations for specific groups of children (e.g., children in emergencies) and barriers (e.g., cost of education).

**Enabling environment** encompasses legislation and government policies, budget allocations and expenditure, and management and coordination within the education sector. Examples of policy proposals include:

1. **Social and Gender Norms** – Support interventions informed by social and behavioral evidence and change strategies to identify...
and address the key drivers of out-of-school children issues across the socio-ecological framework (See the Behavioural Drivers Model in Section 5.2.2). Ensure child and adolescent participatory approaches combined with engagement at policy, institutional, community and family/care givers level.

2. LEGISLATION AND POLICY – redistributive policies that benefit the poor, including: social protection measures; equitable regulatory frameworks for private provision of education; accreditation of multiple pathways to learning; removing legislative and financial barriers to school entry, such as requiring a birth certificate and imposing penalties for late school registration; teacher policies, such as those related to education and certification. Engage children and adolescents, as well as teachers, families, caregivers, institutions and communities in identifying the best channels and strategies to reach the most vulnerable, and regularly consult with them on implementation of education policies.

3. BUDGET AND EXPENDITURE – increased budgetary allocations to education (in terms of both total government expenditure and in relation to other development sectors) and within education (education levels, teacher salaries, capital expenditures, other non-salary expenditures), including in times of economic stress; strategies to ensure that resources reach the poor, including within resource-constrained environments.

4. MANAGEMENT AND COORDINATION – development of institutional arrangements with accountability mechanisms and technical capacity with the Ministry of Education to address the needs of excluded children; inter-ministerial coordination mechanism to identify and support out-of-school children; regulation and monitoring mechanisms affecting children’s timely access and transitions; capacities in policy analysis and building effective data management and monitoring systems; management training for sub-national education offices to adapt and implement policy; and local school grants to support these capacities.

Supply includes the availability of essential inputs, quality and inclusiveness of education, and access to adequately staffed services, facilities and information. Examples of policy proposals include:

1. SCHOOL INFRASTRUCTURE – school mapping and construction of schools in underserved areas; available and adapted transportation to school; improving school facilities; separate water and sanitation facilities for girls and boys; and adaptations of school infrastructure for children with disabilities.

2. TEACHER SUPPLY – increasing teacher supply and female participation in teaching; effective teacher deployment and management (deployment and utilization); reduced class size; pre-service and in-service teacher training in knowledge and skills for assisting students at risk as well as teachers capacity to detect and respond to issues around gender inequality, violence, racism, stereotypes etc. (with teacher education institutions); and development of support structures to teachers for addressing the needs of students at risk.

3. TEXTBOOKS AND LEARNING MATERIALS – availability of appropriate textbooks and learning materials, including textbooks or learning materials in minority languages and/or braille and learning material that enables gender equality and promotes cohesion and inclusion.
Demand encompasses financial access, social and cultural practices, norms, and beliefs, and timing and continuity. Examples of policy proposals include:

1. **ECONOMIC** – abolition or reduction of school fees; scholarships, and subsidies to purchase uniforms and textbooks; cross-sector proposals such as cash transfers, school feeding or take-home food rations; and provision of micronutrient supplements.

2. **SOCIOCULTURAL** – community mobilization and strategies aimed at participation, such as: awareness-raising on gender issues; initiatives to address stigmatizing attitudes towards marginalized children in the school and community, including partnerships with ministries of education, religious and civil society organizations; removal of discriminatory legislation or policies affecting service provision or employment; support to youth and after school clubs; and partnership with youth organizations for empowering the most vulnerable children and adolescents (through building transferable skills and practicing participation) to claim their right to education and remain in school.

3. **TIMING AND CONTINUITY OF USE** – community mobilization and strategies aimed at raising awareness about the value of starting primary at the official entrance age and policies to support children to stay in school (for example, during periods of seasonal harvest).

Quality includes policies that cover:

1. **SCHOOLS** – regulations on school infrastructure and transport, including construction of accessible classrooms, separate sanitation and hygiene facilities for boys and girls located in a safe environment.

2. **TEACHERS** – teacher working conditions and salary; pre-service and in-service teacher training that includes approaches to inclusive education; mechanisms to support teachers in environments with limited resources; training and status of teachers in ECCE and alternative education sections who may not be included in a national teacher policy.

3. **SCHOOL AND CLASSROOM MANAGEMENT, ORGANIZATIONAL AND PEDAGOGIC CHARACTERISTICS** – interactive and participatory pedagogy; child-centred pedagogy; personalized and adapted teaching; teaching in mother tongue; monitoring of student access and learning; addressing violence, gender equality, disability inclusion and other intersectionalities in schools; promote the establishment of students’ participation in school management committees so students can participate in school governance.

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44 Financial access is defined as “Ability to afford the direct and indirect costs of using services and adopting practices” in United Nations Children’s Fund, *Pursuing Equity in Practice: A compendium of country case studies on the Monitoring Results for Equity (MoRES) System*, UNICEF, New York, 2015 p. 8.
4. **SCHOOL SUPPORT TO MARGINALISED CHILDREN** – availability of support staff for children with disabilities, children with special learning needs, marginalised children and in general children at greater risk of dropout (such as school social worker, psychologist, school nurse, speech therapist); regular monitoring of children (well-being, achievement, behaviour, absenteeism); and coordination with external supporting bodies (such as social services, NGOs).

5. **CURRICULUM** – review of curriculum for inclusive teaching and learning in line with SDG 4.7 (for example, sustainable development, human rights and gender equality); encompassing local content in the curriculum; provision of materials that stimulate learning.

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**PRIORITIZING POLICY RECOMMENDATIONS FOR THE OOSCI STUDY**

The policy options generated in the previous review should then be refined into a concise set of feasible policy recommendations that would make a substantial and sustainable reduction in the number of children out of school. These proposed policy changes should address the most critical barriers to education identified in the previous section, and the key profiles of children in the 7DE. This section provides some guidance on how to prioritize policy recommendations for the OOSCI study chapter.

Policy decisions and associated resource allocations are about trade-offs between sectors (e.g., education and health) and within the sector (e.g., basic education and technical/vocational education). The policy recommendations in the OOSCI report must be accompanied by plausible arguments to prioritize the proposed actions over other options. Referring to the results of the cost-benefit analyses of similar policy interventions may be useful. Clearing presenting how the policy will contribute to the overall national and the education sector strategic development goals could also be considered.

These recommendations should be feasible in political, practical and financial terms, so that they can be implemented and sustained without long-term external support. The recommendations should also be clearly prioritized. For this purpose, the study team should consider the technical, political and institutional feasibility and impact of different options. This includes the relevant ministry’s implementation capacity (at national and sub-national levels), alignment with policies across sectors, and implications for monitoring and evaluation, among others. The criteria may include:

- Urgency of the issue(s);
- Existing and potential political commitment from the national leadership;
- Alignment to the national developmental goals;
- Cost;
- Expected impact; and
- Existing capacities for implementation.

Policies are rarely one-size-fits-all and so the team should consider how these policies and strategies might require adaptation or contextualization to address the barriers faced by key profiles of children in the 7DE. For example, a policy recommendation to establish more schools in under-serviced areas (increase supply) may consist of building traditional school buildings in some areas and deploying mobile schools in others (to target pastoralist or nomadic populations).
Policy recommendations for upper secondary age youth out-of-school (DE6) may consider both the right to education and the right to employment and training (see Annex D). Youth in DE6 have likely encountered multiple delays to their education (e.g., late entry, repetition, dropout) and may have been out-of-school for some time. Policy recommendations for this group should consider the potential demand for education and aim to differentiate between those for whom mainstream education is an option, those for whom alternative education pathways is an option, and those for whom neither may be appropriate (See UNICEF’s Secondary Education Guidance in Key Resources).

It may be useful to consider different future scenarios (reflecting different assumptions for the evolution of COVID-19 or other emergency contexts, for instance) and determine which policy options may have an impact across them.

The study team can conduct costing exercises of the proposed strategies to help with prioritization. The team should consider the projected costs and benefits of the various policy recommendations. This may include a cost-effectiveness analysis, which compares the relationship between the marginal/incremental costs and effects of interventions that share the same goal. Some OOSCI study countries have also analysed the cost of non-investment in education (See Varly et. al 2014 in Key Resources). Other costing exercises, such as financial simulation models and cost-benefit analysis, may be beyond the scope of an out-of-school children study. However, the findings of the OOSCI study may inspire more in-depth costing exercises, such as described in Afghanistan’s OOSCI study experience in Section 6.5.

The team should also consider potential obstacles to implementation and propose preventive measures to avoid these. This may draw on the insights from the barriers analysis with respect to what doesn’t work for certain profiles of children. It could also include a mapping of relevant stakeholders, their interests and influence.

To develop the recommendations, the team should discuss the analysis with a broader group of stakeholders, including the national steering committee. For example, the analysis would benefit from review by the local education group and a task team involving cross-sectoral specialists (e.g., social and child protection, WASH, gender, communications for development and health) as well as the key education stakeholders, such as representatives of teachers and school leaders. These discussions should adopt a collaborative and participatory approach. They can be organized as a workshop (Workshop 3) dedicated exclusively to brainstorming proposals and recommendations – in addition to one for the elaboration of out-of-school children profiles and one for the analysis of barriers (see Section 2.4). As part of this discussion, the way forward for the proposed policy recommendations should be discussed: a vision around their implementation, monitoring and evaluation.

6.3 Link the findings of the study together: profiles, barriers and policy recommendations

Once the policy recommendations have been drafted, discussed amongst key stakeholders and prioritized, they can be written up as a narrative in the OOSCI study policy chapter. The review of existing policies and proposed policy changes should link to the profiles and barriers analysis. Table 6.3 shows how the critical barriers, profiles affected, the assessment of existing policies, and the policy recommendations are brought together. The first three columns are taken directly from Table 5.6, with the highest priority barriers listed first. The last four columns summarize existing policies, their effectiveness, recommendations and important considerations generated from the analysis described in this section.
The goal of the policy chapter is to present an evidence-based argument in favour of a select set of policy changes, which once implemented, should significantly reduce the number of out-of-school children and children at risk of dropping out in the country. The MoRES framework and barriers can be used as a framework to organize and present the policy review and recommendations. The study team can consult other OOSCI studies for ideas on how to organize and streamline the recommendations. For example, the Latin America and the Caribbean regional OOSCI study grouped policy recommendations into broad areas and specified the relevant barriers, proposed actions and which Dimensions of Exclusion would be the most impacted. Furthermore, the Palestine OOSCI study grouped barriers in part based on their actionability, and organized policy recommendations according to their ease of implementation (quick fixes, bolstering existing efforts, mainstreaming, new programmes).

### TABLE 6.1
The complete matrix: critical barriers, profiles, existing policies, policy effectiveness and recommendations

<table>
<thead>
<tr>
<th>CRITICAL BARRIER</th>
<th>SPECIFIC BARRIER</th>
<th>PROFILES AFFECTED</th>
<th>EXISTING POLICIES</th>
<th>POLICY EFFECTIVENESS</th>
<th>CONSIDERATIONS FOR POLICY RECOMMENDATIONS</th>
</tr>
</thead>
</table>
| Cost of education | - Indirect and direct costs of upper secondary school (uniforms, fees, opportunity cost)  
- Costs of accessible school transportation | - Adolescent girls in rural areas  
- Children with disabilities | - Schools charge fees despite the existence of fee-free education, due to school repair needs and lack of basic learning materials.  
- Schools lack resources to support children with disabilities to access school. | Increase funding for schools in poor rural areas, and for schools in need of accessible transportation, by revising the formula for capitation grants. | - Addresses the chronic underfunding of poor rural schools to provide necessary services.  
- Implementation can use the existing financial mechanism.  
- Potentially costly and needs targeting. |
| Additional barriers | | Profile 1 | | | |
| | | Profile 2 | | | |
| | | Profile 3, etc. | | | |

The goal of the policy chapter is to present an evidence-based argument in favour of a select set of policy changes, which once implemented, should significantly reduce the number of out-of-school children and children at risk of dropping out in the country. The MoRES framework and barriers can be used as a framework to organize and present the policy review and recommendations. The study team can consult other OOSCI studies for ideas on how to organize and streamline the recommendations. For example, the Latin America and the Caribbean regional OOSCI study grouped policy recommendations into broad areas and specified the relevant barriers, proposed actions and which Dimensions of Exclusion would be the most impacted. Furthermore, the Palestine OOSCI study grouped barriers in part based on their actionability, and organized policy recommendations according to their ease of implementation (quick fixes, bolstering existing efforts, mainstreaming, new programmes).

### 6.4 Plan the next steps: implementation of recommendations

Section 2.5 advised that plans to ensure the OOSCI study has impact should be developed before the study begins. Considerations include identifying the goals of the OOSCI study process, developing a communication and capacity-building strategy for key actors, and identifying in advance of all the channels and fora to which the OOSCI study findings and recommendations will contribute (including Education Sector Plans, joint sector reviews, education sector annual work plans, donor and UN agency programming cycles). This ensures that the OOSCI study findings are used in regular policy and funding processes. How this looks will vary for each country, depending on the findings, the various stakeholders and policy windows. This is an important topic of
discussion for the proposed process workshop 3 on policies and strategies, which is described in Section 2.4. For example, the capacity building strategy discussed in Section 2.5 can be further refined once the policy analysis is complete, in order to target those actors who are meant to implement the recommendations, including teacher educators, school leaders and teachers.

To build on the momentum of the OOSCI study launch, a working action plan can be developed to outline the next steps. As mentioned in Section 2.5, this is not a standalone out-of-school children policy, but a working action plan to concretely identify how the recommendations, research gaps, and capacity building needs identified in the study will be discussed and taken forward by actors or agencies. This includes the inclusion of OOSCI study findings in key policy and decision-making moments (e.g., new Education Sector Plan, new annual Ministry of Education Budget), and development partner funding and programme cycles. For example, the capacity building strategy discussed in Section 2.5 can be further refined once the policy analysis is complete, in order to target those actors who are meant to implement the recommendations, including teacher educators, school leaders and teachers.

The next section (6.5) provides three in-depth case studies of how countries undertook the OOSCI study process (or adaptation of OOSCI methodology) from conceptualization to policy impact, to illustrate how the policy recommendations can move from words to action.

6.5 OOSCI case study of Afghanistan: Using the out-of-school children study as an advocacy and resource mobilization tool to expand community-based education, and address the risk that a significant share of out-of-school children, particularly girls, may never enrol.

The Afghanistan out-of-school children study conducted in 2018 was the first comprehensive assessment of the situation of out-of-school children conducted since 2001. It provided data on the progress made over the previous decade, as well as remaining challenges, finding that the majority of the country’s 3.7 million out-of-school children were rural girls expected to never enter school. Since then, the most recent ESA estimated that the number of out-of-school children was closer to 4.2 million.

Community-based education (CBE) is an outreach programme of the formal education system aimed at offering children an education within their communities. The CBE Programme in Afghanistan consists of two streams: (i) community-based school (CBS) aimed at offering children aged 7-9 years in Grades 1-3 with an education within their communities, with the expectation to transit to Grade 4 in the nearby hub school; and (ii) Accelerated Learning Centres (ALC), offering children aged 10-15 years who have missed out on education with a catch-up programme compressed into three years, to complete their primary cycle. The ALC programme is the only form of education tailored to the needs of out-of-school children (out-of-school children), especially adolescent girls. CBE uses the same curriculum as public

Note to readers (Disclaimer): This case study was drafted before the change of leadership that occurred in Afghanistan in August 2021, during which the Taliban became the de-facto authority. It mainly represents the prevailing perspective at the time of drafting. On 9 September, the MoE's official Facebook page announced the opening of classes for secondary Grades 7-12 for boys and male teachers only. It is not yet clear whether the basis of this decision is to reorganize the co-education system, offering segregated schooling to girls and boys, or if the new authority's position is to not allow girls and female teachers to return to school. Furthermore, on 23 March, despite earlier assurances and public promises, the Taliban banned secondary education for girls. This situation has upended priorities, with current prevailing challenges being to ensure the 1 million girls previously enrolled can return and continue their secondary education, and ensure that schools can remain open in the face of sector funding shortfalls. Going forward, the status of the out-of-school children policy as well as other key strategic documents will need to be defined with the new authorities. UNICEF, together with international and national partners, has been engaging in advocacy with the MoE and the Taliban to ensure girls’ access to education in all grades. As of June 2022, secondary schools remained closed for girls, with the exception of five provinces where schools are open for girls and four provinces where the situation is mixed.
schools, and its teachers receive the same training.

CBE was a successful approach to reducing out-of-school children numbers, particularly girls, in Afghanistan. Over 2017-20, around 800,000 children graduated from the programme. Furthermore, a 2013 evaluation showed that the programme improved learning outcomes and kept children out of work and conflict. On the other hand, CBE coverage was relatively low, especially in areas in the South and East, and the transition rate of leavers to formal schools (under 20 per cent) due to both demand and supply-side factors, fell short of expectations.

Considering this, CBE merits expanding, in terms of both its geographical coverage and to offer the full primary cycle of six grades. Efforts are also required to monitor and improve quality and strengthen cross-sectoral approaches to better address the needs of out-of-school children. This presents a particular challenge in terms of resources and funding, as foreign aid in Afghanistan has been waning. On the other hand, needs may increase with the potential increase in out-of-school children and drop-out numbers due to the economic impacts of the pandemic, internal displacement, and conflict.

The out-of-school children study ultimately not only contributed to the drafting of the national out-of-school children policy 2020-30 and informed the National Education Strategic Plan (NESP), but led to a CBE plan of expansion, including a costing framework and investment case.

The report explicitly aimed “to serve as an advocacy tool for harnessing the resources necessary for implementing our strategic vision” (Afghan MoE/UNICEF, 2018). Indeed, the study was first instrumentalized through extensive press coverage of the launch event and a joint MoE/UNICEF presentation of findings. A dozen international media including BBC, CNN, and Al Jazeera were present and provided detailed reporting. Dialogue around the study findings was then intensified in the Development Partners Group, the One UN Education Group and the Access and CBE working group, then chaired by DFID.

The findings prompted a CBE policy update in 2018, and a new evaluation in 2019 provided several key findings that were instrumental to further improve the CBE model, including: (i) mainstreaming WASH services within the programme, for better hygiene behaviours and infrastructure, as well as increased coordination with nutrition and child protection services, as convergent approaches are more efficient and attractive to communities lacking basic services; (ii) offering greater differentiation in gender strategies for basic education programmes, based on pupils’ age groups, female teacher capacity-building needs and equitable deployment to remote and rural areas, and women’s involvement in the development and management of CBE. With UNICEF’s support, this also led the MoE to approve the Girls’ Education Policy (2019) and Strategy (2020); and (iii) making the enrolment policy more flexible, moving from a one-time approach (whereby students must enrol in Grade 1 and remain with their cohort until Grade 3) to a more usual annual enrolment system, lifting limitations in terms of children’s access to CBE that have caused disappointment among communities, not to mention attempts to circumvent the rules.

The CBE plan of expansion was then elaborated, with the ambitious aim of scaling up outreach from 0.5 million Grade 1-3 pupils in targeted provinces, to 1.7 million pupils (equivalent to 40 per cent of all out-of-school children), in Grades 1-6, in 26 provinces. The plan further addressed the priority in coming years to improve education quality and relevance, ensuring that learning focuses on results and

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46 Bringing Education to Afghan Girls: A Randomized Controlled Trial of Village-Based Schools, 2013.
competencies, with the goal to provide pupils with the literacy and numeracy skills required for them to later transit to general secondary school. A phased approach to the enrolment of new beneficiaries was determined, targeting a group of priority provinces during the first cycle. The number of new beneficiaries was expected to reach 750,000 enrolled children in the first year, with new cohorts of 50,000 pupils each successive year, all of which would be supported to continue until the completion of primary education.

To mobilize the resources necessary for implementation, UNICEF first supported the elaboration of a costing framework. UNICEF conducted a comprehensive exercise to calculate fully inclusive unit costs based on all elements. This involved a series of daily workshops, and the regular communication of drafts with all implementing partners for their respective expert knowledge and input. It was estimated that the plan of expansion would cost USD 944 million over the 2021-26 period, including the Girls’ Access to Teacher Education (GATE) programme, WASH, and child protection dimensions. This is equivalent to a 24 per cent annual increase in the national education budget.

This information then enabled a review of the CBE investment case in January 2021, through a cost-benefit analysis based on the net present value of investment and internal rate of return. The review estimated the cost-benefit ratio at 1.2, meaning that for every USD 1 invested, USD 1.2 would be gained by the Afghan economy. The investment case further explored financing options, including on-budget support and using the ECW-facilitated multi-year resilience programme. It recommended using multi-donor pooled funding in the short term, to ensure coherence in the financing of CBE centres and a smooth transition of existing financing arrangements, as well as to build MoE capacity to eventually transit all participating CBE centres to grant-aided institutions once conditions permit. The goal was to incorporate all CBE costs into the public finance architecture in the longer term. The investment case provided the transparent evidence basis for joint and ambitious resource mobilization efforts.

The programme benefitted from a high degree of buy-in from the former government. CBE was mainstreamed into formal education, with centres covered by EMIS data collection exercises and offering learning according to the national curriculum. CBE teachers’ pay was raised and harmonized with that of teachers in general education, that contributed to more female teacher recruits and a narrowing of the teacher gender gap, better teacher attendance and student learning, as well as encouraging girls’ education. To generate evidence on the learning outcomes of students in reading and mathematics, the MoE and UNICEF commissioned baseline and endline learning assessments in accelerated learning centres to measure the learning outcomes of children in Grades 1-3, as well as increase the capacity of MoE to undertake similar testing in the future. The assessments sought to unearth factors impacting students’ learning and provide recommendations on how to address the key issues in order to improve it.

Resource mobilization based on the investment case started apace, suggesting a high degree of partner/donor commitment and support. The MoE had already received 15 million dollars to open new CBE classes in early 2021, in addition to UNICEF’s support to the programme through Education Cannot Wait, Multi-Year Resilience Programme, Year II (USD 17 million) and GPE funds (USD 20 million). The World Bank also committed USD 300 million as on-budget support to the sector, for the Education Quality reforms in Afghanistan (EQRA) that focuses on bringing children into school and tracking their attendance, making it the biggest funding stream to the sector at the time.

The wide usage and dissemination of the out-of-school children study results and recommendations also placed priority upon supporting the
MoE to translate the dedicated out-of-school children policy, approved in 2020, into actionable strategies and an implementation plan, in alignment with the general education strategy.

Further perspectives included a 2021 pilot to determine MoE operational capacity to run CBE classes in the most remote areas in an efficient manner, and a plan to have CBE pupils sit the same tests as in formal schools, to inform quality improvement.

In the Afghan experience, several factors contributed to the effective harnessing of the out-of-school children study and findings, to translate these into appropriate policy responses. The out-of-school children report was particularly effective in underlining both the compounding of risk factors to determine profiles of out-of-school children and RODO, and the inter-connectivity of barriers, to constitute a sound evidence base for policy making. The study was the main point of reference for out-of-school children data and understanding the reasons behind exclusion. More importantly however, success in achieving policy change also hinged on visibility and ownership, which was achieved through extensive high-level and substantive government participation in the process, as well as the mobilization of multiple stakeholders, including senior UNICEF management from the country office, regional office and HQ, as well as through the local education group. Community-based education was doubtless a particularly appropriate form of education delivery in the Afghan context, not least due to its greater acceptance by all parties, including the Taliban who associated the programme less with the former government.

Following the recent change in leadership, broad advocacy efforts are underway, by UNICEF and local and international education partners, to ensure that the fundamental right to education is not undermined, and that the country can continue to build on the achievements of CBE to date.

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**SECTION 6**

**KEY RESOURCES**

**RESOURCES:**
- OOSCI resources and tools: allinschool.org.
- For Children in Emergencies, see Annex C.
- For Children in Child Labour, see Annex D.
- For Children with Disabilities, see Annex E.
- For Children from Ethnolinguistic groups, see Annex F.

**LINKS:**

**ADDITIONAL RESOURCES:**

**ASSESSMENT OF EXISTING POLICY**

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**POLICY FRAMEWORKS**

**ADDITIONAL RESOURCES FOR SPECIFIC GROUPS:**

**SOCIAL PROTECTION:**

**Girls:**
- UNICEF. 2021. ‘Mapping Social Protection Intervention Pathways to Address Barriers to Girls’ Education: A Visual Guide.’ New York: UNICEF. This guide presents several useful visualizations of different categories of barriers to education faced by girls, with tailored policy recommendations for each barrier.
Out-of-school children in emergencies:


OTHER POLICY RESOURCES:

GENDER


SECONDARY-AGED ADOLESCENTS AND YOUTH


COST-EFFECTIVENESS:


- Varly, Pierre, Constantin Serban Iosifescu, Ciprian Fartsuc, and Luminita Costache. 2014. ‘Cost of Non-Investment in Education in Romania: Final Report for UNICEF.’ Bucharest: UNICEF.

SCHOOL CLOSURES/COVID-19:


Annexes
ANNEX A.

Key Changes to the Updated Version of the Operational Manual

OOSCI

- Inclusion of an updated theory of change.
- Updated conceptual framework, to reflect the expanded 7DE model that now includes upper secondary (Out-of school Dimension 6 (DE6) and risk of dropout DE7) and consideration of now relevant forms of non-formal and alternative education programmes, as well as alternative modalities (remote learning).
- Analysis of DE6 and DE7 reflecting the reality that upper secondary may not be compulsory, a % of youth may in fact be encouraged to start work before completing, so nuancing with NEET indicator.

STUDY PROCESS

- Reviewed guidance on organizing and preparing the study, in particular with respect to stakeholder engagement.
- Strengthened government leadership and engagement, that will mainly impact recommendations of the process to follow in study preparation and drafting. Annexes with example letters and terms of reference to support country teams.
- Detailed guidance on engaging youth and adolescents in out-of-school children studies.
- Recommendation to hold three OOSCI process workshops to engage stakeholders throughout the study, with example workshop agendas in Annex L.

RESEARCH AND ANALYSIS

- Updated indicator definitions and computing methods, reflecting the SDG4 monitoring framework for out-of-school children indicators.
- Differentiation for ROD dimensions, between the risk of dropout during a cycle, and the risk of not pursuing education to the next cycle.
- New approaches to analysis and visualization, including the current status bar chart, education pathway analysis, cumulative risk analysis.
- More guidance relating to qualitative research to better understand barriers.
- Implications of COVID, both as a factor of exclusion and from the perspectives of lessons learned in terms of remote learning, and how these could be tailored to the needs of pre/non-COVID out-of-school children.
- Link to learning crisis, in particular as a factor of dropout (either due to poor perceptions of value of education, or sub-optimal schooling pathways, repetition, then overage), implying some level of analysis of learning outcomes based on minimum proficiency levels.
POLICY AND STRATEGY RECOMMENDATIONS

- Separation of the barriers and policy analysis into two chapters, with more detailed guidance on how to conduct each.
- Box on gender-sensitive social protection integrated into Section 6, rather than standalone annex (in previous Operational Manuals).
- Tightening the evidence-policy recommendations link, involving both a more systematic and structured analysis for policy recommendations; and a process element, with broad stakeholder participation to digest the evidence (profiles, barriers) and prioritize possible responses.
- Examples of effective approaches linking data and analysis to sector policies and plans, through three case studies.
- Reviewed and more detailed approach to identifying and prioritizing policy recommendations, based on current policy coverage, effectiveness, gaps and cost-efficiency analysis.

TOOLS

- A tool-box approach, the manual referencing multiple tools that are made available to users via the www.allinschool.org thematic folders.
- A new and expanded Excel-based Data Inventory and Quality Appraisal tool.
- Three annexes with Stata code for the production of disaggregated data, dropout risk and cumulative risk analysis from household surveys.
- A new Excel-based tool to automatically compute the 7DE indicators and produce corresponding graphs.
The preparation of the profiles chapter of an OOSCI study often reveals important data gaps and quality issues. Drawing on numerous country experiences, the UNICEF-UIS out-of-school children Monitoring Framework distinguishes eight common barriers to obtaining and using relevant and accurate data on out-of-school children and children at risk of dropping out:

1. **Barrier 1:** Information on out-of-school children and children at risk of dropping out is incomplete;
2. **Barrier 2:** Information on out-of-school children and children at risk of dropping out is inaccurate;
3. **Barrier 3:** EMIS cannot incorporate new indicators and methodologies;
4. **Barrier 4:** Gaps in vertical information flows from the local to the national level;
5. **Barrier 5:** Gaps in horizontal information flows: inter-agency collaboration and data sharing;
6. **Barrier 6:** Children at risk of dropping out are not identified;
7. **Barrier 7:** Data on out-of-school children and children at risk of dropping out are not reported and analysed;
8. **Barrier 8:** Data on out-of-school children and children at risk of dropping out are not used for evidence-based policy and decision making.

The eight types of barriers listed above correspond to the eight-step monitoring framework, which proposes step-by-step solutions to each of these challenges. These solutions include:

1. Establish indicators, definitions and benchmarks
2. Prevent, detect and resolve data inaccuracies
3. Update EMIS to incorporate new indicators and methodologies
4. Close gaps in vertical information flows between local and national level
5. Close gaps in horizontal information flows through cross-sector collaboration
6. Create an early warning system
7. Create automated reporting and analysis routines
8. Develop and establish evidence-informed policies and interventions

**FIGURE B.1**
Eight Step Monitoring Framework for out-of-school children and children at risk of dropping out
eight steps are described in Figure B.1. Steps 1 to 3 are concerned with improving the availability and accuracy of data on out-of-school children and children at risk of dropping out. Steps 4 to 5 are concerned with closing gaps in horizontal and vertical information flows. Steps 6 to 8 focus on using and analysing the data to inform and develop evidence-based policies and strategies to reduce exclusion from education.

Each of these steps is described in detail in the UIS-UNICEF publication Monitoring Education Participation. They may be used to generate recommendations to address the data challenges identified in the preparation of the OOSCI study.

**HOW IMPROVING DATA LINKS TO POLICY SUPPORT: LINKING THE VISIBILITY MODEL TO THE EIGHT STEPS**

Figure B.2 summarizes potential information loss at various stages in the monitoring system, from the collection of data to the use of the data for evidence-based decision making. The length of the bars in this hypothetical example reflects the percentage of out-of-school children captured at each step. The decreasing length of the bars at each step reflects information loss, so that by the time the information is analysed and used, only a fraction of the total number of out-of-school children may be captured (or none at all). Information on children at risk of dropping out is not included in this example – it is often not collected and analysed at all, or only at the school level.

The first bar at the top represents all out-of-school children in the country. The second (orange) bar covers all out-of-school children for whom records exist in government and school databases, including the EMIS, but also other databases such as the Civil Registry database. These children have not yet been identified as being out of school, but merely have their personal details recorded in a government database. Invisible out-of-school children are now excluded, as they represent those out-of-school children who are not recorded in any database, such as homeless and refugee children. The third bar (blue) reflects the actual proportion of out-of-school children known to the ministry of education, which excludes Semi-invisible out-of-school children – that is, currently invisible out-of-school children who could be made visible through cross-referencing other government databases or by checking school records. The fourth bar (green) represents out-of-school children included in reporting and analysis. Certain groups of out-of-school children may be excluded from reporting and analysis, and are thus referred to as forgotten out-of-school children. The fifth and final bar (green) represents out-of-school children who receive support. Inclusion in reporting and analysis does not guarantee that efforts will be made to support these children, and out-of-school children who do not receive support despite their situation being known are referred to as ignored out-of-school children.

For further details see UNICEF and UIS’s publication Monitoring Education Participation.
ANNEX C:

Children at risk of dropping out and out of school in emergencies (OOSCiE): analyses of profiles and barriers to education

When analysing the situation of children out of school in emergencies (OOSCiE), there is tension between ensuring both accuracy and timeliness. Formal, structured education data collection, such as EMIS or household surveys, are often halted or function imperfectly during an emergency. This leads to difficulties in determining the number of learners in need, and consequently the numbers and rates of children in the 7DE as part of the OOSCI framework.

Despite these challenges, close monitoring of OOSCiE is critical to deliver efficient and effective education humanitarian responses targeted to those most in need. Estimating the share of out-of-school children in emergencies (OOSCiE) poses many methodological challenges. Definitions of what constitutes a ‘crisis’ in practice are often not consistently or clearly defined; out-of-school children rates often do not capture crisis-affected areas at the subnational level; populations such as forcibly displaced refugees, internally displaced persons or asylum seekers are ignored in out-of-school children estimates, and, even when out-of-school children rates may be disaggregated to include hard-to-reach groups, the fast-changing conditions in humanitarian theatres are such that estimates can become outdated quickly, and be of little practical use. Therefore, analyses of OOSCiE require greater flexibility in approach and strong relevance to the particular context.

In this Annex, one global and three national OOSCiE case studies are presented. Each represent different types of emergencies and relate to different components of the OOSCI methodology. Each summary is provided with key resources for more detail.

1. GLOBAL:

THE ECW/INEE METHODOLOGY TO ESTIMATE THE NUMBER OF OUT-OF-SCHOOL CHILDREN IN CRISSES

The INEE reference group on Education in Emergencies (EiE) data developed a methodology to provide consistent cross-country measurement of out-of-school children rates in crises, relying on high levels of granularity and disaggregation, while allowing flexible integration of new research and new data as it becomes available in fast-moving crises. Using this method, ECW/INEE find that about 78 million children (54 per cent females, 17 per cent with functional difficulties, 16 per cent forcibly displaced) are out of school in crises worldwide. The nested nature of the resulting database allows updating of OOSCiE at a high frequency (as frequently as monthly, if needed) with crisis-specific data to reflect the evolution of crises at district or subnational level.

DATA AND METHODOLOGY

The methodology is closely aligned to the 7DE model: distinguishing out-of-school children in emergencies in dimensions 1, 2, 3 and 6, as well as children in school but not achieving minimum proficiency in learning (DE 4, 5, 8) (DE 4 and 5 combined in this methodology). It is based on highly

47 Written by Simone Holladay (IOM), Matteo Valenza (ECW) and Haogen Yao (UNICEF). Reviewed by members of the Global EiE Data Reference Group.
granular, crisis-specific data from the INFORM severity index (ISI)\(^{48}\), and the latest estimates of out-of-school rates of children with functional difficulties (UNICEF), out-of-school rates of refugees (UNHCR) and crisis-affected countries (UIS/UNICEF). The methodology follows three key steps.

1. A breakdown of the population affected by crises (for each crisis identified by the Inform Severity Index over the period Jan 2019-Feb 2022) is estimated by country, as per the table below, resulting in a disaggregation of the global populations affected by crises in 40 subgroups.

2. A matrix of 40 out-of-school rates for each subgroup is built accordingly, based on the latest available data and research. Whenever a data point is missing, auxiliary algorithms\(^{49}\) for imputation are provided, leveraging data from neighbouring countries with available data points and a similar value of the ISI index. This allows evidence-based imputation leveraging crises of comparable severity as proxies.

3. To enable estimates to remain relevant in the short term, crisis-specific premiums are added if either a) a large-scale shock (e.g., COVID-19) with potential to drive dropout for the next school year takes place; or b) the available out-of-school rates are outdated and the crisis worsens, as indicated by the ISI.

DIFFERENCES FROM STANDARD OOSCI METHODOLOGY

The main differences vs. the standard OOSCI methodology can be summarized as follows:

- The methodology is aimed at producing a reliable global estimate focused on children in crises, rather than accurate country-specific estimates of out-of-school children.
- Out-of-school rates are calculated on crisis-affected subpopulations in a crisis-affected country, hence not at the national level (unless the whole country is deemed entirely affected by a crisis).
- In the aftermath of emergency-induced school closures, subgroup-specific ‘crisis premiums’ can be added to ‘update’ pre-existing estimates of out-of-school rates, thus allowing OOSClE estimates to remain relevant based on the latest context-specific evidence.

There is no foreseen category for children at risk of dropout, even if it could be possible to assume that the great majority of crisis-affected children are on a spectrum of needs (in terms of mental health and wellbeing, learning loss, etc.) and could be all considered at risk, while at different levels.

### LINKS AND KEY RESOURCES

- Education Cannot Wait and INEE. Final Methodology. [https://www.educationcannotwait.org/](https://www.educationcannotwait.org/)

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48 The ISI attempts at estimating the severity of humanitarian crises in an objective and comparable manner. The index is built on highly granular, crisis-specific information from a range of credible, publicly available sources, such as UN agencies, governments, and multilateral organizations. The ISI is an open and free tool updated monthly.

49 For example, in certain protracted crises (e.g. Syria, Somalia, Afghanistan), data collection at national level has not been possible for several years. To provide an evidence-driven educated guess for these countries, the average of the out-of-school children rates by sex and education level in crises with an ISI between 4.5 and 5, weighted by school age population, is imputed. Data remains unavailable also for some additional crises (e.g. Libya), that appear comparatively less severe (ISI between 3.5 and 4.5); the same logic is used to calculate an average out-of-school children rate structure for mid-tier crises, by education level and sex.
2. THE SYRIA CRISIS IN 2017: 
ESTIMATING THE NUMBER OF OUT-OF-SCHOOL CHILDREN DURING A WAR

Out-of-school children in the context of the Syria crisis refers to the age group 5-17 (which also corresponds to the age range for out-of-school Dimensions 1, 2, 3 and 6). Inside Syria, children not enrolled in formal education are considered to be OOS. While in the five host countries, Syrian refugee children not enrolled in either formal or non-formal education are considered to be out of school. Partners under the No Lost Generation umbrella have worked together to update the out-of-school figure annually since the London Syria Conference in 2016, so a time series is available despite the pause of formal data collection (No Lost Generation 2020; 2018). The case below is for 2017 when multiple armed groups were active, and the flow of refugees was increasing. Around 2.1 million Syrian children and 689,000 Syrian refugees were estimated as out of school.

DATA AND METHODOLOGY

For children inside Syria, the school-age population (5-17 years) was estimated using mid-year OCHA population data, and the school enrolment figure was extracted from EMIS then triangulated with data from sources in opposition-controlled areas. For areas under the control of Islamic State of Iraq and the Levant (ISIL), all children were assumed to be out of school. For areas newly liberated from ISIL, it was assumed that 25 per cent of the pre-crisis enrolment was sustained after consultation with the Education Cluster/Whole-of-Syria hub staff who had better insight about the changing field situation and response. Due to the limitations in data collection in 2017, it was difficult to estimate the regularity of school attendance.

In the case of Syrian refugees in the five host countries (Egypt, Iraq, Jordan, Lebanon and Turkey), the school-age population (5-17 years) was calculated based on records provided by UNHCR and the Government of Turkey. Enrolment in formal and non-formal education are both counted as in school; the information was collected by UNHCR and UNICEF country offices from host Governments and field partners. Regional indicators on formal and non-formal enrolment were set to monitor progress in the Regional Refugee and Response Plan (3RP). Each country reported against those two indicators, with country-specific nuances such as age group selection, measures to address double counting, measures to distinguish Syrian children from host community children receiving the same service, etc.

DIFFERENCES FROM STANDARD OOSCI METHODOLOGY

There are four major differences between the OOSCI estimate for the Syria crisis and the out-of-school estimate in a development context. First, the Syria context collected school-age population data (denominator) and school enrolment separately due to the limitations of the mainstream data collection. Due to challenges with the accuracy of age data, and the large number of students over and under-aged for the level of education, it was challenging to precisely disaggregate out-of-school estimates by school age groups (DE2, DE3 and DE6). Therefore, the Syria OOSCI estimate combined DE1, DE2, DE3 and DE6 together (5-17 years). Second, the methodology used multiple data sources for triangulation because no side of the conflict can access all areas of the country. It is important to note that the major purpose of triangulation is to catch up with
the fast-evolving situation (displacement and battles) in the field, as data can be collected in different time periods by people of different sides of the conflict and different levels of field access.\(^{50}\) Third, the methodology and results of estimates by areas of control inside Syria and by host countries outside Syria went through a wide consultation and review by related authorities and education actors. Additionally, in the case of refugees, non-formal education was considered to be in-school in recognition of the fact that recorded programmes mostly prepared younger children for back-to-school or helped youth catching up with the missing school education, and of the effort by Governments and international communities in sponsoring those activities.

### 3. HAITI IN 2020-21: BARRIER ANALYSIS FOR COUNTRIES VULNERABLE TO NATURAL DISASTERS

From March 2020 to August 2021, access to education in Haiti has been heavily affected. School closures due to the COVID-19 pandemic, the August 2021 earthquake, climatic hazards, gang violence and roadblocks have contributed to the prolonged shutdown of many schools. Other than external shocks, key factors identified as contributing to a child being out of school included having a deceased mother, lacking identification and access to electricity and internet.

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50 Under and over-estimates of out-of-school numbers are both possible due to displacement and returns, over/under-aged enrolment, non-attendance of registered students, bias held by the key informants and data providers, etc. The triangulations help decide a reasonable range of the estimates.
logistic regression, and only those that were significant (at 90 per cent significance level) were tested together in a full model. The latter was used to identify the variables which are predictors of being out of school in Haiti.

**BARRIERS**

Qualitative and quantitative analysis identified the following barriers that contributed to Haitian children being out of school. Barriers analysis drew on a wide range of sources, finding that:

- **Access to electricity and the internet:** Reduced access to electricity and the internet limited the possibilities for distance learning, with less than half of the population with access to electricity and only one-third with internet access. DHS data show that only 21 per cent of school-age children live in households with internet access, with a staggering rural-urban gap (11 per cent vs. 36 per cent) (UNICEF 2021). Education actors found challenges in making remote learning a real option for the majority of children, especially the most vulnerable at risk being left behind.

- **Impacts to schools from natural disaster:** The August 2021 deadly shallow earthquake that struck southwestern Haiti caused damages to 127 schools, including at least 10 schools hosting disaster-induced internally displaced individuals and households. Tropical Storm Laura caused flooding in several areas, with the destruction of 60 schools, as well as roads and other infrastructure. Some roads in the southeast remained inaccessible until March 2021, with a clear impact on education services.

- **Identity documentation and mother’s survival:** According to the CARE household survey from 2018, the strongest predictive factor of being out of school was not having an ID, resulting in children being 3.2 times more at risk of being out of school. The next prominent factor for being out of school was whether a child’s mother was alive, with children 2.8 times more likely to be out of school if their mother was not alive.

- **Gender.** During a CERF project assessment in a neighbourhood of the capital city, researchers found that students, especially girls, reported being victims of acts of violence committed by criminal gangs of young people who were out of school (OCHA 2021). Girls were much more likely to be out of school than boys.

- **Mobility.** The Child Protection Area of Responsibility (AoR) identified and assisted over 1,000 unaccompanied children in 2020. However, some more unaccompanied children could not be identified because of the many informal border points. Being out of school increases a child’s risk of being separated, and family separation further exposes children to other types of violence and exploitation by authorities, employers and others.

**LINKS AND KEY RESOURCES**


4. SOUTH SUDAN: BARRIER ANALYSIS FOR COUNTRIES AFFECTED BOTH BY CONFLICT AND HEALTH EMERGENCIES

Access to education was already limited pre-pandemic, with much of South Sudan’s education infrastructure damaged, destroyed, closed or repurposed in 2020 when the COVID-19 pandemic began, further impacting the situation of out of school children, adolescents and youth. In 2019-2020, 2.4 million children were estimated to be out of school, and 30 per cent of schools were damaged, occupied or closed. Like the case of Haiti, mixed methods were useful to conduct barrier analysis to account for why children are out of school in South Sudan.

DATA AND METHODOLOGY (AND DIFFERENCE FROM METHODOLOGY IN DEVELOPMENT CONTEXT)

The South Sudan Humanitarian Needs Overview (HNO) (2021) uses a set of indicators to quantify and describe out of school children and their risk of dropping out. In addition to the traditional out of school estimates, the HNO process also uses a mixed method approach, using information on the number of schools damaged or hosting internally displaced persons or refugees, distance to schools, and lack of financial resources. These barriers to education contributed to assessing how vulnerable a child was while being out of school.

Sources include primary qualitative and quantitative data, collected from key informant interviews, focus group discussions and household surveys in selected internally displaced persons settlements. This allowed for triangulation of information to report the situation of children’s access to education. To enable rollout of representative household surveys in urban areas within a short timeframe, the IOM Displacement Tracking Matrix (DTM) relied on a combination of remote sensing technology and field mapping by teams of trained enumerators to produce a workable sampling frame. Descriptive statistics from the survey reflect unweighted means and standard errors, since the sample was designed to be approximately self-weighting. Because of limited data availability, the approach prioritized new data collection and using what data was available. The barriers analysis had limitations. The sample could not be generalized for the entire country: the qualitative data collection focused on a small number of locations and purposive or convenience-based samples. Careful interpretation of the findings is needed, or there may be bias in reporting the situation or barriers around the country, without identifying the positive coping mechanisms in areas not targeted by data collection.

BARRIERS

Temporary closures due to COVID-19 restrictions disrupted education, limited children’s access to essential services, such as school feeding programmes, and increased their exposure to various forms of Gender Based Violence (GBV). In addition to the estimated figures on out-of-school children during the 2019-2020 school year, country analysis identified factors that contributed to South Sudanese children being out of school during the year. These included:
**Pre-existing lack of or inadequate educational infrastructure.** These barriers contributed to limiting access to and availability of educational services. They were likely exacerbated by school closures due to the COVID-19 pandemic. Moreover, some 400 schools in nine states were damaged by floods and/or affected by violence in 2020. Long travelling distances to school is another reason for children dropping out of school – or never enrolling at all – in South Sudan.

**Livelihoods and gender.** The lack of financial resources prompted parents to put children, mostly girls, to work and increased their exposure to various forms of GBV (e.g., early and forced marriages) (OCHA 2021). Boys face increased risk of recruitment into armed groups. Protection and safety concerns also prevented girls and children with disabilities from attending school when they are located far from their community. Focus group discussion participants highlighted early and forced marriages, as well as adolescent pregnancies, as particular challenges faced by children and adolescents in South Sudan.

**Urban/rural status and mobility.** About 60 per cent of Internally Displaced Persons and returnees live in settlements where no more than half the children attend primary education. The highest gaps were identified in 6 out of 10 states, with children in rural areas and displaced, refugee and returnee children having the lowest access to education. Displaced people, lacking proper and sufficient shelter options, have taken refuge in school buildings, making many schools unusable for learning and delaying re-opening.

Information from four Internally Displaced Persons Site Multi-Sector Needs, Vulnerabilities and COVID-19 Impact Surveys indicates variation in the share of girls and boys never having attended school or dropping out. In some areas girls were more likely to be out of school with boys more likely in others. About 5-10 per cent of 14-17 year olds had never been to school, and a further 10 per cent had dropped out.

**CONCLUSION**

The four examples showcase how different analysts have adopted flexible and mixed methods to understand the profiles and barriers to education faced by children, adolescents and youth in emergencies. This included the triangulation of multiple quantitative sources (global estimates and Syria) and the application of mixed method approaches to study barriers (Haiti and South Sudan). These analyses are mentioned and used in reports such as the annual Humanitarian Needs Overview (HNO), monthly or bimonthly situation reports (SitRep) and briefs outside of formal OOSCI studies (which are conducted less frequently), to translate findings into action more quickly with regards to the focus and scale of the education response. A list of structured questions and responses on education barriers common in humanitarian and displacement settings have been recommended by the Global Education Cluster in the DTM and Partners Field Companion on Education Barriers allowing for consistency in data collection and analysis.51

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51 See: [https://migration.iom.int/dtm-toolkit/education](https://migration.iom.int/dtm-toolkit/education)
ANNEX D:
Child labour and out-of-school children: a statistical profile

INTRODUCTION

The child labour phenomenon is closely related to that of out-of-school children. Most children not in school are engaged in some form of work activity, and, for children in school, involvement in work makes them more susceptible to premature drop out.

Understanding the interplay between child labour and out-of-school children is therefore critical to achieving Sustainable Development Goals (SDGs) 4 and 8, as well as broader child labour elimination goals. The current guidance note presents a comprehensive statistical profile of children in child labour and out-of-school children. Such a profile is an essential starting point for identifying the barriers to education they face and the design of effective policy strategies. The descriptive indicators contained in the profile are designed to provide not only robust estimates of how many children in child labour and out-of-school children there are, but also detailed information on who they are, how they overlap, where they live, what they do and the characteristics of the households they belong to.

DEFINING CHILD LABOUR

Child labour is a legal rather than a statistical concept. Therefore, the international legal standards that define it are the necessary frame of reference for child labour statistics. Three principle international conventions on child labour set the legal boundaries for child labour, and provide the legal basis for national and international actions against it:

- ILO Convention No. 138 (Minimum Age for Admission to Employment) (C138)
- United Nations Convention on the Rights of the Child (CRC); and
- ILO Convention No. 182 (Worst Forms of Child Labour) (C182)

But the translation of these broad legal norms into statistical terms for measurement purposes is by no means straightforward. The international legal standards contain a number of flexibility clauses left to the discretion of the competent national authority in consultation (where relevant) with worker and employer organisations (e.g., minimum ages, scope of application). This means that there is no single legal definition of child labour across countries and, concomitantly, no single standard statistical measure of child labour consistent with national legislation across countries.

The resolution on child labour statistics adopted at the 18th International Conference of Labour Statisticians (ICLS) in 2008 provides a first-ever set of global standards for translating the international legal standards on child labour into statistical terms.\(^{53}\) In 2018, the 20th ICLS adopted the resolution to amend the 18th ICLS Resolution on child labour statistics.\(^{54}\) It takes into consideration the relevant part of the Resolution concerning statistics of work, employment and labour

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52 Written by Lorenzo Guarcello and Shane Niall O’Higgins (ILO). Reviewed by members of the OOSCI Technical Working Group


underutilization, adopted by the 19th ICLS in 2013. It introduced the concept of forms of work, allowing for the classification of working children and children in child labour as follows: a) Own-use production work by children, comprising production of goods and services for own final use; b) Employment work by children, comprising work performed for others in exchange for pay or profit; c) Unpaid trainee work by children, comprising work performed for others without pay to acquire workplace experience or skills; d) Volunteer work by children, comprising non-compulsory work performed for others without pay; e) Other work activities by children, not presently defined but including activities such as unpaid community services and unpaid work by prisoners, when ordered by a court or similar authority.

The ICLS Resolution states that child labour may be measured in terms of the engagement of children in productive activities on the basis of the general production boundary. The general production boundary is a broad concept encompassing all activities whose performance can be delegated to another person with the same desired results. This includes unpaid household services (household chores) that are outside the narrower System of National Accounts (SNA) production boundary.

Even though largely based on the measurement guidelines contained in the 18th ICLS resolution, the scope of child labour analysis in a national OOSCI study is restricted to children from the start of compulsory education age up to the minimum age for admission to employment. In the case of a country where compulsory education begins at five years, the child labour measures used comprise four groups of children:

- 5 to 11-year-olds in economic activity (i.e. those engaged in any activity falling within the SNA production boundary for at least one hour during the reference week). Economic activity covers children in all market production and in certain types of non-market production, including production of goods for own use. It includes forms of work in both the formal and informal sectors, as well as forms of work both inside and outside family settings;
- 12 to 14-year-olds in non-light (or ‘regular’) economic activity (i.e. those engaged in any activity falling within the SNA production boundary for 14 or more hours during the reference week);
- 5 to 14-year-olds in hazardous unpaid household services (i.e. defined for the scope of the report as those engaged in the production of domestic and personal services for consumption within their own household, commonly called “household chores”, for at least 21 hours during the reference week); and
- 15 to 17-year-olds working in economic activity for 43 or more hours per week.

The first two groups relate to ILO Convention 138, which stipulates a minimum age of generally 15 years (possibly 14 years as an exception in less developed countries) for admission to employment or work (article 2), but states that national laws may permit the work of persons from age 13 (or even 12 years) in light work (article 7). In determining the hours threshold for permissible light work, which is not defined explicitly in C138, the ICLS resolution recommends a cut-off point of 14 hours during the reference week, below which non-hazardous work can be considered permissible light work. It should be noted that due to data limitations, which make it difficult to identify hazardous work, the second group of children in child labour does not include those children working for less than 14 hours per week in hazardous work.

The inclusion of the third group marks recognition of the fact that the international legal standards do not rule out a priori children’s production outside the system of national accounts production boundary from consideration in child labour measurement. The ICLS resolution, building on this recognition, opened the way for classifying those performing hazardous unpaid household services – where the general production boundary is taken as the measurement framework for measuring child labour as part of the group of children in child labour for measurement purposes.

The ICLS resolution does not recommend a specific hours threshold for classifying household chores as hazardous (and therefore as child labour), and cites establishing hazardousness criteria as an area requiring further conceptual and methodological development. In the absence of detailed statistical criteria for hazardousness and building on a study presented at the 13th ICLS, a threshold of 21 weekly working hours is applied, above which performance of household chores is classified as child labour.

Young people aged 15-17 who are in employment, but not in child labour (i.e. engaged in hazardous forms of work of work) and young people who are neither in employment, education or training (NEET) comprise two further groups which should be separately identified. In contrast to the situation for those aged under 15, being in (non-hazardous) employment is a positive state, whilst being NEET is not.
Indeed, reduction of the share of the youth population (aged 15-24) who are NEET is the objective of SDG 8.6 and the NEET rate (the proportion of the youth population who are NEET) is SDG indicator 8.6.1 used to measure progress in promoting productive employment amongst young people. The child labour indicator utilized to develop a profile of children in child labour and out-of-school children, therefore, represents a benchmark for international comparative purposes, but is not necessarily consistent with national child labour legislation (and estimates based on such legislation), owing to the flexibility clauses contained in the international legal standards.

**STATISTICAL PROFILE**

A set of indicators and guiding questions for developing an in-depth statistical profile of children in child labour and out-of-school children are presented below. The development of complex profiles of out-of-school children and children in child labour involves systematically disaggregating these populations according to a range of individual, household and group characteristics. It also involves linking the child labour and out-of-school children populations with indicators of marginalization and inequality, such as gender, wealth, location, education and ethnicity. These indicators are typically drawn from household survey sources.

The profile of children in child labour and out-of-school children considers children in the age range 6-14 years or, data allowing, 6-17 years, according to the minimum age of admission to employment of each country. As child labour is a cross-cutting problem among primary and secondary age children, figures are presented for the entire age range 6-17.

The indicators presented in the suggested analyses provide a general picture of the degree to which the **child labour and out-of-school children populations overlap**. They address the following questions:

- What proportion of children is involved in child labour?
- What proportion of children is out of school?
- To what degree do the child labour and out-of-school children populations overlap?
- What work activities do out-of-school children perform?
- Does child labour interfere with education?
- What are the household characteristics of children in child labour and out-of-school children?

Detailed disaggregation of the indicators will help pinpoint specific sub-groups of children that may be at particular risk of being exposed to child labour and denied schooling. These may include individual characteristics (e.g., male or female children, ethnic minorities, children living in particular regions) or household characteristics reflecting vulnerability (e.g., wealth quintile) or other household background characteristics (e.g., household head’s education). Examples of analyses of factors associated with child labour can be found on the ILO **International Programme of Elimination of Child Labour** (IPEC) and in the country reports on child labour produced by the **Understanding Children’s Work (UCW)** programme, an inter-agency research initiative of the International Labour Organization (ILO), UNICEF and the World Bank. Additional information can be found on the **SIMPOC** website.

While they fall short of establishing a robust causal link between child labour and children out of school, the indicators will nonetheless serve to illustrate the degree of incompatibility between child labour, on the one hand, and school participation, on the other.

**WHAT PROPORTION OF CHILDREN IS INVOLVED IN CHILD LABOUR?**

A first analysis should be run to understand children’s involvement in child labour, defined in accordance with the discussion above, as well as children’s involvement in economic activity and household chores, for the 5-11, 12-4 and 5-14 years age groups. The resulting table would disaggregate economic activity by whether or not the work takes place within the household, and, in the case of non-family work, whether it is paid or non-paid. See example Table D.1.

This analysis addresses the overall question of what proportion of children is involved in child labour. It helps to highlight not only what is the proportion of children involved in child labour, but also which characteristics are correlated with being involved in child labour.

The following are some guidance questions of potential use in drawing conclusions from the results:

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55 The Understanding Children’s Work project closed in December 2018. The UCW website maintains relevant resources and studies on children in child labour.
Is there a gender bias? Is child labour mainly a male or female phenomenon? Do gender considerations appear relevant in the types of child labour performed by children?

In many contexts the nature of the work performed by children differs in accordance with traditional social roles. Girls typically shoulder a greater responsibility for household chores while boys are more involved in performing economic activities, particularly outside of the household.

Does area of residence matter? Is child labour primarily a rural phenomenon? Are children in child labour concentrated in some regions compared to others? What do geographic disparities in child labour levels say about the need for targeting of child labour interventions?

In most developing country contexts, child labour is much more common in rural than in urban areas. This can be explained by various factors, including the important role played by children in the agriculture sector, poorer basic services infrastructure in rural areas, and limited access to schooling as an alternative to child labour in rural areas.

Is there a correlation between household wealth and child labour?

In most contexts, there is a negative relationship between child labour and wealth quintile, i.e., higher wealth quintiles are associated with lower levels of child labour. This is not surprising, as better off households are typically less in need of their children’s productivity or wages to make ends meet. There can be exceptions to this negative correlation, however: households with land holdings, for example, may have greater need for their children’s labour to work the land.

Is there a correlation between the education level of the household head (or of the mother/father) and child labour?

In most contexts there is a negative correlation between the two variables, i.e., higher levels of household head’s education are associated with lower levels of child labour. This can be in part the product of a disguised income effect; in other words, more educated household heads also tend to be wealthier. It also may be that better educated households are more aware of the returns to education or are in a better position to help their children exploit the earning potential acquired through education.

Is there a correlation between ethnicity and child labour?

A positive correlation between ethnicity and child labour may point to a broader pattern of discrimination or marginalization of ethnic minorities. The absence of mother-tongue schooling can be a particular factor in keeping ethnic minority children out of school and in child labour.

### Table D.1
Rates of children in economic activity and child labour, by individual and household characteristics

<table>
<thead>
<tr>
<th>PERCENTAGE OF CHILDREN INVOLVED IN ECONOMIC ACTIVITY FOR AT LEAST 1 HOUR</th>
<th>% OF CHILDREN AGED 12-14 IN ECONOMIC ACTIVITY FOR 14 HRS OR MORE</th>
<th>% OF CHILDREN AGED 6-14 YEARS IN HOUSEHOLD CHORES FOR 21 HOURS OR MORE</th>
<th>% OF CHILDREN AGED 15-17 YEARS IN ECONOMIC ACTIVITY FOR 43 HOURS OR MORE</th>
<th>% OF CHILDREN AGED 5-17 YEARS IN CHILD LABOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of children aged 5-11 in economic activity</td>
<td>% children aged 12-14 in economic activity</td>
<td>% children aged 15-17 in economic activity</td>
<td>% of children aged 5-17 in economic activity</td>
<td></td>
</tr>
</tbody>
</table>

**Total**

[Disaggregation by individual and household characteristics]³

**Note:** See section on Child Labour for the definition of children in child labour. ³ Individual and household characteristics can include: sex, location, wealth quintile, geographic region, education of household head, disability status.
TABLE D.2
Child activity status by sex and residence, 5-17 years age group percentages

<table>
<thead>
<tr>
<th>BACKGROUND CHARACTERISTICS</th>
<th>MUTUALLY EXCLUSIVE ACTIVITY CATEGORIES</th>
<th>(A)+(C)</th>
<th>(B)+(C)</th>
<th>(A)+(D)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
</tr>
<tr>
<td>Sex</td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residence</td>
<td>Urban</td>
<td>Rural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example Table D.2 addresses the overall question of what proportion of children is involved in work only, is studying unencumbered by work responsibilities, or is in work and school at the same time. This helps to further study the interplay between children’s work, school and out-of-school.

One way of viewing the interplay between children’s work and schooling is by disaggregating the child population into four non-overlapping activity groups – children in work exclusively, children attending school exclusively, children combining both activities and children doing neither.

The following are some guidance questions of potential use in drawing conclusions from the table results:

**How many children are working without also going to school?** How many children are neither working nor studying? Which share of out-of-school children is made up from children working only or neither working nor studying? Is there a gender bias? Does the area of residence matter? Is one (or more than one) of the four non-overlapping activities predominantly a rural or an urban phenomenon?

Are girls more or less likely to be out of school than boys? Do gender considerations appear relevant in household decisions to keep children from school?

In many contexts, girls face a greater risk of being denied schooling because of traditional social attitudes towards female education.

Do area of residence matter in terms of the risk of denied schooling? Is denied schooling primarily a rural phenomenon? Are out-of-school children concentrated in some regions compared to others? What do geographic disparities in levels of out-of-school children say about the need for targeting of schooling interventions?

In most developing country contexts, the phenomenon of out-of-school children is much more common in rural than in urban areas. This can be explained by

<table>
<thead>
<tr>
<th>WHAT PROPORTION OF CHILDREN IS OUT OF SCHOOL?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondly, the analysis should address the overall question of what proportion of children are out of school, as well as the question of which child, household and community background characteristics are correlated with exclusion from education.</td>
</tr>
</tbody>
</table>

The following are some guidance questions of potential use in drawing conclusions from the results:
various factors, including the important role played by children in the agriculture sector, poorer basic services infrastructure in rural areas which increases the value of children’s time outside the classroom, and limited access to schooling.

Is there a correlation between household wealth and denied schooling?

In most contexts, there is a negative relationship between denied schooling and wealth quintile, i.e., higher wealth quintiles are associated with lower levels of denied schooling. This is not surprising, as better-off households are typically less in need of their children’s productivity or wages to make ends meet and the opportunity cost of schooling is therefore lower. There can be exceptions to this negative correlation, however: households with land holdings, for example, may have greater need of their children’s labour to work the land.

Is there a correlation between the level of education of the household head or the parents and denied schooling?

In most contexts there is a negative correlation between the two variables, i.e., higher levels of household education are associated with lower levels of denied schooling. This can be in part the product of a disguised income effect; in other words, more educated household heads also tend to be wealthier. It also may be that better educated households are more aware of the returns to education or are in a better position to help their children exploit the earning potential acquired through education.

To what degree do the child labour and out-of-school children populations overlap?

How are the out-of-school children and child labour phenomena related? The intersection of the out-of-school children and child labour groups can be expressed in two different ways: first, the extent to which the out-of-school children population is composed of children in child labour and second, the extent to which children in child labour are out of school.

These two indicators offer different ways of viewing the interplay between the out-of-school children and child labour groups. The first indicator, out-of-school children in child labour expressed as a percentage of the child labour population, offers insight into the social cost of child labour in terms of denied schooling. The second indicator, out-of-school children in child labour is expressed as a percentage of the total out-of-school children population, offers some insight into the importance of child labour as a factor in children being out of school.

Table D.3 also addresses the question of what proportion of children in child labour is out of school. Column A reports children out of school expressed as a percentage of the total number of children. Column B reports children in child labour expressed as a percentage of the total number of children, and column C reports out-of-school children in child labour expressed as a percentage of the total number of children in child labour.

Column D of Table D.3 addresses the reverse question of what proportion of out-of-school children is in child labour. Column D reports out-of-school children in child labour expressed as a percentage of the total number of out-of-school children.

Columns C and D offer two different ways of looking at the overlap between the child labour and out-of-school children populations. Column C provides some indication of the social cost of child labour in terms of denied schooling, while column D provides some insight into the importance of child labour as a factor in children being out of school. But again, however, it should be recalled that these descriptive indicators cannot be interpreted as evidence of a causal link between child labour and out-of-school children (in either direction). The disaggregation of these indicators by different individual and household background characteristics can be used to build a profile of children in child labour who are out of school and of out-of-school children who are in child labour.
The following are some guidance questions of potential use in drawing conclusions from the results reported in Table D.3:

**To what extent are children in child labour denied schooling?**

The indicator presented in column C reports the proportion of children in child labour who are out of school. A high estimate is an indication that child labour and schooling are primarily mutually exclusive activities, and that most working children have either dropped out of school or never entered. Again, the indicator offers some initial insight into the cost of child labour in terms of foregone schooling.

**To what extent is the ability of children in child labour to attend school correlated with various child, household and community background factors?**

Background factors can not only affect child labour involvement but also the extent to which child labour interferes with children’s ability to attend school. Again, however, caution is necessary in making causal interpretations. For example, a finding that girls in child labour are less likely to attend school than boys in child labour may not be a product of gender per se, but rather of the fact that girls and boys perform different types of child labour, and that these different types of child labour are more or less compatible with schooling.

The following are some guidance questions of potential use in drawing conclusions from the results reported in Column D of Table D.3:

**To what extent are out-of-school children involved in child labour?**

The indicator reports the proportion of out-of-school children who are in child labour. A high estimate indicates that most out-of-school children must work, in turn pointing to the likely importance of child labour in pulling children from school. A low estimate, on the other hand, would suggest that children are dropping out of (or never entering) school for reasons other than work. In the latter case, school-related push factors may be more important in explaining children’s absence from school.

We would expect this indicator to be especially high for older children (12-14 years and 15-17 years) for two main reasons. The first is that the involvement in child labour increases with the age of the child. The second reason is that when children are closer to the end of compulsory education, the probability of dropping out and entering the labour market increases.

A low proportion of out-of-school children in child labour raises the issue of inactive children, i.e., those neither in school nor in work. This inactive group can sometimes be even more disadvantaged than their working counterparts, benefiting neither from school nor from the learning by doing offered by some benign forms of work. Moreover, they can be at risk of entering child labour if adequate policies are not in place.

**To what extent is the involvement of out-of-school children in child labour correlated with various child, household and community background factors?**

---

**TABLE D.3**

Child labour and out-of-school children

| INTERPLAY BETWEEN CHILD LABOUR AND OUT-OF-SCHOOL CHILDREN: CHILDREN AGED 5-17 |
|---------------------------------|---------------------------------|-----------------|-----------------|-----------------|
| (A) PERCENTAGE OF CHILDREN OUT OF SCHOOL | (B) PERCENTAGE OF CHILDREN IN CHILD LABOUR | (C) PERCENTAGE OF CHILDREN IN CHILD LABOUR WHO ARE OUT OF SCHOOL | (D) PERCENTAGE OF CHILDREN OUT OF SCHOOL WHO ARE INVOLVED IN CHILD LABOUR |
|---------------------------------|---------------------------------|-----------------|-----------------|-----------------|
| Total | [Disaggregation by individual and household characteristics] |

---

* The numerator to estimate the percentage of children in child labour who are out of school includes children aged 5-17 out of school who, during the week preceding the survey, were involved in child labour (see the guidance note for definitions of children in child labour). The denominator is the total number of children in child labour.

* The numerator to estimate the percentage of children out of school who are involved in child labour includes children aged 5-17 out of school who, during the week preceding the survey, were involved in child labour (see the guidance note for the definition of children in child labour). The denominator is the total number of children out of school.

* Individual and household characteristics can include: sex, location, wealth quintile, geographic region, age ranges (e.g., 6-11, 12-14 years), education of household head, disability status.
Background factors can not only affect children’s risk of being denied education but also the extent to which denied education is associated with child labour.

Are female out-of-school children more or less likely to be in child labour than male out-of-school children? Are rural out-of-school children more or less likely to be in child labour than urban out-of-school children? Are younger out-of-school children more or less likely to be in child labour than older children in child labour? Are out-of-school children with educated mothers more or less likely to be in child labour than out-of-school children with uneducated mothers? Are out-of-school children from wealthier households more or less likely to be in child labour than out-of-school children from poor households? Are out-of-school children from ethnic or religious minorities more or less likely to be in child labour than other out-of-school children?

**WHAT WORK ACTIVITIES DO OUT-OF-SCHOOL CHILDREN PERFORM?**

This component of the statistical profile provides more in-depth indicators of the interplay between out-of-school children and the type of work children are involved in. While it stands to reason that most out-of-school children are involved in some form of productive activity (if not child labour per se), effective policy responses require more detailed information on the nature and extent of the work that out-of-school children perform instead of attending school. Table D.4 and CL.5 provide information on the status and sector of those out-of-school children at work.

**TABLE D.4**

Out-of-school children: involvement in economic activity by work status

<table>
<thead>
<tr>
<th></th>
<th>PERCENTAGE OF OUT-OF-SCHOOL CHILDREN AGED 5-17 AT WORK IN ECONOMIC ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PAID WORK</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>[Disaggregation by individual and household characteristics]**</td>
<td></td>
</tr>
</tbody>
</table>

* Individual and household characteristics can include: sex, location, wealth quintile, geographic region, age ranges (e.g., 6-11, 12-17 years), education of household head, disability status.

Table D.4 reports the total incidence of work in economic activity among out-of-school children and the conditions under which out-of-school children work. The table reports the nature of work for those out-of-school children in employment, and in particular, the distribution of out-of-school working children by status (i.e., paid work, unpaid/family work and self-employment) according to a set of background characteristics.

The following are some guidance questions of potential use in drawing conclusions from the results reported in Table D.4:

**What proportion of out-of-school children work in economic activity? Is the involvement of out-of-school children in economic activity correlated with various child, household and community background factors?**

**What is the status of out-of-school working children? Are they more likely to be involved in paid work or unpaid family work? What are the child, household and community characteristics that make it more or less likely that an Out-of-school child will work in a particular category?**

A result common to most countries is that the majority of children work with the family as unpaid family workers. However, the distribution of working children by work status may vary from country to country and by disaggregated characteristics. For example, the incidence of children working as paid employees could be higher in urban areas (where non-agricultural types of work are concentrated) compared to rural areas, and could be higher for older children (aged 12-14, 15-17) than younger children (aged 5-11). The economic activity categories presented in this table may vary depending on the information available in the data source used.

Table D.5 shows the distribution of out-of-school children at work across sectors of employment (i.e., agriculture, manufacturing, commerce and services), disaggregated by a set of background characteristics.
The following are some guidance questions of potential use in drawing conclusions from the results reported in Table D.5:

In what sectors of employment are out-of-school children working? What are the child, household and community characteristics that make it more or less likely that an out-of-school child works in a particular sector? Does the sectoral composition of female out-of-school children’s work differ from that of male out-of-school children? Does the sectoral composition of out-of-school children’s work differ across regions and places of residence? Does the work of older OOSCs differ from that of younger ones? Does the sectoral composition of out-of-school children’s work differ for ethnic or religious minorities? Does the work of older OOSCs differ from that of younger ones?

DOES CHILD LABOUR INTERFERE WITH EDUCATION?

Empirical evidence suggests that work interferes both with children’s ability to attend school and to perform effectively once there, underscoring the importance of child labour as a barrier to achieving SDG 4. Table D.6 reports the school attendance of children in child labour and children not in child labour to illustrate this point.

The following are some guidance questions of potential use in drawing conclusions from the results reported in Table D.6:

What is the school attendance rate of children in child labour?

A high rate of school attendance among children in child labour means most are able to attend school despite the demands of work; it is not, however, an indication that schooling and work are compatible, as work can affect the time and energy that children have for their studies, and their ability, therefore, to benefit from their classroom time. Work can also be associated with more frequent absenteeism or tardiness, factors not captured by the attendance indicator, as typically measured in household surveys.

### TABLE D.5
Out-of-school children in economic activity, by sector of employment

<table>
<thead>
<tr>
<th>SECTOR OF EMPLOYMENT</th>
<th>PERCENTAGE OF OUT-OF-SCHOOL CHILDREN AGED 5-17 YEARS IN ECONOMIC ACTIVITY, BY SECTOR OF EMPLOYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AGROSERVICES</td>
</tr>
<tr>
<td>Total</td>
<td>![Disaggregation by individual and household characteristics][a]</td>
</tr>
</tbody>
</table>

[a] Individual and household characteristics can include: sex, location, wealth quintile, geographic region, age ranges (e.g., 6-11, 12-14), education of household head, disability status.

[b] Countries may wish to report a more detailed breakdown of employment sectors, See Box 1 (ISIC revision 4).

### TABLE D.6
Child labour and school attendance

<table>
<thead>
<tr>
<th>PERCENTAGE OF CHILDREN AGED 5-17 YEARS ATTENDING SCHOOL, BY CHILD LABOUR STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children attending school</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

[a] The numerator to estimate the percentage of children in child labour who are attending school includes children aged 5-17 attending school who, during the week preceding the survey, were involved in child labour (see the guidance note for definitions of children in child labour). The denominator is the total number of children in child labour.

[b] The numerator to estimate the percentage of children NOT in child labour who are attending school includes children aged 5-17 attending school who, during the week preceding the survey, were NOT involved in child labour (see the guidance note for definitions of children in child labour). The denominator is the total number of children NOT in child labour.

[c] Individual and household characteristics can include: sex, location, wealth quintile, geographic region, age ranges (e.g., 6-11, 12-14 years), education of household head, disability status.
BOX D1. International Standard Industrial Classification (ISIC revision 4)

The following example shows the codes to build the proposed classification by sector of employment according to the International Standard Industrial Classification of all economic activities ISIC rev 4.

<table>
<thead>
<tr>
<th>AGRICULTURE</th>
<th>SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 01-03</td>
<td>K 64-66</td>
</tr>
<tr>
<td></td>
<td>Financial and insurance activities</td>
</tr>
<tr>
<td>B 05-09</td>
<td>L 68</td>
</tr>
<tr>
<td></td>
<td>Real estate activities</td>
</tr>
</tbody>
</table>

INDUSTRY

| C 10-33     | M 69-75  |
|             | Professional, scientific and technical activities |
| D 35        | N 77-82  |
|             | Administrative and support service activities |
| E 36-39     | O 84     |
|             | Information and communication |
| F 41-43     | P 85     |
|             | Education |

SERVICES

| G 45-47     | Q 86-88  |
|             | Human health and social work activities |
| H 49-53     | R 90-93  |
|             | Arts, entertainment and recreation |
| I 55-66     | S 94-96  |
|             | Other service activities |
| J 58-63     | T 97-98  |
|             | Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use |

What are the child, household and community characteristics correlated with higher (lower) levels of school attendance among children in child labour?

The role of factors such as the child’s age, sex, ethnicity, residence, mother’s education, and household wealth were discussed previously in the context of the questions on the proportion of children in child labour and the proportion of children out of school.

How does the school attendance rate of children in child labour compare with that of children not in child labour?

Comparing the attendance rate of children in child labour with that of children not in child labour provides an indication of the extent to which children in child labour are disadvantaged in terms of their ability to go to school. Such comparisons usually show that working children lag behind their non-working counterparts at every age,
underscoring the importance of child labour as a barrier to achieving SDG4. Again, however, school attendance is an incomplete indicator of the education cost of child labour, as work also affects the learning achievement of children in child labour that do manage to attend school.

The school attendance of children in child labour usually lags behind that of their non-working counterparts (see Figure D.1 for an example).

School attendance is also negatively correlated with the time children spend actually working.

Table D.7 reports the percentage of children combining work and school by weekly working hours categories. UCW research indicates that working hours affect both children’s school attendance and school performance (See Key Resources).

The following are some guidance questions of potential use in drawing conclusions from the results reported in Table D.7. Do male children work more or less than female children? Do children residing in rural areas work more hours compared with their peers living in urban areas?

As illustrated in Figure D.2, the likelihood of a working child attending school falls off sharply as the number of weekly working hours increases.

**TABLE D.7**

Percentage of children combining work and school, by weekly working hours range

<table>
<thead>
<tr>
<th>WEEKLY HOURS RANGE</th>
<th>&lt;=7</th>
<th>8-14</th>
<th>15-21</th>
<th>22-28</th>
<th>29-35</th>
<th>36 +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Disaggregation by individual and household characteristics)*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Individual and household characteristics can include: sex and household location (urban/rural).

**WHAT ARE THE HOUSEHOLD CHARACTERISTICS OF CHILDREN IN CHILD LABOUR AND OUT-OF-SCHOOL CHILDREN?**

This component of the statistical profile looks at household characteristics of potential relevance to household decisions to keep children out of school and involve them in work. It focuses on indicators of household social vulnerability, as vulnerable households can be forced to keep their children out of school and
involve them in child labour as a buffer against social risk. Specific indicators in this context include the share of out-of-school children and children in child labour living in poor households (proxied by the wealth index or the household expenditure quintile), and education of the parents (mother’s education or household head’s education).

The relevant results reported in the previous tables should be used to develop this part of the study. This section will also serve to summarize the main findings concerning the interplay between child labour and out-of-school children emerging from the descriptive tables.

**FIGURE D.2**
Percentage of children in work, by weekly working hours range

<table>
<thead>
<tr>
<th>Weekly Working Hours Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 7</td>
<td>60%</td>
</tr>
<tr>
<td>8–14</td>
<td>65%</td>
</tr>
<tr>
<td>15–21</td>
<td>70%</td>
</tr>
<tr>
<td>22–28</td>
<td>75%</td>
</tr>
<tr>
<td>29–35</td>
<td>80%</td>
</tr>
<tr>
<td>more than 36</td>
<td>85%</td>
</tr>
</tbody>
</table>

**LINKS AND KEY RESOURCES**

**CONVENTIONS:**
- ILO Convention No. 138 (Minimum Age for Admission to Employment) (C138) ([link](https://www.ilo.org/ipec/ChildlabourstatisticsSIMPOC/ICLSandchildlabour/lang--en/index.htm)).
- ILO Convention No. 182 (Worst Forms of Child Labour) (C182) ([link](https://www.ilo.org/ipec/ChildlabourstatisticsSIMPOC/ICLSandchildlabour/lang--en/index.htm)).

**RESOURCES:**
- UNSD. 2017. ‘SDG Indicator Metadata 8.7.1.’ UN Statistics Division. [https://doi.org/10.1891/9780826190123.0019](https://doi.org/10.1891/9780826190123.0019).
ANNEX E:
Developing profiles and identifying barriers for children with disabilities in the 7DE

The Convention on the Rights of the Child, in article 28, recognizes the right of all children to receive an education, which is the basis of equal opportunity in life. History shows, however, that children with disabilities tend to be excluded from the general education system. The Sustainable Development Goal 4 includes a clear commitment to the inclusion of persons with disabilities into education. The issue of exclusion is also explicitly addressed in article 24 of the Convention on the Rights of Persons with Disabilities (CRPD), which calls for children with disabilities to have access to “an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live.” This includes providing “reasonable accommodations” to a child’s needs within the general education system, and effective, individualized support that is aligned with the goal of full inclusion. For those children with disabilities in school, many are enrolled in segregated systems, schools or classrooms, which is in contravention of this directive of full inclusion.

DEFINING DISABILITY
Disability is a complex and evolving concept which, as stated in the CRPD, stems from the interaction between certain conditions or impairments and an unaccommodating environment (barrier) that hinders an individual’s full and effective participation in society on an equal basis with others.

The following subsections outline key elements for incorporating disability into the OOSCI study and analysis.

REPORTING ON CHILDREN WITH DISABILITIES
Collecting data on out-of-school children and on children with disabilities both pose challenges. Combining the two characteristics creates even further complexities for data collection. Children with disabilities may be among the ‘Invisible out-of-school children’, defined in the OOSCI visibility model as children at higher risk of not having legal documents and not being registered in any database (see Section 1). Due to social stigma, families may not admit to the presence of a child with disability when data are collected. Reliance on community workers or organizations of persons with disabilities who may know about family members with disabilities is one strategy for reducing such risk of underreporting. See UNICEF 2020 in Key Resources for more discussion of sampling and representation.

In addition, many children with disabilities may live in residential care institutions. Institutionalization may result from stigma or shame, and can also result from parents feeling they do not have the capacity to care for their children, or simply because of social norms that suggest children with disabilities belong in such places. Children in these institutions may not be captured in mainstream education data collection, making them ‘semi-invisible’ according to the OOSCI visibility framework, as they could be identified through triangulating government databases. The type and quality of education they receive, if at all, in these settings is also an additional consideration for data collection. Standard sampling designs for household surveys do not include these institutions and, thus,
many children with disabilities could be missed. Data on children with disabilities can be found in a variety of sources, including:

- **NATIONAL POPULATION CENSUSES** – often contain questions on disability that can be useful for providing a count of persons with disabilities. Censuses however have limited space for questions and specific design constraints that may affect the coverage and quality of the data on persons with disabilities, particularly in the case of children.

- **HOUSEHOLD SURVEYS** – Multiple Indicator Cluster Surveys (MICS) modules on functional difficulties among children and adults in a number of countries; and, possibly, Demographic and Health Surveys (DHS), Household Income and Expenditure Surveys, and Living Standard Measurement Surveys, though they are less likely have data on childhood disability.

- **NATIONAL DISABILITY SURVEYS** – conducted in a number of countries, and potentially a rich source of data; recent examples of government-sponsored surveys include national disability studies in South Africa, the United Republic of Tanzania and Viet Nam (see Key Resources).

- **ADMINISTRATIVE DATA** – EMIS systems sometimes collect information on students with disabilities; countries that have disability benefits or other programmes targeted to reach children with disabilities will have administrative data for those programmes as well.

Additional information and evidence on children with disabilities can be obtained from a literature review. Research on children with disabilities has been published on a wide range of countries; though the samples used are not always nationally representative, these studies can provide insights into the nature and extent of various barriers to schooling.

Organizations of persons with disabilities can provide useful information on children with disabilities who may have never been to school and key barriers that persons with disabilities experience in a particular country context.

If data on children with disabilities exists, then all indicators used for understanding the educational status and participation of children should be disaggregated by disability status. However, children can have many types of impairments and functional difficulties, and the barriers that they face might be quite different. Therefore, it is preferred that data can also be disaggregated by type and severity of impairments/functional difficulties, as well as by sex and place of residence. This disaggregated analysis can inform the barriers analysis when children with disabilities are identified as a significant profile of children in the 7DE.

If there are no quantitative data on children with disabilities, or to complement such data when available, other sources can be used, including:

- Qualitative studies that explore the major barriers to school participation; and

For the long term, efforts should be made to identify appropriate data tools and sources (surveys and administrative) that could potentially fill quantitative data gaps and develop plans on how to gather such data.

**CONSTRUCTING INDICATORS THAT MEASURE THE EDUCATIONAL EXPERIENCES OF CHILDREN WITH DISABILITIES**

When including data on children with disabilities as part of the Seven Dimensions of Exclusion described in Section 3, there are important considerations for addressing the needs and situations of children with disabilities. For the overall indicators pertaining to the 7DE (out-of-school rates, risk of dropout), it is important to disaggregate these indicators for children with disabilities. In addition, because there are significant differences in the types of barriers that children with disabilities face, it is advisable to further disaggregate these indicators by type of impairments/functional difficulties.

Considerations for each dimension, including additional indicators for specific analysis, are outlined below.

- **DIMENSION 1. DE1 for children with disabilities is of great importance because a high rate can signal lack of early intervention. Early intervention is crucial to support the development and educational trajectory**
of children with disabilities. As such, this indicator should also be disaggregated by type of impairments/functional difficulties.

**DIMENSIONS 2, 3 AND 6.** Similar to the adjusted gender parity index discussed in Section 4, an adjusted disability parity index should also be calculated. This indicator aligns to SDG 4.5.1 on disparities in education. For example, the adjusted disability parity index of the total net enrolment rate for primary-age children, for example is the ratio of the total net enrolment rate for children with disabilities to the total net enrolment rate of children without disabilities. A value of one would thus mean that children with disabilities are enrolled in school at the same rate of peers without a disability, suggesting barriers to school enrolment are low.

**DIMENSIONS 4, 5 AND 7.** Disaggregation by disability is especially important in relationship to Dimensions 4, 5 and 7 because the lack of accessible schools, inclusive curricula, and teachers trained in inclusive education could all pose significant barriers to attending and staying in school.

All three risk of dropout calculation Methods outlined in Sections 3 and 4 can be applied to the risk analysis of children with disabilities, and where data allows by the type of impairments/functional difficulties.

In many countries, children with disabilities attend separate schools or segregated into specific classrooms within mainstream schools. Sometimes, these children are not considered to be in a particular grade, but only in a ‘special’ class. Therefore, the above indicators must also be disaggregated by type of class and school attended to track the rate of inclusion in mainstream schools and classrooms. Disaggregating by learning situation and type of disability may shed light on the situation of children with disabilities and particular barriers preventing children from attending school.

**TOWARD IMPROVED DATA ON CHILDREN WITH DISABILITIES**

While most countries can produce estimates of the number of persons with disabilities, the poor quality of data on children with disabilities that exists in many countries is an important area for improvement. These concerns include: the narrow definition and operationalization of disability in data collection tools, particularly to capture the domains of functioning for children at various ages; and non-inclusive data collection methods and analyses. For more information see UNICEF 2022 in Key Resources. In some countries, a significant number of children with disabilities are living in institutions that may be explicitly classified as institutions for children with disabilities or, for example, referred to as ‘orphans’. Administrative records should be kept on the number of children not attending school who are living in these circumstances. Studies of these populations can then be used to make estimates of how many of these children have disabilities.

As part of writing the OOSCI study, recommendations can be made on how to improve data systems to collect high-quality data on children with disabilities. These recommendations may stem from the review existing sources of survey and administrative data in order to identify gaps in information on children with disabilities and the environment, within the Data Inventory and Quality Assessment Tool and analysis. Inaccuracies may also be identified when undertaking the calculation of indicators and development of profiles of children in the 7DE.

A country cannot facilitate policy development and evaluation against the goals of the Convention on the Rights of Persons with Disabilities unless it has relevant, high-quality data. This includes data on the experiences of children with disabilities and on the education system’s structure and resources of the education system. Therefore, the EMIS typically used for monitoring the education system in general must be adapted to meet this objective.

In addition, UNICEF and the Washington Group on Disability Statistics, under the auspices of the United Nations Statistical Commission, have developed a survey module on child functioning that can be used to produce internationally comparable data. The module is aligned with the biopsychosocial model of disability and collects data on the difficulties children may have in several domains of functioning. A second module, to measure the barriers and facilitators to education for children with/without disabilities, is expected to be ready for data collection and use by countries in 2023. Together, the modules will provide a comprehensive overview of children with disabilities and their access to education. (See Key resources).
BARRIERS TO SCHOOL PARTICIPATION

As for all OOSCI reporting, data and analysis on disability should include the barriers that keep children with disabilities out of school and at risk of dropping out, drawing on the categories of the MoRES framework (see Section 5 on Barriers analysis). Examples of barriers faced by children with disabilities include:

POLITICAL, GOVERNANCE, CAPACITY AND FINANCIAL BOTTLENECKS:

- **LACK OF NATIONAL POLICIES AND LEGISLATION** on the right to education for children with disabilities.

- **LACK OF A NATIONAL STRATEGY** on inclusive education that includes quantifiable goals, for example, action plans that lay out timetables and responsible parties, and an adequate budget; structures to oversee and inform implementation, such as coordinating committees or councils; civil society engagement, including the involvement of organizations for people with disabilities.

- **LACK OF ADMINISTRATIVE CAPACITY**, including training on inclusive education for administrators at the school, district and national level, and provision of resources and personnel to implement the necessary changes to implement an inclusive education strategy.

DEMAND-SIDE BARRIERS:

- **SOCIOCULTURAL** – social norms that block participation; attitudes that lead to low expectations of children’s capacity to take part in activities and contribute to society; shame and intense stigma or discomfort associated with disability; actions that are seen as kindness but serve to separate people with disabilities from society; lack of awareness among teachers and school administrators, children, youth and parents, and society in general.

- **ECONOMIC** – general costs of education, such as fees, uniforms and textbooks; additional costs, primarily for transportation and including both monetary and the time of family members who are required to offer assistance; low expected economic return to education, based on the reality of barriers to employment and underestimation of what people with disabilities can achieve.

SUPPLY-SIDE BARRIERS:

- **INACCESSIBLE AND/OR UNSAFE FACILITIES** – lack of ramps for wheelchairs and doorways that are wide and can be opened easily or automatically; inaccessible toilets in school; poorly maintained sidewalks or unregulated traffic crossings; unsafe learning environments due to violence or bullying against learners with disabilities.

- **INACCESSIBLE MATERIALS** – lack of appropriate media for information such as software for vision enhancement when using computers, books in Braille or audiobooks; lack of sign language interpretation for children with hearing impairments.

- **LACK OF TRAINED TEACHERS AND SPECIALISTS** – access to specialists to offer teachers ongoing support, either within the school or through resource centres; lower expectations for learners with disabilities; children’s access to specialists in speech therapy, physical therapy and occupational therapy as well as teaching assistants.

- **LACK OF ASSISTIVE DEVICES** – for example modified furniture, devices for helping with gripping and manipulating small objects, canes, walkers, wheelchairs, prosthetics, Braille and audiobooks, computer screen readers, low-vision magnifiers and hearing aids.

QUALITY BARRIERS:

- **LACK OF TRAINING FOR TEACHERS AND SPECIALISTS** – related to preand in-service training for teachers on inclusive education, including attitudes towards children with disabilities as well as teaching techniques and classroom management; preand in-service training in inclusive education for specialists who work with children with disabilities (such as speech therapists and physical therapists.)

- **LACK OF FLEXIBLE CURRICULA** – related to curricula that are not adapted to individual children’s learning needs and need to be modified in terms of content, presentation, and how students’ learning is measured.
Chapter 11 in the *Education Sector Analysis Methodological Guidelines Volume 3* also provides useful guidelines on the analysis of profiles of children with disabilities and the barriers they face to access and succeed in mainstream education (See Key Resources). Information on these barriers may come from the data sources cited above, especially literature reviews and disabled persons’ organizations. As part of the barriers analysis, additional qualitative data collection may be useful to identify the most important barriers for children across the 7DE, or by type of disability, to stay in and succeed in school. The study’s recommendations may also develop proposals for filling the data gaps necessary to address the barriers found in the analysis though targeted policies and strategies.

The policy recommendations related to improving inclusion of children with disabilities may benefit from a discussion of cost effectiveness. UNICEF’s *Combatting the Costs of Exclusion* presents important considerations and arguments for an investment case to strengthen the inclusion of children with disabilities into early childhood education and inclusive primary and secondary. See Key Resources.

### LINKS AND KEY RESOURCES

**LINKS:**
- [https://data.unicef.org/topic/child-disability/overview/](https://data.unicef.org/topic/child-disability/overview/)

**RESOURCES:**
- UNICEF Inclusive EMIS Guide (Forthcoming, 2023)
- National studies on children with disabilities:
ANNEX F:
Ethnolinguistic groups in the 7DE: Profiles, barriers and policies

This annex is a resource for out-of-school children study teams who would like to conduct profiles, barriers and policy analyses for children from different ethnolinguistic populations.

0. INTRODUCTION

This diverse group of children, adolescents and youth is important to consider in an out-of-school children study as they often have different experiences with the education system, face specific barriers to completion and may require targeted policies to support them to succeed in school. Ethnolinguistic groups are understood to encompass a wide range of groups within a country who may have distinct linguistic, ethnic, cultural and/or religious characteristics. The profile of these groups will be particular to each country and regional context but can comprise many different types of populations. Ethnolinguistic groups may be indigenous or long-standing historical communities. Alternatively, they may be part of populations who more recently arrived from abroad or other parts of the country. There may be one major group in the country which needs specific study, or the country may have many different groups with different education trajectories. Though ethnolinguistic groups are typically understood as minority populations, they may in fact be the majority population-wise but not part of the most dominant group in society:

Most education systems are designed by and for the most dominant group in society. This group could be the ethnic majority in a particular country, but is, in some cases, a dominant minority that holds the reins of economic, social and political power (Kosonen and Benson, 2013). In either case, those who are not part of this group may well be socially excluded in certain contexts.

(UNESCO Institute for Statistics and UNICEF 2015, 70)

Therefore, though these groups may be disadvantaged educationally, they may in fact be part of the majority in terms of language, religion, and/or culture. The term ethnolinguistic group is used to broadly capture these populations who are often more likely to be excluded from the education system due to language or cultural barriers or discrimination.

1. DEVELOPING PROFILES OF CHILDREN FROM ETHNOLINGUISTIC MINORITY GROUPS

Profiles analysis as described in Section 4 can reveal whether children from different ethnolinguistic groups have different educational trajectories than other groups. However, there are often challenges in gaining the needed statistical data on ethnolinguistic groups for calculating the 7DE and conducting disaggregated analysis. These challenges include:

- **INVISIBLE IN DATA COLLECTION**: In some countries, data on ethnolinguistic minorities may not be captured in routine data collection systems due to government...
policy. They may be completely invisible to routine data collection and require primary data collection or qualitative research. In others, survey questions are not designed in a way to help distinguish and identify ethnolinguistic minorities. For example, the household head may be asked if they speak the language of instruction. This does not provide sufficient information as to whether there are language barriers for school-age children.

**INCONSISTENCY OR LOW RELIABILITY OF DATA:** In some countries, administrative data on ethnolinguistic groups may be self-reported, or it may be based on other criteria, such as language spoken at home. Furthermore, there may be inconsistencies in how this data is collected across data sources (administrative data systems and household surveys) making the comparison of 7DE estimates from different sources difficult. Therefore, the data inventory and quality assessment should document how these groups are defined and what data is collected.

**DISAGGREGATION:** In some cases, the population of children in this group may be small (or the sample collected by the survey), which creates difficulties in generating reliable estimates, especially when wanting to disaggregate this group by other characteristics (e.g., age groups, sex, classification of out-of-school children).

Where data allow, profiles analysis of children in ethnolinguistic groups can consider how other characteristics linked to education exclusion (e.g., sex, poverty) may compound educational disadvantage. For example, girls may be much more likely to be out of school if they are also part of a particular ethnolinguistic group, due to economic or cultural barriers. Children from particular ethnolinguistic groups may also be affected by emergencies (e.g., refugees or internally displaced persons). Therefore, where possible, it is recommended to further disaggregate data on these children by:

- **SEX:** Barriers related to gender may cause girls and boys from different ethnolinguistic groups to have different out-of-school children rates or levels of dropout risk.

- **LOCATION:** Ethnolinguistic populations may live in certain areas (urban/rural), towns or neighbourhoods (and therefore be geographically concentrated) or they may live across the country (more dispersed). This impacts the type of policy response needed.

- **HOUSEHOLD CHARACTERISTICS:** This includes household structure, but also household wealth. Households belonging to different ethnolinguistic groups are often more disadvantaged economically, but this is not always the case.

- **LANGUAGE:** Language may be a defining characteristic of this group. Whether children speak the language of school instruction, is an important consideration for profiles analysis.

- **LEARNING ACHIEVEMENT:** As low learning achievement is an important risk factor for dropping out, analysing the learning outcomes of children of ethnolinguistic minorities may reveal important differences with the rest of the population and provide evidence for the analysis of barriers.

The UNICEF MICS Roma Settlements surveys undertaken in countries across the Balkans region are an example of targeted data collection to overcome many of the challenges listed above (inconsistencies in collection and small sample sizes). See: UNICEF 2022. *Education Pathways in Roma Settlements.* [https://www.unicef.org/eca/media/19456/file](https://www.unicef.org/eca/media/19456/file)

2. **BARRIERS TO EDUCATION FOR CHILDREN FROM ETHNOLINGUISTIC GROUPS**

Children, adolescents and youth from different ethnolinguistic groups may face different barriers to education, or barriers faced may be more severe than for other groups.

Similar to the sources of evidence listed in Section 5.2, secondary data on barriers faced by these groups of children may come from government ministry thematic reports, evaluations from pilot projects, reports from NGOs that work with these groups, or academic research. Small-scale primary research may also be important to fill in gaps where these groups are invisible in reports, or not well understood. In such cases, interviews and focus group discussions with key stakeholders in education as well as members of the community itself can shed light on barriers to school. For primary research, it is important to follow UNICEF and local governmental ethical guidelines for human research.
When reviewing the available data on barriers to education faced by different ethnolinguistic groups, the study team must consider the diverse perspectives and experiences within these groups. That is, the team should avoid relying on a single view or representative viewpoint to understand each group’s experiences with the education system. It is important to collect information from multiple perspectives from within each group (including adolescents and youth), as well as from those outside the group who work with or support them. In some cases, this may require collecting primary data through interviews and focus groups.

As described in Section 5, the study team can classify the barriers faced by ethnolinguistic populations into the MoRES framework. The table below provides common examples of the barriers that children in these groups may face.

### 3. POLICIES AND STRATEGIES

Building on the barriers faced by children of different ethnolinguistic groups identified in the previous section, the policies analysis can consider how existing policies currently affect ethnolinguistic minority children. This can include both direct and indirect implications of policies on children from these groups. Direct examples include assessment systems that lead to systematic segregation of minority children into special schools or classes that do not provide viable future learning pathways. Another example is language of instruction policies that do not sufficiently support children who do not speak that language at home. Indirect examples may include policies that allow high indirect costs for school enrolment (uniforms, extracurricular activities), which can be a barrier for children from the poorest households who may be disproportionately from a given ethnolinguistic group.

Policy solutions can therefore be generated to address the specific barriers faced by different profiles of children from ethnolinguistic groups. At the same time, it is also important to consider how broader policy solutions recommended in the OOSCI study (e.g., teacher training in inclusive education) may affect or be relevant to particular ethnolinguistic groups.

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>EXAMPLE BARRIERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabling Environment</td>
<td>Social norms</td>
</tr>
<tr>
<td></td>
<td>Discrimination in society against ethnolinguistic group; political sensitivity; lack of political consensus or political will.</td>
</tr>
<tr>
<td>Legislation/Policy</td>
<td>Laws prohibit collection of data on ethnolinguistic minorities, remain invisible in response.</td>
</tr>
<tr>
<td></td>
<td>Lack of clear policy on mother tongue based-multilingual education.</td>
</tr>
<tr>
<td>Budget/expenditure</td>
<td>Lack of funding for language of instruction learning programmes in schools.</td>
</tr>
<tr>
<td>Management/coordiniation</td>
<td>Community groups for and representatives of ethnolinguistic minorities not part of education policy and implementation plans. Birth registration of children ethnolinguistic groups (such as nomadic communities).</td>
</tr>
<tr>
<td>Supply</td>
<td>Availability of essential commodities/inputs</td>
</tr>
<tr>
<td></td>
<td>Lack of textbooks and learning materials in minority language.</td>
</tr>
<tr>
<td>Access to adequately staffed services, facilities and information</td>
<td>Lack of teachers trained in inclusive education for ethnolinguistic minorities. Lack of teachers and teaching assistants from the minority groups themselves (for language, cultural mediation, role model). Inconsistent implementation of multilingual education policies.</td>
</tr>
<tr>
<td>Demand</td>
<td>Financial access</td>
</tr>
<tr>
<td></td>
<td>Many ethnolinguistic minorities may lack equal access to labour market and cannot afford direct and indirect school costs.</td>
</tr>
<tr>
<td>Social and cultural practices and beliefs</td>
<td>Girls are expected to marry at younger age, drop out of school before finishing upper secondary.</td>
</tr>
<tr>
<td>Continuity of Use</td>
<td>Traditional lifestyle. Nomadic practices or seasonal migration affects regular attendance in schools.</td>
</tr>
<tr>
<td>Quality</td>
<td>Quality</td>
</tr>
<tr>
<td></td>
<td>School quality in areas where ethnolinguistic minority children live have fewer trained teachers, resources, and lower overall quality of education. Bullying and harassment of minority students.</td>
</tr>
</tbody>
</table>
LINKS AND KEY RESOURCES

RESOURCES:

KEY RESOURCES:
- Section 3
- Data Inventory and Quality Assessment tool
- Section 4
- Section 6

ADDITIONAL RESOURCES:

DATA AND PROFILES ANALYSIS:
- https://www.unicef.org/malaysia/reports/out-school-children

BARRIERS ANALYSIS:

POLICY
- Implementing effective multi-lingual education (Table 3.1 in UNESCO Institute for Statistics and UNICEF 2015)

POLICY AND PROGRAMME EXAMPLES FOR ETHNIC AND LINGUISTIC MINORITIES:
ANNEX G:
Example Stata code to calculate out-of-school rates (D1236) and the classification of out-of-school children (D236)

DIMENSION 1:
The following is example Stata code to calculate the number of out-of-school children aged one year before primary entrance age (Dimension 1), using the Sierra Leone MICS 2017.

* Missing values are excluded from calculations.
* Required files: Sierra Leone 2017 MICS household members dataset (hl.dta).

```stata
clear
set more off
use "hl.dta"
* ====================================
* Age variable: Keep children 1 year before official primary school age, using UIS database country info on official entrance age
keep if schage==5
/* Note: In the case of MICS data, a variable for school age, where age is calculated based on the child date of birth is already available “schage”. However, in the case of DHS, the variable for age “hv105” must be adjusted. There are two options of adjustment:
Option 1: The standard UIS approach is to adjust ages of all children if survey was conducted more than 6 months after the beginning of the school year. For this, use the command: replace age = age-1
Option 2: The standard UNICEF approach is to adjust only the age of individual children whose interview took place over six months after the beginning of the school year. In this case, the variable “month of the interview” (hv006) should be used. For example, adjusting only for interviews that happened between February and August: replace age = age-1 if HV006>=2 & HV006<=8 */
* ====================================
* Weight variable
* Household weight (in DHS, hhweight must be created: gen hhweight = HV005/1000000)
* ==============================================================
* Schooling variable
*Currently attending ECE/primary
gen oos=1 if ED9==2 //for DHS, use: gen oos=1 if HV121==0
replace oos=0 if ED9==1 & (ED10A==0 | ED10A==1) //for DHS, use: replace oos=0 if HV121==2 & (HV122==0 | HV122==1)
lab var oos "Out of school"
lab def oos 0 "In school" 1 "Out of school"
lab val oos oos

tab oos [aw=hhweight]
* End of do-file
```
Example Stata code to generate data for the out-of-school children rates and classification of out-of-school children (DE236)
The following is an example Stata code to calculate the classification of out-of-school children in Dimensions 2, 3 and 6 using the Sierra Leone MICS 2017. This is discussed in Section 4.1, and 4.1.3.

* Stata do-file to create out-of-school typology data, Sierra Leone 2017 MICS.
* Missing values are excluded from calculations.
* Required files: Sierra Leone 2017 MICS HH members.dta”.

```
clear
set more off

* Load data
cd “[Enter filepath here]”
use hl,clear

* Country information
local country = “Sierra Leone”
local year = “2017”
local survey = “MICS”

* Age variable: Keep children aged 6 to 18 years
keep if schage>=6 & schage<=18
ren schage age

/* Note: In the case of MICS data, a variable for school age, where age is calculated based on the child date of birth is already available “schage”. However, in the case of DHS, the variable for age “hv015” must be adjusted.

There are two options of adjustment:
Option 1: The standard UIS approach is to adjust ages of all children if survey was conducted more than 6 months after the beginning of the school year. For this, use the command: replace age = age-1
Option 2: The standard UNICEF approach is to adjust only the age of individual children whose interview took place over six months after the beginning of the school year. In this case, the variable “month of the interview” (hv006) should be used. For example, adjusting only for interviews that happened between February and August: replace age = age-1 if hv006>=2 & hv006<=8 */

* Weight variable
* Household weight (in DHS, hhweight must be created: gen hhweight = hv005/1000000)
* Schooling variables
* Ever attended school (in DHS use variables hv106 and hv121)
gen schlever=1 if ED4==1
replace schlever=0 if ED4==2
lab var schlever “Ever attended school”
lab def schlever 0 “Never school” 1 “Attended school”
lab val schlever schlever

* Highest level attended (in DHS use hv106)
gen highlevl = ED5A + 1
replace highlevl = 0 if schlever==0
replace highlevl = 5 if highlevl==6
replace highlevl = . if highlevl>=8
lab var highlevl “Highest level attended”
lab def highlevl 0 “None” 1 “Preschool” 2 “Primary” 3 “Lower secondary” 4 “Upper secondary” 5 “Higher”
lab val highlevl highlevl

* School attendance in current school year (in DHS use hv121)
gen school=1 if ED9==1
replace school = 0 if ED9==2|ED4==2
lab var school “School attendance”
lab def school 0 “Not in school” 1 “In school”
lab val school school

* Level of education attended in current school year (in DHS use hv122)
gen edlevel = ED10A+1
replace edlevel = 0 if school==0
replace edlevel = 5 if edlevel==6
replace edlevel = . if edlevel>=8
lab var edlevel “Current level attended”
lab def edlevel 0 “None” 1 “Preschool” 2 “Primary” 3 “Lower secondary” 4 “Upper secondary” 5 “Higher”
lab val edlevel edlevel

* Grade attended in current school year (in DHS use hv123)
gen edgrade = ED10B
lab var edgrade “Current grade attended”
lab def edgrade 0 “Not in school” 1 “In school”

* School attendance in previous school year (in DHS use hv125)
gen schlly=1 if ED15==1
replace schlly = 0 if ED15==2|schlever==0
lab var schlly “School attendance last year”
lab def schlly 0 “Not in school” 1 “In school”
lab val schlly schlly

* Drop cases with missing data
```
drop if school==. | schlever==. | highlevl==. | schlly==. | edlevel==. 

* = ===========================================================================*

* Variables for typology of out-of-school children
* Variable to identify children out of school
gen oos = school==0
lab var oos “Out of school”
lab def oos 0 “In school” 1 “Out of school”
lab val oos oos

* Variable to identify children never in school
gen neverschl = 1 if schlever==0
replace neverschl = 0 if schlever==1

* Dropped out, after having attended primary or higher
gen dropped = (oos==1 & highlevl>=2 & highlevl<=5)
lab var dropped “Dropped out”
lab def dropped 0 “Didn’t drop out” 1 “Dropped out”
lab val dropped dropped

* Entered school (not in school last year and in first grade of primary this year)
* Identify children who entered grade 1 of primary school
gen entered = schlly==0 & edlevel==2 & edgrade==1
lab var entered “Entered school”
lab def entered 0 “Did not enter” 1 “Entered”
lab val entered entered

* Sum of values must be 1
egen check1 = rowtotal(school oos)
gen check2 = school + neverschl + dropped
format check1 check2 %9.3f
forval i = 1/2 {
    tab check`i’, m
}
tabstat check1 check2, by(age)

* Create variables for single year of age
* Mean values per age
* Note: here you can add variables for disaggregation together with age
collapse (mean) school oos neverschl dropped entered [aw=hhweight], by(age)

* Sum of values must be 1
gen check1 = school + oos
gen check2 = school + neverschl + dropped
format check1 check2 %9.3f
forval i = 1/2 {
    tab check`i’, m
}
tabstat check1 check2, by(age) format
* Drop data check variables
drop check*

* Sum of values must be 1
egen check1 = rowtotal(school oos)
egen check2 = rowtotal(school neverschl dropped)
forval i = 1/2 {
    tab check`i’, m
}

* Save data
order country year survey age obs oos dropped neverschl entered
sort age
compress
save “`country’ `year’ `survey’ OOS typology.dta”, replace

* Transpose data for typology calculation matrix
drop country year survey obs oos dropped neverschl entered
xpose, clear varname
ren _varname group
order group

* Save as comma-separated text file, for import into Excel
outsheet using “`country’ `year’ `survey’ OOS typology.csv”, nonames replace comma

* End of do-file
ANNEX H:

Example Stata code to calculate risk of dropout (DE4)

The following is an example of Stata code to estimate the rate of children at risk of dropping out in Dimension 4, which is discussed in Section 4.1.4.

* Example stata do-file to calculate Dimension 4 of “in primary but at risk”. Similar structure for the calculation of Dimensions 5 & 7.
* Required files: Sierra Leone 2017 MICS household members dataset (hl.dta)

set more off

* Load data
cd “folder path”
usepss hl.sav, clear

* Generate variables for “number in grade n this year”. In Sierra Leone, primary education lasts for 6 years.
gen z1t = ED10B == 1 if ED10A == 1
gen z2t = ED10B == 2 if ED10A == 1
gen z3t = ED10B == 3 if ED10A == 1
gen z4t = ED10B == 4 if ED10A == 1
gen z5t = ED10B == 5 if ED10A == 1
gen z6t = ED10B == 6 if ED10A == 1

* Identify those in grade n last year who are not in school this year, and those dropped out during last grade

gen to2 = .
replace to2 = 1 if (ED16A == 1 & ED16B == 1 & ED10A == 1 & ED10B == 2)
replace to2 = 0 if (ED16A == 1 & ED16B == 1 & ED10A == 1 & ED16B == 2 & ED5B==1 & ED9 != 1)
gen to3 = .
replace to3 = 1 if (ED16A == 1 & ED16B == 2 & ED10A == 1 & ED10B == 3)
replace to3 = 0 if (ED16A == 1 & ED16B == 2 & ED10A == 1 & ED16B == 3 & ED5B==2 & ED9 != 1)
gen to4 = .
replace to4 = 1 if (ED16A == 1 & ED16B == 3 & ED10A == 1 & ED10B == 4)
replace to4 = 0 if (ED16A == 1 & ED16B == 3 & ED10A == 1 & ED16B == 4 & ED5B==3 & ED9 != 1)
gen to5 = .
replace to5 = 1 if (ED16A == 1 & ED16B == 4 & ED10A == 1 & ED10B == 5)
replace to5 = 0 if (ED16A == 1 & ED16B == 4 & ED10A == 1 & ED16B == 5 & ED5B==4 & ED9 != 1)
gen to6 = .
replace to6 = 1 if (ED16A == 1 & ED16B == 5 & ED10A == 1 & ED10B == 6)
replace to6 = 0 if (ED16A == 1 & ED16B == 5 & ED5B==5 & ED9 != 1)
gen complete = .
replace complete = 1 if (ED16A == 1 & ED16B == 6 & ED6 == 1)
replace complete = 0 if (ED16A == 1 & ED16B == 6 & ED6 == 2 & ED9 != 1)

* Under the new definition of DE4, also include those at risk of not continuing to lower secondary school.

gen to6 = .
replace to6 = 1 if (ED16A == 1 & ED16B == 5 & ED10A == 1 & ED10B == 6 & ED6 == 1)
replace to6 = 0 if (ED16A == 1 & ED16B == 5 & ED5B==5 & ED9 != 1)

gen complete = .
replace complete = 1 if (ED16A == 1 & ED16B == 6 & ED6 == 1)
replace complete = 0 if (ED16A == 1 & ED16B == 6 & ED6 == 2 & ED9 != 1)

* The current school year’s situation of overage.

gen overage = .
replace overage = 0 if ED10A == 1
replace overage = 1 if (schage-5-ED10B >= 2 & overage >= 0)
la var overage "At least 2 years overage for their grade"
ldef overage 0 "Not overage" 1 "Overage"
tab1 HL4 HH7 HH6 melevel windex5 overage
* Format a summary table ready for the calculation.
sum to2-tolsec z1t-z6t overage
preserve
collapse (mean) to2-tolsec z1t-z6t overage[aw=hhweight]
generate Category = "TOTAL"
save DE4.dta, replace
restore
preserve
collapse (mean) to2-tolsec z1t-z6t overage[aw=hhweight], by(HL4)
generate Category = "" replace Category = "Male" if HL4 == 1 replace Category = "Female" if HL4 == 2 drop HL4
save temp1.dta, replace
restore
preserve
collapse (mean) to2-tolsec z1t-z6t overage[aw=hhweight], by(HH7)
generate Category = "" replace Category = "East" if HH7 == 1 replace Category = "North" if HH7 == 2 replace Category = "South" if HH7 == 3 replace Category = "West" if HH7 == 4 drop HH7
save temp2.dta, replace
restore
preserve
collapse (mean) to2-tolsec z1t-z6t overage[aw=hhweight], by(HH6)
generate Category = "" replace Category = "Urban" if HH6 == 1 replace Category = "Rural" if HH6 == 2 drop HH6
save temp3.dta, replace
restore
preserve
collapse (mean) to2-tolsec z1t-z6t overage[aw=hhweight], by(melevel)
drop if melevel==. | melevel==9
generate Category = "" replace Category = "Pre-primary or none" if melevel == 0 replace Category = "Primary" if melevel == 1 replace Category = "Lower secondary" if melevel == 2 replace Category = "Upper secondary and beyond" if melevel == 3 drop melevel
save temp4.dta, replace
restore
preserve
collapse (mean) to2-tolsec z1t-z6t overage[aw=hhweight], by(windex5)
generate Category = "" replace Category = "Poorest" if windex5 == 1 replace Category = "Second" if windex5 == 2 replace Category = "Middle" if windex5 == 3 replace Category = "Fourth" if windex5 == 4 replace Category = "Richest" if windex5 == 5 drop windex5
save temp5.dta, replace
restore
use DE4, clear append using temp2 append using temp3 append using temp4 append using temp5
* Generate the variables on “in primary but at risk of dropout” (DE4) and its two sub-dimensions of “at risk of dropout before primary completion” and “at risk of dropping out at primary completion”.
gen risk= 100* (1(z1t*to2*to3*to4*to5*to6*complete*tolsec + z2t*to3*to4*to5*to6*complete*tolsec + z3t*to4*to5*to6*complete*tolsec + z4t*to5*to6*complete*tolsec + z5t*to6*complete*tolsec + z6t*complete*tolsec))
gen dropbefore = 100* (1(z1t*to2*to3*to4*to5*t o6*complete + z2t*to3*to4*to5*to6*complete + z3t*to4*to5*to6*complete + z4t*to5*to6*complete + z5t*to6*complete + z6t*complete))
gen discontinue = risk-dropbefore
lab var risk “At risk of dropout (total)” lab var dropbefore “At risk of dropout before primary completion” lab var discontinue “At risk of dropping out at primary completion” replace overage=overage*100 order Category overage=overage*100 save, replace
erase temp1.dta erase temp2.dta erase temp3.dta erase temp4.dta erase temp5.dta
ANNEX I:
Example Stata code for cumulative risk analysis

The following is example Stata code to calculate the cumulative risk indicators and create the CRA figure, as discussed in Section 4.3. It uses the Sierra Leone MICS 2017 data.

```stata
cd "folder path"
use hl,clear
gen total=1
lab def tot 1 "Total"
lab val total tot
gen age_school=. /*school level children should be according to their age*/
replace age_school=1 if (schage>=6&schage<=11)
replace age_school=2 if (schage>=12&schage<=14)
replace age_school=3 if (schage>=15&schage<=18)
*Create variables
gen girl=1 if HL4==2
replace girl=0 if HL4==1
gen poorest=0
replace poorest=1 if windex5==1
gen rural=1 if HH6==2
replace rural=0 if HH6==1
gen m_non=1 if melevel==0
replace m_non=0 if melevel>0&melevel<=3
*Create out-of-school children
gen oos=0
replace oos=1 if ED9==2|ED4==2
*Regressions
*Keep only children of a given education level foreach num in 1 2 3 {
  preserve
  keep if age_school==`num'
  logit oos i.girl i.poorest i.rural i.m_non
  margins girl#poorest#rural#m_non
  restore
}
```

*Create variables
gen girl=1 if HL4==2
replace girl=0 if HL4==1
gen poorest=0
replace poorest=1 if windex5==1
gen rural=1 if HH6==2
replace rural=0 if HH6==1
gen m_non=1 if melevel==0
replace m_non=0 if melevel>0&melevel<=3
*Create out-of-school children
gen oos=0
replace oos=1 if ED9==2|ED4==2
*Regressions
*Keep only children of a given education level foreach num in 1 2 3 {
  preserve
  keep if age_school==`num'
  logit oos i.girl i.poorest i.rural i.m_non
  margins girl#poorest#rural#m_non
  restore
}
ANNEX J.

Government involvement letter templates

Two templates for letters to government from UNICEF offices to invite them to conduct an OOSCI study are provided. Template 1 is intended to be sent by regional OOSCI partners (as part of a wider regional initiative). Template 2 is useful for national OOSCI partners. More information can be found in the OOSCI Operational Manual (Section 2.1).

**TEMPLATE 1: INVITATION LETTER FROM UNICEF AND REGIONAL OOSCI PARTNERS TO NATIONAL GOVERNMENT TO JOIN OTHER COUNTRIES IN THE REGION DEVELOPING OOSCI STUDIES**

Dear ____________________ ,

I am writing to you on behalf of the United Nations Children’s Fund (UNICEF) Regional Office. As part of our ongoing efforts to support governments to reach all children with 12 years of quality education UNICEF and partners launched a global Out-of-School Children Initiative (OOSCI) in 2010. The aim of this initiative is to improve the analysis around the factors affecting the exclusion of these children, leading to more targeted and effective policies and programmatic approaches. Thus far, countries in the region have carried out studies and we are now identifying those countries that will participate in the future.

The studies consist of three main components: a quantitative analysis of who and where the out-of-school children are; a systems analysis of the related barriers; and a policy and strategy analysis. Further details are provided in the attached documentation and can also be obtained by contacting <...>, copied to <...>. Further countries selected for support will receive technical and financial support from the relevant UNICEF Country Office, with complementary analysis performed by the <Include other technical partners>. Experience has demonstrated the crucial importance of the Ministry of Education support for, and involvement in, these studies from inception to completion, dissemination and utilization. <Insert benefits to ministry involvement in OOSCI>.

In selecting the countries, consideration will be given to the degree of planned government involvement; financial, technical, procedural, or a combination of all three. Consideration will also be given to the strategic timing of the study. For example, are any education policies, plans or laws due to be reviewed or updated in the near future? Are out-of-school children a current priority area for the ministry of education?

We would be happy to consider any requests for support from governments in the region that detail why they would like to do a study on out-of-school children and what their commitments are in terms of supporting the study and the utilization of its results. If you wish to discuss it further before formally declaring an interest, please do not hesitate to contact <...> at the UNICEF Regional Office (details given above).

Countries that are interested in conducting such studies will be asked to provide more specific information and send a formal declaration of interest.

Sincerely,

<UNICEF and other representatives (as applicable)>

Attached: OOSCI Briefing Paper <regional>; Global OOSCI introduction slide deck; OOSCI global report executive summary.

---

56 This template is based on the letter to the government from the UNICEF Eastern and Southern Africa Regional Office and UIS.

57 See the allinschool.org for OOSCI-related resources and materials.
TEMPLATE 2: INVITATION LETTER TO NATIONAL GOVERNMENT FROM UNICEF AND NATIONAL OOSCI PARTNERS TO UNDERTAKE AN OOSCI STUDY

Dear ________________________ ________________________________________________________ ,

I am writing to you on behalf of the United Nations Children’s Fund (UNICEF) <UNICEF Country Office>. As part of our ongoing efforts to support governments to reach all children with 12 years of quality education UNICEF and partners launched a global Out-of-School Children Initiative (OOSCI) in 2010. The aim of this initiative is to improve the analysis around the factors affecting the exclusion of these children, leading to more targeted and effective policies and programmatic approaches. Thus far, <> countries in the region: <.., .., ..> and <> globally, have carried out studies. We are writing to enquire as to whether <country> would like to participate in the future. <insert details on past national OOSCI studies, if applicable, with impact and demonstrated need for further analysis>.

The studies consist of three main components: a quantitative analysis of who and where the out-of-school children are; a systems analysis of the related barriers; and a policy and strategy analysis. Further details are provided in the attached documentation and can also be obtained by contacting <...>, copied to <...>. Countries joining the initiative will receive technical and financial support from the UNICEF Country Office, <UNICEF Regional Office> and <other OOSCI partners as applicable>, with complementary analysis performed by the <Include other technical partners>. Experience has demonstrated the crucial importance of the Ministry of Education support for, and involvement in, these studies from inception to completion, dissemination and utilization. <Insert benefits to ministry involvement in OOSCI>

In selecting the countries, consideration will be given to the degree of planned government involvement; financial, technical, procedural, or a combination of all three. Consideration will also be given to the strategic timing of the study. For example, are any education policies, plans or laws due to be reviewed or updated in the near future? Are out-of-school children a current priority area for the ministry of education?

We would be happy to consider any requests for support from <your ministry> that detail why it would like to do a study on out-of-school children and what its commitments are in terms of supporting the study and the utilization of its results. If you wish to discuss it further before formally declaring an interest, please do not hesitate to contact <...> at the <UNICEF Country Office> (details given above).

Countries that are interested in conducting such studies will be asked to provide more specific information and send a formal declaration of interest.

Sincerely,

<UNICEF and other OOSCI partner representatives (as applicable)>


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58 See the allinschool.org for OOSCI-related resources and materials
ANNEX K.

Terms of Reference Templates: Steering Committee, Technical Team and consultants

This resource provides three templates for terms of reference for OOSCI stakeholders: the national steering committee, the technical team, and individual consultants Template 1 is for a national steering committee, which are described in more detail in the OOSCI Operational Manual Section 2.2.2. Template 2 is for the national technical team, which is explained in Section 2.2.3. Lastly, Template 3 provides a basis for developing a terms of reference to engage OOSCI consultants to support the report development (See Section 2.2.3).

TEMPLATE 1: TERMS OF REFERENCE FOR THE OOSCI NATIONAL STEERING COMMITTEE

TERMS OF REFERENCE

<country> Out-of-School Children Initiative

Steering Committee

BACKGROUND

In 2010, UNICEF and partners launched a global Out-of-School Children Initiative (OOSCI). The aim of this initiative is to improve the analysis around the factors affecting the exclusion of children from education, leading to more targeted and effective policies and programmatic approaches. Those children who are still out of school often face deep-rooted structural inequalities linked to income poverty: exposure to child labour, conflict and natural disasters, location, sex, HIV and AIDS, disability, ethnicity, language and religion. These are major barriers to education that place many countries at risk of not achieving primary and secondary education.

Many countries face challenges in accurately identifying children who are out of school, measuring the scope and complexity of exclusion, its causes, and integrating this evidence in policy and planning. Existing data can be used better by strengthening both data collection methods and analytical resources. Participation in the Global Initiative on Out-of-school Children will provide a knowledge base that can support existing interventions and new context-appropriate policies and strategies for accelerating enrolment and sustaining attendance for the most excluded and marginalized children.

PURPOSE

- Lead and monitor the overall activities related to the OOSCI and provide political and technical support to the national technical team;
- Supervise the national technical team that will write the OOSCI national study;
- Facilitate the successful and timely production of the OOSCI national report and government approval of final report; and
- Support the launch of the OOSCI report and its use in education sector decision-making.

MAIN FUNCTIONS

The Steering Committee will perform the following functions with the technical support of the regional team:

- Recommend and facilitate access to databases and data sources, key documents and research to be used in the into the national report;
Convene periodic meetings with the national technical team to develop and outline the study and review progress of the national study, and provide guidance on preliminary findings;

Participate in national planned activities (technical workshops or other events) relevant for the successful production of the national report, and for the implementation of its findings;

Provide high-level review of the national report, and monitoring efforts;

Provide input for development, design and finalization of the OOSCI national report, including refinement of the results of the data analysis;

Ensure that a national action plan is in place to capture the results of OOSCI national report;

Ensure systematic dissemination and effective utilization of the findings from the national report to inform national policies and strengthen strategies targeting out-of-school children; and

Support and coordinate with relevant partners the national capacity development activities related to improvement of the data quality, including harmonization and streamlining of relevant data sources.

**MEMBERS OF THE STEERING COMMITTEE**

- **Chairperson:** Permanent Secretary or equivalent level of senior ministry official from Ministry of Education.

- **Member-Secretary:** Head of the planning unit at the Ministry of Education.

Other members may include:

- Officer-in-charge of education statistics (Ministry of Education);

- The appropriate officers from the relevant departments at the Ministry of Education, such as pre-school department, primary education department, inclusive education department, and non-formal education department;

- Representatives from educational research institutions concerning education policy and analysis;

- Representative from national statistical office, or agency responsible for census and household surveys;

- Representatives from the line ministry/department responsible for national vital registration and local administration;

- Representative from the relevant line ministries (such as health and labour), who collect data and develop policies to support vulnerable children;

- Representatives of youth organizations, particularly those who work with out-of-school and vulnerable youth;

- Representative from key national and international NGOs that are involved in activities concerned with out-of-school children;

- Representative from the Teachers’ Union and teachers who work directly with vulnerable communities;

- Representative of school leaders’ organizations and school leaders who work directly with vulnerable communities;

- Representative from local development partners or/and local education group (LEG);

- Representative from UNICEF; and

- Representative from UNESCO.

**TIMELINE**

The Steering Committee will meet on an ad hoc basis, guided by the study development milestones, described above. The anticipated period for steering committee engagement is <month/year> until <month/year>.
TERMS OF REFERENCE FOR THE OOSCI TECHNICAL TEAM

TERMS OF REFERENCE

<country> Out-of-School Children Initiative

BACKGROUND

In 2010, UNICEF and partners launched a global Out-of-School Children Initiative (OOSCI). The aim of this initiative is to improve the analysis around the factors affecting the exclusion of children from education, leading to more targeted and effective policies and programmatic approaches. Those children who are still out of school often face deep rooted structural inequalities linked to income poverty: exposure to child labour, conflict and natural disasters, location, sex, HIV and AIDS, disability, ethnicity, language and religion. These are major barriers to education that place many countries at risk of not achieving universal primary or basic education.

Many countries face challenges in accurately identifying children who are out of school, measuring the scope and complexity of exclusion, its causes, and integrating this evidence in policy and planning. Existing data can be used better by strengthening both data collection methods and analytical resources. Participation in the Global Initiative on Out-of-school Children will provide a knowledge base that can support existing interventions and new context-appropriate policies and strategies for accelerating enrolment and sustaining attendance for the most excluded and marginalized children.

PURPOSE

To conduct quantitative and qualitative analysis on the profiles, barriers and policies for out-of-school children and those at risk of dropping out, and produce a national report which follows the methodology and structure outlined in the OOSCI Operational Manual. The technical team will work in consultation with the OOSCI Steering Committee, and in cooperation with consultants <and the regional OOSCI team>, which is comprised of staff from UNICEF <Insert relevant regional and country offices>, <insert other regional, national or technical partners> and external consultants.

The technical team will report at key milestones in the development report to the national steering committee set up to guide and approve the national report.

TERMS OF REFERENCE

The technical team will be responsible for the following:

- Develop the OOSCI study design, conduct data review or desk reviews as needed, and develop a detailed plan for analysis consistent with the methodology in the OOSCI Operational Manual, in collaboration with consultants and the regional team;
- Undertake data inventory and quality assessment, using tools provided by the regional team, to identify main data sources for the OOSCI analysis;
- Acquire approval to use the data sources for analysis and dissemination of the findings in the OOSCI national report, in consultation with the Steering Committee;
- Participate in the national technical training workshop, which will be facilitated by the <global/regional/national> OOSCI team;
- Ensure the reliability and accuracy of the statistical data analysis;
- Develop a ToR for consultant to support/conduct the analysis of statistical data on out-of-school children, and on the relevant barriers and policies (templates available);
- Collect relevant policy documents and study reports to feed into the analysis on barriers and policies, in collaboration with the regional team;
- Coordinate the process of qualitative analysis and the integration of the findings in the national report in collaboration with the regional team;
- Participate in OOSCI study process workshops (as described in the Operational Manual Section 2.4). Engage with other relevant stakeholders (government and development partners) to share the methodology and the preliminary findings from the analysis— as well as the draft report;
- Conduct presentations to the national steering committee to update on progress and preliminary findings of the national report;
- Produce the national report with technical assistance from the regional team;
- Coordinate the endorsement of the final draft of the national reports through formal and informal advocacy activities, including but not limited to the national steering committee.
MEMBERS OF THE TECHNICAL TEAM

The members of the technical team should include experts on education data and statistics, barriers to education and policy analysis. It is recommended that the team comprise:

- Two experts on statistics: One expert on the country’s Education Management Information System from the Ministry of Education (administrative data), and one expert on national household surveys or census from the National Statistical Office;

- One or two experts on qualitative research, including review of existing research and ethical data collection (such as conducting interviews and focus groups with children, youth and adults);

- One or two experts on national Education policy from the Ministry of Education or other specialized agency/or centres;

- A UNICEF focal person (possibility to hire national expert to act as facilitator and provide ongoing in country support); and

- National and/or external consultants to be hired by the technical team (see template).

TIMELINE

The Technical Team will meet <bi-weekly/monthly> based on the study development milestones described above. The anticipated period for steering committee engagement is <month/year> until <month/year>.
TEMPLATE 3: TERMS OF REFERENCE FOR THE OOSCI INDIVIDUAL
CONSULTANCY

TERMS OF REFERENCE

<country> Out-of-School Children Initiative

Individual consultancy

Technical assistance to support analysis of Out-of-school Children in <insert country>

Closing date: <Date>

BACKGROUND

In 2010 UNICEF and UIS launched the global initiative on Out-of-school Children (OOSCI) to develop profiles of these excluded children, link quantitative data with socio-cultural barriers and identify policies to address patterns of exclusion. The initiative has country, regional and global dimensions and aims to address research and capacity development.

Many countries face challenges in accurately identifying children who are out of school, measuring the scope and complexity of exclusion, its causes, and integrating this evidence in policy and planning. Existing data can be used better by strengthening both data collection methods and analytical resources. Participation in the Global Initiative on Out-of-school Children will provide a knowledge base that can support existing interventions and new context-appropriate policies and strategies for accelerating enrolment and sustaining attendance for the most excluded and marginalized children.

So far, more than 80 national and regional OOSCI studies have been developed, including <number> in <insert region>.

<Insert rationale for proposed OOSCI study – for example: government interest, policy relevance, data gaps to be filled, and updating of out-of-school children situation with new OOSCI methodology>.

The specific objectives of the OOSCI study are the following:

- Develop specific profiles of out-of-school children and children at risk of dropping out, according to the OOSCI Operational Manual (2023) and the seven dimensions of exclusion (7DE); these profiles should capture the complexity of the problem in terms of magnitude, inequalities and multiple disparities around the 7DE;

- To analyse the barriers to education that children face and to clarify the dynamic and causal processes related to the 7DE;

- To analyse existing policies and interventions and whether they are addressing the complex needs of out-of-school children and children at risk of dropping out;

- Based on the analysis, formulate recommendations on how to address the issues linked to exclusion from education (out-of-school children) and exclusion within education (children who face a high risk of dropping out), taking into account the national context.

OBJECTIVE

The overall objective of this consultancy is to support the development of <country>’s study within the Global Out-of-School Children Initiative (OOSCI). This requires strong technical expertise in data and policy analysis with regards to out-of-school children, as well as project implementation skills to ensure completion of the analysis.

Project implementation support: In coordination with the OOSCI study focal person, ensure timely and effective project implementation, facilitation of communication and ongoing sharing of results among the involved partners (including a national steering committee), overall quality assurance and capacity building among the technical team.

Technical expertise: Lead the completion of the indicator calculation and the statistical profiles analysis of the children in the seven dimensions of exclusion, identify key research and policy documents and other relevant sources to analyse the profiles and their related barriers to education, analyse policy gaps and develop recommendations for strengthening institutional capacities and targeted interventions for children excluded from education, and develop a draft country report.

The OOSCI study is led by the Government of <insert country>, which has set up a Steering Committee and a Technical Team to coordinate the study. The required support described this ToR will be to support the technical team, which is responsible for developing the national study.
ROLES AND RESPONSIBILITIES OF THE CONSULTANT

- Participate in a national training workshop with the technical team;
- Ensure timely and effective project implementation, starting with the development of a work plan with the technical team;
- Conduct statistical and policy analysis based on the OOSCI Operational Manual, in collaboration with the technical team. 
  <Insert modified responsibilities:>
  ✤ Calculate the key indicators of the 7DE (using the 7DE calculation tool) and undertake the disaggregated data analysis to develop profiles of out-of-school children and children at risk of dropping out;
  ✤ Support the analysis of the barriers to education faced by the identified profiles of excluded children through a desk review <add any expected primary research>;
  ✤ Identify key policy documents and other relevant sources for the analysis of policies;
  ✤ Ensure completion of analysis of policy gaps and development of recommendations.
- Capacity building among the technical team: Explain and validate the analytical process and findings from data and the policy analysis with members of the technical team and communicate and share results among partners throughout the study’s development.
- Communication and advocacy: Contribute to development of communication and advocacy strategies based on the research note and action plan, and their timely implementation. Prepare a PowerPoint presentation on findings, lessons learnt from the process and recommendations for interventions and policies.

DURATION AND ESTIMATED TIMELINE (See Operational Manual Section 2.4 for a sample timeline).

<Insert dates>

PROPOSED SCHEDULE FOR DELIVERABLES

<Enter deliverables, target delivery dates and estimated amount to be paid>

WORKING CONDITIONS

The consultant will work in close coordination with the national technical team led by the government, in partnership with UNICEF and <other OOSCI partners>. The consultant is expected to be in country throughout the consultancy and will be required to be in periodic contact (remotely or in person) with the technical team.

QUALIFICATIONS

- A Masters or advanced degree in education, social science, public policy, management or related field;
- Minimum five years of work experience in conducting data production, data review, analysis and reporting and on equity issues in children’s education, preferably in <Insert region>;
- Knowledge of child’s rights approaches;
- Ability to work with governments and facilitate among various stakeholders;
- Expert knowledge and experience in SPSS, STATA or similar software;
- Expert knowledge and experience in Microsoft Excel;
- Excellent analytical capacity of both quantitative and qualitative data;
- Effective communication skills, both orally and in writing, in English;
- Sensitivity to diverse opinions and difficulties arising from differing social and cultural perceptions;
- Work experience with the UN preferred; and
- Knowledge of / fluency in the local language an asset.

SUPERVISOR

The consultant will work under the direct supervision of <insert name>

APPLICATIONS

<Insert process to submit application>
ANNEX L:

Process Workshop Agenda Templates

WORKSHOP #1: LAUNCH OF STUDY PROCESS

Note: This workshop focuses on OOSCI concepts, sharing the purpose and intent of the study, discussing the methodology for indicator computation and profile elaboration, reviewing existing data, and developing a research plan to fill gaps. This would be the opportunity for the steering committee to form the technical team, adapt the OOSCI theory of change to the local context, and underline how it expects the study to contribute to a significant and sustainable reduction in out-of-school children.

Background: [Insert background here]

Objectives: [Modify as needed below]

1. Introduce education stakeholders to the Out-of-School Children Initiative and methodology;
2. Introduce the OOSCI Theory of Change, Study Process;
3. Establish the OOSCI Study steering committee and identify technical team members;
4. Agree on the objectives of the OOSCI study;
5. Overview of data sources and outline of research plan to fill gaps; and
6. Agree on a timeline of next steps to begin OOSCI study.

Agenda Template

<table>
<thead>
<tr>
<th>TIME</th>
<th>AGENDA ITEM AND PRESENTER</th>
<th>RELEVANT SECTION IN OPERATIONAL MANUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SESSION 1</td>
<td><strong>OPENING</strong></td>
<td></td>
</tr>
<tr>
<td>Opening Remarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting Objectives and Review of the agenda</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction of participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SESSION 2</td>
<td><strong>INTRODUCTION TO THE OUT-OF-SCHOOL CHILDREN INITIATIVE, GLOBAL AND REGIONAL ACTIVITIES</strong></td>
<td>allinschool.org Introduction</td>
</tr>
<tr>
<td>Out-of-school children and children at risk of dropout in the region</td>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Overview of the Out-of-School Children Initiative globally, and in the region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SESSION 3</td>
<td><strong>OOSCI THEORY OF CHANGE AND METHODOLOGY</strong></td>
<td></td>
</tr>
<tr>
<td>OOSCI Theory of Change</td>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Overview of OOSCI Conceptual Framework</td>
<td>Section 1</td>
<td></td>
</tr>
<tr>
<td>7 Dimensions of Exclusion</td>
<td>Annex B</td>
<td></td>
</tr>
<tr>
<td>Visibility Model</td>
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<tr>
<td>SESSION 4</td>
<td><strong>OOSCI STUDY STRUCTURE AND TEAM</strong></td>
<td>Section 2.3</td>
</tr>
<tr>
<td>OOSCI Study Structure (Profiles, Barriers, Policies)</td>
<td>Section 2.2</td>
<td></td>
</tr>
<tr>
<td>OOSCI Steering Committee and Technical Working Group</td>
<td>Annex J, Annex K</td>
<td></td>
</tr>
<tr>
<td>SESSION 5</td>
<td><strong>STAKEHOLDER ANALYSIS</strong></td>
<td>Section 2.2</td>
</tr>
<tr>
<td>Interactive activity to identify stakeholders in the area of out-of-school children and children at risk of dropping out (Profiles, Barriers, Policies).</td>
<td>Section 2.2</td>
<td></td>
</tr>
<tr>
<td>Discuss stakeholders in the study process, and how each may be involved and when</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SESSION 6</td>
<td><strong>DATA FOR CALCULATING 7DE AND PROFILES ANALYSIS</strong></td>
<td>Section 3.1</td>
</tr>
<tr>
<td>Discussion of key data sources to be assessed in the data inventory tool, which can be used generate estimates of children in the 7DE and disaggregated data for profiles analysis; identification of relevant stakeholders, data request requirements.</td>
<td>Section 3.1</td>
<td></td>
</tr>
<tr>
<td>SESSION 7</td>
<td><strong>ESTABLISHING A VISION AND WAY FORWARD FOR THE OOSCI STUDY</strong></td>
<td>Section 2.4</td>
</tr>
<tr>
<td>Plenary discussion:</td>
<td>Section 2.4</td>
<td></td>
</tr>
<tr>
<td>Topics: Goals of conducting an OOSCI study; how the findings can be used to reduce the number of out-of-school children; possible challenges in conducting the study and how to overcome them.</td>
<td>Section 2.5</td>
<td></td>
</tr>
<tr>
<td>Agree on next steps for steering committee, Technical Working Group, stakeholder engagement</td>
<td>Annex L</td>
<td></td>
</tr>
</tbody>
</table>
**WORKSHOP #2: BARRIER IDENTIFICATION PROCESS WORKSHOP**

Note: This workshop is led by the technical team and involves other education stakeholders (as identified in the stakeholder mapping), to discuss the barriers to education for the key profiles of children in the 7DE. This workshop would draw on advanced drafts of Chapters 1 (on out-of-school children numbers and data) and 2 (on key profiles of out-of-school children and children at risk of dropping out). This workshop should be participatory and can involve methods such as a problem-tree approach. The role of stakeholder engagement in the analysis of the barriers is described in Section 5.2.1.

**Background:** [Insert background here]

**Objectives:** [Modify as needed below]

1. Review findings of the OOSCI Study draft chapters 1 and 2 (7DE numbers, rates, and profiles);
2. Agree on most important profiles to focus on in the barriers analysis;
3. Identify likely barriers faced by these profiles, using the MoRES (or comparable) framework;
4. Identify key data sources for the barriers analysis and address possible data gaps; and
5. Agree on next steps.

### Agenda Template

<table>
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<td>Meeting Objectives and Review of the agenda</td>
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<td>Introduction of participants</td>
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<tr>
<td>SESSION 2</td>
<td>REVIEW OF ESTIMATIONS OF NUMBER OF CHILDREN IN 7DE (DRAFT CHAPTER 1)</td>
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<td></td>
<td>Data sources used for the calculation of number and share of children in the 7DE</td>
<td>Section 3.1</td>
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<td>Data gaps and issues identified in the data inventory and quality assessment</td>
<td>Section 3.1</td>
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<td>Estimates of children, adolescents and youth in the 7DE</td>
<td>Section 3.2</td>
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<td>Annex B</td>
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<td>SESSION 3</td>
<td>PROFILES OF CHILDREN IN THE 7DE</td>
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<td></td>
<td>Findings from draft Chapter 2 (Profiles)</td>
<td>Section 4.1, 4.2, 4.3, Annexes G, H, I</td>
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<td>Profiles of children identified</td>
<td>Section 4.4</td>
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<td>Profile 1</td>
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<td>Profile 3</td>
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<td>Discussion on key profiles for OOSCI study</td>
<td>Annexes C, D, E, F</td>
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<tr>
<td>SESSION 4</td>
<td>INTRODUCTION TO BARRIERS ANALYSIS</td>
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<td></td>
<td>Overview of barriers analysis, introduction of MoRES framework categories (or alternative framework, if using) and barriers examples</td>
<td>Section 5.1</td>
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<td>Identification of data sources and key stakeholders with information on barriers to education faced by the agreed profiles</td>
<td>Section 5.2</td>
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<tr>
<td>SESSION 5</td>
<td>IDENTIFYING KEY BARRIERS FACED BY THE PROFILES OF CHILDREN IN THE 7DE</td>
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<td>Group Work: Participants will be divided into 5 groups to discuss 5 profiles of children in the 7DE and the barriers which may exclude them from education, and categorize barriers according to the MoRES (or alternative) framework dimensions</td>
<td>Section 2.2</td>
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<td>Plenary presentation of group work</td>
<td>Annexes C, D, E, F</td>
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<td></td>
<td>Discuss data gaps and possible plans for primary data collection (during or after study) to address them</td>
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<td>SESSION 6</td>
<td>FROM BARRIERS TO POLICIES</td>
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<td>Discuss most important barriers and develop the barriers matrix: both those that impact multiple profiles of out-of-school children, or those which significantly impact a single profile</td>
<td>Section 4.4</td>
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<td>Agree on next steps for the development of the policy and strategies chapter, planning for study dissemination and use</td>
<td>Section 2.5</td>
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WORKSHOP #3: POLICIES AND STRATEGIES PROCESS WORKSHOP

Note: This workshop is led by the steering committee and involves the technical team and other education stakeholders (per the mapping), combining both technical and policy participants. This takes place once the barriers chapter has been finalized and the groundwork for the policies chapter is well advanced, including the analytical review of existing policy and gaps, and once international best practice for the country’s critical barriers has been identified. A preliminary national action plan roadmap could be developed to discuss the next steps after the study’s publication. More details are discussed in Sections 2.5 and 6.1.

Background: [Insert background here]

Objectives: [Modify as needed below]

1. Review findings of the barriers analysis (Chapter 3);
2. Review and discuss findings of the assessment of existing policies and strategies, as relates to the major barriers identified for the key profiles of children in the 7DE;
3. Discuss policy recommendations to overcome the barriers identified, and identify key stakeholders and next steps;
4. Develop an action plan for the implementation of recommendations; and
5. Discuss how the findings of the study can be used in future policy discussions and decision-making (dissemination and use).

Agenda Template

<table>
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<tr>
<th>TIME</th>
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<tr>
<td>SESSION 1</td>
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<td>Meeting Objectives and Review of the agenda</td>
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<td>Introduction of participants</td>
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<tr>
<td>SESSION 2</td>
<td>FINDINGS OF THE BARRIERS ANALYSIS</td>
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<tr>
<td>Review the findings of the barriers analysis: data consulted, barriers identified, data gaps</td>
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<tr>
<td>Section 5 Annexes C, D, E, F</td>
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<tr>
<td>SESSION 3</td>
<td>REVIEW OF EXISTING POLICIES AND STRATEGIES</td>
</tr>
<tr>
<td>Overview of existing policy and strategy review: data sources consulted, factors considered</td>
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<tr>
<td>Identification of most important policies impacting the barriers and profiles identified in the study</td>
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<tr>
<td>Section 6 Annexes C, D, E, F</td>
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<tr>
<td>SESSION 4</td>
<td>CASE STUDIES ON POLICY BEST PRACTICES</td>
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<tr>
<td>Experts on various policies (national/international) present example policies and approaches which could address the barriers identified by the study</td>
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<td>Section 6 Annexes C, D, E, F</td>
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<tr>
<td>SESSION 5</td>
<td>POLICY AND STRATEGY RECOMMENDATIONS</td>
</tr>
<tr>
<td>Group Work: Participants will be divided into 5 groups to discuss 5 barriers to access identified in the study and proposed policy recommendations for removing those barriers.</td>
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<tr>
<td>Plenary presentation of group work</td>
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<td>Section 6 Annexes C, D, E, F</td>
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<tr>
<td>SESSION 6</td>
<td>NEXT STEPS – DISSEMINATION AND USE OF STUDY</td>
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<tr>
<td>Discuss launch events, key moments where the study can be used to inform decision-making and policy-making</td>
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<td>Develop national action plan on use and implementation of findings</td>
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<td>Discuss stakeholders in the study launch and use, how each may be involved, and when</td>
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<td>Section 2.5</td>
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